

2002 CORPORATE CITIZENSHIP REPORT  
OUR PRINCIPLES, PROGRESS AND PERFORMANCE



*Ford Motor Company*<sup>™</sup>  
100 YEARS

CONNECTING WITH SOCIETY

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**About the cover:**

Newly installed glass rooftop “monitors,” shown on the cover, beam natural light to the heart of the Dearborn Truck Plant at the Ford Rouge Center, creating a more comfortable and productive working environment that consumes less energy. The plant, shown above, is still a work in progress. Its full potential – as a model of sustainable manufacturing – will not be realized until its doors re-open in 2004. Like the Rouge rooftop monitors, this report sheds light on our commitment to corporate citizenship. In it, you will find what we stand for, how we are performing and where we hope to go. For more on the revitalization of the Ford Rouge Center, see Page 66.

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“Business must be run at a profit, else it will die. But when anyone attempts to run a business solely for profit and thinks not at all of the service to the community, then also the business must die, for it no longer has a reason for existence.” HENRY FORD, 1926

“We are committed to building great cars and trucks, and passing along a stronger business and a better world to future generations.” BILL FORD, 2003

**About this report:**

This report describes the corporate citizenship performance of Ford Motor Company during 2002. The data contained in this report covers all Ford Motor Company wholly- and majority-owned operations globally unless otherwise noted. Changes in the basis for reporting or restatements of data previously reported are noted in the data charts. This report and the corresponding information on [www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship) has been prepared in accordance with the 2002 Global Reporting Initiative (GRI) Guidelines. An index of GRI indicators covered in this report can be found on Page 72. This report was issued in July of 2003.

# Letter from Bill Ford

CHAIRMAN AND CEO

“There are no shortcuts to sustaining our success for another century. To maintain the financial health that is essential for our survival, we are revitalizing our values as well as our business plans. That’s what it will take for us to create greater value for all of our stakeholders and have an even more positive impact on the lives of people around the world in our next 100 years.”

BILL FORD, 2003

Ford Motor Company has worked hard to be a successful business, a good neighbor and a responsible global citizen for 100 years.

Our industry and our Company are at a turning point. Today there are more global manufacturers selling automobiles in more product segments and markets than ever before. In a fiercely competitive worldwide industry with 30 percent overcapacity, the profit margins for automotive companies have steadily declined over the last 50 years. At the same time, new technologies, growing emerging markets and society’s changing expectations of business are raising the stakes of competition, creating higher levels of risk and reward. And the pace of technological and social change is accelerating.

Given the short-term pressures on us, some have asked where corporate citizenship fits into our current plans and whether there is room for sustainability and other long-term issues. In my view, these issues have never been more important. Replicating the business model of the past as we move into our future will not work.

## REVITALIZING OUR BUSINESS AND OUR VALUES

Our vision for the future is to take the personal mobility model we pioneered and make it sustainable for the next century and beyond. Sustainability issues are neither incidental nor avoidable – they are at the heart of our business.

Our Company was built on values – they helped us succeed to this point and will support the drive to a more sustainable future. To inspire us to make our values come alive in our current business practices, we have adopted a set of Business Principles for our next 100 years. These Principles set standards in areas that I strongly believe will be essential for companies to survive and thrive in the 21st century. They outline how we will deliver value to our shareholders over the long term by delivering great products and services in an ethical and responsible way.

The Principles embody our ambitions. Gaps do exist between these aspirations and current reality. But I am personally committed – as I know our Company is committed – to work to close these gaps and deliver the spirit of the Principles in our day-to-day work. Our Corporate Citizenship Report is a tool for allowing others to evaluate this performance for themselves.

**Bill Ford at the  
Management Briefing  
Seminars, Traverse City,  
Michigan – August, 2002**



### **RESTORING OUR FINANCIAL HEALTH**

Our aspirations are high, and our commitment is strong. But we can't contribute to a socially, environmentally and economically sound future if we are not successful in executing the basics of our business – providing desirable, high-quality, affordable products to our customers and doing so profitably. And the first line of corporate citizenship is being a responsible employer to the 350,000 people who work at Ford. That has been my focus for the past year and a half.

The good news is that we are successfully rebuilding our financial health through our Revitalization Plan and are on track to reach our mid-decade target of an annual pre-tax profit of \$7 billion. We made the necessary changes in 2002 that we said we would and achieved the results we anticipated. Our first quarter results in 2003 were ahead of expectations. We continue to rally everyone at Ford to improve quality and profitability and complete that part of our revitalization.

Executing the basics of our business must continue to be the foundation of everything we do. But our efforts to add value can't stop there. I believe that those who say there is a conflict between serving shareholders and serving other stakeholders are wrong. Improving our social performance, reducing our environmental footprint and contributing to strong local, national and global economies benefits everyone, including investors.

That connection will become even stronger and more apparent in the next few years. Corporate transparency and accountability will be ever more important. Performance in every area that affects our stakeholders or the environment will be measured and judged, not only by governments and activists, but also by customers and shareholders. A genuine concern for customers, employees, business partners and the community not only is the right thing to do, it's also a powerful business strategy. It's what will drive the most successful companies in the 21st century.

### **WE HAVE MADE PROGRESS IN KEY AREAS**

In this report, you will find a quote from my great-grandfather that says, "You can't build a reputation on what you are going to do." Taking that advice, I will not describe at length our plans for the future, although you will find some of them discussed in this report. I would like to discuss what we have done since we committed to expand our concept and practice of corporate citizenship.

In our previous corporate citizenship reports, we said we would develop and adopt Business Principles to guide our conduct and decision making. We have done that (see Pages 6 and 7).

We also said we would address human rights issues in our plants and supply chain by developing and adopting a Code of Basic Working Conditions applicable worldwide. We have done that, too (see Page 52).

We set targets to cut energy and water use in our manufacturing operations and have achieved them. We have joined pioneering greenhouse gas trading programs in the United States and the United Kingdom to explore this market-based approach to reducing greenhouse gas emissions.

We said we would issue corporate citizenship reports yearly, using the Global Reporting Initiative (GRI) standard. We have done that. This report has been prepared in accordance with the revised 2002 GRI Guidelines. The report provides a formal and systematic framework for improving the openness and accountability of the Company. In the four years we have been publishing it, it has given us an understanding of the expectations of our stakeholders and helped us begin aligning our business model to meet them.

We said we would reinvest in the Ford Rouge Center to make it a model of sustainable manufacturing for the 21st century. Our new Dearborn Truck Plant at the Ford Rouge Center, which will produce the 2004 Ford F-150, sets world-class standards for environmentally friendly manufacturing processes. It is also a key part of our transformation to lean, flexible manufacturing processes that will make us more efficient, more competitive and more able to respond to changing demands.

### **BUT WE HAVE ALSO HAD SETBACKS**

In the past, we have acknowledged the environmental issues surrounding SUVs and, therefore, we committed to improve their fuel economy by 25 percent by 2005. Although we have made progress and will continue to improve, we do not expect to reach the goal. You will find detailed discussion of the issue on Pages 16 and 17. In short, we were not able to make the investments in the products and technologies needed to meet the goal, nor were some of the technologies as mature as we thought. But I do reaffirm our commitment to continue to work toward improving the fuel economy of our SUVs and, indeed, to cutting greenhouse gas emissions across our entire range of vehicles.

# Progress and performance

## LETTER FROM BILL FORD (CONTINUED)

### THE CHALLENGE

The challenge we face today is how far and how fast we can realistically go. We are already investing in hydrogen fuel cell vehicles, hydrogen internal-combustion engines, hybrid electric vehicles, clean diesel, biodiesel and many other technologies. We are working with partners to explore the issues involved in making mobility more sustainable in developed and emerging economies alike.

More practically, we are putting the finishing touches on the Ford Escape Hybrid, the industry's first no-compromise SUV with a full hybrid-electric powertrain, which will go on sale to the public in 2004. We've also announced plans for the platform of our next hybrid vehicle, a derivative of the new Ford Futura. I personally have high hopes for the Escape Hybrid and expect it to be a huge hit. But we do need help from Congress to put in place the consumer incentives to make these vehicles affordable and help create favorable conditions for larger volumes.

In summary, setting high standards is not the same as achieving them. Aspiring to greatness doesn't make a company great. But standards of performance give our employees a clear direction to work toward and others a way to judge our efforts and progress. Our challenge now is to continue to make improvements in all areas of our business.

There are no shortcuts to sustaining our success for another century. To maintain the financial health that is essential for our survival, we are revitalizing our values as well as our business plans. That's what it will take for us to create greater value for all of our stakeholders and have an even more positive impact on the lives of people around the world in our next 100 years.



### THE BIG PICTURE

Corporate citizenship is a critical part of the way we do business now and will do so in the future. Our focus has expanded from philanthropy and community involvement to a broader look at how we use our resources for sustainable growth and a better world. In our first report, we examined what corporate citizenship means for us and committed to become a more open, engaged and accountable Company. Since then, we have worked with our stakeholders to develop our Business Principles, identify and address strategic priorities and begin to develop new approaches on significant issues like climate change and human rights. We have also gained an understanding of the risks and opportunities inherent in our corporate citizenship commitment. We invite you to take a look at the progress we have made in some of our most significant areas.

### HOW TO READ THIS REPORT

We have organized the performance sections of this report around Ford's Business Principles, with a color associated with each Principle. The first page of each section summarizes additional information on many of these topics that is found in the Web version of this report at [www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship). Data relevant to that Principle is found at the end of each section.

The Business Principles – and how we will use them to move towards sustainability – are introduced on Pages 6 and 7, followed by a look at how Ford Europe, Volvo, Jaguar and Land Rover are using the Principles. The facing page summarizes our performance in key areas, with indicators organized by Principle. As we further implement our Business Principles, we will strive to make these indicators more comprehensive and global. Some will become key performance indicators, while in other cases, new indicators must be created and tested.

## OUR CORPORATE CITIZENSHIP JOURNEY



## 2002 PERFORMANCE HIGHLIGHTS

↗ Better than 2001 → Same as 2001 ↘ Worse than 2001

PRINCIPLE	INDICATOR	2001/2002	TREND	PAGE
<b>PRODUCTS AND CUSTOMERS</b> Page 18	Initial quality (3 months in service), Ford Motor Company, U.S., problems per hundred	162/143	↗	25
	Vehicle dependability (4–5 years of ownership), Ford Motor Company, U.S., problems per hundred	354/354	→	25
	Sales satisfaction with dealer/retailer, Ford Brand, U.S., percent completely satisfied	68/75	↗	25
	Service satisfaction with dealer/retailer, Ford Brand, U.S., percent completely satisfied	52/61	↗	25
	Owner loyalty, Ford Motor Company, U.S., all brands, percent loyal to corporation	50.7/48.5	↘	25
	First-time Ford Motor Company buyers, U.S., percent	9.3/10.0	↗	25
<b>ENVIRONMENT</b> Page 30	Ford U.S. fleet fuel economy, combined car and truck, miles per gallon	23.1/23.2	↗	33
	Ford U.S. fleet CO <sub>2</sub> emissions, combined car and truck, grams per kilometer	238/237	↗	33
	European CO <sub>2</sub> performance, percent of 1995 base (1995 base = 100 percent)			
	Ford	86/83	↗	33
	Jaguar	85/79	↗	33
	Land Rover	87/86	↗	33
	Volvo	89/90	↘	33
	Worldwide facility CO <sub>2</sub> emissions, million metric tonnes	9.2/8.7	↗	34
	Worldwide facility CO <sub>2</sub> emissions per vehicle, metric tonnes	1.37/1.33	↗	34
	Worldwide facility energy consumption, trillion BTUs	89.7/84.1	↗	34
	Worldwide facility energy consumption per vehicle, million BTUs	13.4/12.8	↗	34
Global manufacturing water use, total, million cubic meters	96.1/93.8	↗	34	
Global manufacturing water use, per vehicle, cubic meters	15/14.2	↗	34	
<b>SAFETY (WORKPLACE)</b> Page 40	Lost time case rate (per 100 employees), Ford Motor Company – cases with one or more days away from work per 200,000 hours	2.5/1.9	↗	42
	Severity rate (per 100 employees) – days lost per 200,000 hours worked	35.2/28.1	↗	42
<b>SAFETY (VEHICLE)</b> Page 43	Safety recalls, number per calendar year	29/17	↗	47
	European vehicle sales attaining 4- or 5-star Euro NCAP ratings, percent	63/78	↗	47
	4- or 5-star ratings attained in U.S. NCAP frontal crash tests, percent	96/97	↗	47
<b>COMMUNITY</b> Page 48	Ford Motor Company Fund contributions, \$ million	113/84	↘	49
	Corporate contributions, \$ million	24/47	↗	49
<b>QUALITY OF RELATIONSHIPS</b> Page 54	Employee satisfaction, PULSE survey, overall, percent satisfied	64/61	↘	61
	Total purchases from minority-owned businesses, U.S., \$ billion	3.1/3.2	↗	61
<b>FINANCIAL HEALTH</b> Page 62	Shareholder return, percent <sup>1</sup>	(30)/(39)	↘	64
	Net income/(loss), \$ billion	(5.5)/(1.0)	↗	65

<sup>1</sup>Total Shareholder Return is from Bloomberg Total Return Analysis assuming dividends are reinvested in Ford stock.

