### Toyota European Sustainability Report 2007



## Reporting Context and Scope

Toyota first published its Regional European Environmental Report in 2001, to enhance disclosure of information about its environmental activities. This is the sixth report published so far and it complements the Toyota Motor Corporation (TMC) Sustainability Report 2007.

The purpose of the report is to provide transparency on Toyota's commitments, policies and performance in economic, environmental and social areas affecting its business and stakeholders in Europe. The target audience is employees, public authorities, NGOs and academics as well as customers and suppliers.

This report covers initiatives and activities conducted by Toyota operations in Europe as well as Toyota's progress in consolidated environmental management in Europe, with the exclusion of licensed commercial vehicle manufacturing (Salvador Caetano, Portugal). Both the Toyota and Lexus brands are included.

Facts and figures in this edition cover Toyota's 2006 fiscal year (April 2006 – March 2007) and major developments are covered through June 2007. Selection of the material to be covered by this report is made both on the basis of stakeholder feedback as well as extensive internal dialogue, conducted through processes that form a part of the company's daily operations. Toyota believes that the report covers a balanced set of topics and shows commitment and results as a company based in Europe.

Many departments and data sources have provided input and information for this report. Much time and focus has been placed on ensuring that this information is accurate and of a high quality. The calculation of waste data for NMSCs is based on the number of containers.

As a baseline for reporting, this report makes reference to the "Sustainability Reporting Guidelines – G3" developed by the Global Reporting Initiative (GRI). Other reporting guidelines have also been used and, in addition, Toyota in Europe has applied experience and expertise gained as it has developed its reporting over the past six years.

For further information on Toyota and its work on sustainability matters, please visit the website www.toyota.eu/04\_environment/index.aspx.

As mentioned, this report complements the TMC Sustainability Report 2007, which can be found on <u>http://www.toyota.co.jp/en/environment/index.html.</u>

For further information on specific topics, web links are provided throughout the report with the following icon:



#### Dear Reader,

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**Message fron** 

"Respect" – a key pillar of the Toyota Way – has never played a more vital role to the successful growth of Toyota's operations in Europe.

As demand for Toyota vehicles in Europe continues to grow, our approach to sustainable development must also evolve. Toyota has long encouraged strong and respectful engagement with all its stakeholders: from employees, suppliers and customers to the communities within which we operate. Today, this mind-set underpins our organisation-wide approach to sustainable development, supporting our growth whilst helping us to fulfil our social and environmental commitments in Europe.

At Toyota, we believe in a team-based approach with our employees, one built on mutual trust and repect. In 2005, Toyota Motor Europe conducted a comprehensive self-assessment to evaluate its performance across a variety of Corporate Social Responsibility (CSR) issues. As a result, in 2006, Toyota developed and implemented a universally applicable Code of Conduct, which included the establishment of a whistleblower policy to encourage the reporting of ethical breaches.

Our desire to create quality and enduring relationships also extends to our suppliers. In 2006, more than 90% of the content of our core models came from within Europe, and we maintain partnerships with over 250 suppliers in 22 European countries. This forms part of our commitment to make an economic and industrial contribution commensurate with our market presence within each region.

In the past year, Toyota has continued to actively seek out not-for-profit and public-sector partners, with whom it can help effect positive change in areas of mutual interest. Not including the time personally donated by many Toyota employees, the total amount of Toyota's European social contributions in FY2006 exceeded €11.8 million. These activities perfectly align with Toyota's belief that community respect extends beyond quality products to "social stewardship" in areas such as road safety, technical education and the environment.

This year we are proud to celebrate 10 years of hybrid leadership since the launch of our first mass-produced hybrid vehicle in 1997. One decade on, we continue to garner praise for our respectful relationship to the natural environment. Our investment in new environmental technologies and our efforts to continuously improve energy conservation and recycling measures – right across the business – have not gone unnoticed. In 2007, the company once again earned the top spot

amongst automakers in Fortune's list of Global Most Admired Companies.

While we are proud of the progress we have made, our approach to sustainable development continuously drives us to set new and challenging targets, with constant determination and relentless innovation.

By 2010, Toyota aims to be the No. 1 environmental leader within the automotive industry via the pursuit of new technologies, moving us ever closer to our vision of zero emissions. This is supported by a goal to be No. 1 in Complete Customer Satisfaction in all European markets within the next three years. This undertaking, while challenging, truly exemplifies our "Customer First" approach.

In addition, we recently conducted a European Key Stakeholder Survey to benchmark our social, economic, and environmental performance against that of industry peers based on the opinions of key stakeholders. This survey is just one of several tools, such as the Corporate Social Responsibility Survey, that Toyota will use to assess its social and environmental performance, and further enhance its contribution as a European corporate citizen.

We have long maintained that Toyota's efforts to promote comprehensive long-term corporate sustainability are not just consistent with profitability but are actually conducive to it. Today, I am proud to state that our consolidated figures for FY2006 in Europe demonstrate significant gains in net revenues, operating income and market share. Further, these results are accompanied by a vastly expanded programme of societal stewardship, as is demonstrated in this year's European Sustainability Report.

We hope that you find it an informative and interesting read, and we thank you for your continued interest in Toyota.



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Tadashi Arashima President and CEO, Toyota Motor Europe, Senior Managing Director, Toyota Motor Corporation (TMC)



Message from Top Management	1
Key Figures	4
Vision & Strategy	5

Economic Performance	18
Toyota in the World and Europe	19
Consolidated Figures for Europe	22

Environmental Performance	24
Special: Toyota's Approach to Climate Change	25
Product Design & Development	28
Production	35
Logistics	43
Sales & Marketing and After Sales	52
Recycling of Vehicles	60

Social Performance	64
Introduction	65
Engagement towards Customers	68
Engagement towards Employees	76
Engagement towards Business Partners	88
Engagement towards the Community	92

Glossary of Terms	100
GRI Reference	102
Independent Assurance Statement	103

# Key Figures

#### **Key Figures**

€23,615 Million
€916 Million
808,463
1,124,000 (CY)
5.8% (CY)

Environmental Performance	
ISO 14001-certified European Manufacturing Companies (EMC)	7
ISO 14001-certified National Marketing & Sales Companies (NMSC)	21
ISO 14001-certified Toyota & Lexus Retailers	107
ISO 14001-certified Parts Distribution Centres	15
ISO 14001-certified Vehicle Logistics Centres	7
EMC energy usage	1,332kWh/vehicle
EMC water usage	2.2m <sup>3</sup> /vehicle
EMC VOC emissions	25.6g/m <sup>2</sup>
EMC waste to landfill	0.09kg/vehicle
EMC number of fines	1
EMC number of prosecutions	0
EMC number of complaints	1
CO2 emissions – EMCs	311,000 tonnes
CO2 emissions – NMSCs	11,000 tonnes
CO2 emissions – Production Parts Logistics	100,000 tonnes
CO2 emissions – Vehicle Logistics	84,500 tonnes
CO2 emissions – Service Parts & Accessories Logistics	72,900 tonnes
CO2 average standard emissions from vehicles (JAMA)	170g/km (2004)
Hybrid vehicles sold	36,016
Sales of remanufactured parts (units)	56,200 (8% increase)

Social Performance	
Employment (direct) – NMSCs, logistics sites and Head Office	6,812
Employment (direct) – EMCs	15,363
Employment (direct and indirect) - total	80,000
Gender distribution – percentage of women in the Sales Group	28%
Gender distribution – percentage of women in the Manufacturing Group	7%
Injury frequency rate - Manufacturing Group (No. of injuries x 1 million / No. of hours worked)	2.76
Injury frequency rate - European HO (No. of injuries x 1 million / No. of hours worked)	0.08
Injury frequency rate - Parts Logistics (No. of injuries x 1 million / No. of hours worked)	5.33
Suppliers – purchased local European content of core models	>90%
European social contributions – total amount	€11.8 million
European social contributions - percentage of operating income	1.02%
European social contributions – percentage of subsidiaries that have policies and procedures	53%

# Vision & Strategy

#### The Toyota Vision: Economic, Environmental and Social Sustainability

With a comprehensive corporate vision for 2010 of being "a driving force in global regeneration," Toyota embraces the concept of sustainability in its broadest sense, which involves economic, environmental and social stewardship. As a responsible corporate citizen, Toyota cannot be exclusively focussed on a short-sighted strategy to maximise growth in its profit-making activities. Rather, the company understands that it must devote equal attention and resources to accurately assessing the environmental and social costs and benefits accruing to its operations and to developing the structures, policies and procedures that will make the company a good corporate citizen in the eyes of its stakeholders. This is an absolute requirement for longterm business sustainability, in Europe and elsewhere around the globe.

In this section of the report, Toyota Motor Europe (TME) presents its strategies for ensuring continued leadership in this area.

#### **Toyota's Corporate Management Philosophy**

The Toyota Guiding Principles form the cornerstone of the company's corporate management philosophy. Established in 1992 and updated in 1997, these Guiding Principles help the company to steer a clear path towards achieving sustainable development in Europe.

#### **Guiding Principles**

- 1. Honour the language and spirit of the law of every nation and undertake open and fair corporate activities to be a good corporate citizen of the world.
- 2. Respect the culture and customs of every nation and contribute to economic and social development through corporate activities in the communities.
- 3. Dedicate ourselves to providing clean and safe products and to enhancing the quality of life everywhere through all our activities.
- 4. Create and develop advanced technologies and provide outstanding products and services that fulfil the needs of customers worldwide.
- 5. Foster a corporate culture that enhances individual creativity and teamwork value, while honouring mutual trust and respect between labour and management.
- 6. Pursue growth in harmony with the global community through innovative management.
- 7. Work with business partners in research and creation to achieve stable, long-term growth and mutual benefits, while keeping ourselves open to new partnerships.

In addition to its actual shareholders, Toyota's Guiding Principles thus delineate a set of stakeholders to whom it must also be responsible: Society at large (1, 2 & 6), Customers (3 & 4), Employees (5) and Business Partners (7).

In January 2005, based on these Guiding Principles, Toyota Motor Corporation's President, Mr. Fujio Cho, prepared a more developed statement of the company's commitments, entitled "Contribution towards Sustainable Development".

We, TOYOTA MOTOR CORPORATION and our subsidiaries, take initiative to contribute to harmonious and sustainable development of society and the earth, based on our Guiding Principles. We comply with local, national and international laws and regulations as well as the spirit thereof and we conduct our business operations with honesty and integrity. In order to contribute to sustainable development, we believe

our business operations with nonesty and integrity. In order to contribute to sustainable development, we believe that management interacting with its stakeholders as described below is of considerable importance, and we will endeavour to build and maintain sound relationships with our stakeholders through open and fair communication.

#### Customers

Based on our philosophy of "Customer First", we develop and provide innovative, safe and outstanding high quality products and services that meet a wide variety of customers' demands to enrich the lives of people around the world. (Guiding Principles 3 and 4)

We will endeavour to protect the personal information of customers in accordance with the letter and spirit of each country's privacy laws. (Guiding Principle 1)

#### Employees

We respect our employees and believe that the success of our business is led by each individual's creativity and good teamwork. We stimulate personal growth for our employees. (Guiding Principle 5)

We support equal employment opportunities, diversity and inclusion for our employees and do not discriminate against them. (Guiding Principle 5)

We strive to provide fair working conditions and to maintain a safe and healthy working environment for all our employees. (Guiding Principle 5)

We respect and honour the human rights of people involved in our business and, in particular, do not use or tolerate any form of forced or child labour. (Guiding Principle 5)

Through communication and dialogue with our employees, we build and share the value "Mutual Trust and Mutual Responsibility" and work together for the success of our employees and the company. (Guiding Principle 5)

Management of each company takes leadership in fostering a corporate culture, and implementing policies, that promote ethical behaviour. (Guiding Principles 1 and 5)

#### Business Partners

We respect our business partners such as suppliers and dealers and work with them through long-term relationships to realise mutual growth based on mutual trust. (Guiding Principle 7)

Whenever we seek a new business partner, we are open to any and all candidates, regardless of nationality or size, and evaluate them based on their overall strengths. (Guiding Principle 7)

We maintain fair and free competition in accordance with the letter and spirit of each country's competition laws. (Guiding Principles 1 and 7)

#### Shareholders

We strive to enhance corporate value while achieving a stable and long-term growth for the benefit of our shareholders. (Guiding Principle 6)

We provide our shareholders and investors with timely and fair disclosure of our operating results and financial condition. (Guiding Principles 1 and 6)

#### Global Society/Local Communities

#### Environment

We aim for growth that is in harmony with the environment throughout all areas of business activities. We strive to develop, establish and promote technologies enabling the environment and economy to coexist harmoniously and to build close and cooperative relationships with a wide spectrum of individuals and organisations involved in environmental preservation. (Guiding Principle 3)

#### Community

We implement our philosophy of "respect for people" by honouring the culture, customs, history and laws of each country. (Guiding Principle 2)

We constantly search for safer, cleaner and superior technology to develop products that satisfy the evolving needs of society for sustainable mobility. (Guiding Principles 3 and 4)

We do not tolerate bribery of or by any business partner, government agency or public authority and maintain honest and fair relationships with government agencies and public authority. (Guiding Principle 1)

#### Philanthropy

Wherever we do business, we actively promote and engage, both individually and with partners, philanthropic activities that help strengthen communities and contribute to the enrichment of society. (Guiding Principle 2)

As the following pages of this report will show in more detail, TME continues to work hard to develop structures and policies that effectively implement these

guidelines and help the company to build and maintain sound relationships with all of its various stakeholders in Europe.

#### **Core Strategic Principle: Today for Tomorrow**

Ever since Toyota first established a presence in Europe, it has been constantly expanding its sales and marketing operations, its production and logistics facilities, as well as its European employment base (see Economic Performance). In all of the company's activities – from product design and development right through to the recycling of End-of-Life Vehicles (ELVs) – TME applies the "Today for Tomorrow" principle.

This key principle reflects the company's insistence on anticipating future problems and taking proactive steps in the present to prevent them from occurring.

#### Management Structure

TME's management structure has evolved considerably in recent years in an effort to ensure that policies and programmes incorporating these core principles are fully developed and implemented in Europe. The company has established two committees for performance review and strategic planning: the European Environmental Committee and the Corporate Social Responsibility (CSR) Committee. The Environmental Committee was established in 2003, and the CSR Committee in 2004. The role of the Environmental Committee is to discuss and decide on basic policy, strategy, direction and action plans bearing on environmental issues in Europe, as well as to review and confirm strategy towards environmental leadership. The role of the CSR Committee is to analyse any possible gaps between societal expectations of Toyota and its economic, environmental and social performance in Europe. These committees report to the TME Executive Committee, which, as the TME top management decision-making body, ensures the effective implementation of action plans.



#### **European Environmental Committee**

To further ensure effective consolidated environmental management throughout the organisation, Toyota

established the European Environmental Committee in January of 2003 with the following structure:



Created to ensure that consideration of all key environmental issues is properly integrated into all of the company's operations, the European Environmental Committee is composed of key executives from all the operational divisions, who meet four times a year to decide on policy, strategy and actions. Closely linked to the Corporate Environmental Committee at Toyota Motor Corporation in Japan, the European Environmental Committee demonstrates Toyota's

#### **Environmental Management**

#### Holistic Approach

For Toyota, minimising environmental impact throughout the vehicle's life cycle has long been a top priority at every level of the company. As a result of its extensive R&D efforts, Toyota has played a leading role in developing and marketing new technologies and

#### Environmental Management System

In order to ensure environmental risk management and compliance across all its business activities, Toyota has developed a consolidated Environmental Management System (EMS), which sets specific requirements for each of its various business activities and makes efficiency an integral part of performance. These requirements include the adoption of the Toyota Earth Charter, the drafting of individual environmental policies, the promotion of environmental action plans and commitment to facing environmental challenges. Having accomplished its first priority of establishing an Environmental Management System (EMS) certified to the ISO 14001 international standard, the committee has proven to be highly effective in ensuring that communication and coordination on environmental issues are maximised throughout Toyota's European activities and that eco-efficiency is seen as a top performance issue.

designs that limit the environmental impact of its automobiles. These efforts have become the hallmark of Toyota's business philosophy for the 21st century, based on a comprehensive vision of sustainable mobility.

the attainment of top-level environmental performance, on a national and regional basis.

Toyota's Environmental Management System also involves meticulous environmental management in all areas and in every stage of the vehicle life cycle, from product design and development, to production, logistics, sales and marketing, after sales service, and – lastly – recycling and disposal of End-of-Life Vehicles.



#### Vehicle Life Cycle

The diagram on p. 8 provides an overview of the significant environmental issues considered by Toyota throughout the life cycle of its vehicles and operations. Toyota's Environmental Management System determines how the company deals with each of these issues in each part of the vehicle life cycle. The actual steps taken to control and reduce the environmental impact of its vehicles and of its production, marketing and other business processes are examined in detail in the following chapters.

#### **Environmental Policy**

In an effort to distil the environmental values inherent in the Toyota Guiding Principles and the Toyota Earth Charter (as established by TMC), as well as to promote environmental leadership throughout the company, the European Environmental Committee issued a simple environmental policy for employees, linking overall corporate environmental principles, goals and targets. An accompanying list of guidelines has also been issued in order to explain what is expected of all employees in their daily routines.

#### Continuous Environmental Planning

The purpose of the European Environmental Action Plan is to set five-year goals and targets designed to help the European operations achieve Toyota's overarching environmental mission and vision of environmental leadership. Every year, the company reports on progress made in achieving these environmental goals. FY2006 saw the start of the latest five-year plan running through FY2010, which is a blueprint for the company's contribution to the development of a sustainable European



society through corporate growth in harmony with society and the environment. For the Global Environmental Action Plan of TME's parent, Toyota Motor Company, please see the TMC Sustainability Report:

http://www.toyota.co.jp/en/environment/report/index.html

The following chart summarises a number of 2006 achievements and results for TME (some results refer to fiscal year, some to calendar year).

#### TME's Five-Year Consolidated Environmental Action Plan (FY2006-2010)

Direction	2006 Result	2010 Target
I. Tackling Energy & Global V	Narming Issues	
Reduce CO <sub>2</sub> emissions in all Toyota's European operations: production and non-production areas (logistics, buildings, etc.)	CO2 inventory management system extended and consolidated. While absolute emissions have naturally increased due to higher production and sales levels, a reduction was achieved in emissions per unit produced and shipped • 2010 target beaten (achieved in production and at NMSCs – National Marketing and Sales Companies) • 13% decrease obtained for production parts logistics	<ul> <li>Proceed with CO<sub>2</sub> management throughout the entire company</li> <li>Consolidate all CO<sub>2</sub> emissions for Toyota European operations: <ul> <li>Reduce energy per vehicle produced (Target: 1400 kWh/vehicle)</li> <li>Reduce energy consumption in all operations</li> <li>Decrease emissions from logistics transportation</li> </ul> </li> </ul>
Promote the development of technologies that achieve the best fuel efficiency	Continued efforts to further improve the efficiency of engines, extend the range of hybrid vehicles, and introduce a greater number of smaller models with lower emissions	<ul> <li>Contribute to the voluntary agreement of JAMA<sup>(1)</sup> to achieve 140g CO<sub>2</sub>/km in 2009</li> </ul>
Promote the development and sales of clean-energy vehicles	<ul> <li>Continued corporate and brand environmental awareness advertising surveys show a 10% gain in both awareness and liking of the Toyota Prius hybrid</li> <li>Sold 36,016 hybrids</li> <li>Diesel mix: 39.7% Toyota and 24% Lexus</li> <li>Small cars: 33.0% (A&amp;B segment)</li> </ul>	<ul> <li>Raise public awareness about the benefits of Toyota's full hybrid systems</li> <li>Contribute to global sales of one million hybrids/year</li> <li>Promote clean diesel technology</li> <li>Increase sales of small cars</li> </ul>

(1) Japan Automobile Manufacturers Association

Direction	2006 Result	2010 Target
I. Tackling Energy & Global V	Varming Issues	
Promote the effective use of resources to contribute to a recycling-based society	<ul> <li>2010 target met (all plants achieved zero waste to landfill)</li> <li>Modal shifts implemented wherever possible; factors such as load capacity and route planning were also evaluated and changes implemented</li> <li>Use of returnable packaging for parts led to a 4.1% reduction in packaging waste over 2005</li> </ul>	<ul> <li>Promote zero waste to landfill at all production plants</li> <li>Evaluate alternative modes of transportation to improve on energy consumption in logistics areas</li> <li>Reduce general waste and packaging waste</li> </ul>
Reduce water consumption	<ul> <li>2010 target beaten (water volume of 2.2m<sup>3</sup>/vehicle produced attained)</li> </ul>	Reduce water volume used per vehicle produced (target: 2.3m <sup>3</sup> /vehicle)
II. Improve Recycling of Res	ources	
Implement recycling systems in Europe	Toyota is in full compliance in all 27 Member States of the European Union covered by the ELV (End-of-Life Vehicle) directive, as well as in all other countries in Europe that have implemented ELV legislation	Fulfil all requirements of the EU ELV Directive 2000/53/EC
III. Eliminate Substances of (	Concern	
Reduce the use of Substances of Concern (SOCs)	<ul> <li>In full compliance with the ELV directive</li> <li>Initiated internal process to guarantee compliance with REACH (European Chemical Policy) as it becomes effective</li> </ul>	<ul> <li>Eliminate the use of four SOCs (lead, mercury, cadmium and hexavalent chromium)</li> <li>Comply with REACH regulation</li> </ul>
IV. Improve Atmospheric Qua	ality	
Reduce exhaust emissions to improve air quality in urban areas	<ul> <li>Euro 5 standard set for 2009 (PM and NOx) and Toyota well positioned for full compliance</li> <li>Brand environmental awareness campaigns led to continued rise in market share of diesel and hybrid technology models</li> </ul>	Promote clean diesel technologies
Reduce emissions of Volatile Organic Compounds (VOCs)	<ul> <li>Attained VOC emissions rate of 25.71g/m<sup>3</sup>, beating 2006 target and nearly attaining 2010 target</li> <li>161 body &amp; paint shops joined the co-branded paint programme resulting in sales of 94,500 litres total of VOC-compliant water-borne paint and ancillary products such as thinners, hardeners and clearcoats</li> </ul>	<ul> <li>Reduce the volume of purge solvents in the vehicle painting process (target: 25g/m<sup>2</sup>)</li> <li>Expand the use of water-borne paint</li> </ul>
V. Expand Environmental Ma	nagement	
Strengthen consolidated environmental management	<ul> <li>2010 target met (re-certification of all Toyota Europe operations accomplished with no non-compliance issues)</li> <li>32 internal audits conducted</li> </ul>	<ul> <li>Assure re-certification for Toyota Europe's consolidated Environmental Management System (EMS) based on ISO 14001</li> <li>Scope: head office sites, parts logistics depots, and vehicle logistics hubs</li> <li>Enhance internal auditing</li> <li>Further automate the EMS system</li> </ul>
Promote environmental management to business partners	<ul> <li>Green Purchasing Guidelines issued</li> <li>21/28 NMSCs have obtained ISO 14001 certification</li> <li>Environmental compliance at retailers is being monitored through the Toyota Service Marketing programme</li> </ul>	<ul> <li>All NMSCs to obtain ISO 14001 certification</li> <li>Enhance environmental management and compliance at retailers</li> </ul>
Enhance environmental education & awareness within the company	Green Month campaign conducted at 40 sites based on the theme 'Switch Off': Think & Act to contribute to the energy solution	<ul> <li>Launch a Green Months campaign in conjunction with the UN World Environment Day each year at all sites</li> <li>Provide environmental training to all newcomers</li> </ul>
Promote businesses that contribute to environmental improvements	<ul> <li>10% of energy for TME head office operations now derives from renewable sources</li> <li>Research into renewable energy opportunities for new projects is ongoing</li> </ul>	<ul> <li>Purchase of Green Energy (renewable sources) for head office operations</li> <li>Study renewable energy opportunities in new or expanded facilities</li> </ul>

#### **ISO 14001 Implementation**

The ISO 14001 standard has become an international reference for environmental management, outlining requirements for an effective Environmental Management System (EMS) that includes:

- Establishing an environmental policy;
- Determining environmental aspects and impacts of products, activities and services;
- Planning environmental objectives and measurable targets;
- Implementing programmes to meet objectives and targets;
- · Checking and taking corrective action, and
- Conducting a management review.