# Using Business Principles to integrate sustainability at Ford

The Ford Business Principles, adopted in late 2002, reflect and codify the values of our past and our ambitions for the future. The words themselves are important, but how we apply them in our actions and behaviors is even more important. They will enable us to address the balance required in all of our decisions. They will help us be a trusted Company that people want to work for, partner with, invest in, buy from and welcome into their communities.

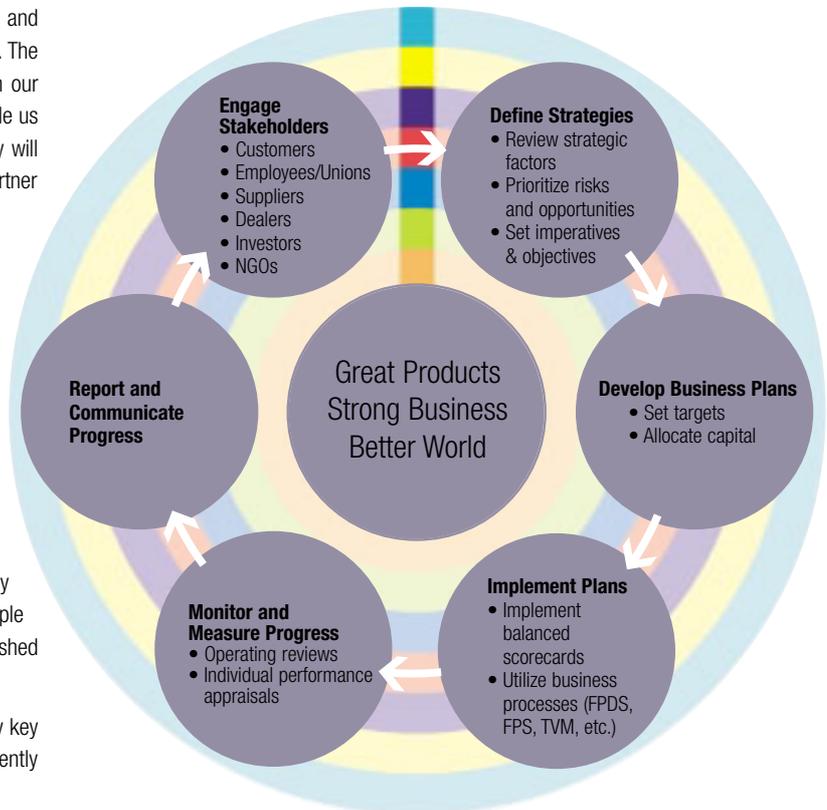
Beginning with this report, the Business Principles will be an integral part of our reporting and will strengthen the communication of our corporate citizenship approach and performance to internal and external audiences.

Our engagement of stakeholders helps internalize critical environmental, social and economic issues that in turn help shape our business strategy.

By 2004, each of our business units will include the Principles in their five-year business planning processes. These business plans are then implemented through key product development, manufacturing, marketing and people development processes, each of which has well-established mechanisms for tracking performance.

Over the course of the next year and beyond, we will identify key performance indicators for each Principle where they currently exist and continue to develop new ones where needed.

Our Business Principles provide a framework for embedding sustainability into the business over time. They mark a beginning, and they are also the basis for continuous improvement.



# Ford Business Principles

Ford Motor Company is committed to creating value for our shareholders over the long term through the delivery of excellent automotive products and services and to do so ethically and responsibly. These Principles will guide our decisions and actions globally. As a whole, they set the standards by which we judge ourselves and by which we hope to be judged by others.

<b>Accountability</b> We will be honest and open and model the highest standards of corporate integrity.	<b>We will achieve this by:</b> <ul style="list-style-type: none"><li>• Being responsive to stakeholders' concerns on the impact of our operations, products and services through public disclosure and regular reporting</li><li>• Making accurate and forthright statements, competing ethically, avoiding conflicts of interest and having zero tolerance for the offer, payment, solicitation or acceptance of bribes</li></ul>
<b>Products and customers</b> We will offer excellent products and services.	<b>We will achieve this by:</b> <ul style="list-style-type: none"><li>• Focusing on customer satisfaction and loyalty and keeping our promises</li><li>• Using our understanding of the market to anticipate customer needs</li><li>• Delivering innovative products and services that offer high value in terms of function, price, quality, safety and environmental performance</li></ul>
<b>Environment</b> We will respect the natural environment and help preserve it for future generations.	<b>We will achieve this by:</b> <ul style="list-style-type: none"><li>• Working to provide effective environmental solutions</li><li>• Working to continuously reduce the environmental impacts of our business in line with our commitment to contribute to sustainable development</li><li>• Measuring, understanding and responsibly managing our resource use, especially materials of concern and nonrenewable resources</li><li>• Working to eliminate waste</li></ul>
<b>Safety</b> We will protect the safety and health of those who make, distribute or use our products.	<b>We will achieve this by:</b> <ul style="list-style-type: none"><li>• Working to create the safest possible workplace</li><li>• Striving to continuously reduce the risk of accidents, injuries and fatalities involving our products</li><li>• Striving to protect people and property</li></ul>
<b>Community</b> We will respect and contribute to the communities around the world in which we work.	<b>We will achieve this by:</b> <ul style="list-style-type: none"><li>• Respecting and supporting, in line with the legitimate role of business, the basic human rights of all people within our businesses and throughout our entire value chain</li><li>• Being sensitive to, and engaging in, the cultures of the communities in which we participate</li><li>• Making responsible and mutually beneficial investment in the communities we serve</li></ul>
<b>Quality of relationships</b> We will strive to earn the trust and respect of our investors, customers, dealers, employees, unions, business partners and society.	<b>We will achieve this by:</b> <ul style="list-style-type: none"><li>• Building and maintaining a caring culture of partnership and mutual benefit</li><li>• Developing individual and team skills so employees may reach their full potential and contribute to the success of the Ford Motor Company</li><li>• Creating a business climate that encourages innovation, learning and exceptional performance</li><li>• Actively pursuing the benefits derived from a diverse workforce, as well as those from the diversity of perspectives provided by our stakeholders</li></ul>
<b>Financial health</b> We will make our decisions with proper regard to the long-term financial security of the Company.	<b>We will achieve this by:</b> <ul style="list-style-type: none"><li>• Striving to create value for our shareholders that is sustainable over the long term</li><li>• Seeking enhanced stakeholder loyalty as a route to competitive advantage and long-term growth</li></ul>

# A global overview

Ford Motor Company is the world's second largest producer of cars and trucks in terms of revenues and units sold, and one of the largest providers of automotive financial services. We market our vehicles under the eight brands described below. We produce our products in facilities operated by Ford Motor Company and/or joint ventures. We are a publicly traded company listed on the New York Stock Exchange.

During 2002, we made 7 million vehicles and employed 350,000 people worldwide. Our business partners include 28,000 dealers and more than 10,000 suppliers.

	AUTOMOTIVE CORE BRANDS				PREMIER AUTOMOTIVE GROUP	
<b>PRIMARY BRANDS</b>		 L I N C O L N	 M E R C U R Y		 A S T O N M A R T I N	
<b>DEALERS</b>	Approximately 13,000 dealers	1,561 dealers	2,141 dealers	6,131 dealers	100 dealers	
<b>MARKETS</b>	137 markets	38 markets	15 markets	145 markets	25 markets	
<b>COMPETITORS</b>	DaimlerChrysler, Fiat, General Motors, Honda, Nissan, Toyota, Volkswagen, Hyundai/Kia	General Motors, DaimlerChrysler, Toyota, Nissan, Honda, BMW	DaimlerChrysler, General Motors, Honda, Nissan, Toyota, Volkswagen	Toyota, Nissan, Honda, Mitsubishi, General Motors, DaimlerChrysler, Volkswagen	Lamborghini, Ferrari, Porsche	
<b>MAJOR CUSTOMERS</b>	Hewlett-Packard, Phillip Morris International, GlaxoSmithKline, Astra Marck, CNF, Logistica, GE, Budget, BT and other commercial accounts, governments and millions of individuals	Hertz, Budget, Hewlett-Packard, CAN, Carey Limousine, Boston Coach, other commercial accounts and thousands of individuals	McDonald's, Hertz, Budget, Hewlett-Packard, CNA, GE, other commercial accounts and thousands of individuals	Sekisui House, LDS Church, AstraZeneca, Hertz, other commercial vehicle accounts and thousands of individuals	Individuals	
<b>2002 RETAIL SALES</b>	5,457,445 vehicles	159,651 vehicles	274,875 vehicles	964,800 vehicles	1,551 vehicles	
<b>2002 SALES MIX</b>	62% North America 29% Europe 5% Asia-Pacific 3% South America 1% Rest-of-the-world	99% North America 1% Rest-of-the-world	98% North America 2% Rest-of-the-world	39% Asia-Pacific 36% North America 20% Europe 5% Rest-of-the-world	30% North America 30% Europe 30% UK 10% Rest-of-the-world	
<b>NEW PRODUCTS AND SERVICES FOR 2002/2003</b>	Bantam Ecosport Everest Expedition F-150 Falcon Falcon Utility Fairlane Fiesta (South America, China, Europe) Focus C-Max Fusion Ikon (India) Ranger (Thailand) Sportka Streetka Tourneo Connect (Europe) Transit Connect	Aviator LS Navigator Town Car Town Car BPS	Grand Marquis Marauder Monterey	MAZDA 3 MAZDA 6/Atenza MAZDA B-Series (Thailand) MAZDA 2/Demio MAZDA Familia MAZDA RX-8 MAZDASPEED  *Ford Motor Company has 33.4% ownership	AMV8 Vantage Concept DB AR1 DB7 GT DB7 Zagato	

Our subsidiaries – Ford Credit and Hertz – provide financing and leasing services to retail and fleet customers. Quality Care, Motorcraft and Extended Service Plan provide customer service support to our dealers. More details about these brands can be found in our Annual Report. In 2002, there were no significant changes in our corporate structure.

			SERVICES		
					<b>PRIMARY BRANDS</b>
787 dealers	2,500 dealers	1,808 dealers	<b>Operations and locations:</b> Operations in 36 countries Nearly 300 locations 12,500 dealerships use Ford Credit financing	<b>Operations and locations:</b> Operations in more than 150 countries and jurisdictions Approximately 7,000 locations	<b>DEALERS</b>
66 markets	100 markets	142 markets			<b>MARKETS</b>
DaimlerChrysler (Mercedes-Benz), BMW, Toyota (Lexus), Porsche	BMW, Mercedes-Benz, Audi, Lexus	Toyota, Nissan, General Motors, DaimlerChrysler, BMW	Major banks and credit unions	Alamo, Avis, Budget, Dollar, Thrifty, Enterprise Rent-a-Car, Europcar, National	<b>COMPETITORS</b>
Johnson & Johnson, GE, BP, Hertz, other commercial accounts and thousands of individuals	GlaxoSmithKline, Johnson & Johnson, Hertz, Coca-Cola, other commercial accounts and thousands of individuals	BP, Hertz, Enterprise Rent-a-Car and thousands of individuals	Dealers, automotive loan and lease customers and commercial accounts. More than 11 million customers	Commercial accounts including numerous Fortune 500 companies, as well as millions of individual customers worldwide	<b>MAJOR CUSTOMERS</b>
130,330 vehicles	406,695 vehicles	174,593 vehicles	<b>Financing contracts:</b> More than 4 million vehicle financing contracts	<b>Revenue:</b> \$5 billion revenue 75% revenue from United States 25% revenue from Rest-of-the-world	<b>2002 RETAIL SALES</b>
50% North America 41% Europe 7% Asia-Pacific 2% Rest-of-the-world	60% Europe 30% North America 10% Rest-of-the-world	61% Europe 25% North America 14% Rest-of-the-world			<b>2002 SALES MIX</b>
S-Type X-Type 2.0 XJ Sedan XK 4.2	Four-c Technology S80 AWD Volvo S60R Volvo V70R XC90	Discovery Freelander Range Rover	Ford Motor Company Vehicle Insurance Program <ul style="list-style-type: none"> <li>• One of the largest independent insurance platforms</li> <li>• Personal auto and home insurance</li> <li>• Several leading insurance companies</li> </ul>	<ul style="list-style-type: none"> <li>• Expanded to more than 800 off-airport locations in the United States</li> <li>• Introduced Sirius Satellite Radio in select U.S. markets</li> <li>• Introduced a redesigned Web site at hertz.com</li> <li>• Introduced Hertz Prestige collection in Europe</li> <li>• Began car rental operations in China</li> </ul>	<b>NEW PRODUCTS AND SERVICES FOR 2002/2003</b>

# Applying our Principles in a brand and regional context

## PREMIER AUTOMOTIVE GROUP

### Jaguar and Land Rover

At Jaguar and Land Rover, the challenge of sustainable development is to integrate and balance our economic, environmental and social responsibilities within all of our activities.