Toyota's Environmental Management System is being implemented across all operations in Europe, all along the value chain. The new Five-Year Environmental Action Plan established in 2006 provides for a continuing rollout of ISO 14001 certifications, as will be demonstrated in the following chapters of this report.

#### Assessing Environmental Leadership

Toyota's position as a leading corporate citizen depends on maintaining continuous dialogue, full transparency, and consistent active collaboration with the company's key stakeholders. Only in this way will Toyota be able to implement its "Today for Tomorrow" principle, anticipating potential problems and devising proactive solutions.



In 2007, Toyota undertook a European Key Stakeholder Survey (EKSS), to assess its performance in the areas of environmental and social stewardship (see also p. 14).

One aspect assessed was the success of Toyota's efforts in working with key stakeholders across Europe

to promote broader awareness of the threat of global warming and the need for automakers to act now to preserve the quality of our environment in the future. The research shows that the message appears to be getting through, as 52% of those polled said that the environment would be the key issue for automakers over the next decade.



Source: EKSS by Ipsos Mori 2007

Toyota's pole position as the environmental leader in the automotive sector was also confirmed. The survey indicated that Toyota is believed to perform better than all of the company's benchmark automotive competitors in terms of environmental performance. Specifically, it is seen to be better at reducing the environmental impact of the full range of cars, from manufacture to disposal, and is viewed as being committed to reducing pollution and waste at its operations.

Even more significantly, through the company's actions, Toyota is viewed as having actively moved environmental issues up on society's agenda.





Perception of Toyota's environmental performance is much the same in all the countries surveyed, as it is across all stakeholder groups, although the strength of that view does vary.

This result would indicate that the company needs to work harder to ensure that all audiences are

knowledgeable about Toyota and, as a consequence, understand the company's environmental achievements. While knowledge of Toyota is relatively strong among financial analysts, business leaders and trade unions, greater effort will be needed to improve such understanding among potential employees, national politicians and NGOs. Thus, increasing knowledge and understanding of the environmental issues and Toyota's efforts to develop solutions will be essential to broadening the company's reputation as an environmental leader.

Accordingly, in addition to closely adhering to the company's latest Five-Year Environmental Action Plan,

#### Corporate Social Responsibility (CSR)

The second part of Toyota's commitment to sustainable development in Europe is Corporate Social Responsibility. In 2004, the company established the CSR Committee, after internal research demonstrated

Toyota Motor Europe has established steps (see p. 10) to ensure that its environmental leadership in Europe is maintained. These steps will help the company not only to improve its environmental performance still further, but also to identify gaps, threats and challenges, to set priorities and improve overall communication in this important area.

the need for a cross-divisional and cross-company approach to CSR, similar to that set up to address environmental issues throughout the company's operations.



#### Good European Corporate Citizen

Meeting stakeholder expectations to contribute to sustainable development in Europe

The CSR Committee oversees all strategic aspects of sustainable development and analyses possible gaps between societal expectations and Toyota's actual environmental, social and economic performance in Europe. Based on such a gap analysis, the Committee decides on the overall CSR strategy for Toyota in Europe and implements this strategy within its business operations through the Committee's various working groups.

Members are key executives from all relevant divisions and representatives from the affiliated national manufacturing and sales and marketing companies.



In 2006, the CSR Committee met twice to evaluate progress made in advancing the FY2006 objectives of the CSR Development Plan. At the Executive Committee of April 10, the strategy for 2007 was agreed, and a plan was approved for future CSR development over the next fiscal year (see below).



CSR Committee meeting

#### Assessing Societal Expectations: TME as a Corporate Citizen

As with its environmental leadership position, TME in 2006 undertook extensive surveys to assess

stakeholder opinions with regard to Toyota's level of corporate citizenship in Europe.

#### Methodology



At the request of Toyota, the UK research firm Ipsos MORI conducted a survey of seven different groups of stakeholders throughout 11 countries.



**Corporate Citizenship Model** 

The composite results of this study show that Toyota in Europe has already established a leadership position in the opinion of stakeholders, based primarily on clear leadership in environmental performance and co-leadership with another manufacturer with respect to business performance (including business ethics).

Specific results of the Ipsos MORI survey will be presented in greater detail later in this report (see section on social performance).





#### Gap Analysis and the Assessment of Company Performances: CSR Management

In November and December of 2005, a CSR audit exercise was undertaken in 23 Toyota business operations (both NMSCs and EMCs), as well as Toyota's European headquarters. Each entity had to assess its performance on 37 CSR issues such as product safety, integrity, equal opportunity and corporate philanthropy. These issues were specifically chosen to cover CSR concerns of the six primary categories of Toyota stakeholders (Customers, Employees, Business Partners, the Environment, the Community, and CSR Governance). The assessment was based on a gap analysis of the expectations of Toyota's internal and external stakeholders (including business risk assessment) and followed a PDCA<sup>(1)</sup> risk-based approach.

The purpose of this assessment was to establish a process for:

- Prioritising risk through analysis of the business risks and identification of urgent needs, and
- Identifying opportunities to improve the company's business.

The process was designed to facilitate the identification of appropriate countermeasures and continuous improvement of performance.





The CSR audit revealed the major areas for improvement in CSR management throughout Europe, distributed over the six stakeholder dimensions. More detailed results of this audit can be found in the Sustainability Report 2006. A subsequent audit is planned for autumn 2007.

#### **Developing Countermeasures and Taking Concrete CSR Actions**

Review Achievements

Based on the consolidated results from the CSR audit conducted in 2005 and an evaluation of the FY2005 CSR projects, the CSR Committee was able to delineate a course for its FY2006 CSR development. The table below gives a high-level overview of the year's major achievements.

Kaizen (continuous improvement project)	Objectives FY2006	Achievements FY2006	Lead division
HR Management Issues	<ul> <li>Implement tracking and reporting systems on gender diversity data</li> <li>Implement training and disseminate guidelines for managers</li> </ul>	<ul> <li>Consolidated gender data developed in the head office. Analysis showed possible gender issues in the process for attracting potential employees</li> <li>Focus groups have identified challenges and a pilot training programme has been developed</li> </ul>	HR
CSR and the Supply Chain	<ul> <li>Include reference to the 'Contribution towards Sustainable Development' principles in the Green Purchasing Guidelines</li> <li>Benchmark and develop pilot management system for social concerns in the supply chain</li> </ul>	<ul> <li>Green Purchasing Guidelines now include overall CSR principles and were communicated to all TME suppliers</li> <li>CSR questionnaire for TME suppliers developed and full implementation for all suppliers planned for FY2007</li> <li>Collaboration with Clean Cargo Working Group<sup>(1)</sup> initiated for logistics companies</li> </ul>	Purchasing CSR
Reporting and Stakeholder Relations	<ul> <li>Develop long-term strategy on stakeholder relations</li> <li>Develop and integrate Social KPIs in reporting</li> </ul>	<ul> <li>European Key Stakeholder Survey rolled out and strategy under development</li> <li>First European Stakeholder Dialogue on road safety held (see also p. 72)</li> <li>Inventory of social KPIs in all affiliated companies established</li> <li>Greater focus placed on social KPIs in the annual Sustainability Report</li> </ul>	Environment CSR
Toyota Europe Code of Conduct	<ul> <li>Fully implement the European Code of Conduct and whistleblower policy</li> </ul>	<ul> <li>Code of Conduct fully implemented in European affiliated companies</li> <li>Whistleblower policy established (see also p. 76)</li> </ul>	CSR HR / Legal
CSR Support for Affiliates	<ul> <li>Develop countermeasures on specific CSR issues</li> <li>Review the audit tool as a continuous improvement process</li> <li>Develop and implement a web-based CSR toolbox</li> </ul>	<ul> <li>Follow-up in affiliated companies showed major deficiencies in integration of CSR into business planning (see below)</li> <li>Audit tool reviewed May – July 07; new audit planned for October 07</li> <li>Toolbox rolled out in June 07 (see also p. 67)</li> </ul>	CSR
Special Mobility Programme	Measure CSR effect	<ul> <li>Assessment showed that Toyota is not known as providing Special Mobility solutions</li> <li>A pilot project was started in UK and France (see also p. 73)</li> </ul>	After Sales CSR
Social Contributions in Europe	<ul> <li>(FY2007) Ensure that 50% of all social contributions are strategic (linked to environmental awareness, road safety or technical education)</li> </ul>	66% of all contributions in Europe are strategic (see also p. 93)	CSR

(1) The Clean Cargo Working Group is a business-to-business collaboration dedicated to integrating environmentally and socially responsible business principles into transportation management. Multinational manufacturers, retailers (shippers), and freight carriers and forwarders (carriers), work together to develop practical solutions addressing the environmental and social impacts of transporting products.

#### Strategic Directions

In the European Regional Hoshin (Yearly Target Plan) for 2007, the overall CSR objective towards 2010 is "to be accepted as a good corporate citizen in Europe, and enhance management systems and communication with respect to social performance and corporate governance".

The FY2006 review especially clarified the need for further integration of CSR in the manufacturing and marketing and sales companies throughout Europe. The adjoining graph shows the extent to which CSR Kaizen projects have been integrated into the business plans of the affiliated companies (as of March 2007).

Survey results, as well as an overall review of the FY2006 performance, led to the identification of two major challenges for the coming years: **standardisation** and **enhanced visibility** of CSR initiatives.



To deal with these challenges, an additional "CSR scoreboard" has been indentified in order to facilitate a more standardised approach to CSR development.

The table below provides an overview of the current action plan and the directions for the fiscal years 2007 to 2010.

CSR Project	Objectives FY2007 – FY2010
1. HR Management	<ul> <li>By FY2010, implement countermeasures to reduce gender gap in employee attraction by 50%</li> <li>Analyse gender-gap impact on employee retention and development, and propose countermeasures by FY2008</li> <li>Implement training on gender diversity for head office management by FY2008</li> </ul>
2. Supply Chain	<ul> <li>Roll out supplier portal with full assessment of all parts suppliers</li> <li>Study the implementation of the Clean Cargo Working Group social assessment tool for logistics suppliers by FY2009</li> </ul>
3. Reporting and Stakeholder Relations	<ul> <li>Enhance advertising and PR content and distribution methods to ensure maintenance of "environmental leadership"</li> <li>Include 10 additional social KPIs (under Global Reporting Initiative) in Sustainability Report</li> <li>Develop KPIs on stakeholder relations and set up proactive stakeholder strategy</li> </ul>
4. Code of Conduct	• Ensure that employee briefings and reporting on whistleblower policy are integrated into the action plans of the divisions concerned
5. Support to Affiliated Companies	<ul> <li>Review CSR audit tool and implement by November 2007</li> <li>Roll out CSR support via intranet ("CSR toolbox")</li> <li>Assure integration of CSR action plan into business plans of all affiliated companies by July 2008</li> </ul>
6. Special Mobility	<ul><li>Roll out pilot in UK and France</li><li>Measure CSR effect of pilot</li></ul>
7. Social Contributions	<ul><li>Increase alignment of social contributions with overall business strategy</li><li>Enhance visibility of social contributions in Europe</li></ul>
8. CSR Management	Develop and implement overall scoreboard with process and outcome KPIs

#### **CSR** Integration in Affiliated Companies

**Economic Performance**  Toyota once again set new records for production and sales of new cars in Europe over the past fiscal year, achieving a 13.7% leap in its market share over FY2005. With TME's ninth manufacturing plant set to open in St. Petersburg, Russia, by the end of 2007, Toyota is confidently planning its continued European expansion.

Toyota Motor Corporation is one of the world's largest automobile manufacturers, selling over 8.8 million vehicles in 2006<sup>(1)</sup> on all five continents and generating almost €153 billion in net revenues. A Top 10 Fortune Global 500<sup>(2)</sup> enterprise, Toyota is proud to once again have

received a top ranking in Fortune's list of Global Most Admired Companies, where it was named as the most socially and environmentally responsible automaker<sup>(3)</sup>, winning top marks in the industry as well for global presence, long-term investment, and financial soundness.

#### Toyota's European Network



(1) Including Hino and Daihatsu

- (2) Global 500 2006, Fortune magazine (at time of publication the 2007 results had not been released)
- d and Europe (3) World's Most Admired Companies 2007, Fortune magazine

Toyota today has 52 manufacturing companies in 27 countries and regions excluding Japan, and markets vehicles in more than 170 countries, supported by a consolidated workforce of over 299,000 people.

Toyota first began selling cars in Europe under an official distributor agreement in 1963. Since then, the company has matured into the leading Japanese automaker in this highly competitive market. Toyota has invested over €6 billion throughout Europe since 1990, and currently employs around 80,000 people, both directly and through retailer channels.

Toyota's operations in Europe are supported by a network of 28 National Marketing and Sales

Companies in 48 countries, a total of 2,882 sales outlets, and seven manufacturing plants, with an eight under construction in Russia. As an important player in Europe, Toyota continues to grow, both geographically and in terms of market share – with the goal of putting its customers first.

Toyota believes in a policy of localisation, adapting its vehicles to meet the specific needs of Europe's varied customers. This means the company's operations in Europe are generally located within the communities they serve. In fact, all of Toyota's best-selling European models – the AYGO, Yaris, Auris, Avensis and Corolla Verso – are now built in Europe.

#### **Continued Investments**

The first Toyota vehicles to be made in Europe were produced under license in Portugal in 1971. But it was not until 1992 that Toyota began full production of cars and engines, originally in the United Kingdom. That plant was followed by a new Toyota facility in France, which began producing the Yaris in 2001. In 2002, Toyota opened a new plant in Poland to build transmissions. In the same year, Toyota Motor Manufacturing Turkey (TMMT), located in Adapazari, established itself as a major strategic manufacturing centre for Corolla vehicles, which are now exported to European countries and beyond. In 2004, TMMT started production of the Corolla Verso as well.

Toyota's new diesel engine plant in Jelcz-Laskowice, Poland, began operations in 2005, as did the new vehicle manufacturing plant in Kolin, Czech Republic, which is a joint venture between Toyota Motor Corporation and PSA Peugeot Citroën. Toyota's expansion in Europe has continued with the start of construction of a new manufacturing plant in Russia in 2006. Set to become operational in December 2007, the St. Petersburg plant will assemble the Camry, will have an annual capacity of 50,000 units (at full capacity) and will initially employ 500 people. Toyota expects total investment in the St. Petersburg plant to amount to approximately €100 million. Toyota also recently opened a new parts depot in the Czech Republic (TPCCZ), which commenced operations in July 2007 with 50 employees. TPCCZ represents an additional European investment of  $\in$ 13 million. Toyota also expanded its European parts centre in Belgium (TPCE), which represented an investment of  $\in$ 20 million.

Toyota's growth in Europe has also extended to the financial services industry. The company's 14 national sales finance companies employ a total of 750 people charged with providing high-quality financial services to customers seeking to purchase Toyota vehicles. The effect of Toyota's presence in Europe is also felt through the economic activity of various member companies of the Toyota Group, whose growth and expansion in Europe have kept pace with that of Toyota.

DENSO Corp. – which supplies Toyota with thermal, electronic, powertrain control and electric systems and components – has 19 companies and employs roughly 13,000 people in Europe. Toyota Industrial Equipment Europe (the European unit of Toyota Industries Corp.) manufactures internal combustion and electric-powered forklifts and has two factories and 20 distributors in 27 countries. Aisin Europe (the European unit of Aisin Seiki Co. Ltd.) supplies Toyota with body, engine and driveline parts. Aisin Europe employs 700 people in its three European factories. Toyota maintains relations with nearly 300 independent European suppliers as well. In total, the company spends over €5.1 billion annually with these suppliers.

	2006			
Employment & Inves	Employment (Approx.)	<b>Investment</b> (in Million €)		
	Toyota's European Head Office – Brussels, Belgium	1,153	219.0	
Sales & Marketing, Logistics	Toyota Accessory & Service Centre – Brussels, Belgium	209	50.0	
	Toyota Training Centre – Zaventem, Belgium	17	7.5	
	Toyota European Global Production Centre (E-GPC) – Derbyshire, UK	14	20.0	
	Toyota Parts Centre Europe – Diest, Belgium	586	86.0	
	Toyota Regional Parts Centres (Total)	750	18.4	
	Grimsby and Derby Logistics Centre – Grimsby and Derby, United Kingdom	y and Derby, 9 18		
	Zeebrugge Vehicle Centre – Zeebrugge, Belgium	8	12.0	
	Toyota Logistics Services France – Valenciennes, France	7	12.4	
	Toyota Parts Centre South of France – Le Pouzin, France	52	11.0	
	Le Rendez-Vous Toyota – Paris, France	5	5.0	
Manufacturing & Engineering	Toyota Motor Manufacturing France – Valenciennes, France – Vehicle and Engine Plant	3,829	897.0	
	Toyota Motor Manufacturing UK Ltd – Burnaston, UK – Vehicle Plant	4,101	2,700.0	
	Toyota Motor Manufacturing UK Ltd – Deeside, Wales – Engine Plant	646		
	Toyota Motor Manufacturing Turkey – Adapazari, Turkey – Vehicle Plant	3,498	3,498 860.0	
	Toyota Motor Manufacturing Poland – Walbrzych, Poland – Vehicle and Engine Plant	2,003	540.0	
	Toyota Motor Industries Poland – Jelcz-Laskowice, Poland – Engine Plant	1,112 250.		
	Toyota Peugeot Citroën Automobile Czech – Kolin, Czech Republic – Vehicle Plant <sup>(1)</sup>	3,633 650		
	Toyota Technical Centre – Zaventem, Belgium	777	140.0	
Design	European Design Development – Nice, France	40	14.8	
TOTAL (Through Dire	Approx 80,000	Over €6 Billion		

(1) 50/50 joint venture Toyota / PSA Peugeot Citroën



New parts depot in the Czech Republic (TPCCZ)

Net revenues in Europe (TME and affiliated companies) increased by 19.5%, to €23.6 billion in FY2006 compared with FY2005, and operating income increased by 18.9%, to €916 million in FY2006 compared with FY2005. The increase in operating income was mainly due to increases in both production volume and vehicle units sold and the effects of cost-reduction efforts.

Consolidated Figures

	FY2004	FY2005	FY2006	Evolution
In Value	Million €	Million €	Million €	%
Net Revenues	18,366	19,764	23,615	+19.5
Operating Expenses	17,562	19,083	22,699	+18.9
Operating Income	804	681	916	+ 34.5
Assets	16,612	17,908	19,448	+ 8.6
Value of Sales	17,522	18,897	22,300	+18.0



#### **Consolidated Figures**

In 2006, Toyota built 808,463 vehicles, 863,507 engines and 569,212 transmissions. By the end of 2007, Toyota expects to have a total of nine manufacturing

plants in seven countries. In 2006, Toyota witnessed a 13.7% increase in market share to a record of 5.8%.

#### Annual Sales and Market Share in Europe



• Sales Record • Market Share



Toyota Motor Europe head office, Brussels, Belgium

Environmental Performance





Graham Smith enior Vice-President External and Environmental Affairs, TME

a comprehensive and up-to-date assessment of the current state of knowledge on climate change.

The role of the IPCC is to assess - in an objective, open and transparent manner - the scientific, technical and socio-economic information establishing the scientific basis of the risk of human-induced climate change.

The fourth Assessment Report confirms previous trends and clarifies the results, which are presented with a degree of certainty of over 90%. Some findings from the Report:

"Global atmospheric concentration of carbon dioxide, methane and nitrous oxide have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values."

Fact: CO<sub>2</sub> concentration increased from 280 (circa 1750) to 379 ppm<sup>(2)</sup> (2005). This represents the highest concentration over the past 650,000 years.

"Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperature, widespread melting of snow and ice, and rising global mean sea level."

Fact: Eleven of the last 12 years (1995-2006) rank among the 12 warmest years in the instrumental record of global surface temperatures.

"At continental, regional, and ocean basin scales, numerous long-term changes in climate have been observed. These include changes in Arctic temperatures and ice, widespread changes in precipitation amounts, ocean salinity, wind patterns and aspects of extreme weather including droughts, heavy precipitation, heat waves and the intensity of tropical cyclones."

Fact: There is observational evidence of an increase of intense tropical cyclone activity in the North Atlantic since about 1970, correlated with increases in tropical sea surface temperature.

The report also states that: "Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse qas concentrations."

natural habitats.

We accept the scientific evidence cited by IPCC and other sources, which points to the fact that global

- (1) The World Meteorological Organisation (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate
- Change (IPCC) in 1988. (2) ppm (parts per million) is the ratio of the number of greenhouse gas molecules to the total number of molecules of dry air. E.g. 300 ppm means 300 molecules

25 Environmental Performance - Special: Toyota's Approach to Climate Change

of a greenhouse gas per million molecules dry air.

We will make every effort to work with other European stakeholders to stimulate appropriate and effective countermeasures to global warming.

Although Toyota has for many years defined its mission as providing environmentally considerate products that are consistent with measures to counter global warming, now more than ever we are committed to redoubling our efforts to develop advanced and innovative automotive technologies that will define a new model of sustainable mobility.

#### Importance of an International Framework

In order to reduce the harmful effects of global warming at the rate required, measures are needed worldwide that go beyond present international initiatives like the Kyoto Protocol. To achieve significant emissions reductions without compromising future prosperity, Toyota believes the most important requirement for a car company is the development, introduction, and widespread adoption of innovative technologies. An effective international framework has the potential to stimulate and accelerate developments in this area.

Toyota is committed to making contributions in the areas where it can have the greatest impact, for instance by strengthening its efforts in the field of technological innovation, including development of fuel-efficient vehicles and diversification of energy sources.

#### **CO<sub>2</sub> Emissions**

The transport sector is a major source of CO<sub>2</sub> emissions. Almost a quarter of the world's CO<sub>2</sub> emissions stem from transport activities and around 80% of that comes from

## automobiles. CO<sub>2</sub> emissions reduction throughout all stages of the vehicle life cycle is therefore a major objective for Toyota.

#### **Products and Services**

As an automobile manufacturer, Toyota is engaged in developing a broad array of improvements in fuel efficiency and conducting research into low CO<sub>2</sub> alternative energy sources. But the company is also committed to promoting an even broader range of sustainable mobility initiatives. For example, Toyota has participated in initiatives to improve traffic flow based on IT/ITS<sup>(1)</sup> technology and has also been involved in customer education initiatives promoting environmentally considerate driving practices (known as "EcoDriving"). Toyota has also introduced Gear Shift Indicators, which tell drivers when their vehicles are

being operated in a fuel-efficient manner, and the company has plans to expand the deployment of this technology (see p. 32).