Using Ford's Business Principles to support our direction, we launched our new Sustainable Development Policy at the end of 2002, which details our long-term aims and commitments. The policy is supported by a strategy framework and a series of Key Sustainable Development Goals, which set direction and clear targets for the business. We are currently developing a 10-year vision to guide our road map for the future and to ensure we satisfy our stakeholder interests.

At the highest level, the Board of Directors is responsible for policy and strategy approval, and performance is reported to them on a quarterly basis. A Sustainable Development Committee of the Board acts like a strategic think tank on critical issues.

Our Environmental Forum, comprised of representatives from all business functions, is responsible for reviewing policy, monitoring performance and driving sustainable development change within the business.

The road towards sustainability is challenging, and we recognize that genuine progress will require changes within our business and the industry sector. One of our greatest challenges is to improve the performance of our vehicles and continue to satisfy our customer requirements. To this end, we have focused programs to improve the fuel economy and safety of our vehicles, reduce materials intensity and incorporate more renewable materials.

For more information, see our Environmental and Social Report at [www.jaguar.com/uk](http://www.jaguar.com/uk).

**In keeping with the Volvo corporate philosophy and the Ford Business Principles, we aim to be a leader in corporate citizenship. This is based on the conviction that it will reinforce our competitiveness in both the short and long term.**

### Volvo Cars

To Volvo Cars, sustainable development means seeking to establish a balance among the needs of our customers, the Company, society and future generations.

In keeping with the Volvo corporate philosophy and the Ford Business Principles, we aim to be a leader in corporate citizenship. This is based on the conviction that it will reinforce our competitiveness in both the short and long term. Although our basic motivation is to grow our business, our work in the area is supported by the knowledge that we are also contributing to a better society.

Our strategic orientation is discussed by the Corporate Citizenship Steering Committee, which is chaired by the CEO and includes the Deputy CEO, executive heads of Human Resources, Purchasing, Marketing, Public Affairs and others. In 2002, we formed a cross-functional Corporate Citizenship Council to support the work being carried on in various parts of the organization.

Environmental, personnel, safety, purchasing, diversity and other issues are pursued on the basis of existing structures integrated in the business-planning process and assured by means of the stage gate system in product-planning processes. We have developed a "corporate citizenship scorecard" that we use to track our progress.

For more information, see our Corporate Citizenship Report at [www.volvocars.com/citizenship](http://www.volvocars.com/citizenship).



*"We are increasingly being judged by our relationships with, and impacts on, employees, the local community and society at large. Our ability to integrate corporate citizenship and sustainability into our daily business is therefore critical not only to our reputation but also to our commercial success."*

**Wolfgang Schneider**

Vice President, Legal, Governmental and Environmental Affairs, Ford Europe

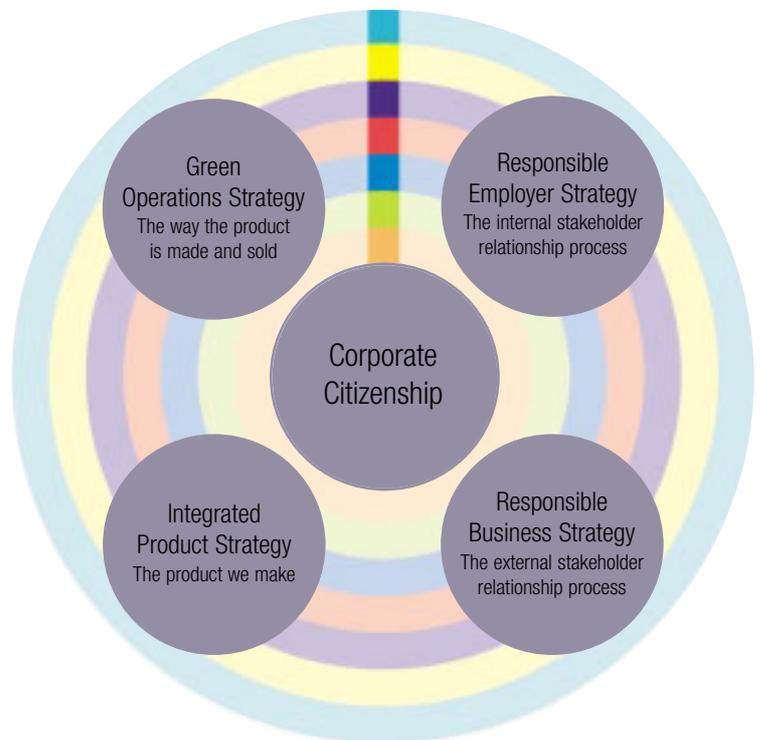
## FORD EUROPE

Sustainability issues are advancing rapidly in Europe at the societal, political, financial and consumer level. Our Ford brand operations in Europe (Ford Europe) are responding to these operating parameters by drawing upon the Business Principles and defining corporate citizenship as it applies regionally to the business.

The European approach is anchored in four key cornerstone strategies relating to the product we make, how we make it and the internal and external stakeholder relationship processes. This approach is integral to the European Turnaround Strategy. It is further reinforced by the business-planning process with assignments championed by European vice presidents through a balanced scorecard. Specific examples in this report from Ford Europe include the Dagenham revitalization (Page 51), wastewater recycling and inclusion of workers with disabilities at our Cologne plant (Pages 32 and 55) and Eco-Driving (Page 38).

Ford Europe is also working to strengthen its measurement approach and improve performance. Sustainability indices are being piloted for the Integrated Product Strategy and studied for the Green Operations Strategy. Indices provide a unified framework for considering the many factors affecting sustainability and aid in the development of forward-planning targets. The Responsible Employer Strategy is under development and will focus on issues as wide ranging as diversity and dignity at work, recruitment, retention and training. The Responsible Business Strategy covers community relations, stakeholder engagement, corporate governance, sustainable mobility and human rights.

The European experience to date has demonstrated that change takes time. Integration requires concerted effort, and the opportunities of sustainability must be further realized in the hearts and minds of employees for transformation to truly occur. Applying our Business Principles will help guide that effort and support transformation.



# Accountability

We will be honest and open and model the highest standards of corporate integrity.

We will achieve this by:

- Being responsive to stakeholders' concerns on the impact of our operations, products and services through public disclosure and regular reporting
- Making accurate and forthright statements, competing ethically, avoiding conflicts of interest and having zero tolerance for the offer, payment, solicitation or acceptance of bribes

**Today's operating environment demands a new kind of accountability – one that focuses on principled decision making, systematic engagement of stakeholders and increased transparency. Our Accountability Principle responds to those demands by affirming high standards for our corporate behavior.**

**In addition, we believe that the concept of “accountability” underlies our six other Business Principles.**

**By discussing how we are managing and performing in each Principle area, we see this report as an important tool for accountability – and hope report users agree.**

**This section describes our perspective on changing expectations for accountability, our overall approach and developments in 2002.**

In the Web version of this report, you will find additional information about:

- Our Board of Directors and senior management
- Key policy letters and directives
- Memberships of major associations
- Reputation research
- Political contributions
- Shareholder resolution on climate change
- Links to brand, country and facility corporate citizenship and environment reports
- Links to CERES Principles and Global Sullivan Principles

[www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship)

## CHANGING EXPECTATIONS – EXPANDING ACCOUNTABILITY

Society's concept of corporate accountability is expanding in response to a number of factors, including:

- Stakeholder concerns that the global reach of corporations exceeds the ability of existing institutions to govern them effectively
- The well-publicized failure of certain companies in the recent past that has eroded public trust in corporations
- Evolving corporate commitments to sustainability, with a corresponding need to define how companies can be accountable to these commitments

Although established accountability mechanisms remain an important foundation, we see expanding expectations for accountability emerging in four major areas (see the diagram opposite).

### 1. BUSINESS PRINCIPLES

Governance using Business Principles builds on established rules (policies, standards, codes, etc.). However, rules cannot cover every eventuality. Our adoption of Business Principles acknowledges the complexity of our business environment and the many, often competing factors that go into our decisions and behaviors. Through our Business Principles, we provide employees with the means to address dilemmas inherent to business decision making.

### 2. RESPONSIBILITY

Compliance with all legal requirements everywhere we do business is essential, but not always sufficient. Going beyond compliance by adhering to global, voluntary standards for our activities can be more efficient and further protect our employees, customers, other stakeholders and our reputation. We will continue to examine opportunities, working with key stakeholders, to adopt voluntary standards as we go forward.

#### FAST FACT

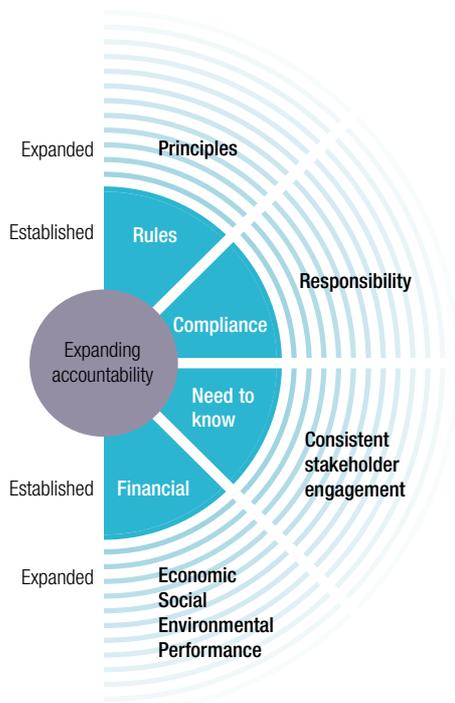
A study of one-, three- and five-year returns of companies in the Standard & Poor's 500-stock index showed that firms in the top of GovernanceMetrics International's ranking significantly outperformed the index. The analysis cut across seven broad categories, including board accountability, disclosure, executive compensation, shareholder rights, ownership base, take-over provisions and corporate behavior and social responsibility. Those ranked lowest significantly underperformed the index – [www.governancemetrics.com](http://www.governancemetrics.com)



*"You can't build a reputation on what you are going to do."*

**Henry Ford**

Founder, Ford Motor Company



### 3. CONSISTENT STAKEHOLDER ENGAGEMENT

A "need to know" approach to communicating with stakeholders relies on a one-way flow of information, often after the fact. Expanded accountability includes stakeholders early in decisions likely to affect them and involves two-way communication. Systematic engagement reveals stakeholder expectations, improves the quality of information available to make decisions and increases the transparency of our actions and their consequences.

### 4. ECONOMIC, SOCIAL AND ENVIRONMENTAL PERFORMANCE

Taking account of our economic, environmental and social performance – and publicly reporting on that performance – embraces the fact that we have more than just financial impacts and must measure, integrate and communicate these impacts.

### BUILDING THE FOUNDATION – ESTABLISHED ACCOUNTABILITY

We believe that established accountability mechanisms – sound governance, policies and standards for business practices and comprehensive compliance systems – are core to our activities.

These mechanisms include oversight by our Board of Directors and its committees – Audit, Compensation, Environmental and Public Policy, Finance and Nominating and Governance. Six directors, including Bill Ford, serve on the Environmental and Public Policy Committee that addresses significant corporate citizenship risks and opportunities. Other significant corporate citizenship risks and opportunities are addressed by the full Board of Directors.

At the very highest levels of management within the Company, the Strategy and Business Governance group sets corporate direction and strategic priorities, including regularly reviewing issues of importance to the Company's corporate citizenship commitments. During 2002, this committee participated in the development of the Business Principles and approved their adoption and implementation.

We have a comprehensive set of policies, directives, standards and guidance that governs our business activities. These apply to every Company activity.

**We have a comprehensive set of policies, directives, standards and guidance that governs our business activities. These apply to every Company activity.**

In 2002 and early 2003, our salaried employees were required to complete an online, educational tutorial on our Standards of Corporate Conduct. The tutorial covered matters pertaining to integrity at Ford, business relationships and confidential information. Employees were also required to certify their compliance with our Standards of Corporate Conduct that, among other things, embody our commitment to comply with all legal requirements and Company policies, including refraining from soliciting or receiving improper payments or benefits.