Toyota's immediate challenge is to continue to do everything possible to assist its trade association, JAMA<sup>(2)</sup>, to meet its voluntary commitment to achieving CO<sub>2</sub> emissions of 140g/km by 2009. The company will do this by further improving the efficiency of its engines, widening its range of hybrid vehicles, and by introducing a greater number of smaller models with lower emissions.

#### Production and Logistics (Including Suppliers)

With the aim of achieving the world's top level of environmental efficiency in its production processes, Toyota will continue to strive to reduce CO<sub>2</sub> emissions in accordance with the principles of the Toyota Production System (TPS).

TME is proud to have reduced per-car energy consumption in the production process by 44% since 2001, achieving a 13.3% reduction in 2006 over 2005 levels. Moreover, TME's Five-Year Environmental Action Plan calls for further reductions in energy consumption

and CO<sub>2</sub> emissions in all of the company's business areas (see p. 9-10).

The company is also working to reduce CO<sub>2</sub> emissions in its logistics processes, and has achieved significant positive results through measures such as improved loading rates, sharing vehicle transportation with other companies and modal shifts. As of this year, all logistic partners have to report their CO<sub>2</sub> emissions in accordance with Toyota's Green Purchasing Guidelines (see p. 90).

#### Sales and Marketing

Toyota is also committed to reducing CO<sub>2</sub> emissions in its sales and marketing operations. More and more of its National Marketing and Sales Companies are implementing measures such as those introduced by Toyota Belgium and Toyota Denmark, which have taken steps to ensure that 100% of the energy they purchase is from renewable sources. Dealers also help to reduce CO<sub>2</sub> emissions by giving customers EcoDriving tips and tests designed to help customers improve their fuel efficiency, reduce CO<sub>2</sub> and save money.

#### Internal CO<sub>2</sub> Monitoring

In 2005, Toyota commenced a CO<sub>2</sub> inventory of all its business operations in Europe, including an estimation of the CO<sub>2</sub> emissions of new cars sold (average CO<sub>2</sub> emissions x number of vehicles x average km driven per year). However, despite significant progress in reducing per-vehicle CO<sub>2</sub> emissions, the company's absolute CO<sub>2</sub> emissions increased from 2005 to 2006 by almost 10%. This, of course, is

primarily due to increased business operations and the greater number of cars being produced and sold in Europe.

The chart below highlights the importance of improving the fuel efficiency and reducing the CO<sub>2</sub> emissions of our vehicles, which account for 81% of TME's direct and indirect annual CO<sub>2</sub> emissions.



In this regard, the company's top priorities remain accelerating the reduction of energy consumption and reducing CO<sub>2</sub> emissions, in all stages of the vehicle life cycle.

Purchasing CO<sub>2</sub> credits to offset the impact of certain business activities is another way for Toyota to virtually neutralise the environmental impact of its operations. To date, some of its European business meetings and the Auris Fleet event have been CO<sub>2</sub>-neutralised in this manner. In the future, TME plans to expand such offsetting programmes in well-defined business areas.

#### **Government Incentives**

Toyota also recognises and supports the beneficial effects on CO<sub>2</sub> emissions of government support and policy enforcement in areas like regular vehicle

maintenance obligations or fiscal incentives for public and private purchasing of more energyefficient vehicles.

#### **European Emissions Trading Scheme**

At its plant in the United Kingdom, Toyota will successfully meet the reduction targets assigned to it under the EU Emissions Trading Scheme for the first trading period (2005-2007).

Toyota believes, however, that the Emissions Trading Scheme would benefit from further improvements, especially in the areas of allocation methodology and transparency of the system. The company looks forward to seeing this trading system developed further, so that it can more effectively achieve the purposes for which it was designed. Through its membership within a number of initiatives such as the International Emissions Trading Association (IETA) and the Centre for European Policy Studies (CEPS), Toyota Motor Europe seeks to promote further progress in this area.

# Product Design & Development



#### Styling for Europe

Design plays a central role in the Toyota approach. Everyone understands that consumers are attracted to cars that are pleasing to the eye. But Toyota customers also expect them to be fun and safe to drive, as well as environmentally considerate, reliable and easy to own. Toyota has teams of designers on three continents, whose job is to explore people's ideas, dreams and desires in order to develop advanced-concept cars and attractive new technologies that add value to their lives.

In 2000, Toyota opened its European Design Development facility (ED<sup>2</sup>) in the South of France specifically to help the company understand the local

On the Road to the Ultimate Eco-Car

In all of Toyota's design and development activities, the proactive "Today for Tomorrow" approach informs the company's efforts to explore a broad variety of technological solutions for developing cleaner, greener influences and expectations of the customers it is targeting in Europe. The strategy has proven highly successful. The new-generation Toyota Corolla, designed and built in Europe, was named Car of the Year 2002 by "What Car" magazine, an automotive consumer magazine in the United Kingdom. The all-new Toyota Avensis was also crafted by the ED<sup>2</sup> team, and is the first European Toyota to be exported to Japan. The latest model to emerge from the Centre is the popular Auris, launched in 2007, and the ED<sup>2</sup> team is currently working on a global model sports car, which may use Toyota's trailblazing hybrid technology.

vehicles. Each promising new technology is a step forward towards the goal of sustainable mobility through the concept and strategy of the ultimate eco-car, which would have zero exhaust emissions and be fully recyclable.



With the achievement of a viable hybrid technology, Toyota has established the platform from which continued research and development of various engine technologies will proceed. Thus, Toyota's commitment to sustainable mobility will continue to lead it to proactively research and address any and all issues with a potential negative impact on the environment.

#### Methodology

#### Vehicle Development: Eco-VAS

Ever since TMC's in-house R&D facilities obtained ISO 14001 (environmental management) certification in 1998, the company has been constantly monitoring its progress towards achieving environmental impact reduction targets. One way it does this is through the Eco-Vehicle Assessment System (Eco-VAS), which has become an important environmental management tool for Toyota. Eco-VAS works in the following manner:

- From the very first stages of design, the project leader responsible for a particular vehicle sets environmental impact reduction targets for that vehicle.
- Assessment of environmental impact is carried out over a wide range of areas, including fuel efficiency, emissions and noise during vehicle use, the disposal

#### LCA - a Major Pillar of Eco-VAS

Life Cycle Assessment (LCA) is a methodology for quantitatively analysing the energy and resources a product uses, as well as its environmental impact during manufacture and use. It serves to evaluate the product's overall environmental impact over the course of its life cycle. As part of its LCA, Toyota quantitatively analyses the emission volume of recovery rate, the reduction of substances of environmental concern, and CO<sub>2</sub> emissions throughout the entire life cycle of the vehicle from production to disposal.

• Target achievement is continuously tracked throughout the development process by the project leader and other responsible parties.

Through these processes, necessary measures to reduce the environmental impact of each vehicle can be integrated from the earliest to the final stages of development, not only to ensure target achievement but also to raise a vehicle's overall environmental performance. To date, Eco-VAS has been carried out on the new-generation Prius, Yaris, RAV4, new-generation Corolla and Auris.

substances that cause global warming (CO<sub>2</sub>) and air pollutants (NOx, SOx, PM, and NMHC), as well as the volume of non-renewable resources used over the total product life (from production to disposal). Toyota now actively and routinely carries out LCA in the development stage of new models and technologies.

#### **Recycled Materials**

Toyota supports recycling at each stage of vehicle development, production, use and disposal. During vehicle development, the Toyota Recycle Vision sets specific targets for improving vehicle recovery rates, increasing the use of recyclable resources, recycled materials and used parts, and reducing substances of environmental concern. An improved Toyota Super Olefin Polymer (TSOP) is now widely used across the Toyota model range, greatly improving the recyclability of Toyota vehicles. As shown by the diagram below, the use of TSOP has greatly increased from the launch of the Toyota Yaris in 2006 to the launch of the Toyota Auris in 2007, demonstrating Toyota's Recycle Vision.



Toyota Yaris (launched 2006)

Toyota Auris (launched 2007)

Parts with recycled material – Toyota Super Olefin Polymer (TSOP)

#### Emission Requirements CO<sub>2</sub> Emissions

The European Commission (EC) has outlined a strategy to reduce CO<sub>2</sub> emissions from passenger cars and improve fuel economy, signing agreements with the European Automobile Manufacturers' Association (ACEA) as well as the Japanese Automobile Manufacturers Association (JAMA), of which Toyota is a member. The agreements seek a gradual reduction in emissions from new vehicles sold in Europe to attain a target of 140g/km by 2008 (ACEA) or 2009 (JAMA). JAMA achieved a figure of 170g/km in 2004, which indicates that the association is on track to meet the target. These figures are based on actual sales data.





An emission level of 140g CO<sub>2</sub>/km is equivalent to an average fuel consumption of 5.3 litres per 100km for a diesel vehicle and 5.9 litres per 100km for a petrol vehicle.

#### Toyota's Strategy

Toyota's strategy for improving its CO<sub>2</sub> performances is based on:

- Technological improvements, such as the improved fuel efficiency of both diesel and petrol engines, and wider use of hybrid technology throughout the vehicle range.
- Increasing consumer awareness of environmentally friendly vehicles through advertising and marketing.

#### **Exhaust Emissions**

The EU has also issued a series of directives on emission limits for both petrol and diesel vehicles.

The Euro 3 directive applied to new passenger vehicles sold after 1/1/2000; the Euro 4 directive applies to new vehicles as of 1/1/2005. New emission-limit requirements have also been set for Euro 5 and Euro 6, applying to new vehicles as of 1/9/2009 and 1/9/2014, respectively. Toyota is responding to society's demands for cleaner emissions by

Simply stated, Toyota's approach is first to produce vehicles with lower emission levels and then to induce more consumers to opt for such models rather than other, less environmentally considerate choices available on the market.

Currently, four of Toyota's most popular models have emission levels well below the 2009 target level of 140g CO<sub>2</sub>/km. (For more information, see Environmental Vehicle Impact Data, at the end of this chapter.)

achieving steady reductions through engine combustion improvement and after-treatments. Toyota's Engineering Division, both in Japan and in Europe (Brussels, Belgium), continuously works to ensure that Toyota vehicles not only meet but surpass the new regulations in application in Europe. For example, the Toyota Diesel Clean Advanced Technology (D-CAT) system has been developed to go well beyond the Euro 4 standard values for NOx and particulate emissions.

#### Progress towards Low Exhaust Emissions



Development of Emission Standards in Europe, Japan and the USA PM (g/km)

#### **Powertrain Technologies**

Over the course of a vehicle's life cycle, it is the actual driving of cars that clearly generates the largest portion of Greenhouse Gases (GHGs). That is why finding ways to minimise fuel consumption and produce fewer emissions (both GHGs and other pollutants) is one of the main priorities of Toyota's designers. Each of the engine technologies employed has its advantages and drawbacks.

#### Diesel

Diesel engines are more energy-efficient than petrol engines and therefore have lower fuel consumption and emit less CO<sub>2</sub> per km. Their principle drawback, however, is higher emissions of nitrogen oxides (NOx) and particulate matter (PM).

Given the popularity of diesel engines in Europe, Toyota set itself the task of developing the cleanest possible diesel technology. Today, the company's common rail diesel engines (D-4D) are among the cleanest on the market.

#### Case Study: Clean Diesel

The 177 DIN hp 2.2-litre D-4D is Toyota's revolutionary new concept for diesel engines – Clean Power. Thanks to Toyota D-CAT, this Clean Power engine has the smallest combined NOx and PM emissions among all diesel engines on the market. But such eco-friendly results do not mean a sacrifice in performance and comfort. The unit leads its segment in levels of power and torque, combined with the lowest noise, vibration and harshness (NVH) and, on average, 20% lower fuel consumption among engines of equivalent power.



The new Clean Power engine is equipped with the revolutionary Toyota Diesel Clean Advanced Technology. Toyota D-CAT features a Diesel Particulate NOx Reduction (DPNR) catalyst, which is the only after-treatment in production that reduces NOx and PM simultaneously via a combination of a NOx-reduction catalyst with a particulate filter.

#### Petrol

Petrol engines emit more CO<sub>2</sub> than diesel engines, although they do produce less NOx and PM. Toyota has introduced advanced petrol engines with variable valve timing for all of the company's core models to continuously reduce emissions from all models. On top of this, Toyota is now introducing the "Valvematic".

#### Valvematic

The efficiency of petrol engines can be further optimised by adjusting the way the valves are operated. With the newly introduced Valvematic technology, the opening lift of the intake valves is made variable, aiming to reduce pump loss and therefore increase the engine's efficiency by several percent. Valvematic can be seen as a further advancement of the currently available 'VVT-i' (Variable Valve Timing – intelligent), in which the opening and closing time of the valve is made variable depending on the circumstances.



Toyota Valvematic technology

#### Gear Shift Indicator

The 'Gear Shift Indicator' (GSI) is a technology designed to encourage fuel-efficient driving by indicating to the driver the optimised points at which to shift gears.

GSI takes into account a number of elements to determine the optimal gear-shifting points, including accelerator pedal position and vehicle speed. The Engine Control Unit (ECU) then calculates the optimal gear-shift points (also taking into account exhaust emissions and drivability).

For an average driver, using the GSI indications can cut fuel consumption by about 5% compared to normal gear shifting. The potential for improvement is obviously dependent on the driver's personal driving habits.

Gear Shift Indicator in the Toyota Auris

#### Engine of the Year

Toyota's continuous efforts to enhance automotive technologies have again been acknowledged by the 'International Engine of the Year' organisation, which awarded Toyota in the sub 1-litre category for the 1.0, 3-cylinder petrol engine used in the Toyota AYGO. This engine is the lightest internal combustion engine on the market today, weighing in at only 69kg.



Engine of the Year award ceremony

#### Toyota Hybrid Synergy Drive® and Lexus Performance Hybrid

Toyota's Prius, the world's first mass-produced hybrid vehicle, came out of the company's early conviction that hybrid would become a mainstream technology. The public's readiness to embrace this new technology has now been amply demonstrated. Today, Toyota has sold over one million hybrid vehicles worldwide (with sales of over 100,000 units in Europe alone).

Hybrid technology is the most promising solution currently available on the market for realising supreme environmental, as well as driving, performance. A hybrid system combines the power of a conventional engine with the efficiency of an electric motor, keeping the performance benefits of petrol, while enjoying the environmental advantages of clean, electric power. In the field of electric vehicles relying on a battery and a motor for their power source, Toyota has amassed an array of technologies, such as high-performance batteries, high-output compact motors, motor controls and regenerative brakes. With further improvements to electric vehicle technology, combined with hybrid control technology, a number of revolutionary petrol hybrid vehicles have been launched. The pioneering model was the Toyota Prius, joined now by the Lexus RX 400h, GS 450h and most recently the LS 600h.

The Lexus LS 600h shows the potential of hybrid technology, offering a high-performance driving experience as well as outstanding environmental performance.

#### Fuel Cell Technologies

With further assimilation of the fuel cell vehicle technology comes the fusing of the Toyota Fuel Cell stack and hybrid technology, creating the Toyota Fuel Cell Hybrid Vehicle (FCHV). This is a major step forward towards the ultimate eco-car. The FCHV achieves high vehicle efficiency, while offering a smooth and quiet drive. The FCHV was made commercially available in December 2002 – another world premier from Toyota – and gained Japanese type approval in July 2005. Fuel Cell Hybrid Vehicles, currently available only in the USA and Japan, are still far from being ready for massmarketing, however. The number of Fuel Cell Hybrid Vehicles (FCHV) on the road in Japan and the USA is currently 13.



#### Issues for FC Vehicles and Hydrogen Fuel

#### **Environmental Vehicle Impact Data**

Four of the models have already achieved fuel

The table below presents data for a sample of Toyota consumption and CO<sub>2</sub> emission levels significantly under and Lexus vehicles available on the European market. those set by the EU's 2009 Voluntary Agreement with JAMA.

For details on other models please consult local retailers or visit: Toyota's European website: 💻 www.toyota-europe.com Lexus' European website: 💻 www.lexus-europe.com

Model		Engine	Fuel Type	Fuel Consumption (Combined) (I/100km)	CO2 (g/km)	European Emission Standard	Noise Drive-By (dB-A)
	Toyota Prius	1.5 VVT-i Hybrid	Petrol	4.3	104	Euro 4	69
	Toyota AYGO	1.0 VVT-i 5M/T	Petrol	4.6	109	Euro 4	70
		1.0 D-4D 5M/T	Diesel	4.1	109	Euro 4	71
the	Toyota Yaris	1.0 VVT-i 5M/T	Petrol	5.4	127	Euro 4	70
Ser.		1.4 D-4D 5M/T	Diesel	4.5	119	Euro 4	67
	Toyota Auris	1.4 VVT-i 5M/T	Petrol	6.9	163	Euro 4	69
		1.4 D-4D 5M/T	Diesel	5.0	132	Euro 4	68
	Toyota Avensis	1.8 VVT-i 5M/T	Petrol	7.2	171	Euro 4	73
		2.0 D-4D 6M/T	Diesel	5.5	146	Euro 4	71
	Toyota RAV4	2.0 VVT-i 5M/T	Petrol	8.6	202	Euro 4	71
		2.2 D-4D 6M/T	Diesel	6.6	173	Euro 4	70
Toyo Vers	Toyota Corolla	1.6 VVT-i 5M/T	Petrol	7.5	178	Euro 4	73
	verso	2.2 D-4D 6M/T	Diesel	6.4	170	Euro 4	71
-	Toyota	4.0 V6 VVT-i 5A/T	Petrol	12.7	305	Euro 3	73
-1-1	Land Gruiser	3.0 D-4D 5M/T	Diesel	9.1	244	Euro 3	74
0	Lexus IS 250	2.5 VVT-i 6M/T	Petrol	9.8	231	Euro 4	72
	Lexus IS 220d	2.2 D-4D 6M/T	Diesel	6.3	168	Euro 4	72
	Lexus RX 350	3.0 VVT-i 5A/T	Petrol	11.2	264	Euro 4	73
-	Lexus RX 400h	3.3 V6 VVT-i Hybrid	Petrol	8.1	192	Euro 4	71
	Lexus GS 300	3.0 VVT-i 5A/T	Petrol	9.8	232	Euro 3	71
-0-	Lexus GS 450h	3.5 V6 VVT-i Hybrid	Petrol	7.9	186	Euro 4	73
A COMPANY	Lexus LS 460	4.6 VVT-i 8A/T	Petrol	11.1	261	Euro 4	71
-0-1	Lexus LS 600h	5.0 V8 VVT-i Hybrid	Petrol	9.3	219	Euro 4	71


Shinji Kano Production Engineering R&D and Manufacturing Company, TME

even allowed us to beat some of the challenging 2010 targets we set back in FY2005 - four years ahead of schedule. Moreover, all plants have now achieved zero waste to landfill and are ISO 14001 certified. As our goal is to achieve the best possible performance, we will now challenge ourselves still further by renewing our targets for 2010.

### **European Production Capacity Increase**

This year, the EMCs' consolidated results have been expanded to include two new plants for the first time: Toyota Motor Industries Poland (TMIP) and Toyota Peugeot Citroën Automobile (TPCA). In FY2006, the volume of Toyota vehicles produced in Europe rose to an all-time record of 808,463 vehicles. Although the company's original environmental performance targets did not anticipate TMIP and TPCA joining the family of Toyota production facilities so soon, the EMCs nonetheless were able to meet each of their six main Key Performance Indicators (KPIs) despite the increased production (see below).

### Sustainable Production

All of the EMCs have continued to strengthen their environmental management programmes. In FY2006, TMIP obtained ISO 14001 certification for its Environmental Management System, which means that all of the currently operating EMCs have now achieved this internationally recognised standard. As one of the latest plants to come online, TMIP was the last plant to achieve the zero waste to landfill goal in 2006. As a result, all EMCs are now operating at this level.

All plants pressed for progress towards the challenging targets identified in the Five-Year Action Plan, set in 2005 with the horizon of 2010. TME is proud of the fact that 2006 marked the sixth consecutive year of continual improvement in each of the main performance KPIs, with three KPIs already attaining the 2010 targets (energy, waste to landfill and water). These results - four years in advance of the original plan - now allow the EMCs to refine their performance goals and set additional challenges for further improvement by 2010. Accordingly, a new 2010 plan will be established during FY2007. Since the 2006 report, TME has established a new performance KPI measuring the amount of waste disposed of at cost. The target set for 2010 is an ambitious 30% reduction over the FY2003 data.

Energy reduction also remains a key concern of all Toyota's EMCs. Significant activity continued in this area throughout the year with impressive gains at each plant.

### **Environmental Impact from Production**

### Volume of Resources Input and Volume of Substances Released into the Environment in FY2006<sup>(1)</sup>



(1) Data for FY2006 include all EMCs: TMUK/B-D, TMMF, TMMP, TMMT, TMIP & TPCA.
 (2) To calculate CO<sub>2</sub> emissions, conversion factors provided by energy suppliers or National Emission factors were used.
 (3) Includes all direct and indirect CO<sub>2</sub> due to production processes.

Toyota has established a set of six environmental KPIs for each of the most significant aspects of production:

- 1. Energy usage
- 2. Water usage
- 3. Volatile Organic Compounds (VOCs) released from painting operations
- 4. Waste to landfill
- 5. Degree of compliance with environmental regulations
- 6. Number of complaints from external (neighbourhood) parties

Each individual plant sets its own annual targets for each KPI. Data is reported on a monthly basis via the Toyota intranet to Toyota's European head office in Brussels, Belgium.

### 1. Energy Usage

All of the EMCs made a significant effort to identify additional ways of reducing energy use.

Aided by a relatively mild winter in Europe, Toyota's production facilities achieved an exceptional result: energy usage fell by 204kWh/vehicle (13.3%), even with two more plants included in the FY2006 results.

Green Month campaigns conducted at all of the EMCs encouraged the active involvement of all members.

This "bottom up" approach generated many simple ideas that could be easily implemented by team members. The activities helped establish minimum "baseline" usage for each shop and process and led to the setting of new records for best performance – a benchmark for the future in each shop. TMUK Burnaston – the only plant affected by the EU Emissions Trading Scheme (ETS) – once again set a record for low CO<sub>2</sub> usage (for the entire EU ETS-eligible area) of 9,361 tonnes (vs. an annual allocation of 13,312 tonnes).

As Toyota's EMCs have already achieved the pre-established 2010 target for energy usage, they will identify a new and appropriately challenging target in FY2007.

Toyota's EMCs have been reporting the absolute volume of their CO<sub>2</sub> emissions since 2002. In 2007, a per/unit CO<sub>2</sub> reduction target for 2010 will be set in conjunction with the new kWh/unit energy target. Consequently, progress towards this target will henceforth be tracked and reported annually.



### Energy Usage – Best Practice: TMMP

2010 Target = 1,400kWh/unit

By installing dusk sensors in its casting shop, Toyota Motor Manufacturing Poland (TMMP) was able to save 21,120kWh of energy during FY2006. The dusk sensors measure the amount of daylight entering the factory. If the amount of daylight entering is no longer sufficient (nightfall, a cloudy day, etc.) the dusk sensors generate a signal to switch on the lights.



In addition, TMMP investigated where lamps could be eliminated. In total, 24 lamps were removed, resulting in an energy reduction of 38,000kWh during FY2006.