*"It is time to restore trust and confidence in businesses and markets through more rigorous corporate governance, more robust disclosure and reporting, improved regulatory oversight and a restoration of the relationship between corporations and their various stakeholders. Just as importantly, it is time for a new definition of the corporation itself – one where stakeholders also sit center stage, and where corporate social responsibility becomes just as important as corporate profitability."*

**Joseph F. Keefe**

President, NewCircle Communications

Ford has had sound corporate governance practices in place for many years. We have also recently adopted new procedures in response to regulatory and legislative changes. Among these corporate governance practices are the following:

- We adopted Corporate Governance Principles, available on [www.ford.com](http://www.ford.com). These Principles include a limitation on the number of boards on which a director may serve; qualifications for directors; guidelines for determining director independence; director orientation; and a requirement that the Board and each of its committees perform an annual self-evaluation.
- The charter of each committee of the Board, as well as its Standards of Corporate Conduct that apply to all employees, and a code of ethics for senior financial personnel, is published on [www.ford.com](http://www.ford.com).
- A majority of the Board is comprised of independent directors as defined by the Corporate Governance Principles and existing and proposed rules that govern us. Independence and diverse backgrounds are important considerations in selecting new candidates for the Board.
- Only independent directors serve on the Audit, Compensation and Nominating and Governance committees.
- Nonemployee directors meet in executive session at every Board meeting without management present.
- We have designated a presiding independent director of the Board.
- The lead partner of the Company's independent public accountants is rotated at least every five years.
- The Board, and each committee of the Board, has the authority to engage independent consultants and advisors at the Company's expense.

## EXPANDING THE CONCEPT

Incorporating enhanced accountability into our systems and behavior is an ongoing process, but we have taken some important steps in this direction.

### Embedding our Business Principles

By codifying our Business Principles and working them into our strategic planning and business processes (see Page 6), we strengthen the link between our values and our daily actions and decision making. Our success will be measured by the extent to which we deliver results through the planning and assurance processes and also by our ability to identify and respond to performance shortcomings. The discussion of our SUV fuel economy commitment at the end of this section offers one such example of accounting for our performance.

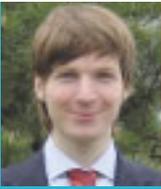
We are identifying key performance indicators for each Principle, using existing indicators where possible and developing additional indicators where we have identified gaps. Regular review of these indicators will help us track our performance against the Principles.

### Responding to stakeholder concerns

We use a variety of means to understand and provide the basis for responding to stakeholder concerns. Many of these are described, by stakeholder group, in the Quality of Relationships, Products and Customers and Financial Health sections.

We also consider several sources of feedback on our overall performance in sustainability and corporate citizenship:

- We receive feedback from investors in the form of shareholder resolutions. Some can contain important information about investor perceptions of the issues or risks we face as a Company and our capacity to manage these appropriately. In 2002, we received two major resolutions addressing corporate citizenship issues. A resolution on HIV/AIDS submitted by St. Joseph Health System and other members of ICCR was withdrawn based on our performance to date, our



*"We are impressed by Ford's activity on its Business Principles so far. Ford has the opportunity to claim a real leadership role with these Principles – but we are watching carefully to see where they go from here – in particular we are paying attention to whether and how these Principles will be implemented and underpinned by clear performance indicators."*

**Niki Rosinski**

Auto Sector Analyst, Sustainable Asset Management Research

commitment to further address the issue through dialogue and a report on our progress (see 'A Closer Look – Addressing the HIV/AIDS Crisis' on Page 53). A second resolution, filed by The Sisters of St. Dominic of Caldwell, New Jersey, and other members of ICCR related to greenhouse gas emissions, was also withdrawn on the basis of commitments we made to continue the dialogue with the intent of working toward a mutually agreeable response (see 'A Closer Look – Addressing Climate Change' on Page 36).

- A variety of organizations now rank and rate companies for their performance on nonfinancial issues (e.g. the Dow Jones Sustainability Index, Storebrand and FTSE4Good – see Pages 63 to 64). Companies are assessed for their approach to sustainability, their attractiveness as an employer, their record in employee and supplier diversity and their sustainability reporting. We have worked closely with several of these organizations to provide information and to understand the issues and performance indicators used in their ranking methods.
- We track how potential customers, business leaders and others perceive our reputation using commissioned and external surveys such as the Fortune Corporate Reputation Report and Harris Interactive Surveys. These assessments ask questions about a number of issues relevant to sustainability, such as the quality of our relationships, environmental performance and our actions as an employer and community leader. Reputation assessments give us insight into the importance of these issues to the respondents' overall impression of us, as well as how we are seen to address them.
- We meet in person with a variety of nongovernmental organizations at the global, regional and local level. Together, we discuss emerging issues, respond to questions about our performance, identify our differences in assumptions and opinions and find opportunities for collaboration.



**Jaguar**



**Ford Taiwan – Lio Ho**



**Volvo**

**Other Ford Motor Company environmental and social reports:**

- Australia
- China (forthcoming)
- Dagenham (UK)
- India
- Malaysia
- Otosan (Turkey)
- Rouge Center (U.S.)
- Thailand

**Public reporting**

Our Accountability Principle commits us to disclosure and reporting. Done well, public reporting serves as a mechanism for holding ourselves accountable to a wide range of stakeholders and lets others judge our performance. In the past several years, we have expanded our public reporting in several ways:

- Publication of this and three preceding global corporate citizenship reports
- Issuance of brand, country and facility corporate citizenship or environment reports in some locations

We have gathered feedback on our corporate citizenship reports through several channels. A portion of the feedback on last year's global report is summarized at the end of this section. Although the feedback came from a limited sample, we have found it useful in shaping our approach to this report. For example, the most common suggestion for improvement was to make the report more readable and accessible. We have changed the format of the report and put additional content on [www.ford.com](http://www.ford.com) for readers who wish to delve deeper.

Assurance of corporate citizenship reports is meant to increase the credibility and quality of information reported to stakeholders, as well as strengthen internal management systems. Assurance can take many forms and its value in large part depends on the standards that are followed and who does it. While assurance has typically focused on data verification, emerging areas for sustainability reporting include governance and management systems, as well as a focusing on specific issues or material risks.

In this report, much data has been verified internally and/or externally. Data reported to governments under regulatory requirements are often readily available to the public. We continue to explore assurance options and evaluate if and how to proceed in a way that adds value for us and our stakeholders.

# Data

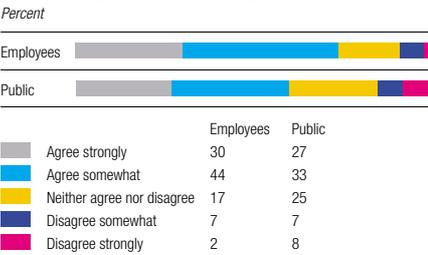
**A-F** Results are from an Internet survey conducted with readers of the 2001 Corporate Citizenship Report.

Two groups of readers were studied: employees (574 respondents) and consumers/general public (280 respondents).

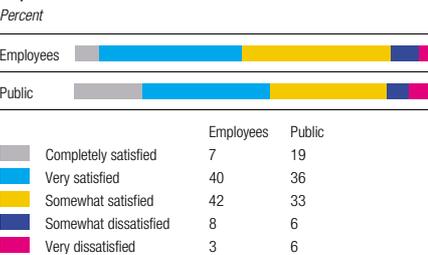
# A closer look

## OUR SUV FUEL ECONOMY COMMITMENT

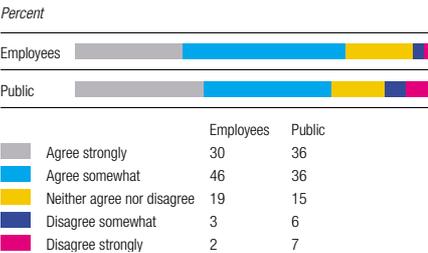
### A Ford is taking the lead in sharing information.



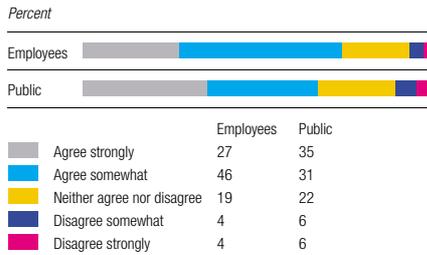
### B How satisfied are you with the Corporate Citizenship Report overall?



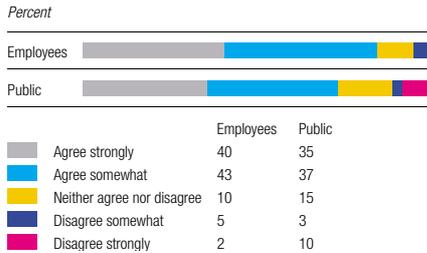
### C The report provided me with a good understanding of Ford's effort in the area of corporate citizenship.



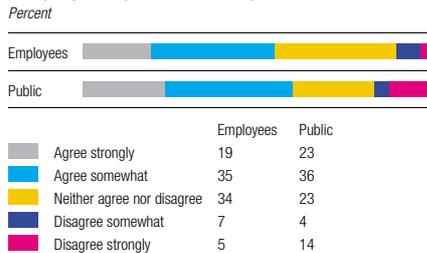
### D The information/content contained in the report is valuable.



### E I respect Ford's approach to corporate citizenship.



### F My overall opinion of Ford has improved as a result of the Company's corporate citizenship efforts.



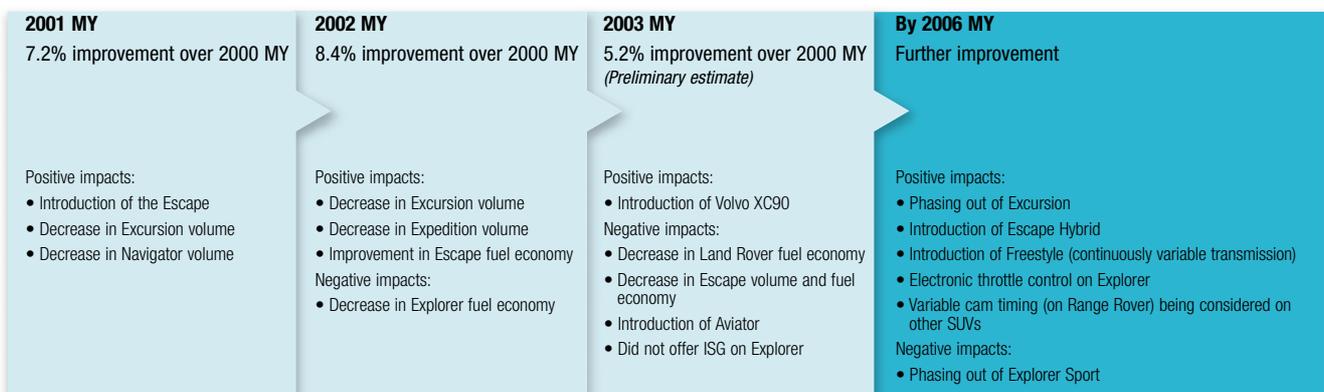
When we announced our 25 percent fuel economy improvement commitment in 2000, our assessment showed that we could achieve this goal through a combination of new technology and product introductions by the 2006 model year (see Glossary on Page 71 for definition of model year). Through the 2003 model year, we will have achieved an estimated 5.2 percent average fuel economy improvement in our U.S. SUV fleet relative to the 2000 model year. Our current projections do not show us reaching the 25 percent level; however, further improvements to the fleet average will be achieved for the next two years. We will continue to monitor our progress to our 2005 goal.

Given the importance of the commitment to us, our customers and others, we want to offer further insight on why we expect not to meet the goal and share the factors affecting our performance. Although we are committed to improving the fuel economy of all of our vehicles, we know that this shortcoming has raised questions and affected relationships with some of our key stakeholders, including nongovernmental organizations.

Our cycle plan is the internal map showing what products will be introduced when, and with what characteristics. Among the most confidential planning elements of an automotive manufacturer, cycle planning is driven by customer desires, market demand, technology readiness and affordability, regulatory requirements and financial considerations. These factors, in turn, depend on overall economic conditions and competitive positioning, among other things. Planning over a five-year timeframe is a dynamic balancing act of many different considerations. Multiple actions across our product lineup, when added together, result in the fleet becoming more or less fuel efficient, on average.

## SUV FUEL ECONOMY IMPROVEMENT

Percentages show improvement relative to 2000 MY



### PRODUCT INTRODUCTIONS

Over the past several years, we have introduced new, more fuel-efficient products into the SUV lineup like the Ford Escape, Land Rover Freelander and Volvo XC90. Sales of smaller, more fuel-efficient SUVs are increasing relative to larger SUVs like the Expedition and Excursion. Looking forward, we will introduce the Ford Freestyle as a 2005 model year product and phase out the Excursion from our offerings in 2004. Both actions will improve our average SUV fleet fuel economy.

### NEW TECHNOLOGY

Some of the key technologies originally slated to help us reach the 25 percent goal have been delayed or eliminated, in large part because of cost-based decisions to restore our financial health. For example, because of an unfavorable business case, we decided not to offer the integrated starter generator (ISG) in the 2003 Explorer, and this was a setback in our efforts to improve the fuel economy of this vehicle. This start-stop technology would have increased its fuel economy primarily during city driving. Our decision was predicated, in large part, by the fact that the customer fuel savings benefit was not expected to be great enough to offset the cost of the technology. The electronic throttle control that will become standard on the 2004 Explorer will help us recapture some of the desired fuel economy improvement for this vehicle.

**We recognize the importance of fuel economy and will continue working towards better performance.**

Other technologies will improve fuel economy. The continuously variable transmission on the Freestyle will contribute positively to improving our fleet average. The Escape Hybrid, which will be available to customers in 2004 (see Page 19), will help the average, although only in a limited way, because of its relatively low initial volume. Variable cam timing (currently on the Range Rover), as well as six-speed transmissions, are being considered for other SUVs by mid-decade.

### GOING FORWARD

Changing market demands, reflected in sales volumes different from our current assumptions, could cause these projections to change. Increased demand for four-cylinder Escapes or six-cylinder Explorers, for example, would have a positive effect on our performance. Significant demand for the Escape Hybrid after its introduction in 2004 would improve our SUV fuel economy average. External influences such as an increase in fuel price or other factors that change consumers' willingness to pay for fuel economy could cause these types of shifts.

We are currently reviewing our cycle-planning processes to understand how to meet our goal of improving fuel economy and how best to apply technology in our SUVs and across our vehicle fleet. We recognize the importance of fuel economy and will continue working toward better performance.

# Products and customers

We will offer excellent products and services.

We will achieve this by:

- Focusing on customer satisfaction and loyalty and keeping our promises
- Using our understanding of the market to anticipate customer needs
- Delivering innovative products and services that offer high value in terms of function, price, quality, safety and environmental performance

**Strong customer relationships and innovative, high-quality, high-value products are the foundation of our business and essential to our success.**

**Our customers are diverse by all measures – geography, education, income, ethnicity, sexual orientation, age and world view – and they have equally diverse needs and desires. We believe, however, that vehicles offering superior comfort, convenience, safety and environmental performance and made by a trusted company, have universal appeal.**

**Our markets are always changing, and so are the products we offer. We constantly evaluate what external factors are shifting, such as the level of environmental concern among our customers. We anticipate trends, respond to changes through our manufacturing and product design and lead by developing new technologies.**

**Going forward, we will build on the gains we've made in customer satisfaction and product quality. In 2002:**

- **According to J.D. Power and Associates in the United States, Ford Motor Company tied with GM for first place in Sales Satisfaction and showed twice the rate of improvement over the industry average for the Sales Satisfaction Index (SSI). We also exceeded the industry average for J.D. Power and Associates' Customer Service Index (CSI), which focuses on service experiences during the first three years of vehicle ownership.**
- **We improved quality substantially in the United States, as reflected in gains in J.D. Power's Initial Quality Study (IQS), an 11 percent improvement in warranty repairs and a 6 percent improvement in cost per unit (CPU).**

On the Web, you will find additional information about our customers, technologies under development, flexible manufacturing and links to:

- External sites that rank and rate our products
- The WBCSD Sustainable Mobility Project Web site

[www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship)

## NAVIGATING CHANGING MARKETS

To help us better navigate rapidly changing markets, we track near-term and long-term trends. We enhance our capacity to respond to changing markets through the use of flexible manufacturing and common vehicle platforms. We create markets by researching and introducing new product concepts and technologies.

## ANTICIPATING FUTURE DIRECTIONS

To determine what our customers will want and need in the future, we identify large-scale consumer and societal trends that may impact our vehicle design, content and performance, as well as the changing expectations customers have of us as a Company.

### Long-term trends

Through our involvement in projects like the World Business Council on Sustainable Development's (WBCSD) Sustainable Mobility Project ([www.wbcsdmobility.org](http://www.wbcsdmobility.org)), and the work of our Global Consumer Insights Group, we have deepened our understanding of the societal and environmental trends that will shape the market for our products over the next 30 years.

### Near-term trends

Some of the more immediate trends we are witnessing include:

- Light trucks, including SUVs, minivans and pickup trucks, continue to gain market share in North America. During 2002, the fastest-growing SUV segment, up 23 percent, was "crossover utility vehicles" – smaller SUVs typically built on unibody platforms that offer trucklike functionality.
- Growth is shifting from the developed to emerging economies. By 2011, the Asia-Pacific region is expected to account for more than 60 percent of the growth in the auto industry. More than 85 percent of this growth is expected to occur in China, ASEAN and India. By that time, the total auto industry volume in the markets of Asia-Pacific will be about the same as the U.S. and European markets combined. (Ford in China, Page 23).

#### FAST FACTS

The overall U.S. market for new cars and trucks will grow less than 1 percent annually until the end of this decade, according to J.D. Power and Associates. Sales to Gen Y buyers, however, will balloon 20 percent a year in the same time period. Four million Gen Y drivers will turn 16 every year for the next decade.

Ford scooped 10 awards at the 2002 Fleet Excellence Awards, which are voted for by UK fleet customers. Included was a one-two for the Mondeo TDCi and Focus TDCi in the "Diesel Car of the Year" category.

*"I am one retailer who is excited about the hybrid vehicles on the horizon. Ford has the opportunity to take a leadership position in developing and delivering highly fuel-efficient vehicles to the market. As the Escape Hybrid is introduced, I would encourage the Ford Motor Company to get behind the launch and create consumer awareness and demand."*

**Dave Dunn**

Courtesy Ford, Littleton, Colorado, United States

#### THE FORD ESCAPE HYBRID

Ford is currently developing its first hybrid electric vehicle, the Escape Hybrid. It will be available for sale to the public in late summer 2004. The Escape Hybrid will deliver all the benefits of the conventional Ford Escape, including plenty of room and the acceleration performance of a V6 engine, plus the fuel economy and emissions advantages provided by its "full" hybrid system.

As a "full" hybrid, the Escape Hybrid can run on its four-cylinder gasoline engine, electric battery power or both together, depending on the driving situation. At slower speeds and while the vehicle is idling, the engine can automatically shut off, and the vehicle will run in pure electric mode, reducing fuel consumption and lowering emissions. An advanced powertrain control module chooses the best power method and ensures that the vehicle runs at maximum efficiency. When the need for extra power is detected, the engine automatically turns on. The 300-volt, nickel-metal hydride battery pack recharges via regenerative braking, capturing energy that would otherwise be lost and eliminating the need to plug it in.

The Escape Hybrid is expected to achieve EPA fuel economy between 35 and 40 mpg for city driving and nearly 30 mpg for highway driving in front-wheel-drive configuration. Fuel economy for the 4x4 will be slightly lower. Conventional emissions from the vehicle will be significantly better than today's low emissions vehicles and will meet strict Super Ultra-Low Emission Vehicle (SULEV) and Partial Zero Emission Vehicle (PZEV) emissions standards.

The retail price for the Escape Hybrid will be established shortly before its introduction. Like other hybrid vehicles that cost more than their conventional counterparts, the Escape Hybrid will carry a competitive price premium. We have actively advocated for government tax incentives for consumers to help offset the cost of the technology. The Escape Hybrid will be sold through certified Ford dealers throughout the United States and Canada.

Offering this vehicle is a valuable opportunity to gain experience in developing and marketing hybrid technology. By designing and making the vehicle, we are building the capacity to innovate and standardize, to use hybrids on other platforms like the Futura and to bring down costs over time. By selling and servicing it, we will learn more about the customers for this product – what their interests and priorities are, who and how many they are and how to market to them.

We view the Escape Hybrid as an investment: Should the market react positively to hybrids, we will be well-positioned to provide this "best of both worlds" solution.

#### HYBRID TECHNOLOGY FOR A BETTER WORLD

Hybrid systems combine an electric transaxle with an internal-combustion engine to meet peak demands for power effectively and to capture and store energy that is wasted during braking. Escape Hybrid features include:

- 1 Engine start-stop: the engine turns off to conserve fuel and restarts instantly in response to the need for power
- 2 Electric motor: 65-kW permanent-magnetic electric motor can power the Escape Hybrid on its own or boost the engine
- 3 Electric transaxle: houses the electric motor and generator directs power among the engine, electric motor, generator and drive wheels
- 4 Regenerative braking: collects energy created from braking that would otherwise be lost and uses it to recharge the battery pack, eliminating its need to be plugged in
- 5 Engine: highly efficient four-cylinder gasoline engine uses an advanced combustion cycle to reduce both fuel consumption and emissions
- 6 300-volt battery pack: stores and provides energy when needed
- 7 Thermal management: maintains battery temperature for optimum performance and battery life



**FAST FACT**

The American Council for an Energy-Efficient Economy's 'Greener Choices 2003' list includes the 2.0L, four-cylinder, automatic Focus Wagon; the 2.3L, four-cylinder, automatic Ranger (also Mazda B2300); and the 4.2L, six-cylinder, automatic F-150 truck. The Ford Focus 2.3L, four-cylinder, manual sedan and wagon are among the "Greenest Vehicles of 2003." To learn more about how all of our vehicles rate on overall environmental performance, visit [www.greencars.com](http://www.greencars.com).



- Some fleet customers are factoring corporate responsibility considerations into their purchase decisions. For example, a recent sale to BT involved a review of our approach to human rights. Fleet customers also are seeking improved fuel economy to reduce operating costs and demonstrate environmental responsibility.
- Like other manufacturers, we are also under increasing pressure to improve SUV safety and the environmental performance of our vehicles. During the past year, multiple advocacy campaigns have begun asking us and others in the auto industry to improve the fuel economy of our vehicles. Participants in these campaigns are concerned about the impact that fuel consumption has on climate change and energy security.

**Other market insights**

Our research shows that the most important factor in forming an impression of Ford in the United States is how we treat our customers and employees. Concern by consumers about the environment, and specifically about climate change, while lower in relative importance, increased in 2002. In Europe and other high-fuel-cost markets, fuel economy is a significant purchase consideration. In North America, however, we have found that a majority of customers want increased fuel economy but generally will not pay more for it. Fuel economy ranks low in pre-purchase considerations by these customers, but can be rated significantly higher in post-purchase dissatisfaction ("Things Gone Wrong," see Glossary). Though our customers care about the quality and value of our vehicles, they do not want to choose between performance, functionality and the environment.

**During the next five years, we will introduce 65 new Ford, Lincoln and Mercury products in North America and 45 new products in Europe (started in 2000). We expect our Premier Automotive Group to introduce 35 new models worldwide. In the next two years, Mazda will unveil eight new products in Japan, seven in North America and four in Europe.**

**Right: Select headlines of the past year.**



In 2002, we discontinued our THINK brand of battery electric vehicles because of limited customer demand, performance limitations (e.g., range) and a strategic shift toward other higher volume environmental technologies. The THINK sale was handled in a socially responsible manner. We have gained valuable experience from the development of battery electric vehicles in areas like regenerative braking, battery management and drivetrain technology, which we will use in future products.

### RESPONDING TO MARKET SHIFTS

Our product pipeline includes new vehicles to respond to these trends. For example, in 2002, we introduced the Volvo XC90, which includes many innovations to address environmental and safety concerns (see Page 45 for discussion of SUV safety). In 2004, the Escape Hybrid will be available for sale to the public (Page 19). In 2004, we will also introduce the Ford Freestyle, a crossover utility vehicle using a continuously variable transmission for improved fuel economy.

As we move forward with new product development, several fundamental changes to our business will enable us to respond more quickly to market signals.

#### Using flexible production

Historically, the long lead times of auto manufacturing have meant that production capacities played a role in driving markets. As we implement flexible manufacturing worldwide, we will be able to shift production to different models relatively quickly and better synchronize our customers' wants with what we can produce. The new assembly plant at the Ford Rouge Center, for example, will have the capability to produce nine models from three platforms (Pages 66 to 69).

#### Building on common platforms

Cutting the time it takes to bring a new product to market helps us meet changing demand more quickly. Globally, we are moving toward common platforms and shared technologies so that vehicles can be differentiated while using common components. Cuts in development time create greater efficiency. For example, the Ford Futura (right), announced in early 2003, is modified from the Mazda 6 platform and follows the flexible system that also underpins the upcoming Ford Five Hundred and Ford Freestyle. Up to 10 distinct Ford, Lincoln and Mercury vehicles will be based on the Futura, starting in the 2006 model year. The Ford Futura platform will be the basis for Ford's second full hybrid electric vehicle.



The Futura

### VOLVO XC90 – AN SUV WITH MANY FIRSTS

Although one of the fastest expanding segments in the world, SUVs are also one of the most challenged from the aspect of sustainability. Volvo Cars waited longer than most to enter this market with its introduction of the XC90 in 2002. It features a range of innovative and award-winning safety and environmental technologies and has won wide recognition, like:

- Motor Trend 2003 Sport Utility of the Year
- “Best Pick” by Insurance Institute for Highway Safety
- NAIAS North American Truck of the Year

Below are some of its innovations:

- Roll stability control. The gyroscopic sensor automatically detects an impending rollover and intervenes to help reduce the potential for rollover.
- Seat belt pretensioners in all seven seats. In an accident, the XC90's seat belts automatically tighten to help keep everyone restrained in their seats.
- Inflatable side curtains in all three rows. The inflatable side curtains enhance head protection and help keep all passengers inside the vehicle.
- The integrated sliding child booster seat has a safety belt configured specially for a child.
- PremAir® transforms ground-level ozone into oxygen.