### 2. Water usage

FY2006 saw another drop of 0.1m<sup>3</sup>/unit in water usage, beating the established 2006 target and proving that Toyota's EMCs are continuing to play a leading role for

reduced water usage in manufacturing. Toyota Motor Manufacturing France (TMMF) is now the global benchmark vehicle plant within Toyota.



### Water Usage

Consolidated Data						
Fiscal Year	2001	2002	2003	2004	2005	2006
Number of Plants Included	4	5	5	5	5	7
Data (m³/unit)	3.5	3.2	2.9	2.6	2.3	2.2

### Water usage – Best Practice: TMMF

Since its start-up in 2001, TMMF's ED line in the paint shop has reduced its water consumption by over 50%, largely due to the implementation of innovative technology as well as the integration of water-reduction activities in its daily operations.



One new technology was recently added to the pre-treatment process allowing the paint shop to reduce its total water consumption by 12% over the previous year. Pre-treatment, or the process that occurs before vehicles are painted, is the largest water-consuming process in automotive manufacturing because of the large coating baths and the need to rinse off excess chemicals.

Prior to implementation of the new technology, the rinse water from the final stage of pre-treatment was all sent directly to a wastewater treatment plant. Now, it is collected and sent through a filtration system, from which 95% is now recovered and reused.

### 3. Volatile Organic Compounds (VOCs)

Toyota's EMCs achieved a further reduction of  $4.1g/m^2$  in VOC emissions over the course of FY2006: the target for 2006 was exceeded and the target set for 2010 was very nearly attained.

see a benefit from the introduction of water-borne paint in the last quarter, while all of the EMCs continued to apply the methods of PDCA (Plan-Do-Check-Act) and Yokoten (best practice sharing) to achieve savings, even though two plants had a model change and one plant implemented new material and application technology.

Toyota Motor Manufacturing Turkey (TMMT) started to



### VOC Emissions

Consolidated Data						
Fiscal Year	2001	2002	2003	2004	2005	2006
Number of Plants Included	3	3	3	3	3	4
Data (g/m²)	37.7	37.5	35.6	34.3	29.7	25.6

### **VOC – Best Practice: TPCA**

Although TPCA is one of Toyota's newest plants, members are already committed to continuously improving their performance. One of the focus areas for TPCA during FY2006 was VOC emissions (expressed in g/m<sup>2</sup>). During FY2006, TPCA implemented several small Kaizen measures to reduce the amount of VOC emitted into the air. One of the improvements was the reduction of the flow rate resulting in a benefit of 10g/m<sup>2</sup>. By increasing the amount of recovered solvents, TPCA gained an additional VOC reduction of 3g/m<sup>2</sup>.



### 4. Waste Reduction

Zero waste to landfill<sup>(1)</sup> was achieved at all plants during FY2006 on an ongoing monthly basis. A new waste reduction KPI and target was introduced during FY2006: Toyota now aims to achieve a 10% reduction of the amount of waste disposed of at cost (over FY2003 levels).



Consolidated Data						
Fiscal Year	2001	2002	2003	2004	2005	2006
Number of Plants Included	4	5	5	5	5	7
Data (kg/unit)	8.10	2.50	2.40	2.80	3.72	0.09

## (1) Zero waste to landfill is defined as <3% of waste to landfill (kg/unit) in the baseline year (TMUK/B-D = 1997, TMMT = 2002, TMMP = 2002, TMIP = 2005, TMMF = 2001, TPCA = 2005).

### Waste Reduction – Best Practice: TMMT

TMMT had a large amount of biological sludge coming from the wastewaster treatment plant that necessitated transport and off-site treatment. In order to reduce the volume or even potentially eliminate this waste stream, a new process was developed. A green house was built to make it possible to concentrate the solid portion (by evaporating the remaining water out of the sludge). Secondly, a composting machine was installed to turn the sludge into compost. This compost is used on site to maintain the green areas around the plant. This Kaizen application generated a reduction of 2.1kg of sludge per vehicle.



### 5. Initiatives to Reduce Environmental Risk

Over the course of FY2006, the five original Toyota manufacturing plants continued their risk-reduction activities first introduced by TME in FY2004. The focus remained on developing a strengthened Environmental Management System capable of proactively recognising and managing potential risks. This is being accomplished by setting strict internal control limits, developing robust and effective control mechanisms and ensuring standardised operational control.

Results of the FY2006 audits show continued consolidation across Toyota's manufacturing plants and an improvement in performance scores. In FY2007, the auditing methodology will undergo significant revision, incorporating TMC Global Audit elements, and should be ready for use later in the year. In addition, TMIP and TPCA manufacturing plants will also be included in the next round of audits scheduled for FY2007/2008.



### Key Performance Indicators – Absolute Emissions

Absolute Emissions	FY2002 <sup>(1)</sup>	FY2003	FY2004	FY2005	FY2006 <sup>(4)</sup>
Total Energy Usage (MWh)	817,943	873,611 <sup>(2)</sup>	930,496	956,686	1,075,240
Total CO2 (1,000 tonnes) <sup>(6)</sup>	203	234	257	276	311
Total Water Usage (1,000m <sup>3</sup> )	1,337	1,496	1,522	1,410	1,782
Total VOC Emissions (tonnes)	1,368	1,672(2)	1,905	1,752	1,913
Total KPI Waste (tonnes) <sup>(8)</sup>	11,272	13,464 <sup>(2)</sup>	14,789	17,256	26,329
Total Waste to Landfill (tonnes)	1,179	1,252	1,680	2,319	71
Legal Compliance					
Total Number of Fines	0	0	0	0	1 (5)
Total Number of Prosecutions	0	0	0	0	0
Total Number of Complaints	0	2(6)	1 <sup>(7)</sup>	0	1 <sup>(8)</sup>
Total European Production Volume (Vehicles) <sup>(9)</sup>	419,674	514,975	596,544	622,907	807,134
Number of Plants Covered by Result	5	5	5	5	7

(1) FY2002 is 12 months at all plants except in France where performance data has been calculated using data from January 2002 through March 2003

(4) Excludes scrap steel at all plants and recycled waste for which revenue was gained

(5) Instantaneous carbon monoxide measurement on an abatement equipment burner, immediately corrected (6) One noise complaint and one odour complaint

(7) One noise complaint

(8) One odour complaint

(9) Includes TMME, TMUK/B, TPCA (1/3 of total production volume) and TMMT

Includes all Toyota plants: TMUK/B, TMUK/D, TMMF, TMMT, TMMP, TMIP and TPCA
 This includes direct emissions from fuels and indirect emissions from purchased electricity

### **Overview of Assembly Plants**

Toyota Motor Manufacturing France (TMMF)	Plant Location: Valenciennes, France FY2006 Production: 266,231 Yaris Start of Production: 2001 Number of Employees: approx. 3,829 ISO 14001 Certification: 2002
Toyota Motor Manufacturing Turkey (TMMT)	Plant Location: Nehirkent/Adapazari, Turkey FY2006 Production: 169,769 Corolla Verso MPVs, Corolla sedans and station wagons Start of Production: 1994 Number of Employees: 3,498 ISO 14001 Certification: 1999
Toyota Motor Manufacturing Poland (TMMP)	Plant Location: Walbrzych, Poland FY2006 Production: 639,793 gasoline engines and manual transmissions Start of Production: 2002 Number of Employees: 2,003 ISO 14001 Certification: 2003
Toyota Motor Manufacturing UK (TMUK) Engine Plant	Plant Location: Deeside, UK FY2006 Production: 359,774 engines Start of Production: 1992 Number of Employees: 646 ISO 14001 Certification: 1996
Toyota Motor Manufacturing UK (TMUK) Vehicle Plant	Plant Location: Burnaston, UK FY2006 Production: 272,671 Corolla Hatchbacks and Avensis Start of Production: 1992 Number of Employees: 4,101 ISO 14001 Certification: 1996
Toyota Motor Industries Poland (TMIP)	Plant Location: Jelcz-Laskowice, Poland FY2006 Production: 135,558 diesel engines Start of Production: 2005 Number of Employees: 1,112 ISO 14001 Certification: 2006
Toyota Peugeot Citroën Automobile Czech (TPCA)	Plant Location: Kolin, Czech Republic FY2006 Production: 295,389 Toyota AYGO, Peugeot 107, Citroën C3 Start of Production: 2005 Number of Employees: 3,633 ISO 14001 Certification: 2005

-ogistics

an area where Logistics improvements can have big environmental benefits. Simply changing the way we move prior to deliverv around at a plant cars We make a hude difference. can are lookina constantly for new make our ways to logistics more efficient and therefore more environmentally friendly. Erik Van De Wiele



Hirovuki Ikeda Vice-President Production & Logistics Control, TME



Pierre Van San Director Parts Supply Chain, TME

### **Delivering Sustainable Logistics**

Whether from the transport of parts and materials to the production site, or the delivery of the finished product to the customer, the auto industry relies on a great deal of logistical support. Accordingly, the efficiency of logistics operations and methods represents a significant contribution to an automaker's environmental balance sheet.

Toyota carefully studies all available logistics options to

### **Production Parts Logistics**

The collection and distribution of parts from suppliers to manufacturing plants is managed by TME's Production and Logistics Control Division (PLC).

Since 2003, Toyota has been tracking CO<sub>2</sub> emissions on a yearly basis, with the aim of identifying ways of reducing such emissions. Despite production increases, actual per-vehicle CO2 emissions have consistently decreased (see chart p. 44).

In 2005, rail transport was implemented between Central-European suppliers and TMMT (as reported in the Toyota Europe Environmental and Social Report 2005, p. 39). This led to a decrease of parts are always organised to maximise the efficient use of logistics materials and resources.

Director Vehicle Logistics, TME

TME's logistics are divided into three separate operations:

- 1. Production Parts Logistics The collection and distribution of parts from suppliers to manufacturing plants;
- 2. Vehicle Logistics The import and export of new finished vehicles and customising of individual orders, and
- 3. Service Parts and Accessories Logistics The distribution of spare parts and accessories to retailers.

2kg of CO<sub>2</sub>/vehicle for the plant's production parts logistics.

In 2006, Toyota increased the number of direct routes for deliveries for TMUK, which also resulted in significant CO2 savings (see Toyota European Sustainability Report 2006, p. 38).

PLC is also increasingly challenging the basic assumptions of logistics (distance and volume):

- 1. Minimise distance by influencing supplier location;
- 2. Minimise volume by optimisation of the design and packaging of parts.

### Production Parts Logistics – per vehicle CO<sub>2</sub> emissions

In 2005, the new TPCA plant was opened in the Czech Republic. TPCA has already two advantages regarding

CO2 emissions: TPCA manufactures a small car and suppliers are located close to the production site.

ensure that the most efficient and environmentally responsible methods are favoured. Modes of transport with the least environmental impact are selected whenever possible, and both deliveries and returns of

### **CO<sub>2</sub> Emission Evolution**



## Action Plan for CO<sub>2</sub> Emissions Reduction

As a new challenge, Toyota has established a detailed action plan for parts logistics setting aggressive targets for per-vehicle CO<sub>2</sub> emissions through 2010.

### Action Plan for CO<sub>2</sub> Emissions Reduction



### Short-term Improvement Short-term Improvement Vision

The short-term improvements focus on simplifying routes, minimising shunting (trailer movement from the yard to the plant's dock) and rationalising the emptyreturn operations. By simplifying the routes, the number of kilometres travelled will be reduced. By optimising the shunting activity, the number of kilometres at the plant will be cut drastically. By rationalising the empty-return operation, fewer trailers will be sent out with packaging to suppliers. These actions will all have a direct link to kilometre reduction as well as CO<sub>2</sub> reduction.



### Impact Assessment

To ensure that all relevant actions are implemented and their impact tracked, the proposed actions have been included in the Hoshin (Yearly Target Plan). In the plan, each action is broken down into individual activities, with clearly established numerical targets. The results are then monitored on a monthly basis and compared with the target figures listed in the plan.

### **Expected Result**



### **km Reduction**



### **CO2 Reduction**





### **Vehicle Logistics**

The Vehicle Logistics Group (VLG) continues to grow and expand. With operations already established in Belgium, France, the United Kingdom, Sweden, Turkey, Finland and the Czech Republic, the Group is now expanding its logistics operations into Russia and the Baltic states with a new hub opened in Paldiski, Estonia, and another VLG hub planned for completion in Spain by the second quarter of 2008.

With such a significant increase in volume and operations, VLG must identify and seize every opportunity to reduce emissions in order to meet its environmental targets.



Toyota Vehicle Logistics Centre - Malmö, Sweden

The Group has continued to set aggressive targets that require every aspect of its activities to be scrutinised in terms of their emissions impact. For example, the decision to locate its new Spanish hub in the port of Sagunto was in part determined by a thorough study of the CO<sub>2</sub> effect of the various sites under consideration.



### New Hub in Spain

### Environmental Management at Vehicle Logistics Centres

VLG hubs are not only responsible for the import and export of new finished vehicles throughout Europe via vessel, truck and rail, but also for the fitting of accessories and final preparation before transportation to their ultimate delivery points. These additional activities generate a variety of waste streams within the hubs, and VLG continues to review and improve on these "in-house" streams, with the overall objective to reduce the amount of general waste and, as a result, the amount sent to landfill. This target is included in the Five-Year Environmental Action Plan.

An example of one such improved waste stream can be found in the VLG hub in Malmö, Sweden. Previously, seats removed from vehicles during local conversion for commercial purposes were simply sent to landfill. Two changes have now been implemented: first, the Group arranged for local dismantlers to take the seats and segregate the materials for disposal in the proper waste streams (i.e., metal/plastic); secondly, the Group has started to approach the appropriate factories to plan non-fitting of the seats at the source. This has started and new models will be introduced this year with the possibility of no rear seats, as applicable.

To ensure a continued coordinated corporate approach to the potential environmental impact of its logistics operations, VLG is implementing the ISO 14001 international environmental standard across all of its operations. Implementation and certification at the last hub, at Kolin, Czech Republic, is expected to be completed in FY2008.





### Vehicle Logistics Centres: ISO 14001 Implementation & Roadmap

<sup>46</sup> Environmental Performance - Logistics

In addition to ISO 14001 standards, the Group also observes locally recognised environmental standards, such as the Vlaams Milieu Charter in Zeebrugge, Belgium.

The Cross-hub Functional Team formed in 2005 continues its primary objective of maintaining ISO 14001 certification for existing logistics facilities and supporting the certification of new VLG facilities across Europe.

The team has put into place the standardisation of internal audit functions throughout the VLG European operations and raises awareness among members about the environmental impact of their activities. It has also introduced monitoring of the environmental performance of external carriers and other service providers, with feedback provided to the companies on all areas identified for improvement.

In line with the current Five-Year Environmental Action Plan, the team was also given the objective in 2006 of compiling an inventory of VLG resource usage (energy, waste, water and paper) and then entering this data into the central TME environmental system.

This data will allow VLG for the first time to set collective Key Performance Indicators (KPIs) for improvement in these areas, facilitating achievement of the Group's 2010 targets. The environmental KPIs have been developed for the most significant environmental aspects, namely:

- Energy consumption
- Waste production

### Overview of Environmental Impact from Vehicle Logistic Centres



### Managing CO<sub>2</sub> Emissions

Along with ensuring quality and service levels to its final customers, TME continuously seeks ways to make its transportation operations more environmentally friendly. One way this is achieved is by combining the most CO<sub>2</sub>-efficient modes of transport with a constant optimisation of routes (reducing the overall distances).

To help TME fully understand the impact of emissions from the company's expanding vehicle logistics processes, a CO<sub>2</sub> inventory was started in 2004. With the inventory now complete, the data is analysed to determine where reductions can be made, and KPIs are set accordingly.

As part of the Five-Year Environmental Action Plan (FY2006-2010), a reduction target of 10% of CO2

emissions was set, as compared to the 2003 baseline. Under TME's Green Purchasing Guidelines, all Logistics Partners are requested to submit a list of emission factors specific to the services they provide, in order to fine-tune the analysis and better direct and focus countermeasures and reduction activities.

The continuous changes in operational coverage (mainly due to the expansion to the East – Russia, Ukraine, Kazakhstan, the Balkans, etc.) make it difficult to present an accurate picture of the company's progress in managing CO<sub>2</sub> emissions over time, as so many variables have changed from previous years. Therefore, the assessment has been extended to look not only at CO<sub>2</sub> emissions per vehicle but also at kg of CO<sub>2</sub> "per kilometre driven".

### Vehicle Logistics CO<sub>2</sub> Emissions

Although the average CO<sub>2</sub> emission per vehicle and activities to increase load factors, the emission has increased (because of the longer distances to factor per kilometre driven has been reduced be covered), thanks to route optimisation efforts significantly.



### CO<sub>2</sub> Emissions Vehicle Logistics

Kg CO <sub>2</sub> /km	Total CO <sub>2</sub> (tonnes)
------------------------	--------------------------------

	2003	2004	2005	2006
Number of Cars Transported	679,093	888,442	940,456	1,161,681
Total km (million)	865	1,317	1,578	1,999
Total CO <sub>2</sub> (tonnes)	39,374.837	55,660.891	62,831.865	84,499.680
Kg CO <sub>2</sub> / car	57.98	62.65	66.81	72.74
Kg CO <sub>2</sub> / km	0.046	0.042	0.040	0.042

Information is provided by transportation contractors and calculation factors from DEFRA.

### Service Parts and Accessories Logistics

The distribution of spare parts and accessories to retailers is handled by regional and national distribution centres and managed by TME's Parts Supply Chain Group (PSCG). The replenishment of these distribution centres is done from parts centres in Japan and from TME's central distribution centre in Belgium, TPCE, as well as directly from local suppliers.

The CO<sub>2</sub> emissions inventory launched in 2004 also tracks the service parts and accessories logistics

processes. The data from this inventory serves to identify areas where reductions can be made. This has resulted in the implementation of a variety of solutions such as improving load efficiency, increasing load capacity, optimising route planning and changing transport modes.

In addition, in the current Five-Year Environmental Action Plan (FY2006-2010) a reduction target of 10% CO<sub>2</sub>/transported volume has been set, as compared to the 2004 baseline.

> **2006** 72,893 27.40

> > 0.699

	2004	2005	
Absolute CO <sub>2</sub> emissions (tonnes)	50,885	61,889	
CO2 emissions (kg/m3 transported)	27.70	28.10	
CO <sub>2</sub> emissions (kg/km transported)	0.632	0.593	

### Managing CO<sub>2</sub> Emissions

Information is provided by transportation contractors and calculation factors from DEFRA. The data includes transportation through TME parts logistics sites all the way to the retailer. Total absolute CO<sub>2</sub> emissions related to transport increased between 2005 and 2006 due to the expanded business. However, the emissions per transported

 CO2 Emissions of Service Parts
 • Increas

 and Accessories Logistics
 • volume



volume decreased by 2.5% due to the following efforts to further reduce emissions:

- Increased use of mega trailers, which allow a higher volume to be transported per truck;
- Change of the supply route for fast-moving body parts for Russia, from Belgium to Finland;
- Improvement in the truck fill rate and optimisation of route planning at TME's regional distribution centres;
- Full year of barge use on the canal from Rotterdam, the Netherlands, to Meerhoud, Belgium, decreasing the amount of trucking used.



### Environmental Management at Parts Distribution Centres Parts Distribution Centres: ISO 14001 Implementation and Roadmap

As successive logistics sites have earned ISO 14001 certification, activities aimed at reducing the environmental impact of the operations have been increasingly enhanced. These activities include the storage, physical handling and transport of hazardous materials according to the highest standards and all applicable legislation, prevention of chemical contamination of the soil or ground water, as well as elimination of risks for the people involved in Toyota's logistics operations. It also includes continuous efforts to reduce packaging, energy consumption, waste disposal and water consumption wherever possible.

In FY2006, in line with the Five-Year Environmental Action Plan, two additional parts distribution centres were certified as ISO 14001: Toyota Parts Centre Portugal and Toyota Parts Centre Ireland. This brings the current number of TME parts distribution centres certified as ISO 14001 to 14, out of a total of 16 centres.

As for its vehicle logistics, Toyota has established a set of environmental KPIs for all parts distribution centres. The environmental KPIs have been developed for the most significant environmental aspects, notably energy consumption and waste production.





### Energy Consumption

In 2006, total energy consumption remained flat at 27,256 MWh, or 9,154 tonnes of CO<sub>2</sub> – no increase from 2005 despite the rise in operational activity. To improve the pertinence of this data, Toyota established a set of

energy KPIs linking the energy data to the activity, surface area and operational hours. In addition, Toyota plans to define environmental targets for each of the KPIs for FY2007, using 2006 data as a baseline.

### Case Study – Reducing CO<sub>2</sub> Emissions: Toyota Parts Centre Germany (TPCDE)

At TPCDE, as part of their ISO 14001 action plan, a target was set to reduce energy consumption by 10% compared to FY2005. To achieve this target, a series of technical and behavioural actions was introduced.

### **Technical Actions:**

Review of current consumption patterns:

- Energy audit.
- Installation of movement sensors in corridors and staircases.
- Installation of new light switches and zoning to allow supervisors in the warehouse greater flexibility to switch
  off the lights in certain areas if required.
- Installation of timer on the water boiler to avoid unnecessary heating of water outside operational hours

### Behavioural Actions (awareness of employees):

- Integration of 10% reduction target into the warehouse employee bonus system.
- Placement of signs throughout the facility encouraging employees to turn off lights after meetings.
- All warehouse lights switched off during break times.
- Monthly dissemination of information such as tips on how to save energy and feedback on energy consumption.

Overall, the actions resulted in a 13% savings in electricity and 22% savings in natural gas consumption, compared to the previous year's consumption.

### Waste Disposal

Another significant area of environmental concern for the parts distributions centres is waste generated, such as cardboard, plastics and metal. In 2006, a total of 3,113 tonnes of waste were produced from all parts distribution centres, of which 2,646 tonnes were recycled or treated (85%).

Efforts include seeking ways to avoid producing this waste in the first place, but also to ensure that any

waste produced is handled correctly and that it does not go to landfill but is recycled or recovered.

The goal established for 2010, as set out in the Five-Year Environmental Action Plan, is to achieve zero waste to landfill. As with the Key Performance Indicators for energy, Toyota has also introduced a set of waste KPIs linking waste production to activity in question.

### Hazardous Materials (HazMat)

Minimising environmental impact also encompasses the activities related to the storage, physical handling and transport of hazardous materials. This is done according to the highest standards and all applicable legislation. For instance, with respect to transport, TME's Warehouse Management System was enhanced in 2005 to ensure full compliance with international legislation (ADR for road transport and IMDG for sea transport) with respect to packaging, labelling and transport documents. In addition, clear operating

procedures are in place to prevent any chemical contamination of the soil or ground water, and to eliminate risks for the people involved in Toyota's logistics operations.

TME has also developed a computerised system through which the Material Safety Data Sheets (MSDS) are made easily accessible to all parties involved in the handling of HazMat goods in the Toyota distribution network, including every European retailer/repairer.

### **Returnable Packaging**

By introducing more returnable, reusable packaging, us Toyota Parts Centre Europe (TPCE) alone prevented the 20

use and waste of 3,470 tonnes of packaging material in 2006. This represents a 4.1% improvement over 2005.