#### FAST FACT

The Ford Focus Station Wagon (2.0L, four-cylinder, manual and automatic) and Ranger (2.3L, four-cylinder 2WD, manual and automatic) are each best-in-class on the U.S. Environmental Protection Agency's 2003 fuel economy guide. For more information on these and other vehicles, see [www.fueleconomy.gov](http://www.fueleconomy.gov). These vehicles and three others were recognized by Natural Resources Canada for their fuel efficiency. See: [www.oeenrncan.gc.ca/vehicles](http://www.oeenrncan.gc.ca/vehicles)

#### ANTICIPATING NEW MARKETS

We respond to changing paradigms and specifically address growing environmental and mobility challenges in part through the research and advanced engineering of concept vehicles. For example:

- Our Model U, the "Model T for the next century," demonstrates innovative environmental, safety, interior and exterior features (Page 29).
- We have developed 10 fuel-cell-powered vehicles for engineering testing and public demonstration.
- We designed a Personal Urban Vehicle concept for Asia in collaboration with the University of Michigan, the College of Creative Studies in Michigan, Shanghai Jiaotong University and several global automotive suppliers.

#### HOW ARE WE DOING?

To be competitive in future markets, we must get things right in terms of customer satisfaction and quality. This involves a positive experience with the dealer during the sale and service of the vehicle, satisfaction with the initial quality of the vehicle and satisfaction with the dependability of the vehicle after extended use.

In 2002, we continued our efforts to eliminate quality problems through better design and manufacturing. From 2001 to 2002, we reduced the number of "Things Gone Wrong" by 15 percent. This reduction was in large part due to Consumer Driven 6-Sigma, which in 2002 achieved more than \$350 million in waste

**We are using good design to increase the appeal of our vehicles to customers. In the 2002 J. D. Power and Associates Automotive Performance, Execution and Layout (APEAL) Study, Ford received more segment awards than any other manufacturer.**

elimination savings worldwide. Other efforts like standardizing our processes through our Quality Operating System and engaging our employees through our Quality Leadership Initiative are making a difference in quality.

As a result, various internal and external indicators of quality performance show that we are making significant progress. All 2002 J.D. Power and Associates surveys show a positive trend. For example:

- Ford was the most improved U.S. automaker in the 2002 Initial Quality Study (IQS).
- Ford leads the domestic automakers in durability according to the 2002 Vehicle Dependability Index, which measures 1998 model year products.
- Ford ranked above the industry average in J.D. Power's first industry-wide automotive study conducted in Germany.

We are using good design to increase the appeal of our vehicles to customers. In the 2002 J.D. Power and Associates Automotive Performance, Execution and Layout (APEAL) Study, Ford received more segment awards than any other manufacturer.

We are also working with our dealers in a number of ways, most importantly, on certification programs designed to enhance the sales and service experience for our customers. This is reflected in improved Sales Satisfaction Index and Customer Service Index rankings.



**Ford Freestyle**

Mei-Wei Cheng, Vice President of Ford Motor Company, Chairman and CEO of Ford Motor (China) Ltd., shakes hands with Yin Jiaxu, President of Changan Automotive Group, at the Fiesta off-line ceremony.



## FORD IN CHINA

Asia-Pacific is expected to account for over half the growth in the global auto industry in the next 10 years, and almost half of this will occur in China. The opportunities and complexities it represents are immense. We plan to participate profitably and responsibly in China's automotive market and have plans in place to expand in well-measured steps.

### Ninety years of involvement

We have been active in China for 90 years. By 1913, the Model T was being imported into China and embraced by customers. In 1924, Chinese President Sun Yat-sen sent a letter to Henry Ford inviting him to bring Ford's automotive technology and modern management know-how to China.

Henry Ford II and Deng Xiaoping met in 1978 and 1979 and established the Ford Visiting Scientist program. Through it, Chinese scientists and engineers gain on-the-job training in Ford's facilities in Michigan.

Following establishment of business development offices in Beijing and Shanghai in 1992-93, a wholly owned holding company, Ford Motor (China) Ltd., was established in October 1995.

Also in 1995, Ford entered an equity relationship with Jiangling Motor Company (JMC). Today, Ford has a 30 percent equity stake in JMC, producing the Ford Transit with more than 90 percent local content.

### Our business today

In 2001, Ford established a 50/50 joint venture with Changan Automobile Group. This JV has the capacity to assemble approximately 50,000 units per year, and in January this year, launched production and sale of a four-door sedan based on the popular Ford Fiesta, with more than 200 changes and improvements to meet the unique needs of the Chinese market. We plan to introduce more Ford products to China with the launch of the Ford Mondeo in 2003. Going forward, we intend to launch at least one new model annually in China.

Ford passenger vehicle dealerships in China will increase from 17 to 26 by mid-2003. Jaguar, Land Rover and Volvo also sell vehicles in China through a growing distribution network. Mazda also is growing steadily in China, with contract assembly of vehicles and sales through an expanding network of Mazda dealers.

A strong supply base in China will provide high-quality parts and components and help reduce our global costs.

### A responsible approach

As with any investment we make, our stakeholders expect that we will respect the environment and human rights in China. In our own operations and those in which we have a controlling interest, we certify our facilities to ISO 14001, comply with all applicable laws and apply our own policies and standards. For example, we follow our Restricted Substance Management Standard and Code of Basic Working Conditions (Page 52). For suppliers, we use contractual agreements and Q1 standards to require certification to ISO 14001 and conformance with the Restricted Substance Management Standard. For other business partners, including affiliates that we do not control, we encourage them to implement policies similar to our own. We will also encourage suppliers and other business partners to adopt policies and procedures consistent with our Code of Basic Working Conditions.

### Engagement on key issues

Our participation in China goes beyond manufacturing and selling vehicles. We have worked cooperatively with government agencies and scientists to explore fuels, vehicles and the infrastructure needed to use locally available resources for environmentally and economically sound approaches to mobility.

Since 1995, Ford, the Chinese Government and the Chinese Academy of Engineering have worked together to explore alternative fuel vehicles appropriate to China. Among the fuels researched was "naturalgen" fuel, a blend of natural gas and hydrogen that could be used in the existing natural gas fueling infrastructure. A prototype Ford Fiesta running on naturalgen was introduced in 2002. Another study with the Chinese Academy of Engineering identified issues that China should explore in developing its automotive industry, including infrastructure requirements, congestion, pollution and sprawl. A project report *Personal Cars and China*, published by the U.S. National Academy of Engineering, summarized these issues, explored options and presented recommendations, research directions and policy choices.

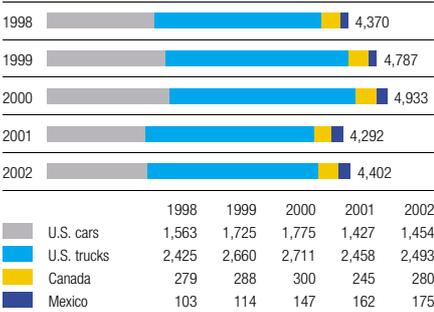
Our present efforts in China are focused on all aspects of the business – including internal operating efficiencies, meeting customer needs with desirable and affordable products and fulfilling our role as responsible citizens in the community. We're planning for long-term sustainable growth in China.

# Data

## A Summary of vehicle unit sales

### North America

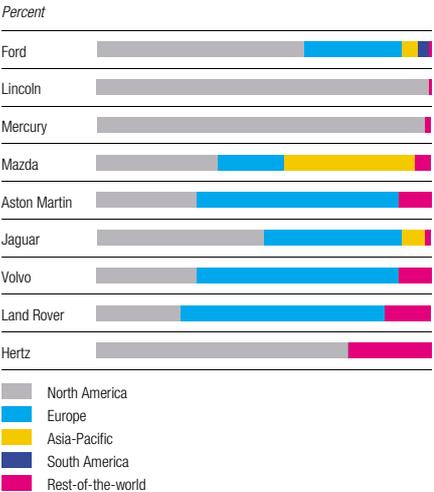
Thousands



Vehicle unit sales generally are reported worldwide on a 'where sold' basis and include sales for all Ford Motor Company-badged units, as well as units manufactured by Ford and sold to other manufacturers.

## B Geographic breakdown of 2002 markets

Percent

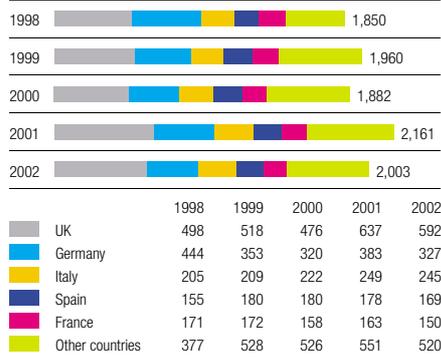


Thirty percent of Aston Martin's market is in the UK, with an additional 30 percent in the rest of Europe.

Seventy-five percent of Hertz's revenue came from North America, 25 percent from Rest-of-the-world.

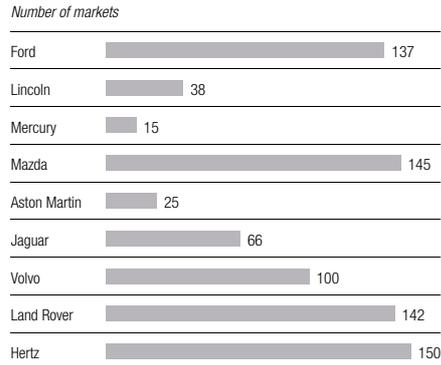
### Europe

Thousands



## C Number of markets served in 2002

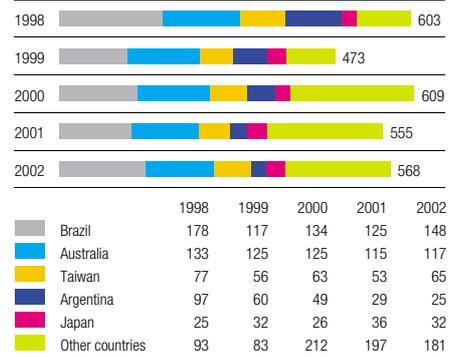
Number of markets



Hertz serves 150 countries with 7,000 sales locations.

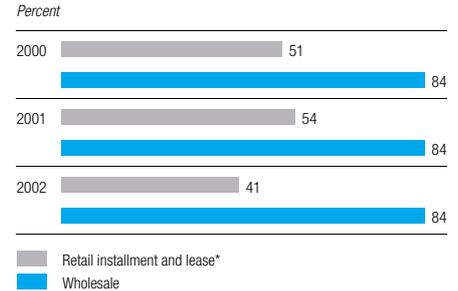
### Other international

Thousands



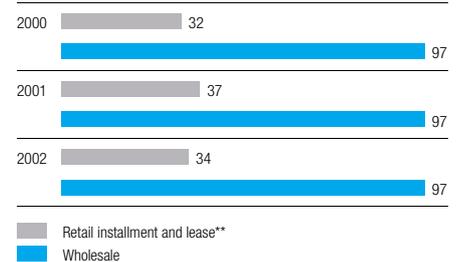
## D Ford Credit market share - United States

Percent



## Ford Credit market share - Europe

Percent

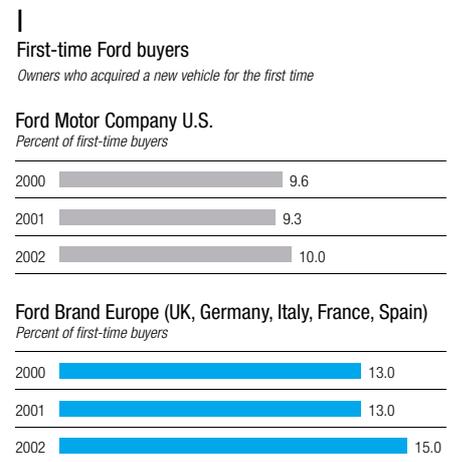
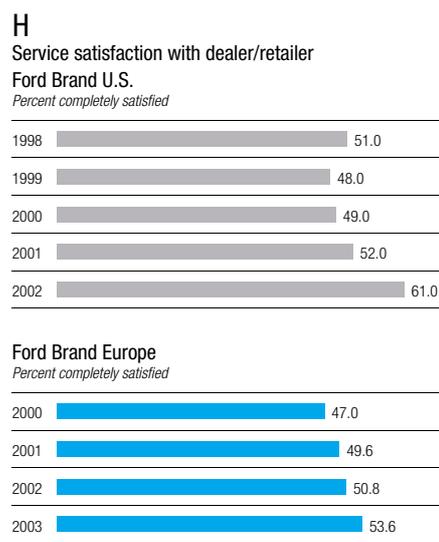
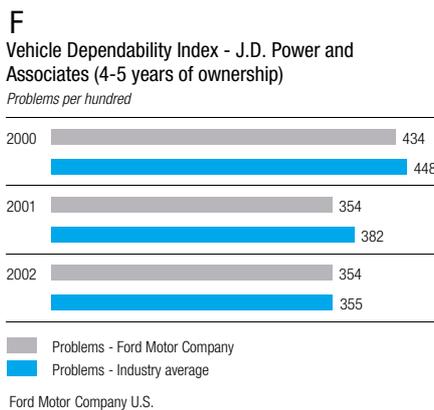
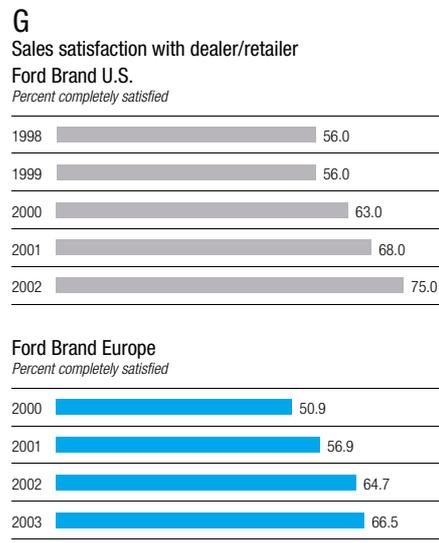
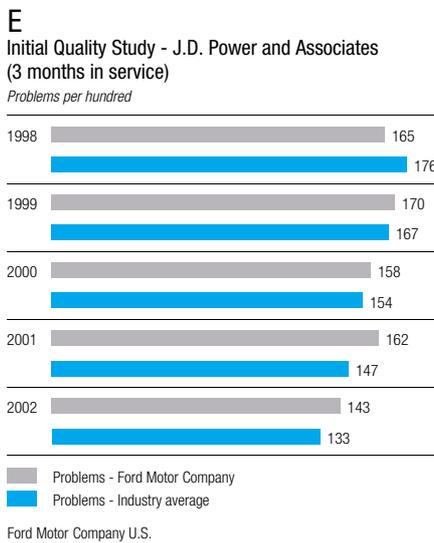


\*As a percentage of total sales and leases of Ford, Lincoln and Mercury brand vehicles, including cash sales.

\*\*As a percentage of total sales and leases of Ford brand vehicles, including cash sales.

**E** The Initial Quality Study focuses on problems that consumers report with their new vehicles during the first three months of ownership. Both Ford and the rest of the industry have been improving according to this measure.

**F** The Vehicle Dependability Index (VDI) evaluates vehicle quality after four to five years of ownership, providing an indicator of how vehicles perform beyond typical warranty periods. Owners rate their vehicles on questions similar to the Initial Quality Study (IQS) survey. VDI replaces the problems that occur in production and shipment, like dents and dings with longer-term problems such as rust and corrosion. The questionnaire includes 137 problem areas covering the same nine vehicle systems from IQS.



# A closer look



## DRIVING TECHNOLOGY TO CO2 REDUCTION: WHAT PATH WILL WE TAKE?

*“Even if hydrogen fuel cells are our long-term future, diesel provides a means to significantly reduce CO2 emissions today. Similarly, internal-combustion engines powered by hydrogen represent a realistic transition pathway to zero CO2 emissions from the transportation sector. From a ‘well-to-wheels’ perspective, hydrogen generated from renewable sources (or with carbon byproducts sequestered) is clearly the most attractive fuel option, and fuel cells are the most energy-efficient technology for converting hydrogen into mobility.”*

**Gerhard Schmidt**  
Vice President, Research and Advanced Engineering

One hundred years ago, a variety of fuel sources and engine types – steam, electric, gasoline – competed fiercely to become the propulsion of choice for the “horseless carriage.” Gasoline-powered spark ignition engines won decisively. Henry Ford and other motorcar pioneers succeeded in offering an affordable vehicle for the masses that also solved growing pollution problems then associated with horse-powered transport.

We are now entering an era of environmental concerns regarding transportation in which a variety of engines and fuel types – some the same as 100 years ago, some entirely new – are competing to meet the needs of future personal mobility.

One important difference is that a century of dominance of gasoline-fueled vehicles has led to trillions of dollars of investment in gasoline refining and fueling infrastructure in all but the most remote parts of the globe. Thus, the deck is stacked in favor of vehicles powered by gasoline and diesel. Imagining and planning for a major shift in direction, like a hydrogen-based system, requires vehicle innovations and the development of, and investment in, fueling infrastructure.

Concerns about the contribution of transport sector CO2 emissions to the issue of climate change are behind much of the interest in alternative fuels and engine technologies. On these pages, we compare the leading contenders according to their “well-to-wheels” CO2 emissions. Well-to-wheels analysis accounts for CO2 emissions as a result of making and distributing the fuel, as well as emissions from the vehicle itself. Some of the technologies profiled have no CO2 tailpipe emissions, but the CO2 emitted during fuel production is just as significant to a global issue like climate change. Engines using fuels produced from renewable sources have the least well-to-wheels CO2 emissions.

We are researching and developing a wide variety of new technologies – some of which are shown on these pages – and working in cooperation with government agencies and other business partners to explore ways to bring them into the mainstream. Much like at the turn of the century, we must find ways to make these technologies and fuels affordable, available and desirable.

### CO2 WELL-TO-WHEELS ATTRIBUTES OF DIFFERENT FUELS AND ENGINE TYPES (G/KM)\*

*Emissions derived from making, distributing and using the fuel for a mid-size (Taurus-like) sedan.  
▼ This assumes advanced vehicles that are aluminum intensive (weigh less) and have lower aerodynamic drag.*

CO2 g/km	GASOLINE	DIESEL
300 (Higher CO2)	● Current technology Spark ignition	
250		● Current technology Compression ignition
200	▼ Spark ignition	
150	▼ Spark ignition hybrid	▼ Compression ignition ▼ Compression ignition hybrid
100		
50 (Lower CO2)		
0		
	<b>GASOLINE</b>	<b>DIESEL</b>
<b>Development status of Ford Motor Company vehicles</b>	<b>Spark ignition:</b> <ul style="list-style-type: none"> <li>• Dozens of models available worldwide</li> <li>Advancements to improve fuel economy include a combination of: <ul style="list-style-type: none"> <li>• Aluminum-intensive vehicle (e.g. 2003 Jaguar XJ)</li> <li>• Reduced aerodynamic drag</li> <li>• Continuously variable transmission (e.g. 2004 Ford Five Hundred and Freestyle)</li> <li>• Variable cam timing (e.g. 2003 Range Rover, other SUVs being considered)</li> <li>• Electronic throttle control (e.g. 2003 Lincoln LS and Thunderbird, 2004 Explorer)</li> <li>• Six-speed transmission (multiple vehicles currently, more planned)</li> </ul> </li> </ul> <b>Spark ignition hybrid:</b> <ul style="list-style-type: none"> <li>• “Full” hybrid (2005 Escape)</li> <li>• Futura platform</li> </ul>	<b>Compression ignition:</b> <ul style="list-style-type: none"> <li>• Primarily in Europe (e.g. Focus, Fiesta, Fusion, Mondeo, Galaxy, Ranger, Volvo S60, S80, V70)</li> <li>• Advancements to improve fuel economy and reduce traditional emissions include: <ul style="list-style-type: none"> <li>- particulate traps</li> <li>- NOx traps</li> <li>- six-speed transmissions</li> <li>- engine friction reduction</li> <li>- others</li> </ul> </li> </ul>

More information on vehicles that we offer and specific technologies is available at:

\*Assumed a base weight vehicle and adjusted for different powertrains, resulting in a range of weights from 2,375 to 3,125 pounds.

**FUEL ECONOMY AND CO<sub>2</sub> EMISSIONS:  
A COMPARISON OF THE PAST, PRESENT AND FUTURE**

	<b>Ford Model T</b> Spark ignition (gasoline)	<b>Focus SI</b> Spark ignition (gasoline)	<b>Focus TDCI</b> Turbo diesel compression ignition	<b>Focus Fuel Cell</b> Hybrid electric
Vehicle weight (lbs)	<b>1,200</b>	<b>2,600</b>	<b>2,900</b>	<b>3,525</b>
Fuel economy (mpg)	<b>20.0<sup>1</sup></b>	<b>33.8</b>	<b>43.1</b>	<b>50<sup>2</sup></b>
Tailpipe CO <sub>2</sub> emissions (g/km)	<b>278</b>	<b>166</b>	<b>144</b>	<b>0</b>
Well-to-wheels CO <sub>2</sub> emissions (g/km) <sup>3</sup>	<b>326–353</b>	<b>193–209</b>	<b>156–173</b>	<b>131–163/0<sup>5</sup></b>

1 Source: Taken from Model T sales brochure; however, it does not apply the same FTP test cycle as today's vehicles  
 2 Targeted fuel efficiency/gasoline equivalent  
 3 Values depend on where the fuel is produced  
 4 CO<sub>2</sub> emissions incurred in making H<sub>2</sub> by steam reforming methane  
 5 Negligible emissions when made from renewable electricity



The Focus was chosen for comparison because it is our top-selling vehicle worldwide, and gasoline, diesel and fuel cell versions exist.



Today, other tailpipe emissions (HCs, NOx and CO) range from 10 to 50 times lower than they were during the early 1960s, depending on the particular emission. They will be even less by the end of this decade.

ETHANOL	NATURAL GAS	ELECTRIC	HYDROGEN FROM FOSSIL FUELS	HYDROGEN FROM RENEWABLE SOURCES
▼ Spark ignition (upper limit)		▼ Battery (upper limit)	▼ Spark ignition	
	▼ Spark ignition	▼ Battery (average)	▼ Spark ignition hybrid ▼ Fuel cell	
▼ Spark ignition (lower limit)				
		▼ Battery (lower limit)		▼ Spark ignition or Fuel cell
ETHANOL	NATURAL GAS	ELECTRIC	HYDROGEN FROM FOSSIL FUELS	HYDROGEN FROM RENEWABLE SOURCES
<p><b>Flexible fuel models:</b></p> <ul style="list-style-type: none"> <li>Run on any combination of gasoline and up to 85 percent ethanol (E85) in the same tank</li> <li><b>United States:</b> Taurus, Explorer, Mountaineer, Ranger</li> <li><b>Europe (Sweden):</b> Focus</li> </ul> <p><b>Note:</b> The range reflects different approaches to making ethanol.</p>	<p><b>Compressed natural gas:</b></p> <ul style="list-style-type: none"> <li>Can be dedicated (run only on natural gas) or bi-fuel (also run on gasoline)</li> <li>Dedicated: <b>United States:</b> Crown Victoria, F-150, E-Series van;</li> <li><b>Europe:</b> KA, Focus, Galaxy, Transit</li> <li>Bi-fuel: F-150, Volvo V70, S60, S80</li> </ul>	<p><b>Electric:</b></p> <ul style="list-style-type: none"> <li>Discontinued Ranger EV and THINK brand because of lack of market demand, performance limitations (e.g. range) and strategic shift toward other higher-volume technologies</li> </ul> <p><b>Note:</b> The range reflects different sources of electricity. The upper limit is coal-based electricity, the middle point is the U.S. grid average and a value of zero is electricity made from renewable sources.</p>	<p><b>Hydrogen internal-combustion engine:</b></p> <ul style="list-style-type: none"> <li>Uses compressed hydrogen in spark ignition engine similar to typical gasoline engine</li> <li>P2000 and Model U (see Page 29)</li> </ul> <p><b>Hydrogen fuel cell:</b></p> <ul style="list-style-type: none"> <li>Developed three generations of fuel cell technology that use methanol reformation or compressed hydrogen. Have produced 10 fuel cell vehicles for engineering testing and public demonstration</li> <li>Focus FCV (hydrogen), Focus FCV hybrid (hydrogen), Focus FC5 (methanol reformation), P2000 (hydrogen), Mazda Premacy (methanol reformation)</li> <li>Opened two hydrogen fueling stations, one in Dearborn, Michigan, and one at Arizona Proving Grounds in Yucca, Arizona</li> </ul> <p><b>Note:</b> Even though CO<sub>2</sub> emissions are negligible for both spark ignition and fuel cell hydrogen fueled vehicles when renewable sources are used, the fuel cell will nevertheless require less energy per unit of distance traveled than its spark ignition counterpart.</p>	

**WHAT FUEL WILL POWER US?**

*“Many observers view as inevitable the transition from an economy powered by fossil fuels to one based on hydrogen. But that view presupposes market forces that are only beginning to stir. Today, power from a fuel cell car engine costs 100 times more than power from its internal-combustion counterpart; it’ll take a lot of R&D to reduce that ratio. More daunting, the notion of fuel cell cars raises a chicken-and-egg question: How will a nationwide fueling infrastructure materialize to serve a fleet of vehicles that doesn’t yet exist and will take decades to reach critical mass? Even hydrogen’s boosters look forward to widespread adoption no sooner than 30 to 50 years from now. That’s three to five times too long.”*

**Peter Schwartz and Doug Randall**  
Global Business Network

**THE PHASES TOWARD A HYDROGEN FUTURE**

Hydrogen has important advantages as a fuel: It can be refined from several feedstocks. It can even be made from water and electricity. When hydrogen is used to power a fuel cell vehicle, the only significant tailpipe emission is water. But replacing existing gasoline and diesel fueling infrastructure with new infrastructure to deliver hydrogen – and producing the hydrogen fuel in the least greenhouse-gas-intensive manner from renewable sources – requires a huge societal undertaking and a massive, coordinated shift in technology,

behavior and systems. We have done some thinking about what it would take to get from here to there. The necessary phases and challenges inherent in each stage of the transition to hydrogen are represented in the graphic below.