### Prevention of Packaging Waste Due to Increased Use of Returnable Packaging

### New Depot Construction

TME has made a strong effort to minimise the environmental impact of new constructions, such as the new TPCCZ regional parts centre in the Czech Republic and the expansion of TPCE in Belgium. Measures include:

### **TPCE** expansion:

- Rainwater recuperation: usage for sanitary facilities;
- Reduction of heat loss at docks: dock levellers outside building, rapid-closing gates, etc.;
- Limited availability of warm water (only one tap connected to boiler per sanitary installation);
- Push taps to reduce water use;
- Movement detectors and operating system lighting;
- Maximum use of skylights in roofing;
- Change in heating installations (3% savings in gas consumption);
- Installation of heat-recovery units, and
- Computer system for efficient use of utilities.

### **TPCCZ** construction:

- Rainwater recuperation: usage for sanitary facilities;
- Three separate light circuits in warehouse to allow adjustments based on available sunlight;
- HVAC: office air-conditioning units equipped with a valve that allows reverse functionality, heating air during intermediate seasons, allowing boilers to be started up later in the autumn and shut down earlier in the spring;
- Night cooling of the warehouse through the ventilation system, combined with high roof insulation values, so that no air-conditioning is required, and
- Use of skylights in office area to reduce need for artificial light.





TPCE Construction

# Sales & Marketing and After Sales

Raising public awareness about the need to protect the environment is not just good for the planet, it also happens to be the best way to sell Toyota products, because all of our cars are designed from the ground up with environmental performance in mind. In s



Andrea Formica Senior Vice-President Sales & Marketing and After Sales, TME

with environmental performance in mind. In short, what is good for the environment is also good for Toyota's bottom line. The more people understand that good environmental behaviour can be synonymous with good business, the better it is for everyone.

Sales and marketing can play a key, if indirect, role in protecting the environment. After all, the more drivers switch to environmentally friendly cars, the better for the planet. By informing consumers about the benefits of driving "green, clean and lean" eco-cars, Toyota seeks to raise awareness among the general public about the need to behave responsibly towards the environment, while providing products designed to meet that growing need.

### **Corporate Environmental Awareness**

In 2006, Toyota continued its pan-European corporate advertising campaign designed to build awareness in Europe about the company's position as the automotive leader in environmentally friendly technologies.

Toyota also continued to run a series of vignettes focussing on "Green Design" as sponsored advertising on four pan-European television channels. The vignettes, showcasing innovative ideas such as regenerative energy and a carbon-neutral city under construction in China, show how clever design and technology can make people's lives better while reducing their environmental impact (to learn more about Toyota's corporate advertising campaign, go to:

http://www.toyota.eu/05\_aim\_zero\_emissions/2006.aspx)



Toyota's 2006 European Corporate Advertising Campaign

### Sales and Marketing

### Brand Environmental Awareness

The Toyota and Lexus brands have for several years conducted awareness-raising campaigns on their environmental technologies in an effort to educate European customers about their multiple benefits. Studies demonstrate the continued effectiveness of these efforts, as diesel and hybrid market shares have risen steadily in recent years. In the case of Lexus, this has resulted in markedly reduced CO<sub>2</sub> emissions.



### Toyota Prius General Awareness & Image

Awareness and image of the Prius continue to increase significantly since its launch. An independent study conducted in the five main European markets shows that almost 60% of car owners in these markets are aware of the Toyota Prius. Even more interesting, this increase in awareness is followed by a similar trend in liking.



**Toyota Prius Awareness & Liking** 

The study results represent a positive step for Toyota, as it shows that not only the general awareness of Prius is increasing, but that its image on important criteria for car owners within the Prius segment is also trending upwards. This indicates that more car owners in European markets are becoming positively aware or Toyota's efforts to help ensure a cleaner environment.



### **Prius Model Image**

### Powertrain Research – July 2006

In July 2006, Toyota Motor Europe conducted a market survey to better understand consumers' key motivations in the choice of powertrain and to identify the barriers for consumer acceptance of fuel alternatives.

### Methodology

- Group discussions with moderator.
- Participants: new car buyers in the mainstream and premium car segments.
- Countries: Germany, France, the United Kingdom and Sweden (Sweden being the only European country where the market share of 'Flexible Fuel Vehicles' (FFV<sup>(1)</sup>) is already of some significance: 7.9% in 2006).

### Key Findings

Consumer attitude towards cars and the environment:

 Driving a car is considered to be both a functional necessity and a basic individual freedom. The majority of consumers resent too-strict regulations regarding car usage. A large group of consumers is in favour of environmentally friendly products and engines.

### Choice of fuel type for new car:

- In the minds of Western European consumers, diesel is currently seen as the reference powertrain, mostly for cost reasons but also for durability.
- Toyota is spontaneously mentioned and viewed as the only manufacturer able to offer a true hybrid car today.

- Consumers appreciate the increased number of models available with a hybrid engine.
- Hybrid cars are considered very 'environmentally friendly' (85%), but also contribute to the 'innovative' (65%) and 'socially responsible' (55%) character of Toyota.
- Bio-fuel, partially thanks to the name, reflects a strong sense of being 'environmentally friendly' (91%).
- When talking to current Flexible-Fuel Vehicle owners in Sweden, it appears that most of them were "accidental" buyers. They had not been intentionally looking for such a car but while shopping were persuaded of the cost-benefits and other advantages of such a car.

### Future behaviour:

- Hardly any of the survey participants were aware of the CO<sub>2</sub> emission level of their current car.
- The respondents indicated they might change their car-purchasing behaviour in the future if CO<sub>2</sub> emission categories start having a meaningful financial impact for vehicle owners (taxes, etc.).

For mainstream car buyers, this 'new behaviour' could be to downsize to a smaller car, with less CO<sub>2</sub> emissions and therefore less taxes. Premium-car buyers prefer invisible changes such as a smaller engine or an alternative fuel technology.

## Consumer attitude towards cars and the environment



### Image of Hybrid



### **Environmental Product Declarations**

As a further effort to increase awareness and knowledge of Toyota's advanced technologies, the company has continued to publish Environmental Product Declarations in its product brochures, which provide information on:

- Eco-VAS and Life Cycle Assessment (LCA);
- Product and technology development;
- Greener manufacturing;
- Recycling;
- Disposal of End-of-Life Vehicles, and
- · Recycled materials used.



Environmental information pages in product brochures

### ISO 14001 Implementation at Toyota & Lexus Retailers/Repairers

Toyota's retailers also have an obligation to participate in TME's Environmental Management System and therefore must also complete the requirements for ISO 14001 certification. The current status of the certification process for Toyota and Lexus retailers can be seen in the graph below. The implementation of ISO 14001 will increase in the coming years to reach approximately 15% of our retailers in FY2010.



### ISO 14001 Certification – Toyota and Lexus Retailers

### **After Sales**

As in previous years, the After Sales performance on environmental issues continued to improve in 2006. Once again, this improvement has been accomplished by a mix of Toyota's continuing efforts to procure environmentally friendly parts and materials, as well as through working with Toyota's network of retailers and repairers to ensure that they are in compliance with the company's environmental guidelines.

### Toyota VOC Reduction Programme in Paints

As of January 2007, European legislation came into effect to limit the total content of Volatile Organic Compounds (VOCs) in vehicle paint refinishing products. Toyota took a very proactive stance to assist its European network in complying with this legislation, codeveloping a complete range of VOC-compliant products for the repair and painting of vehicles. After many months of planning, the Co-Branded Paint Programme was launched with the first pilot paint shops in the autumn of 2005. By March 2006, 161 Body and Paint shops had joined the programme across 15 countries, resulting in sales of 94,500 litres total of VOC-compliant water-borne paint and ancillary products such as thinners, hardeners and clearcoats.



### **Co-Branded Paint Programme FY2006**



### Expected Co-Branded Paint Programme Growth 2006-2009

Although the current forecast falls short of the initial ambitious objectives, an additional 150 Body and Paint shops are expected to join the programme during 2007, with expected sales of around 300,000 litres of paint products. These products are to be delivered via Toyota's own parts logistics systems.



### **Co-Branded Paint Programme Growth**

### Promoting the Benefits of the Programme

The 2006 Body and Paint Skills Grand Prix held in Brussels, Belgium, was the first competition held by TME to use these VOC-compliant products and was used as a platform to further promote the benefits of the Co-Branded Paint Programme.



### Specialist Chemicals and Oils

Throughout TME's network of Authorised Repairers, there is a need for some very specialised workshop products, including specialist chemicals and oils that were originally developed in Japan to Toyota's exacting specifications. Over the past year, TME has adapted these products for use in Europe, by ensuring that the chemical content meets with stricter European legislation and that labels display the important health, safety and disposal information in all 29 local languages used within the territory. While most of these products are for professional use only, several of them are being promoted for customer use, and therefore must comply with Toyota's After Sales Division goal of being environmentally considerate.

### Some examples of these include:

- Super Long Life Coolant
  - Only needs to be changed every 150,000km instead of 45,000km.
  - Formulated with long-life hybrid organic acid technology, a combination of low phosphates and organic acids.
- Fuel Injection Cleaners (source: Chevron)
  - Reduce exhaust emissions by up to:
    - -10% HC (hydrocarbons)
    - -23% CO (carbon monoxide)
  - -26% NOx (nitrogen oxides)
  - Reduce fuel consumption
  - Increase engine durability
- Toyota Genuine Motor Oil



Fuel Injection Cleaner

well received by European markets. Thanks to its compatibility with Diesel Particulate Filter Systems and extended drain properties, expansion in environmentally conscious markets is expected.

- Use of the Toyota 5W30 fuel economy motor oil versus mineral oil reduces fuel consumption by 4.9% (Source: ExxonMobil and DAT Germany).
- Synthetic Manual Transmission Fluid (source: Chevron)

- The Toyota After Sales Division's introduction of a special low

ash, 5W30 premium fuel economy (C 2) motor oil has been

- Better fuel consumption (-0.7%)
- Lower CO2 emissions (-8g/km)



Toyota Genuine Long Life Coolant range

### **Remanufactured Parts**

By reusing many components and thereby reducing the demand for new raw materials, Toyota also saves the energy needed to turn those raw materials into finished products. Toyota continued to broaden the range of remanufactured parts, both in quantity and in terms of new product lines. Turbo chargers and petrol engines have been added to the 'reman' catalogue, resulting in a sales increase of 8% over 2005 levels and 26% since 2001.

Additional savings were achieved by reducing one-way packaging, thanks to an investment in 3,000 returnable shipping crates. Plans were established to further improve the efficiency of the whole process by increasing the return rate of used parts required for remanufacturing from the network of Authorised Repairers using Toyota's own logistics system.



### **Remanufactured Parts – Sales**

### Enhancing Repairer Environmental Performance

To ensure environmental compliance at the repairer level, the Toyota Service Marketing (TSM) programme includes five minimum environmental requirements and contains an intranet-based tool to facilitate the tracking of repairer compliance with the company's requirements. Members of Toyota's field staff make regular visits and enter any issues into the database to ensure quick follow-up and monitoring.

Minimum Requirements	Has the repairer nominated and defined the responsibilities of the person in charge of environmental affairs?
	Does the repairer have access to air conditioning refrigerant recovery / recycling equipment (R123 and R134a)?
	Does the repairer ensure the correct treatment of hazardous wastes?
	Does the repairer comply with local legal requirements for wastewater discharge?
	Does the repairer ensure the proper recovery of HFC/CFC and does it maintain records?
	Does the repairer collect data for specific environmental aspects on an an annual basis (water, gas, electricity & waste streams; plus VOC for paint shops)?
	Does the repairer comply with additional obligations as required by local legislation?
Level 1 Requirement	Has the repairer set environmental objectives / targets relevant to environmental aspects?
Level 2 Requirement	Has the repairer implemented an environmental management system either based on ISO 14001 or an NMSC-approved scheme?

### **Criteria for Repairer Compliance**

The Toyota Service Marketing manual not only specifies what needs to be achieved, but also provides information on how to fulfil the requirements. The manual includes an Environmental Guide as well as a Facility Guide stipulating environmental criteria and guidelines for new facilities.

### The National Marketing and Sales Companies

Aside from promoting sales and awareness of Toyota's environmentally friendly vehicles and technologies, all of the National Marketing and Sales Companies (NMSCs) in Europe continually strive to improve their own records in energy consumption, waste management, water consumption and paper consumption. In order to manage and control their environmental impact, the NMSCs have all either attained certification with respect to the international environmental standard ISO 14001 or are planning to implement it in the near future.



### NMSC ISO 14001 Implementation & Roadmap

### NMSC Environmental Performance Data

Each NMSC operates office and training facilities, and in some cases workshops, that use specific environmental resources. In 2006, a pan-European environmental performance database was introduced for reporting environmental data, including these specific resources. Specific environmental KPIs have been established to allow the NMSCs to compare performance and share best practices. In 2006, a total of 10,993 tonnes of CO<sub>2</sub> was produced by NMSC facilities, although efforts to increase the amount of renewable resources, either produced locally or from green energy supply contracts, accounted for 345 tonnes of the total. Efforts will continue to reduce the environmental impact of NMSC facilities, particularly with regard to the specific environmental KPIs.



Toyota's recycling vision requires the company to seek out every opportunity for recycling, reuse and recovery at every stage of a vehicle's life cycle. For example, this past year, the company developed a new approach allowing it to recycle plastics derived from shredder residues – a feat previously not considered feasible. Such efforts have put us squarely on track to achieve the European Commission's 95% vehicle recovery and reuse target by the 2015 deadline.

### End-of-Life Vehicles Directive

The proposal for a Directive on End-of-Life Vehicles (ELVs) arose from the European Commission's Priority Waste Streams Programme, which sought to bring together government, environmental and industrial interests in an effort to build consensus on how to address major waste streams. With respect to End-of-Life Vehicles, the annual waste within the EU is of the order of eight to nine million tonnes, all of which requires proper treatment. At the time the Directive was adopted, around 25% of this waste was considered to be hazardous, accounting for roughly 10% of the total

hazardous waste generated each year in the European Union.

The purpose of Directive 2000/53/EC, which was officially adopted by the European Parliament and the Council of the European Union in September 2000, was to make vehicle dismantling and recycling more environmentally friendly, to set clear, quantified targets for reuse, recycling and recovery of vehicles and their components, and to push producers to consider recoverability in the design and development of their new vehicles.

### **ELV Collection Network**

Toyota ensures that the recovery process is easy and convenient for the last owner of an ELV. When a Toyota or Lexus vehicle reaches the end of its life, the driver can simply return it to one of the many authorised take-back points that Toyota has set up throughout Europe.

In collaboration with the National Marketing and Sales Companies, Toyota in Europe has contracts either under negotiation or already established with treatment facilities in more than 35 countries.

At the present time, in each of these countries Toyota has taken steps to ensure that the last owners know where they can find the nearest authorised take-back point. Information on these points can be found in promotional literature or simply by telephoning a dedicated service number. Should vehicle owners have any questions about the process, Toyota and Lexus retailers are prepared to provide any additional information they may require.



Recycling information leaflet



The Toyota Recycling Vision sets specific targets for improving vehicle recovery rates, increasing the use of recyclable resources, recycled materials and used parts, and reducing and banning the use of substances of environmental concern. Toyota is on track to achieve a 95% vehicle reuse and recovery target by 2015 – as set forth in the End-of-Life Vehicles Directive.

### **Design for Recycling**

Toyota's Engineering Division continuously strives to improve its "Design for recycling" approach through

### Substances of Concern (SOCs)

One of the top eco-priorities is the early elimination of the use of the four substances of concern – lead, cadmium, mercury and hexavalent chromium – from all vehicles and vehicle-related products manufactured or sold by

its Eco-Vehicle Assessment System (Eco-VAS) (see p. 29).

the Toyota Group worldwide. (For more information on this achievement, please refer to the section on the phase-out of SOCs in the chapter on Toyota's Engagement towards Business Partners, p. 90-91).

### Dismantling

Toyota has also made great strides in designing for ease of dismantling. In order to simplify the dismantling process, an 'Easy to Dismantle Mark' is added at certain points, such as the positions at which large resin parts can be easily separated or the locations at which holes can be drilled for removing fuels.

In conjunction with its easy-to-dismantle vehicle structure, Toyota has developed innovative dismantling techniques, which have been effective in shortening the time required for dismantling by 20%.



Example of how the Easy-to-Dismantle Mark is used

### International Dismantling Information System

Toyota has joined 58 other automotive manufacturers to set up the International Dismantling Information System (IDIS).

The system has been designed to provide treatment facilities with essential dismantling information on best environmental practices for processing End-of-Life Vehicles. This information identifies the various components and materials as well as the location of all hazardous substances in the vehicles, in particular in terms of potential for reuse and recovery. IDIS is currently available in 23 languages and provides information on a total of 1,154 vehicles, including 48 Toyota and 14 Lexus models. More information can be found at:



### **Reuse and Recovery Targets**

www.idis2.com.

Until now, mechanical processing of shredder residue on an industrial scale has focussed on the recovery of fractions that are rich in carbons and have high heating value for energy and raw-material recycling. The recycling of plastics from shredder residue has only been attempted in several smaller pilot projects. One of the obstacles to this sort of initiative has been the fact that contamination with fuels and lubricants can never be completely excluded. Another difficulty lies in the heterogeneity of different plastic types, making it next to impossible to produce homogeneous fractions through simple density separation.

The new approach of Toyota in cooperation with SiCon GmbH and the Fraunhofer Institut für Verfahrenstechnik und Verpackung proves that it is indeed possible to produce homogeneous, virgin polyethylene and polypropylene qualities from plastics derived from shredder residues in a cost-effective process, without having to mix it with clean production waste. This new approach represents a combination of mechanical processing with sophisticated density separation and a solvent process.

### Hybrid Batteries Collection and Treatment

Toyota wants to make sure that hybrid batteries are collected and treated in the most environmentally friendly way. Currently, there are five types of such NiMH (Nickel Metal Hydride) batteries on the market in Europe.





Since the launch of Toyota hybrid vehicles in Europe, a collection and treatment scheme has been set up to comply with all legislative requirements, and to guarantee the highest possible degree of recycling.

### **Toyota Collection and Treatment Scheme**



### Example of NiMH Battery Recycling (Umicore Process)



## Social Performance





Thierry Dombreval Executive Vice-President & Chief Operating Officer TMME Company, TME

This is how Toyota Motor Europe views its task in terms of corporate citizenship, and it is a key priority for the company. Ideally, TME wants to be recognised by stakeholders as a good European corporate citizen among all car manufacturers operating in the region.

Since starting its formal Corporate Social Responsibility (CSR) journey in 2002, the company has developed a common understanding of the task throughout all of its business units; it regularly assesses its current CSR situation and develops a series of countermeasures. The next priority is to focus on enhanced measurement, standardisation of processes and clear communication. In this way, formal CSR procedures will quickly become fully integrated into the "Toyota Way" of doing business. Corporate Social Responsibility is after all not the job of the CSR office, but of all Toyota divisions and companies.

As discussed in the "Vision and Strategy", (see p. 5) at Toyota Motor Europe, it is not only environmental performance that is managed cross-divisionally, but also the full spectrum of Toyota's efforts to perform as a good corporate citizen. This section of the report will look more specifically into Toyota's social performance with reference to its various stakeholders in order to assess the company's success in honouring its commitments to its customers, employees, business partners, and the wider community within which it operates.

To that end, in 2006, Toyota Motor Europe conducted the first European Key Stakeholder Survey (EKSS) (see p. 11), the results of which are summarised below.

### Key Stakeholder Opinions about Toyota in Europe

### Different Stakeholder Groups' Opinions on Corporate Citizenship

Various stakeholder groups were surveyed on their opinion of Toyota's level of corporate citizenship in Europe. The chart below shows the results for several automobile manufacturers as a deviation from the average score for the car manufacturing sector. This graph indicates that national authorities and civil servants, Non-Governmental Organisations (NGOs), potential employees and unions all tend to view Toyota as only slightly above average for the car manufacturing sector, while members of the press, business leaders and financial analysts regard TME's performance as significantly above average.





### Social Performance Image

When stakeholder perceptions are broken down into greater detail, the results generally show that stakeholders appreciate Toyota's business and environmental performance but are less aware of the company's social performance, including employment creation in Europe, the company's partnerships with local communities and NGOs and its contributions to European economies.



However, Toyota scores well above average in terms of stakeholder perceptions of the company as a

responsible employer and is at the top for "learning and development opportunities" and "secure employment".

### Image of Toyota on "Responsible Employer" – Deviation from Industry Average





### **CSR Development as Kaizen**

A strong CSR policy for Toyota must focus on continuously improving performance (Kaizen), both in the manufacturing plants and in the local marketing and sales organisations. To that end, TME has developed and rolled out a support programme for the subsidiaries, the core of which is the following Plan-Do-Check-Act PDCA) cycle. TME provides support to the subsidiaries at every stage of the process as indicated by the dark green boxes.



### **CSR** Network

A CSR Network has been formed by appointing one manager in each company who is responsible for CSR development. Twice a year, a meeting is organised in Brussels to give the CSR managers the opportunity to exchange good practice and discuss overall strategy and progress.



### **CSR Kaizen Projects**

Based on its CSR self-assessment, each subsidiary has identified and conducted specific CSR projects.

- For example, over 800 suppliers deliver services, catering and consumable items to Toyota Manufacturing UK. The company therefore decided to apply CSR objectives to its supplier screening process in order to ensure adherence to certain business values, while at the same time enhancing supplier relations. TMUK is also developing a questionnaire to assess each supplier's CSR risk profile.
- Acting as a good corporate citizen is essential to Toyota Motor Manufacturing France (TMMF), especially with respect to the local community in which it is located. As a major employer in the region, the company therefore decided to focus on its relations with local voluntary entities and governments.

## In January 2006, a group of people living near TMMF complained about the disruptive effect of trains transporting Yaris vehicles at night. Although not involved in the implementation of the routing scheme, TMMF nonetheless decided to act proactively and, together with TLSFR (Toyota's vehicle logistics unit), arranged a meeting with the French railway company, SNCF.

After several meetings, a number of temporary solutions were identified and implemented and longer-term solutions are under investigation. TMMF's immediate engagement with all concerned parties allowed it to strengthen its relations with SNCF, to act as a responsive corporate citizen with respect to its own local community, and also to profit from the opportunity to discuss the impact of future volume increases in its vehicle logistics.

### **CSR** Assessment

In 2005, TME developed an audit tool, the CSR Self-Assessment, which is designed to help Toyota's subsidiaries throughout Europe to assess their CSR performance in comparison with the expectations of

### **CSR** Toolbox

In June of 2007, a specific extranet was launched to further facilitate the sharing of CSR best practice among all the subsidiaries.

stakeholders. Following a careful review of the FY2005 self-assessment, an improved CSR audit tool is under development, with roll out beginning as of the autumn of 2007.



Toyota has always been oriented towards customer satisfaction. In fact, the concept of "Customer First" originated in the lovota Production System where, ever since the beginning, customer demands have shaped the final product from the ground up. company, we have to listen to and understand our customers, and make sure we offer them the high-quality and safe products and services they are asking for.

### Mission: Complete Customer Satisfaction

As TMC Chairman Fujio Cho noted in 2004, making a profit is not the purpose of business. Rather, making a profit is "the inevitable consequence of putting customers first." That is why Complete Customer Satisfaction is, and always has been, Toyota's primary goal, and why it will continue to be a central pillar of the company's growth in the 21st century.

### **Customer Satisfaction: The Basis for Further Growth**

### Completely Satisfied Customers > Loyalty & Recommendations > Growth in Market Share

There is no better way to earn a customer's satisfaction than by offering top quality products and services. That is because a satisfied customer is a return customer. And a highly satisfied customer is a referring customer.

Studies have shown that the higher the level of customer satisfaction, the higher the degree of customer loyalty and brand-recommendation. In general, loyalty is 1.5 times higher when customers are completely satisfied.

### Target 2010: Leading the Industry on Complete Customer Satisfaction (CCS)

Toyota's mission is to consistently deliver the best possible purchase and ownership experience. The ambitious goal of Toyota in Europe is to be No. 1 in Complete Customer Satisfaction by 2010 in all European markets.

The graph below shows the number of countries in Europe where Toyota is already ranked No. 1, as determined by a recent Toyota benchmark study. Longitudinal studies show that Toyota is both sustaining and gradually improving its leading position across Europe.



### TOYOTA CCS No. 1 Positions in European **Countries – Sales**

### TOYOTA CCS No. 1 Positions in European **Countries – After Sales**





Tetsuo Agata Executive Vice-President, TMF

As

The Toyota approach is clearly bearing positive results. In the 2006 survey, Toyota was ranked No. 1 in 13 out of

the 27 European countries for Complete Customer Satisfaction with respect to After Sales Service.

### The CCS Survey: A Tool for Improvement

To facilitate progress towards meeting its CCS goal, in 2006 Toyota developed a new business tool to improve customer satisfaction at the retail level: "The Complete Customer Satisfaction Survey".

Trained call agents contact customers to gather

feedback on the customer's experience of purchasing or servicing their car via the Toyota network. This information is shared with the retailer network so that, in the Toyota tradition of Kaizen (continuous improvement), the retailer can take the required action to improve quality and guarantee a completely satisfied customer.



**CCS Survey Process** 

The following graphs reflect a marked improvement in in most cases, by repairers on the basis of the first Customer Satisfaction scores achieved by retailers and, results of the Customer Satisfaction Survey programme.



Evolution Average Retailer CCS Score (Five Example Markets)



### **Evolution Average Repairer CCS Score (Five Example Markets)**

### Pan-European CCS Awards

In 2007, Toyota launched the first Toyota Ichiban<sup>(1)</sup> European Customer Satisfaction Awards to recognise and reward those retailers who excelled in complete customer satisfaction.

The retailers were awarded for their results in the Complete Customer Satisfaction survey introduced by Toyota in 2006. The winning retailers were selected for their strong performance in key satisfaction areas for both sales and service.



The 2007 Pan-European CCS Awards

### **Quality Management**

The key to complete customer satisfaction is to offer quality products and services. Here too, the Toyota principle of Kaizen plays a key role: this ongoing drive for excellence ensures that customers can feel confident that their vehicle will conform to Toyota's highest standards of quality, safety, performance and driving pleasure.

### **Basic Quality Policy**

Ensuring a leading quality level requires the involvement of each and every Toyota employee. All divisions – from product planning & development to production engineering & manufacturing, purchasing and sales & marketing – are responsible for maintaining high levels of quality in their respective fields, and division managers

### EDER: Quality Improvement Systems

In conjunction with the increasing globalisation of its business, Toyota has been accelerating the implementation of measures to obtain information quickly on product concerns from remote markets, and to convey that information "directly to the source" of the relevant departments. This principle is known as "Early Detection Early Resolution" (EDER).

### Providing Information to Customers

Toyota continuously strives to provide information to customers about the quality and safety of its products and services. To do so, it relies on a broad range of channels and methods, including: regularly devise new procedures to foster quality improvement.

Quality must be built into every single process to achieve top levels of customer satisfaction and to maintain top quality for every vehicle Toyota produces.

Covering both the Toyota and Lexus brands, the company's EDER activities are targeted at reducing customer inconvenience. By detecting problems early in the field and channelling all relevant information (such as problem occurrence conditions, probable causes, etc.) back to the appropriate divisions promptly, early action can be taken to take corrective measures, improving the production quality of vehicles.

- · Explanations to customers by retailer staff;
- Technical support via telephone helplines for customers, and
- Dissemination of information via Toyota websites.

(1) "Ichiban" is taken from the Toyota customer satisfaction slogan "Okyakusama Ichiban" which means "Customer First" in Japanese. "Ichiban" means "first" or "number one".
### **Toyota Approach to Safety**

As a major vehicle manufacturer, Toyota has a clear responsibility in the area of road safety. In working to reduce traffic accidents, injuries and fatalities, Toyota's proactive approach to developing new technologies that will make vehicles safer to drive for its customers is just a point of departure. Toyota understands that genuine sustainable mobility also requires the company's active participation in a wide variety of road safety initiatives conducted in collaboration with other stakeholders.

Toyota's safety responsibility is not limited to the safety of the car as such. The overall issue of road safety is a major concern for Toyota that is depicted in our Triple Approach to safety.

### The Triple Approach to Safety



### Automobiles

Taking accident analyses data into consideration, Toyota develops technologies for excellent 'active' and 'passive' safety to protect and assist customers.

### **Traffic Environment**

As a member of our global society. Toyota strives to improve the traffic safety environment. We are safety conscious and willing to cooperate with various stakeholders.

### People

Toyota always focusses on people, enhancing their awareness of safe driving.

### The European Road Safety Charter

In 2005, some 41,600 people died in road traffic accidents throughout the European Union. A total of

approximately 1.9 million people were injured, some of them severely.



The European Commission, through its Vice President Jacques Barrot, has announced the ambitious goal of cutting the number of road fatalities in half by the year 2010. To do this, the European Road Safety Charter was developed. The Charter is a political instrument and serves as a platform for the signatories, including civil society organisations, to exchange experiences and new ideas and to encourage concrete actions to improve road safety in Europe.

Toyota was the first single vehicle manufacturer to sign up to the European Road Safety Charter in 2006 and has made important commitments towards its



employees and society in this area. For further details, go to:  $\hfill\blacksquare$ 

http://ec.europa.eu/transport/roadsafety/charter\_en.htm

### **Commitments towards Employees**

Toyota's commitment towards employees incorporates the following:

 Inclusion of safety-related principles in the Code of Conduct that apply to all 20,000 employees in Europe (see also p. 76).

### **Commitments towards Civil Society**

- Strengthening the road safety component in the Toyota Fund for Europe (see p. 94 for more information) by supporting awareness campaigns by European and national road safety NGOs (for an overview, see p. 96).
- Increasing safety awareness among our subsidiaries by giving them the opportunity to raise their safety and

### ETSC PIN Programme

The PIN Programme is an instrument designed to encourage stronger political leadership in the field of road safety by identifying the most important road safety performance indicators and by comparing Member States' performance in all areas of road safety. Toyota and its subsidiaries support the PIN Programme by playing an active role in the so-called PIN Talks, which help to kickstart national road safety debates across Europe.

In 2006-2007, Toyota and its local companies helped to organise and participated in PIN debates in

### eSafety Aware Initiative and "Choose ESC!" Campaign

Toyota Motor Europe has joined this new communication platform dedicated to accelerating the market introduction of life-saving technologies. Through a variety of information campaigns, the initiative hopes to promote awareness of the benefits of eSafety (or intelligent vehicle safety systems) among policy-makers and end users. The first campaign in 2007 focusses on promoting greater awareness of Electronic Stability Control (ESC), a safety technology that can reduce road accidents significantly, especially in wet or icy conditions.

<u>http://chooseesc.eu</u>

### European Stakeholder Dialogue, Brussels, 26 April 2007

In April, during the UN Global Road Safety Week, TME hosted its first European Stakeholder Dialogue on Road Safety. The event was an opportunity for a frank exchange of opinions between Toyota executives and influential European and national public authorities, NGOs and other stakeholders. Participants presented their road safety education and promotion activities and discussed how to protect vulnerable road users. Jacques Barrot, Vice-President of the European Commission and Transport Commissioner, attended the event and welcomed it as "a good example of 'shared responsibility' between all road safety actors".  Programmes to ensure continuous improvement in the active and passive safety knowledge of Toyota's technical instructors for members of the Toyota retailer network throughout Europe. This training enables Toyota experts to explain the proper functioning of Toyota safety technologies to customers.

road safety consciousness with their customers and national authorities.

 Assessing EU Member States' performance on road safety across Europe (see below) through the European Transport Safety Council (ETSC) and its Road Safety Performance Index (PIN) Programme.



12 countries: Greece, Cyprus, Switzerland, Slovakia, Germany, Spain, Poland, Austria, Italy, the United Kingdom, Sweden and Belgium.



### European Road Assessment Programme (EuroRAP)

Since 2002, Toyota Motor Europe has actively supported the European Road Assessment Programme (EuroRAP), which rates roads according to the risk of traffic accidents that can cause death or serious injury, and makes recommendations to reduce the number of accidents. To bring the economic and social costs of road accidents to the attention of policy makers, EuroRAP publishes detailed Risk Maps and recommendations for infrastructure improvements in 23 countries, and is working with its national partners to update assessment results every year.



### Euro NCAP(1): Status of the Current European Toyota Fleet

Toyota and Lexus vehicles are currently among the best overall performers in safety across the full range of Euro NCAP safety tests. To date, eight Toyota and Lexus vehicles have achieved the maximum score of five stars for Occupant Protection, eight Toyota and Lexus vehicles have achieved the current highest score of four stars for Child Protection, and three Toyota and Lexus vehicles have achieved the current highest score of three stars in their segments for Pedestrian Protection.

<u>http://www.euroncap.com/home.aspx</u>

	Year	Occupant Protection		Child Protection		Pedestrian Protection	
Lexus IS 220d	2006	****	33	****	39	**	15
Lexus GS 300	2005	****	35	****	41	**	18
Toyota AYGO	2005	****	26	****	37	**	14
Toyota Yaris	2005	****	35	***	34	**	18
Toyota Auris	2006	****	35	****	37	***	21
Toyota Corolla	2007	****		****	40	***	23
Toyota Corolla Verso	2004	****	35	****	37	**	11
Toyota Prius	2004	****	34	****	43	**	13
Toyota Avensis	2003	****	34	*		*	8
Toyota RAV4	2006	****	32	****	39	***	21

### A New Approach to Safety Technology

In the area of safety, the "Today for Tomorrow" principle has yielded a new direction known as the Integrated Safety Management Concept (ISMC). The idea is to provide optimal driver support at every possible level of danger, from parking to an unavoidable collision, and even in post-crash emergency response situations. Eventually, ISMC will not only integrate individual safety technologies and systems within the vehicle, but will also include an infrastructure-respondent system (processing road-to-vehicle information) and should be capable of integrating information obtained from vehicles other than the driver's (vehicle-to-vehicle information).

Toyota focusses its safety improvement efforts on five types of situations defined by the degree of accident risk: driving support, active safety, pre-crash safety, passive safety and emergency response.

For more detailed information on Toyota's groundbreaking safety technologies, please see the 2007 "Toyota and Safety" brochure, available at: <u>http://www.toyota.eu/07\_Publications/index.aspx</u>

<sup>(1)</sup> Established in 1997, the European New Car Assessment Programme (Euro NCAP) has rapidly become a catalyst for encouraging significant passive safety improvements in new car design. It is now backed by five European governments, the European Commission and motoring and consumer organisations in every EU Member State.

### **Special Mobility Project**

In addition to focussing on the quality and safety of its products, Toyota also strives to make mobility available to all customers. In June 2006, Toyota Motor Europe launched the Toyota Genuine Mobility Programme in Europe to enhance the lives of customers with limited mobility by making vehicles more accessible to them.

The programme provides special passenger mobility seats that are designed, tested, produced and fitted by Toyota. Active driving and wheelchair storage solutions are offered through a partnership with Autoadapt, a European manufacturer of mobility adaptation solutions.

Currently, two different genuine mobility seats are available, a mechanical swivel seat and a lift-up seat that is electrically powered for maximum comfort.

In 2006, a pilot project was introduced in the United Kingdom and France to make such seats available for

the Yaris, Auris, Corolla Verso and RAV4 models. The plan is to extend this mobility programme to other European countries in 2007.

For more information, please visit: <u>http://www.toyota-</u> europe.com/cars/conversion/index.aspx



### Communicating with Customers

### National Marketing Communication and Advertising

In communicating with the general public, Toyota is committed to respecting all national and local laws, regulations and voluntary codes. This applies to all of the company's advertising, including that which is locally produced. Many of these standards and guidelines are reflected in the European Advertising Standard Alliance Bluebook.

See: <u>http://www.easa-alliance.org/</u>).

### Hybrid Synergy Drive<sup>®</sup> Prius Campaign

In 2007, Toyota Great Britain (TGB) aired a global Prius – Hybrid Synergy Drive (HSD) campaign produced by TMC and Saatchi & Saatchi. The advertisement claimed that the Toyota Prius "emits up to one tonne less CO<sub>2</sub> per year" with the on-screen text stating "1 tonne of CO<sub>2</sub> less than an equivalent family vehicle with a diesel engine. Average calculated on 20,000km a year."

The Advertising Standards Authority (ASA) decided to investigate the claim after receiving one complaint. The calculation behind the savings was submitted to the ASA, which ruled that the claim was not valid on the grounds that:

A. The supporting evidence for this claim included data to compare the Prius to both diesel and petrol cars Nevertheless, complaints do arise and are taken very seriously. Toyota takes action to respond to complaints and has also established the Toyota European Advertising Guidelines in order to avoid future complaints.

In 2007, two sets of complaints were reported in the UK regarding advertising.

(not just diesel, as claimed by the on-screen text) and the document was not considered suitable to identify the cars with which the Prius should be compared.

B. The average annual mileage used for the comparison was 20,000km, which was felt to be unreasonable; the ASA used 13,440km for its decision.

With regard to point A, the calculation remains valid when comparing to equivalent petrol or diesel models listed in the SMMT<sup>(1)</sup>-defined D segment, against which the Prius is also listed. For point B, 13,440km is not a figure commonly used in the UK. Multiple independent sources show that the average annual mileage used in the UK is approximately 20,000km.

### RX 400h 'High Performance, Low Emissions, Zero Guilt' Advertisement

Developed in July 2006, this advertisement was designed to communicate the key benefits of the RX 400h and ran in the national press and in outdoor advertising. The advertisement had been approved by the Committee of Advertising Practice (CAP) prior to going live.

In March 2007, three complaints were received. The three complainants believed the claims "low emissions", "low CO<sub>2</sub> emissions" and "zero guilt" misleadingly implied the car caused little or no harm to the environment and gave a misleading impression of the car's CO<sub>2</sub> emissions in comparison with other vehicles. They argued that the "192g/km" emissions figure was high when compared to the emissions of all cars.

TGB responded to the ASA in March and challenged the complaint on the basis that:

- The advertisement had been approved by CAP in July 2006.
- The advertisement was clearly about the RX 400h and the vehicle does have low emissions within its category – details of which were included in the

body copy of the advertisement, and should therefore not be misleading.

ASA responded that disagreements between CAP and the ASA can and do occur, as in this instance. They also felt there was not a clear enough link in the body copy between the statement 'low emissions' and 'category leading'. They also felt the claim 'zero guilt' was a problem, as it suggests the car is environmentally friendly and adds to the overall impression that the vehicle's emissions are low regardless of class. The complaint was forwarded to the ASA Council for a final decision.

On 11 May 2007, the complaint was upheld and TGB was asked to withdraw the advertisement. The ASA stated: "We told Lexus not to imply in future that a car caused little or no harm to the environment and had low CO<sub>2</sub> emissions in comparison with all cars if that was not the case." Since then TGB has obtained approval for the following advertisement as part of its new campaign.



Revised Advertisement

### **Toyota European Advertising Guidelines**

The fact that Toyota operates in many different countries has led Toyota Motor Europe to begin developing a set of Advertising Guidelines that are based on "Respect", a core principle of the Toyota Way. The purpose of the Guidelines is to ensure that all communications involving the Toyota brand are consistent with the company's core values. The guidelines are structured around five key pillars:

- 1. Respect for society
- 2. Respect for people
- 3. Respect for the environment
- 4. Respect for competitors
- 5. Respect for our company and our brand

The guidelines will be rolled out in 2007 and a tracking mechanism will be implemented afterwards to monitor customer complaints.



## The Code of Conduct

### Content

In October of 2006, the new Code of Conduct was launched. Toyota's Guiding Principles outline the company's basic values (see, p. 5), and the expanded policy statement, "Contribution to Sustainable Development," describes the company's commitment to various stakeholder groups. The Code includes references to the respect of the human rights of people involved in the company's business and, in particular, to the prohibition to use or tolerate any form of forced or child labour. The aim of the Code of Conduct is to clearly delineate the type of ethical behaviour that is expected of every Toyota manager and employee. At the unveiling of the Code, Tadashi Arashima, TME President & CEO, said that each employee should carefully read through it and act in accordance with both its letter and spirit.

The code looks at how to:

- Create a harmonious and dynamic work environment;
- Achieve a safe and healthy work environment;
- Improve work efficiency and skills;
- Manage information and assets;
- Promote safety as well as research and development;
- Preserve the environment;
- Ensure honest and fair transactions, and
- Secure the trust of our customers and retailers.

### In addition it:

- Reiterates the importance of human rights;
- Looks at the importance of complying with local, national and international regulations, and
- Highlights the relations between the company and society.

The content of the Code of Conduct is available at: Attp://www.toyota.eu/07\_Publications/index.aspx

### Reporting Issues of Concern

In order to achieve full compliance with the Code of Conduct, a process for reporting issues of concern has been established and has been operational since 1 November 2006.

This process encourages employees to discuss any issue of concern with their line management. Should they wish to report misconduct, they can do this either through the internal Compliance Officer or through an external agency.

After a complaint has been filed, a specific investigation is launched that will lead to a decision by the Executive Compliance Committee within a maximum of 2.5 months. This Committee is chaired by the TME President and is run by the Compliance Officer. Since October 2006, no complaint has been introduced; only a report regarding the reception of a gift. This report was handled according to the procedure mentioned above.



### Briefing of Employees on the Code of Conduct

Between October and November 2006, a total of 19 briefing sessions, each lasting at least two hours, were organised for all line managers. These managers were then charged with passing along the information within their own group, division, department or teams.

All new recruits are routinely made aware of the Code and reporting procedures. As of FY2007, an extended

### **Employment and Growth within Toyota**

Over the years, Toyota Motor Europe's operations have grown steadily. With a 40-year presence in Europe, Toyota has grown along with the European Union, with sales companies in 28 countries overseeing nearly 3,000 retail outlets and employing some 80,000 people (including the dealerships but excluding local suppliers). explanation of the Code will be incorporated into the four-day orientation for new employees.

As of October 2006, all subsidiaries have been required to adapt their own Code of Conduct to the new Toyota Europe Code, taking into account local laws and regulations. As of April 2007, all subsidiaries had prepared a new Code of Conduct and presented it to their employees.

Naturally, this expansion has been mirrored by a significant growth in employment. Current Toyota activities are expected to create some 500 additional jobs in our new production site at St. Petersburg, Russia, and 75 in our new parts depot in Krupka, Czech Republic<sup>(1)</sup>.









European Manufacturing Companies (EMCs) include sites in the UK (TMUK), France (TMMF), Turkey (TMMT) and Poland (TMMP, TMIP)

Toyota's workforce in Europe is relatively young, with more than half the population between the ages of 25 and 34 in the manufacturing group. This age distribution

TLS = Toyota Vehicle & Parts Logistics

TME = Toyota Venice & Fails Logistics TME = Toyota Motor Europe, European Head Office NMSCs = National Marketing and Sales Companies

> can be explained by the fact that Toyota is a relative newcomer to Europe and has hired and trained local young people to work in its new plants.

 TPCCZ, Czech Republic, opened in July 2007; TMMR, Russia, opening in December 2007



% Turnover of Permanent Workforce



Legend for graph:

TME HO: Toyota Motor European Head Office EMCs: European Manufacturing Companies NMSCs: National Marketing and Sales Companies (affiliates)

### Equal Opportunity: The Continuing Challenge

Given the results of the 2005 CSR audit and facing an aging workforce, Toyota Motor Europe recognised the

need to attract, select, hire and develop its workforce and improve processes.



As the statistics show, the representation of women in the manufacturing area is still rather low, although this is not unusual within the automotive industry as a whole. Within the Toyota sales and marketing group, women represent more than one quarter of the Toyota workforce.

Gender Distribution in Sales Group (TMME HO – NMSCs – TLS) Gender Distribution in Manufacturing Group (RDMC HO – EMCs)

Men

93%



An analysis of different grades reveals that women are better represented in the professional career path at Toyota compared to industry competitors. At manager level, about one out of 10 managers is a woman, which is within the average for the automotive industry.



### Gender Breakdown in Sales Group (TMME HO only)



### Gender Breakdown in Manufacturing Group (RDMC HO only)



The principle of Kaizen, or continuous improvement, is of primary importance at Toyota, and as of 2006 a new initiative was taken to tackle diversity, with a special focus on gender. With the support of the European Social Fund<sup>(1)</sup>, Toyota Motor Europe in 2006 initiated a fact-finding exercise to determine how best to improve existing Human Resources (HR) procedures for recruitment, retention and career advancement. This Fund-supported project includes:

- The adoption of guidelines for recruiters and managers to help them in the application of gender-neutral recruitment;
- The development, planning and gradual roll-out of gender diversity awareness workshops targeting senior and middle managers. Through business



cases, the workshops focus on the roles these managers play in recruitment, coaching and development of employees, and

 In partnership with Hasselt University in Belgium, the development of an assessment tool to evaluate the business impact of gender and family-friendly measures and to identify the most appropriate and promising options for Toyota.

### Corporate Communications: "Respect" Campaign

To further demonstrate its commitment to equal opportunity and to highlight the fact that the majority of Toyota cars sold in Europe are made "in Europe, by Europeans, for Europeans," TME took the decision to set up a specific corporate communications campaign. The objective was to explain Toyota's basic stance and commitment to contributing to both the European economy and society in general. The core idea for this campaign is one of the basic values of Toyota's Guiding Principles, namely "respect". The campaign featured actual Toyota employees across Europe, who were asked about the importance of "respect" in their lives. The quotations used in the campaign were direct employee responses. The employees were filmed at their workplaces, in their homes or within their communities.

The campaign targeted Opinion Leaders across Europe and ran in key pan-European print titles between January and March of 2007, during the annual Davos meeting in Switzerland and the Geneva Motor Show.



Economic and Social Contribution Advertising Campaign 2006

### **Continuous Training & Employee Development: The Key to Sustainable Growth**

People development starts with a review of an employee's current performance in order to provide guidance through appropriate training. To that end, twice a year Toyota assesses the performance of each employee including a mid-term review. The aim is to review the performance of 100% of its labour force. A new software appraisal tool ("e-appraisal") has been designed to help the company reach that target by facilitating online monitoring of assessment participation.

Getting Toyota's complex multi-faceted organisation to act as a single entity with one approach is a constant challenge. It requires shared language and terminology, common processes, and consistent expectations in behaviour. These commonalities must not only translate across functions and businesses but also across borders, languages and culture.

To achieve this in Europe, Toyota has focussed its activities on four training initiatives to ensure that every employee understands and can work in the "Toyota Way":

- Training courses on the Toyota Way values and how to apply them;
- The Graduate Development Programme (GDP);
- The European Global Production Centre, and
- Quality Control circles.

The company has created a global standard curriculum that teaches every member its history and philosophy, its problem-solving process and business management methods. One of the keys to the success of this training is the connection between on-the-job and off-the-job training. Each course begins in the classroom, is reinforced through a project with supervision on the job, and concludes with the presentation and evaluation of the projects. Upon completion of training, participants themselves become mentors.

These training courses help to strengthen the Toyota culture in every aspect of the business so that all members can follow a common path to success. The graphs below illustrate the number of training days offered to employees by the Toyota Academy at the European Head Office. The figures do not include training courses taken outside the company.

Number of Training Days Provided by European Head Office (TMME – RDMC)

Number of People Receiving Training from European Head Office (TMME – RDMC)





### The Toyota Way Training

Training is introduced by grade, from top management on down. The initial roll-out of the Toyota Way curriculum will take a total of four years and will be extended to all new employees in the future. In 2006, TME provided training to 45% of its management and office population (3,223 employees, for a total of 70,000 training days). In 2007, the company will continue to provide training down through all levels of the organisation in every company in Europe.

### Graduate Development Programme

Toyota recruits newly graduating talent from European universities. These graduates participate in a graduate development programme lasting 18 months before receiving their first assignment within the company. Once hired, they start with the fundamentals of a particular job. In addition, they are trained in all aspects of the "Toyota Way", spending eight weeks working in a manufacturing plant and six weeks at a retail dealer and with other businesses related to their new job. A mentor is assigned to provide extra support throughout the 18-month programme. The programme was started in 2001 at RDMC with three graduates. Over the past five years it has grown steadily. In 2006, Toyota recruited 87 graduates out of an applicant pool of 4,200 from 59 universities located in 17 countries. In 2007, the programme will be extended to 125 graduates and incorporate the marketing and sales fields.



Participants of the 2006 Graduate Development Programme



### **Graduate Recruitment Evolution**

### European Branch of the Global Production Centre

The European Global Production Centre (E-GPC) was opened in Derbyshire, UK, in 2006. It uses new training technology to teach skills using actual equipment in the setting of an actual worksite. Its purpose is to train manufacturing production managers in fundamental Toyota production and shop-floor management skills.

The training is designed to strengthen quality, increase cost effectiveness, build a strong mindset and productivity, and improve safety awareness and practices.

The Centre teaches best practices in all areas of manufacturing. Supervisors spend one to two weeks in training at the Centre before returning to their respective

**Quality Control Circles** 

Toyota's Kaizen philosophy requires employees to not only continually improve their job and processes, but also to improve themselves. To facilitate this, Toyota puts a strong emphasis on training skills that make it possible for employees to take responsibility for improving their own worksites and processes. In manufacturing shops and offices, this takes the form of Quality Control (QC) Circles.

A QC Circle is a small group of people who do the same or similar work and who agree to meet together on a regular basis during their workday to identify, analyse, and solve problems that arise. The goal is to devise and present solutions to management and, where possible, to implement solutions themselves. QC Circles were first established in Europe at TMUK in 1994 and tend to focus on such factors as cost issues, safety and productivity.

### Training in the After Sales Network

plants to share what they have learned with their own team members.

In 2006, over 750 members were trained at the E-GPC and in 2007 that number is expected to double.

Headcount Trained for E-GPC





Every plant has implemented the activity and all plants compete to present the best QC Circle activities at either the annual pan-European or the Global QC Convention. In 2006, over 6,000 employees (47% of the total production population) were involved in over 700 QC circles. The outcome is not only interventions leading to improvements at the worksite, but also increased capability on the part of employees in problem solving and consensus building.

Human Resources development in the After Sales Division starts with support for technical schools provided through the Toyota Technical Education Program (T-TEP) (see p. 97).



### **Toyota Training System**



Toyota Motor Europe's Customer Service Training Centre has provided training courses to the NMSCs through a cascading "Train the Trainer" system since 1990. The "Train the Trainer" curriculum includes:

 The technical curriculum known as "TEAM" (Technical Education for Automotive Mastery), which is Toyota's technician-training programme conducted at the national level for its own network. It is composed of four levels starting with the basic Level 1, called "Pro-Technician", through to the highest Level 4, called "High-Tech Master Diagnosis Technician".

- The Toyota Service Advisor Programme (TSAP) curriculum, which trains service advisors in the network at two different levels.
- Body and paint training, which is also conducted at various levels and provides certification.

The graphs below show the total annual training hours and the annual training hours per technician provided by the Customer Service Training Centre.



Average Training Hours per Technician

### **Total Annual Training Hours**



### **Retailer Training** Toyota Retail Academy

The Toyota Retail Academy provides the Toyota NMSCs with training solutions for retailers. This involves three components:

- The essential transfer of knowledge concerning Toyota products, to ensure that retailers are able to present them knowledgeably, professionally and in a friendly and efficient manner.
- Skills training with respect to general sales techniques and customer handling.
- **3.** Training in how to establish the necessary systems and processes to bring the transfer of skills into place.



Auris drive-in movie at Auris Train the Trainer event in Malaga, Spain

In 2006, the product-training challenge for the Toyota Retail Academy was to develop a training programme designed to ensure that Toyota staff, both at the NMSC and retailer level, had full knowledge of the Auris, Toyota's latest model, in order to deliver an outstanding launch. To that end, the Toyota Retail Academy delivered 270 hours of product training on the Auris in FY2006.

### **Retail Skills Training**

With regard to retail skills, the Toyota Retail Academy's mission is to devise a training curriculum that will enable retail staff to provide the customer with detailed and comprehensive information. Inherent in the curriculum is a staff-development strategy supported by a checklist of standardised information and skills to support national marketing and sales companies with implementation.

Toyota Retail Academy and, specifically, the Retail Skills

Training department are responsible for defining European skill sets and behaviour training (Toyota Way values) for retail staff, including sales consultants, retail managers and retail principals.

The graphs below show the total number of annual training hours offered to NMSC training managers and the number of certifications issued to Training managers for Retail Skills Training Courses.

# Total Annual Retail Skills Train the Trainer Hours for NMSC



### Certifications Issued for Skills Training Courses

No. of Certifications Issued (accumulated) 60 40 20 0 24 2005 2006

### The Toyota Working Environment: Labour and Management Relations Mutual Trust and Dialogue

Toyota's Guiding Principles call for the company to honour the language and spirit of the law as well as to respect the culture and customs of every nation. As a result, the company has established collective agreements, information, and consultation processes following specific national traditions in the field of social dialogue that are fully in line with the existing body of EU legislation and practice. Where collective agreements have been reached, these cover 100% of our employees.

Freedom of association and collective bargaining are already clearly established throughout the company's European activities.

### Toyota European Forum

In July 2006, Toyota Motor Europe celebrated the 10th anniversary of its Toyota European Forum (TEF), which is the company's European Works Council. Toyota was among the very first employers to adopt such a forum, based on an agreement signed on 10 July 1996 and revised on 11 July 2003.

Today the Forum is composed of 15 representatives from senior management and 23 employee representatives.

Since its creation, three major training sessions for the employee representatives have been organised in the United Kingdom (Esher and Stratford-upon-Avon) and in France (at the Valenciennes plant). Over the years, the





The 2006 Toyota European Forum

Forum has helped to build greater transparency and a better quality of dialogue.

### A Safer Work Environment

Toyota is committed to providing fair working conditions and to maintaining a safe and healthy working environment for all its employees.

Joint employee and employer safety committees have been set up in accordance with European Union and local legislation.

These committees, covered by health and safety agreements, cover 100% of employees and have been established to:

- Perform advisory functions (with respect to legislation and both preventive and curative improvements), and
- Monitor activities, i.e. review company performance (KPIs) and verify workplace safety.

In 2006, safety committees produced a pan-European campaign for office and logistics centres focussing on "slips, trips and falls". It included a safety slogan competition and a Safety Month programme to raise awareness. Campaign materials, such as folders and practical checklists, were distributed to personnel. Special attention was given to fall protection in vehicle logistics operations and work place ergonomics.

• Debate safety issues;

Some Examples of Joint Health & Safety Committees	Composition	
ТМИК	<ul> <li>MD (Chair)</li> <li>Directors</li> <li>TMAB (Employee/Union) Representatives</li> <li>H&amp;S Mgr</li> </ul>	
TMMF	<ul> <li>Manufacturing S GM (Chair)</li> <li>GMs</li> <li>Union Representatives</li> <li>Labour Inspector</li> <li>H&amp;S Mgr</li> </ul>	
ТММР	President (Chair)     All Mgrs and above     MAB (Employee/Union)	
ТМІР	Representatives • H&S Mgr	



Great progress was also made in 2006 in the development of the foundations for pan-European health and safety activities in the manufacturing environment. The first set of common pan-European health and safety standards have been established for the areas of ergonomics, risk assessment and working with machinery. Implementation of these standards should help to achieve a common safety level among Toyota's European Manufacturing Companies (EMCs) and ensure that the concept of "built-in" safety is realised.

In the future, Toyota will continue to further develop common health and safety standards for its European operations and enhance the company's health promotion activities.

Finally, there is also a health and safety dimension to the benefits provided to all Toyota employees – full-time employees, employees with a limited-duration contract and part-time employees. The latter benefit not only from a complementary pension scheme, but also a complementary health and hospitalisation insurance in countries where this is not fully covered by the national social security system. Differences in all other types of benefits result from differences in local practices and/or national legislation or from grade differences.



Pictures taken during health and safety audits

### Some Facts and Figures

With regard to health and safety, TME has corporate policies and standards setting clear guidelines in risk assessment, hazardous substances, ergonomics, personal protective equipment, emergency planning, fire management, working with machines and healthcare management. It continuously looks at improvements to make a safer and healthier work environment for all its employees. The graphs below show injury frequency as well as the lost-day rate. The higher injury rate in parts logistics can be explained by the opening of new depots.

### Injury Frequency Rate in Manufacturing Group (EMCs only)



### Injury Frequency Rate in European Head Office (TMME & RDMC) and Parts Logistics, FY2006



The injury rate is lower for the EMCs than it is for parts logistics. This can be explained by the fact that stricter safety measures have been implemented more recently for the latter; those for the EMCs are already well-established. The situation for parts logistics is expected to improve over the next year with the introduction of more safety measures. Data collection started in FY2005 for the EMCs, while it only commenced in FY2006 for parts logistics and will only start in FY2007 for vehicle logistics.

There were no work-related fatalities in the European manufacturing or office activities for FY2006.

Toyota is constantly striving to reduce the number of work-related accidents. Several actions were taken in FY2006 that proved highly successful in reducing the number of work accidents. These include:

- A policy change indicating that each EMC must now conduct its own analysis of the accident data and use it to improve safety at work.
- Regular meetings of the Health and Safety Committee to share best practices among EMCs and to visit a different plant each time in order to understand the local issues.
- Implementation of the "Health and Safety 12 key standards," which set a common standard across Europe in areas such as ergonomics, working with machines, health management, fire management, H&S policies, hazardous substances and emergency planning.





Yuji Ando /ice-President Purchasing Division, TME

in supplied parts, we know that working together is the best way to get the job done, efficiently and effectively.

Toyota seeks to contribute to society by providing customers with outstanding vehicles that fully meet their mobility needs. To achieve this objective, Toyota's Purchasing Division must ensure long-term and stable procurement of the best products at the lowest price and in the most timely and efficient manner. That is why Toyota puts such a premium on establishing and maintaining stable, long-term relationships with its European business partners (e.g. suppliers, logistics partners, etc.).

### The Toyota Purchasing Policy

Toyota conducts purchasing in accordance with the following three principles:

### 1. Fair Competition Based on an Open-Door Policy

Toyota is open to doing business with all suppliers, regardless of size, from all over the world. Every potential business partner is treated equally and fairly and is granted the opportunity to present its products, services and capabilities. The company also evaluates suppliers' willingness to address societal expectations, particularly with respect to environmental issues and corporate social responsibility.

### 2. Mutual Prosperity Based on Mutual Trust

Toyota bases its stable procurement on developing long-term and mutually beneficial relationships with its business partners; such relationships can only be developed on the basis of mutual trust and strong communication.

### 3. Good Corporate Citizenship

Toyota strives to make an economic and industrial

contribution commensurate to its market presence within each region. The company actively promotes the purchase of locally produced parts, tools and equipment from local business partners.

In addition, Toyota seeks to contribute to economic and industrial sustainability by implementing strong environmental management systems informed by clearly articulated social and economic initiatives.

The measure of success of Toyota's business in Europe can be taken from the following facts (TME):

- TME's purchases more than doubled since 2002, in line with its manufacturing expansion in Europe.
- Local content of core models: > 90%
- Total purchases have been broadly balanced between Japanese and European suppliers, showing equal opportunity to all suppliers.
- Top 10 suppliers account for almost 40% of the total purchase amount.
- · Partnership with 250 suppliers from more than 400 locations in 22 countries.

### 2006 Supplier Base Location by Purchase Amount



TME 2007 ABM Superior Awardees			
Cost	Denso		
Quality	Valeo		
Supply	Bourbon Fabi		
Production Preparation	Borgers		

### Toyota Annual Business Meeting

The 2007 theme for the Annual Business Meeting (ABM) was Quality and Customer First. Over 700 guests (representing 250 suppliers) attended the annual occasion.

As in previous years, Toyota used the opportunity to acknowledge business partners that had demonstrated significant achievements in quality, supply, cost and production preparation. In 2007, 15 supplier companies were recognised for their outstanding support in the above-mentioned fields.



### Toyota European Association of Manufacturers (TEAM)

TEAM is an association of 44 European Toyota business partners who have come together to develop and improve individual and group performance through the exchange of information and best practices from the shop floor.

Suppliers are divided into seven core groups, which meet regularly and visit each other's facilities to develop practical problem-solving initiatives. The results are shared with other TEAM members and conclude with Toyota presenting awards of recognition to the suppliers judged to have completed the best problemsolving projects.

For the 2006-2007-project year, Mecaplast, a supplier of exterior plastic parts, won the Best Project for its PPM (Parts Per Million) improvement for a fender liner. Bosch and Autoliv, suppliers of ABS control and airbag and steering wheel assembly, respectively, were the runners-up.

### Working Directly with Suppliers New Model Production Preparation

Toyota conducts Supplier Parts Tracking Team (SPTT) activities to assist each supplier partner in Europe with the necessary production preparation related to new model programmes. The team is comprised of engineers and specialists from Toyota's Quality, Production & Logistics, Design, and Production Engineering Divisions.

The essence of the SPTT activity is collaboration. Any problem encountered during the development stage is tackled jointly with suppliers. The activity runs for three To establish a stronger supplier base, TEAM executives together with TME's purchasing management launched a three-year activity plan during its Annual Review Meeting. The objective is to achieve process improvement by 2009, while focussing on flow-out prevention and practical problem solving in the first two years.



Tetsuo Agata, Executive Vice-President TME, presents the Best Project Award to Mecaplast

years prior to a model launch, and focusses on activities such as simultaneous engineering, built-in quality, process design, capacity management and project management.

The work is located at the manufacturing locations of Toyota's suppliers, where the actual parts and processes can be directly reviewed and analysed. The "Genchi Genbutsu" (go to the source) approach is essential for Toyota to reliably grasp the facts and tackle the problems collaboratively with its suppliers.

### Mass Production Capability Development and Supplier Development

Continuous improvement extends beyond Toyota's own direct operations. Purchasing engineers working in the Supplier Production Management group conduct development activities directly at suppliers' manufacturing plants to achieve the requirements set for quality and delivery.

When a supplier has trouble attaining Toyota's targets, engineers from the Supplier Production Management department are assigned during an intensive six-month period to tackle the problems together with the supplier teams. The aim is not only to solve specific problems, but also to develop the operational and management capabilities of the supplier, so that after Toyota's exit, the improved performance can be sustained.



### Reinforcing Environmental Management with all Suppliers Key Environmental Priorities for Toyota Business Partners:

- ISO 14001 Certification
- Elimination of Substances of Concern (SOC)/ submission of SOC Declarations
- Data submission to the International Material Data System (IMDS)
- Management of safe transportation and storage
- Use of recyclable packaging

### **Green Purchasing Guidelines**

In pursuit of Toyota's environmental aims, the new Green Purchasing Guidelines have been issued to all suppliers at the 2007 Annual Business Meeting. The guidelines set out Toyota's aims for environmental protection in Europe and apply to all business partners of parts and raw materials, as well as car accessories and service parts.

The new version incorporates the following:

- Contribution Towards Sustainable Development
- Voluntary Audit Management System for SOCs
- Information about Eco-VAS
- Business initiatives for environmental compliance and performance improvement

### Phase-out of SOCs

In order to meet the requirements of the EU End-of-Life Vehicle (ELV) Directive, Toyota insists that its business partners work closely with the company to attain the target of no banned substances of evironmental concern in Toyota vehicles.



- Toyota's goal is to achieve SOC removal before the EU regulation deadline.
- Removal of four heavy metals (Lead, Mercury, Cadmium and Hexavalent Chromium).
- Scope: Original equipment parts as well as service parts (added later on cars).

Comply with ELV Directive Phase Out of Four Heavy Metals (Lead, Mercury, Cadmium and Hexavalent Chromium)	2006	2007	2008
Lead – Elastomers and initiators			
Cadmium – Thick film pastes			
Lead - Brake linings, valve seats			
Cadmium – Optical compounds			
Hexavalent Chromium - Corrosion preventive coatings			
Lead – Aluminium for machining and bearing shells and bushes			
Completed Ongoing			

### International Material Data System (IMDS)

In order to manage substances of concern, suppliers are required to input material data about their procured parts and components, including the volume of certain substances that they contain, into the International Material Data System.

- Toyota uses IMDS to ensure compliance with the Endof-Life Vehicle and Type Approval Directives.
- As of October 2008, new Toyota models will have to comply with the "3R" requirement for Type Approval (85% Reusable and/or Recyclable and 95% Reusable and/or Recoverable).
- The data is important for innovation in the development of environmentally friendly vehicles.
- Material composition data collection has improved over time.

### **Timetable of Activities for IMDS Collection**



Completed

### Encouraging Business Partners to Act in a Socially Responsible Manner

Toyota requires all goods or services supplied to the company to be in compliance with all regulations or standards applicable to the destination countries. This requirement pertains to the manufacture, labelling, transportation, importation, exportation, licensing, approval or certification of goods and services. It covers environmental matters, wages, hours, conditions of employment, subcontractor selection, forced and child labour, discrimination, occupational health and safety, and motor vehicle safety.

In 2006, the Toyota Purchasing Division issued its guidelines implementing the Toyota policy statement, "Contribution towards Sustainable Development", to all of its suppliers (see p. 5-6).

Moreover, in 2007, TME launched the online CSR survey

requiring all suppliers to verify information on the status of their adherence to environmental and social standards applicable to Toyota's supply chain. The survey focusses on key CSR issues in purchasing and aims at:

- Visualising suppliers' CSR activities;
- Having a readily available KPI of suppliers' CSR performance, and
- Establishing risk management and improvement plans based on the information gathered.

### **Key CSR Issues in Purchasing**

- 1. Ethical Behaviour
- 2. Health & Safety
- 3. Working Conditions
- 4. Supplier Management
- 5. Community Improvement



greater road safety, and fostering high-quality technical

education.

Toyota aims for growth that is in harmony with society throughout all areas of its business activities.

Following TMC's Guiding Principles (see p. 5), Toyota Motor Europe strives to honour its commitment to the broader community in which it operates, whether at the local, regional, national, pan-European or global level. Toyota strongly encourages all of its affiliated companies to actively contribute to and engage with their local communities, and has created a decentralised budget and decision-making process to allow each company to adequately respond to the needs and demands of their own local constituencies.

Toyota's aim is to contribute to local communities in partnership with various stakeholders, such as national and international non-governmental organisations, international associations and federations, public authorities at all levels and educational institutions. Working together with its stakeholders, Toyota knows that it can achieve more than by acting alone.

Creating active collaborations with civil society is the cornerstone for social contributions. It allows Toyota's affiliated companies and employees to be in close contact with other stakeholders and to better understand their needs and expectations. This kind of collaboration and communication has led TME to focus on three specific areas for its social contributions:

- 1. Environmental awareness-raising;
- 2. Road safety, and
- 3. Technical education (since 2006).



Structure of Social Contributions in Europe

To ensure the overall consistency and unity in its social contributions, TME created the Toyota Fund for Europe (TFfE) in 2004. The Fund works in close collaboration with Toyota's subsidiaries and helps ensure that their contributions are consistent with the company's overall values and priorities.

While the Fund has its own budget and reviews and selectively funds proposed projects (see p. 94), its direct contributions are just one part of Toyota's overall social contributions. As noted on p. 93, Toyota's total social contributions in Europe in FY2006 amount to  $\in$ 11.8 million, of which the Toyota Fund for Europe's direct contributions amount to  $\in$ 1.5 million.

### Social Contributions in Europe

Three different Key Performance Indicators (KPIs) are currently being tracked with regard to social contributions:

 Percentage of social contributions made by TME and its affiliates invested in strategic priority areas (target:

### Strategic Focus

The following chart shows the evolution of social contributions in Europe since FY2003. It should be noted, however, that some of the increase in contributions may also be attributed to increased central registration of social

minimum 50% by 2010).

- Percentage of operating income spent on social contributions (target: 1%).
- Percentage of subsidiaries having specific social contributions policies in place (target: 100% by 2010).

contributions (with more countries now reporting). The total amount of social contributions in Europe for FY2006 is €11.8 million. This amount does not include employees' involvement and time, or other in-kind donations.



**Evolution of Social Contributions in Europe** 

The above chart demonstrates that Toyota was able to achieve its 2010 target, with respect to contributions in its strategic priority areas, in FY2006.

Support to technical education was added as a strategic

### Percentage of Operating Income

Toyota's second quantitative target in Europe is contributing 1% of operating income each year to local

### Social Contribution Policies at the Subsidiaries

The third KPI instituted with respect to social contributions measures the extent to which TME's affiliates have developed their own social contribution policies and procedures. The target set for 2010 is to have social contribution policies and procedures

priority in 2006 and the largest amount of money was devoted to this area in FY2006. These contributions are consistent with the EU's Growth and Jobs strategy, part of which calls for investment to enhance the quality of technical education in Europe.

communities. In 2006, Toyota exceeded this goal, making contributions amounting to 1.02% of its operating income.

in place at 100% of the company's affiliates.

In 2006, 18 companies (53% of the affiliates) had developed such policies and procedures. That puts TME on track to achieve its 100% target by FY2010.

### % of Affiliated Companies with Social Contributions Policy



Example Social Contribution Policy: TMMT (Turkey)			
Priority Areas	Education, traffic safety and the environment		
Focus	City of Adapazari		
Project Selection Criteria	Estimated impact on general public/society, the company, level of local needs and cost performance		
Approval Procedure	Projects submitted to and approved by the plant's Executive Committee (consisting of Vice-Presidents and above)		
Budget Guideline	One euro / every one vehicle produced		

### Toyota Fund for Europe (TFfE)

The purpose of the Toyota Fund for Europe is to enhance the strategic impact of Toyota's social contributions in Europe. The TFfE Board is composed of senior Toyota management and representatives from the subsidiaries who meet twice a year. The TFfE Board reports to the CSR Committee.

The role of the TFfE Board is to define the overall social

### Selection Criteria

The TFfE selects projects for funding on the basis of the following criteria:

# Toyota Fund for Europe –

**Distribution of Contributions** 



contributions strategy of the TFfE and, for Toyota in Europe, to:

- 1. Identify, select and fund appropriate projects;
- 2. Review, follow up and evaluate the projects funded, and
- Support Toyota subsidiaries' project development and strategy setting.
- Consistency with strategic funding priorities (environment, road safety and technical education);
- Pan-European scope;
- Degree of Toyota involvement;
- Visibility;
- Extent of a hands-on/pragmatic approach, and
- Multi-stakeholder involvement.

In 2006, the Fund received 40 requests for funding, from NMSCS, EMCs and external NGOs, of which the Board approved a total of 30. All 30 of the projects involved the NMSCs or EMCs. The €1.5 million contributed to these 30 projects represents a 50% increase in funding and a 30% increase in the number of projects funded over 2005 levels.

### A Selection of Toyota-Sponsored Projects in Europe Raising Environmental Awareness

### **Educational Partnership for Sustainable Development (France)**

In December of 2005, Toyota Motor Manufacturing France (TMMF) signed a partnership agreement with an environmental NGO, CPIE Bocage de l'Avesnois. The objective of the partnership is twofold: 1) to maintain biodiversity on the plant's grounds and 2) to enhance the environmental and ecological awareness of children in the surrounding communities.

CPIE Bocage de l'Avesnois helped TMMF to create a biodiversity inventory of its premises, including plants, flowers, insects and birds, and worked with the company to improve the plant's environmental management. Since the contract was established, 20



Spring 2006: First Green Visit

classes of students from 12 different local schools have learned about TMMF and participated in outdoor ecology lessons on the plant grounds.

### EcoLife: Promoting EcoDriving (Belgium)

In 2006, Toyota Belgium initiated a collaborative project with EcoLife, a local NGO that develops action models to demonstrate how the environmental impact of daily life can be lessened. With the support of Toyota, they developed a series of five EcoDriving Simulators that can be used to demonstrate how changes in personal driving techniques can reduce the environmental impact of car usage.

The simulators are made available for workshops offered to public employees, private companies and all kinds of non-profit organisations. They are also used at major public events where the public can participate in a contest to drive as far as possible with 0.1 litres of petrol.

The project was launched in Brussels in the presence of the Flemish Minister of Mobility on 21 March 2007. Within the first four months of the project, workshops had already been offered to 182 people and events had raised awareness and informed more than 6,000 about the advantages of EcoDriving. The Belgian project is considered to be a pilot for further replication in Europe. For further details, see: (in Dutch)

http://www.ecolife.be/ecodriving/bestuurders.asp



### Environment & Innovation: Eco-Schools (pan-European)

Since 2005, Toyota has been working with Eco-Schools, an international programme of the Foundation for Environmental Education (FEE), on a special project called "Environment & Innovation" in Spain, Italy Germany, England and Northern Ireland. The purpose of the programme is to assist schools in the implementation of innovative problem-solving projects to promote sustainable mobility solutions, in their local communities.

Over 100 schools participated in the competitions and 47 schools received grants to implement their ideas, involving nearly 25,000 students. A national winner was



selected in June of 2007, and a European winner, in September of 2007. For further details, see:

### Road Safety

### ADAC-Toyota: "Safe in the Car" - Five Years of Road Safety Partnership (Germany)

More than 72% of traffic fatalities of children under the age of six are due to incorrect fastening of child safety devices (seatbelts, infant and child car seats, and seatbelt adapters). In 2003, Toyota Germany joined with ADAC, the German Automotive Consumer Association, to initiate a campaign entitled "Safe in the Car" and increase awareness of special safety measures to protect children in the car.

The project involves the organisation of training sessions for parents offered by professionals at pre-schools, toy retailers and Toyota dealers. Since 2003, roughly 8,000 sessions have been conducted with over 330,000 parents participating. Over 200 Toyota dealers have made cars available for the training sessions. For further details, see: <u>http://www.sicher-im-auto.com</u> (in German)



### Traffic Safety Campaign: "Respecting People, Respecting Traffic" (Turkey)

ToyotaSa (the Turkish NMSC) launched a traffic safety campaign in 2005, targeting primary school children as future drivers.

In 2006, a pilot project was implemented in the city of Eskisehir. A competition on traffic regulations and a painting competition with a traffic safety theme were conducted in local schools. Over 100 children participated.

Also developed in 2006 was the "Toyota Traffic Game," an interactive education software to teach children about 160 traffic regulations, with 60,000 CD-ROMs distributed to Toyota's nationwide retailer network. A special Internet site on this theme was also set up. So far, over 500 children have learned about traffic regulations through this project.



ToyotaSa will continue and expand this project and 2007 will also see the opening of a traffic park in Eskisehir. For further details, see: <u>http://www.toyotatrafikoyunu.com/</u> (in Turkish)

### **TOP-25 (pan-European)**

In 2006, Toyota Motor Europe became one of the funding partners of TOP-25, a European not-for-profit road safety association.

TOP-25's aim is to promote responsible driving among young people by using fun interactive tools like the AlcoKart – a driving simulator equipped with an on-board computer that simulates the experience of driving under the influence of drugs or alcohol.

As of May 2007, TOP-25 had organised 10 events in France and Portugal, allowing over 1,000 participants to experience the AlcoKart and the very real dangers of



driving under the influence. In 2007, many more events are planned at venues in Germany, Poland, Bulgaria and elsewhere. For further details, see:

<u>http://www.top-25.eu</u>

### **Technical Education**

### Skills Contest: European T-TEP Schools Meet in Rotterdam

In March of 2007, teams from T-TEP schools in France, Great Britain, Spain, the Netherlands and Italy participated in the first Toyota Open Skills Competition, held at the Ahoy stadium in Rotterdam, the Netherlands. The competition, organised by Toyota Motor Europe in partnership with Skills Netherlands, served as a pilot competition for the pan-European skills contest, Euroskills 2008.

The five competing teams were all winners of national competitions that pitted teams from the various T-TEP schools in each country against each other. In Rotterdam, each team was given the opportunity to demonstrate its mastery of practical skills learned through T-TEP. At the



end of the three-day competition, the British students scored the highest and won the Toyota Open Skills Competition. For further details, see :

### **Toyota Technical Education Programme (T-TEP)**

The existence of high-quality technical education in Europe is obviously of great importance to Toyota. It is, however, also a pressing social need in Europe as a whole, as expressed by the European Commission in its "Growth & Jobs" strategy. That is why Toyota Motor Europe last year decided to put even more emphasis on strengthening its relations with technical and vocational schools in Europe.

The goal of Toyota's Technical Education Programme is to provide technical vocational schools and institutions with materials such as engine simulators, cutaway components, technical documentation and vehicles, as well as important services such as teacher training.

In some countries, schools are also used as decentralised training outlets for the training of personnel for the Toyota network. This directly benefits the schools



as it ensures that they are kept up-to-date on the latest technologies.

Throughout Europe, over 200 schools in more than 20 countries are supported with Toyota materials and work collaboratively with the national NMSCs as well as with local dealers. Five schools were added to this continuously growing network in 2006 alone.



### T-TEP Development: Number of Schools and Countries

97 Social Performance - Engagement towards the Community

### Stakeholder Engagement – Our Partners

In addition to its various efforts in support of social contributions projects, Toyota continues to collaborate actively with a number of specific stakeholders.

### World Business Council for Sustainable Development (WBCSD)

Toyota Motor Europe is actively involved in a number of WBCSD activities and working groups, namely Energy & Climate and Mobility for Development. In the Energy & Climate area, Toyota actively participates in the fact-finding and strategic discussions that have resulted in the WBCSD trilogy publications, *Facts and Trends to 2050, Pathways to 2050,* and *Policy Directions to 2050.* The company has also been involved in the development of standards, and has strived to implement these strategies and standards in its own day-to-day business.



World Business Council for Sustainable Development

For example, the Greenhouse Gas Emissions Guideline developed by the WBCSD several years ago today forms the basis of TME's own GHG management programme. For additional information, see: Attp://www.wbcsd.org

### CSR Europe

Toyota Motor Europe is a member of CSR Europe, the business organisation that promotes corporate social responsibility in Europe. Toyota also serves on the board of this NGO.

In 2006, the focus of activity was on the creation of the EU Business Alliance for CSR. The alliance, initiated by the European Commission, is a political umbrella for

### BUSINESSEUROPE (Confederation of European Businesses)

Toyota Motor Europe joined UNICE's Advisory and Support Group in January 2005. UNICE – now BUSINESSEUROPE – is composed of 39 European national business federations.

BUSINESSEUROPE formed the Advisory and Support Group to allow leading European businesses to participate directly in the organisation's work. Currently there are 26 companies listed as members, meeting three to four times per year. TME has attended and

### **Relations with Authorities**

The legislative agenda for 2006-2007 saw the conclusion of one major legislative undertaking and the commencement of another with a direct impact on Toyota's business activity.

In December 2006, the Euro 5/6 passenger vehicle emissions standards were defined for Europe. TME actively engaged with all stakeholders involved to achieve an acceptable and reasonable outcome. The end result, although challenging, will greatly improve vehicle emissions in 2009 when Euro 5 comes into force,



CSR initiatives by large companies, small and mediumsized enterprises, and their stakeholders.

# BUSINESSEUROPE

participated in the confederation's working groups on a wide range of subjects, including climate change and research and development. For more information, please visit:

and sets even stricter values for 2014 (Euro 6). TME fully supports the new emissions targets for both nitrogen oxide (NOx) and particulate matter (PM).

In February of 2007, the European Commission made a proposal for CO<sub>2</sub> emissions from passenger cars, in a communication titled: *Results of the Review of the Community Strategy to Reduce CO<sub>2</sub> Emissions from Cars.* In response to the new passenger vehicle CO<sub>2</sub> targets for Europe, TME's stance is summarised on the next page:

- TME is party to JAMA's voluntary commitment with the European Commission to reach 140g/km by 2009.
   JAMA has met its interim target and has made progress since that date.
- The European Commission has stated that it intends to introduce legislation to oblige automakers to introduce new cars with average CO<sub>2</sub> emissions in 2012 of no more than 120g/km, with 130g/km being achieved by motor vehicle technologies and the remaining 10g/km being secured by six specific so-called complementary measures.
- TME has previously noted that a target of 120g/km of CO<sub>2</sub> is extremely challenging and that:

- The timeframe is very short: 2012 is only three years after 2009, the date for 140g/km;
- The complementary measures may be able to contribute more than 10g/km;
- There are other complementary measures not mentioned by the European Commission, and
- A broad-ranging integrated approach is essential if significant and early reduction of CO<sub>2</sub> emissions is to be achieved.
- However TME is fully committed to continuing its efforts to reduce emissions of CO<sub>2</sub>, not only from its products but also its activities, and has made substantial progress in this regard in recent years.

### European Automobile Manufacturers' Association (ACEA)

TME submitted a formal application for ACEA membership to the association's president in January 2005 as the company wished to join with its European competitor OEMs in representing the auto-making sector to the EU's institutions. In June of that year, ACEA's board asked TME to observe five of its working

groups as an interim measure, which TME began to do as of September. In April 2007, ACEA's board decided to recommend to the annual General Assembly that TME should be admitted as a member of the association from 1 January 2008. TME now looks forward to participating as a full member as of that date.

### Toyota Technology Seminar

The second Toyota Technology Seminar was held early in June 2007 outside Berlin. More than 150 participants from the European Commission, European Parliament, national authorities, the media and investment institutions learned about Toyota's activities and priorities in the areas of environmental and safety technology.

Participants experienced these technologies both through presentations and "Ride & Drive" sessions. On the environmental side, a line-up of hybrid cars demonstrated how the technology has developed over the past 10 years and how it can meet the needs of different markets.

Active and passive safety technologies on display included Lane Keeping Assist, VDIM (Vehicle Dynamics Integrated Management), Frontal Pre-Crash, Rear Pre-Crash and Intelligent Parking Assist.

Presentations from the European Commission and other stakeholders, including the Low Carbon Vehicle Partnership and the FIA Foundation for the Automobile and Society, focussed on issues such as the role of consumers, climate change, real-life safety and environmentally efficient technologies, and actions being conducted at the national level.



Toyota Technology Seminar outside Berlin, Germany, in June 2007



Toyota Technology Seminar outside Berlin, Germany, in June 2007

# **Glossary of Terms**

ABM	Annual Business Meeting
ACEA	European Automobile Manufacturers Association
ARERAP	Authorised Repairer Environmental Risk Audit Programme
ASE	Average Specific Emission
ASR	Automotive Shredded Residue
A/T	Automatic Transmission
BAT	Best Available Technique
CARE	Consortium For Automobile Recycling
CFC	Chlorofluorocarbon
CNG	Compressed Natural Gas
со	Carbon Monoxide
<b>CO</b> <sub>2</sub>	Carbon Dioxide
CSR	Corporate Social Responsibility
СVТ	Continuously Variable Transmission
СҮ	Calendar Year (1 January – 31 December)
D4	Direct Injection 4-Stroke Petrol Engine
D-4D	Direct Injection 4-Stroke Diesel Engine
DPNR	Diesel Particulate and Nox Reduction Catalyst
EACO	Environmental Affairs Coordination Office
Eco-VAS	Eco-Vehicle Assessment System
ECU	Engine Control Units
ED <sup>2</sup>	Toyota Europe Design Development
EGR	Exhaust Gas Recirculation
ELV	End-of-Life Vehicle
EMAS	Eco-Management and Audit Scheme
EMC	European Manufacturing Company
EMS	Environmental Management Systems
EPG	Environmental Purchasing Guidelines
EPI	Exhaust Port Injector
ETS	Emissions Trading Scheme
FCHV	Fuel Cell Hybrid Vehicle
FY	Fiscal Year (1 April – 31 March)
Genchi Genbutsu	Japanese term that roughly translates to "go to the source and see for yourself
	to find the facts to make correct decisions"
GHG	Green House Gas
GRI	Global Reporting Initiative
GRSP	Global Road Safety Partnership
GRSI	Global Road Safety Initiative
GTL	Gas-to-Liquid
HAZMAT	Hazardous Materials
HB	Hatchback
HC	Hydrocarbons
HFC	Hydrotiluorocarbons
Hoshin	Japanese term that translates to "direction" or "needle", as in a compass.
	Usually used as Hoshin Kanri, meaning Direction Management.
HV	Hybrid Venicle
HVAC	Heating, Ventilation, Air Conditioning
	International Dismantling Information System
JAIVIA	Japan Automobile Manuacturers Association
raizen	Japanese term that roughly translates to "continuous improvement"
	Lile Cycle Assessment
IVI/ I	ivianuai Iransmission

NCAP	New Car Assessment Programme	
NGO	Non-Governmental Organisation	
NMSC	National Marketing and Sales Company	
NMHC	Non Methane Hydrocarbons	
NOx	Nitrogen Oxide	
ODS	Ozone Depleting Substance	
РСВ	Polychlorinated Biphenyl	
PDC	Parts Distribution Centre	
PDI	Pre-Delivery Inspection	
PM	Particulate Matter	
PP	Polypropylene	
PVC	Polyvinyl Chloride	
R&D	Research & Development	
RDMC	Research & Development and Manufacturing Company (part of TME)	
REACH	Registration, Evaluation, Authorisation of Chemicals	
REC	Regional Environmental Centre	
SCF	Social Contributions Fund	
SED	School for Employee Development	
SOC	Substances of Environmental Concern	
SOx	Sulphur Oxide	
SRD	School for Retail Development	
SSD	Schools for Sustainable Development	
TEAM	Toyota in Europe Association of Manufacturers	
TEF	Toyota European Forum	
THS	Toyota Hybrid System	
ТМС	Toyota Motor Corporation	
ТМЕ	Toyota Motor Europe	
ТМІР	Toyota Motor Industries Poland	
ТММЕ	Toyota Motor Marketing Europe (part of TME)	
TMMF	Toyota Motor Manufacturing France	
ТММР	Toyota Motor Manufacturing Poland	
TMMR	Toyota Motor Manufacturing Russia	
тммт	Toyota Motor Manufacturing Turkey	
TMUK	Toyota Motor Manufacturing UK	
Toyota D-CAT	Toyota Diesel – Clean Advanced Technology	
TPCA	Toyota Peugeot Citroën Automobile	
TPCE	Toyota Parts Centre Europe	
TPCDE	Toyota Parts Centre Germany	
TPCDK	Toyota Parts Centre Denmark	
TPCGB	Toyota Parts Centre Great Britain	
TPCNO	Toyota Parts Centre Norway	
TPS	Toyota Production System	
TSM	Toyota Service Marketing Manual	
TSOP	Toyota Super Olefin Polymer	
T-TEP	Toyota Technical Education Programme	
VLG	Vehicle Logistics Group	
VOC	Volatile Organic Compounds	
VVT-I	Variable Valve Timing-intelligent	
WBCSD	World Business Council for Sustainable Development	
Yokoten	Japanese term that roughly translates to "best practice sharing"	
5R	Refine, Reduce, Reuse, Recycle, Retrieve	

GRI	Report content (key indicators)	Page
1.1	Statement from the CEO on vision and strategy	1
	Description of key impacts, risks and opportunities	
Organi	sational profile	
	Name of the company	
2.2	Major brands, products and services	
2.4	Location of company's headquarters	
2.5	Countries in which the company has operations	
2.7	Markets served	
2.8	Scale of the company	
2.10	Awards received in the reporting period	
Report	Parameters	
0.1	Report profile	incide front cover
3.1	Contact point for questions recording the report	inside front cover
3.4	Contact point for questions regarding the report	Inside front cover, back cover
0.5	Reporting scope and boundary	incide front cover
3.0	Process for defining report content	inside front cover
3.0	CPL content index	
2 1 0		102
Gover	nace commitments & engagement	
	Governance	
4 1	Governance structure	7 13
42	Chair of highest governance body and executive officer	
4.8	Internally developed missions value statements codes of conduct etc.	5, 6, 9, 76, 77
4.9	Sustainability processes and management	
4 10	Processes for evaluating the performance of the highest governance body	
	Commitments to external initiatives	
4.13	Significant memberships in associations	98. 99
	Stakeholder engagement	
4.14	List of stakeholder groups engaged by the company	13
4.16	Approaches to stakeholder engagement	
Econo	mic performance indicators	
	Economic performance	
EC1	Economic value generated and distributed	21, 22, 93
EC6	Practices and proportion of spending on locally based suppliers	
EC8	Infrastructure investments and services supported that provide public benefit	
Enviro	nmental performance indicators	
EN2	Percentage of materials used that are recycled	29, 36, 40, 61, 62
EN3	Direct energy consumption broken down by primary energy source	36, 37, 41, 47, 49, 59
EN5	Total energy saved due to conservation and efficiency improvements	
EN6	Initiatives to provide energy-efficient products and services	26, 27, 28-34
EN8	Total water withdrawal by source	36-38, 41, 59
EN10	Percentage and total volume of water recycled and reused	
EN16	Total direct and indirect greenhouse gas emissions by weight	26, 27, 30-34, 36-39, 45-49, 59
EN18	Initiative to reduce greenhouse gas emissions and reductions achieved 26,	27, 30-34, 36-39, 45-51, 55-57, 59
EN19	Emissions of ozone-depleting substances	
EN20	NOx, SOx, and other significant air emissions by weight	
EN21	Total water discharge and quality	
EN22	Total amount of waste by type and destination	36, 40, 41, 47, 49, 51, 59
EN26	Initiatives to manage and reduce the environmental impacts of products and services	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	
EN29	Significant environmental impacts of transportation used for logistical purposes	
Social	performance indicators: Labour practices and decent work	
LA1	Breakdown of total workforce by employment type and by region	
LA2	Total number and rate of employee turnover broken down by age group and gender	
LA4	Percentage of employees covered by collective bargaining agreements	
LA6	Percentage of workforce represented in formal health and safety committees	
LA7	Rates of injuries, lost days, absenteeism and work-related fatalities	
LA9	Health and safety topics covered in formal agreements with trade unions	
LA11	Programmes in place to support the continued employability of employees	
LA13	Governance structure and breakdown of employees per category according to diversity	
Social	performance indicators: Human rights	
HR3	Employee training on policies and procedures of human rights	
HR4	Total number of incidents of discrimination and actions taken	
HR5	Actions taken to support the right to exercise freedom of association and collective bargaining	84
HR6	Measures taken to contribute to the elimination of child labour	
HR7	Measures taken to contribute to the elimination of forced or compulsory labour	
Social	performance indicators: Society performance	
SO1	Assessment and management of impacts of operations	
SO4	Actions taken in response to instances of corruption	
SO5	Participation in public policy development and lobbying	
Social	performance indicators: Product responsibility	
PR1	Procedures for improving health and safety of products and services	
PR5	Practices related to customer satisfaction, including results of surveys	
PR6	Programmes for adherence to laws related to marketing communications	
PR7	instances of non-compliance concerning marketing communications	74-75

Reference is made to indicators reflected in the report

### Introduction

We have reviewed the environmental and social aspects of the Toyota European Sustainability Report 2007 (The "Report"). The Report is the responsibility of Toyota

Motor Europe NV/SA, with whom the objectives and terms of the engagement were agreed. We are responsible for expressing our conclusion based on the engagement. We have based our approach on emerging best practice for independent assurance on environmental and sustainability reporting, including ISAE 3000 ("Assurance Engagement other than Audits or Reviews of Historical Financial Information"), issued by the International Auditing and Assurance Standards Board (IAASB).

Deloitte.

### **Procedures**

Our objective was to achieve limited assurance. Based on an assessment of materiality and risk, we have gathered and evaluated evidence supporting the conformity with criteria for the subject matters described. This work included analytical procedures and interviews with management representatives and employees at Toyota Motor Europe headquarters in Brussels and at the two reporting units Toyota Motor Manufacturing UK (Burnaston, UK) and Toyota Belgium (National Marketing and Sales Company). Our work was performed on sample basis, as we deemed necessary in the circumstances, but no substantial testing was undertaken. Therefore, the assurance that we obtained from our evidence gathering procedures is limited. We believe that our work provides an appropriate basis for conclusion.

### Comments

We continue to observe that Toyota Motor Europe is managing environmental impact from production and national marketing and sales in an integrated management system involving essential elements such as target setting, clear roles and responsibilities, detailed programmes and action plans, reporting and monitoring. The environmental data for this Report are derived from the information system supporting such ongoing management monitoring and decision making. This is an indicator of a mature, well-established management system. Further, we noted with respect to reporting material social impact that in FY2006 Toyota Motor Europe took measurable steps towards establishing criteria for definition and adjusting management and information systems to enable such systems to serve as a basis for external reporting.

### Conclusion

In conclusion, based on our work described in this report, nothing came to our attention that causes us not to believe that in all material respects:

- 1. Toyota Motor Europe at Headquarter level has applied detailed and systematic procedures for the purpose of collecting, compiling and validating environmental and social data for FY2006 to the Corporate level, and
  - a. such data are appropriately reflected in the environmental and social sections of the Report.
  - b. the Report provides an appropriate and balanced account of Toyota Motor Europe's material environmental aspects and in FY2006 Toyota Motor Europe continued the process to improve defining and reporting on material social aspects.
- 2. The two reporting units mentioned above have implemented the requirements of Toyota Motor Europe to appropriately prepare and report such environmental and social data for FY2006 to the Corporate level.
- Toyota Motor Europe has applied detailed and systematic methodologies and processes for the preparation of the Report in order to achieve its reporting objective.

Copenhagen, September 5, 2007 DELOITTE Statsautoriseret Revisionsaktieselskab

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