A hydrogen-fueled transportation sector is possible, but it is unlikely to be accomplished through market forces alone. Coordinated, goal-driven partnerships and action on the part of public and private entities will be needed for a hydrogen-based future to become reality.

		Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
<b>Fueling stations</b>	Numbers of stations	1–2 (Fleets)	Up to 10 (Fleets)	Up to 1,000 (Fleets)	Up to 5,000	Grows substantially
<b>H2 fueled vehicles and vehicle types</b>	Numbers of H2 ICE and fuel cell vehicles	Up to 100	Up to 5,000	Up to 500,000	Up to 3,000,000	Over 3,000,000
	Dual fuel ICE	Manufacturer demos	Manufacturer demos	Centrally fueled fleets	Centrally fueled fleets	Retail customers
	Dedicated H2 ICE and H2 ICE HEV and fuel cell		Demo fleets		Retail customers	
<b>Fuel production distribution and storage infrastructure</b>	Existing H2 production					
	New H2 production from fossil fuel					
	New H2 production from renewables					
	Existing distribution					
	New distribution					
<b>Focus areas</b>	Safety					
	Technical and Regulatory Framework					
	Infrastructure					
	Codes and standards					
	Familiarization with H2/training					
	CO2 sequestration					
	H2 ICE vehicle quality					
	Fuel cell vehicle quality					
	Vehicle	Vehicle H2 storage				
	Customer	Public awareness/acceptance				
	Customer experience with H2					
	Value to customer					
	H2 vehicle customer use					
Growth	Scale up					

Start-up effort

Major effort

Maintenance effort



## WHAT COULD THE CHANGE LOOK LIKE?

*"What I think is so exciting about the Model U is that it opens the door to a whole new way of looking at things, just like the Model T did. The vision behind the Model U is entirely positive. Instead of focusing on minimizing environmental harm, which is what most approaches to sustainable mobility do, the Model U starts to find ways to be recreational and regenerative – to have fun and create environmental benefits at the same time. That's a totally new vision for the industry."*

**William McDonough**

Environmental advisor to Ford Rouge Center and co-founder of the product design firm MBDC

## MODEL U



### Hydrogen ICE plus hybrid electric powertrain

- 2.3-liter, four-cylinder supercharged, intercooled hydrogen-fueled internal-combustion engine
- Capable of 45 miles per kilogram of hydrogen, equivalent to 45 miles per gallon of gasoline
- 300-mile range
- Near-zero regulated emissions
- Over 99 percent reduction in tailpipe CO<sub>2</sub>
- Modular Hybrid Transmission System simplifies manufacturing

### Conversational speech

- Most advanced system to date
- Uses everyday language to operate on-board systems, e.g. entertainment, navigation, cellular telephone and climate control
- Asks for clarification if needed

### Active safety features

- Night vision with laser illuminator shows on a heads-up display
- Adaptive front headlights change coverage based on conditions
- Stereo camera-based pre-crash sensing system
- TrafficView™ camera in side mirrors allows driver to see beyond vehicles in front

### Reconfigurable interior and exterior

- Modular design allows for ongoing upgrades
- Power retractable roof, rear window, tailgate and deck lid allows the vehicle to go from closed to opened

### Green materials and processes

- Polyester fabric recyclable into polyester – cradle-to-cradle
- Corn-based compostable roof
- Soy-based seat foam and resin tailgate
- Corn-based tire fillers
- Sunflower seed engine oil

Powered by the world's first supercharged hydrogen internal-combustion engine and hybrid electric transmission – and pioneering green materials and processes – the Model U embodies a vision for the future. It is Ford's model for change – exploring the benefits a vehicle provides to its users, the way it is manufactured and how it impacts the world.

The Model U was created through a partnership among Ford's Research and Advanced Engineering; Ford's Brand Imaging Group, an internal design think-tank; William McDonough; BP; and a host of technology suppliers.

Inspired by how the Model T revolutionized personal transportation in the last century, the team succeeded in creating a vehicle that is versatile and affordable but can



grow and adapt to a customer's changing lifestyle. It offers advanced technologies that respond to customers' desires for convenience, entertainment and safety. And it looks at how building a car, truck or SUV can strengthen the environment without compromising it.

Some of the technologies introduced in the Model U are near commercialization. Others, such as the material and manufacturing concepts, are further out in the future. An immediate benefit of the development of the Model U is the transformation that took place within the product team, which crossed internal functions and harnessed the expertise and imagination of suppliers. The novel ways of thinking about design challenges will shape generations of products to come.

# Environment

We will respect the natural environment and help preserve it for future generations.

We will achieve this by:

- Working to provide effective environmental solutions
- Working to continuously reduce the environmental impacts of our business in line with our commitment to contribute to sustainable development
- Measuring, understanding and responsibly managing our resource use, especially materials of concern and nonrenewable resources
- Working to eliminate waste

**Safeguarding – and improving – the environment is a fundamental part of making the world a better place. The environment’s prominence as one of the seven Business Principles reflects our focus on this area.**

**Our products and services are associated with a range of environmental issues that span our value chain, from raw material production through manufacturing operations at our own plants and those of our suppliers, to the distribution, sale and use of our products through their end-of-life.**

**We have worked steadily over the past several years to integrate environmental considerations into how we do business. Through our core business processes, we set improvement goals and targets and monitor performance (see Pages 33 to 35).**

**During 2002, we met and exceeded our targets for water use and Volatile Organic Compound (VOC) emission reductions. We cut global facility energy use by 6.2 percent and facility CO<sub>2</sub> emissions per vehicle by 2.9 percent and are also on track with our target to improve our production normalized energy efficiency by 14 percent between 2000 and 2005. We now supply 5 percent of our U.S. energy demand from green power sources and have met our commitment under the Environmental Protection Agency (EPA) Green Power Partnership.**

**In Europe, our brands continue to make progress to reduce vehicle CO<sub>2</sub> emissions in line with a challenging voluntary industry agreement; Ford of Australia made a similar pledge in early 2003. In North America, we saw a slight improvement in the average fuel economy of our fleet. We are introducing new technologies globally to cut emissions and improve fuel economy.**

In the Web version of this report, you will find additional information about:

- How our activities affect the environment
- How we address environmental issues, including product design, energy use, materials use, land use, life-cycle assessment and logistics
- How we measure progress
- Additional performance data, including our U.S. Department of Energy 1605(b) report
- Description of significant penalties paid relating to environmental matters

[www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship)

## MANAGING ENVIRONMENTAL ISSUES

We manage our manufacturing and product impact issues using the Ford Environmental System, which is consistent with ISO 14001. Ford was the first auto manufacturer to embrace ISO 14001 and certify all of its manufacturing facilities worldwide.

In our manufacturing operations, our business strategies, objectives, systems and incentives are aligned for continuous environmental improvement. Implementing lean and flexible manufacturing processes at our facilities is one of the highest priorities of our Revitalization Plan. The Ford Production System (FPS), a key business process for managing manufacturing operations, is driving this transformation.

Business plans for each Business Operation establish targets for energy and water use and emissions reductions. These form the basis for target setting by each facility and are incorporated into the FPS. We monitor our environmental performance monthly and annually, along with other areas of manufacturing performance, using a balanced scorecard to monitor progress against key targets.

We have extended what we’ve learned about environmental management systems to nonproduct facilities and to our suppliers by promoting ISO 14001 certification of additional Ford functions, including product development, and of manufacturing facilities that supply our plants. Both Jaguar and Volvo have certified all of their facilities (including functions like finance and human resources) to ISO 14001. More than 90 percent of our major supplier companies certified at least one location by the end of 2001. In 2002, we focused on certification of all supplier manufacturing sites with potentially high environmental impacts, and approximately 80 percent of these sites were certified. The remaining 20 percent had confirmed plans in place.

*"The Ford-Alcan closed-loop aluminum recycling program is a real win/win – environmentally and economically for both companies. It enables Ford to capture and retain the maximum value of this premium alloy, thus reducing its cost of aluminum sheet. For its part, Alcan gains a reliable source of clean, high-quality metal, which is recycled and manufactured for reuse. And we all enjoy the environmental benefits of aluminum recycling – natural resources are conserved, waste is reduced and energy consumption and emissions are both reduced."*

**Tom Gannon**

Vice President, Alcan Automotive

**FAST FACT**

A study by Ford, GM and DaimlerChrysler, in cooperation with the aluminum, steel and plastics industries, showed that for a typical North American family sedan (Taurus-class gasoline-powered vehicle):

- Vehicle operation generates 87 percent of life-cycle carbon dioxide
- Material production and vehicle assembly generates 65 percent of dust and particulates and 34 percent of life-cycle sulfur oxides

**FORD-ALCAN ALUMINUM RECYCLING PARTNERSHIP**

Ford Motor Company's Chicago Stamping Plant is breaking new environmental ground with the launch of a "closed-loop" recycling program for aluminum sheet scrap.

The program, launched in partnership with Alcan Inc., is the first of its kind in the North American automotive industry.

Under the recycling plan, Ford recovers aluminum process scrap from its Chicago Stamping Plant and returns it to Alcan for recycling directly back into autobody sheet metal. Previously, the recovered aluminum was sold into the general scrap market in combination with other metals, thus diminishing both its quality and value, and making it unsuitable for reuse in autobody applications. The new closed-loop process provides significant economic and environmental benefits for both corporations. This loop can be repeated virtually indefinitely because aluminum does not degrade when recycled. Recycling eliminates 95 percent of the greenhouse gas emissions associated with the primary production of aluminum.

Similar programs will be implemented in other Ford stamping facilities where it makes economic sense.

**FOCUS PZEV**

The 2003 Focus PZEV is a Partial Zero Emissions Vehicle, meaning that in addition to meeting stringent super-low tailpipe emissions (SULEV), it has more than 100 new parts that virtually eliminate any fuel evaporation.

Major upgrades include a completely unique fuel system from the filler tube and gas tank through fuel lines and into the intake.

The engine is a new 2.3-liter I-4 that produces more horsepower and torque than the current engine. The exhaust system, including the catalytic converter, is new.



**Modified MTX75 transaxle**  
Upgraded bell housing to meet torque requirements of 2.3L

**Fuel tank**  
New steel fuel tank assembly with stainless steel filler tube

**Stainless steel fuel lines**  
With double O-ring seals

**Evaporative emissions systems**  
Revised canisters and purge valves to eliminate vapors for 15 years or 150,000 miles

**Catalytic converter**  
Revised size, loading and cell-density catalytic converter

**2.3L I-4**  
Modified for even lower oil consumption and zero evaporative emissions

**HOW ARE WE DOING?**

During 2002, our environmental performance improved (see data trends on Pages 33 to 35).

**Products**

Over the life cycle of a vehicle, product use accounts for most of the life-cycle energy consumption and CO<sub>2</sub> emissions. Ford is working to reduce these impacts by developing new products and technologies, including the Escape Hybrid, the PZEV-certified Focus and by tapping years of alternative fuel vehicle leadership. Our Model U concept vehicle, discussed on Page 29, showcases a collection of environmental, safety and customer features that offer new ways of thinking about vehicle design and applications.

We have also made progress in addressing near-term environmental product issues. We have developed comprehensive systems for tracking and managing our materials use. Management systems like the evolving International Material Data System help us document and assess the materials that go into our products, including those provided by suppliers, and reduce or eliminate undesirable materials. Between 2001 and 2002, for example, we reduced mercury use in our products by 98 percent by eliminating mercury-containing switches.

Tools like design for environment and life-cycle analysis help us choose recycled, recyclable and renewable materials and plan for the dismantling and recycling of vehicles at the end of their useful lives. To date, we have developed more than 950 parts that use post-consumer and post-industrial recycled content.

In most of our major markets, vehicle standards for smog-forming and other conventional tailpipe emissions are ratcheting downwards. We are meeting, and in some cases going beyond, the tougher environmental standards. Our 2003 Ford Expedition, for example, qualifies as an Ultra-Low Emission Vehicle, making it the cleanest-running full-size SUV on the market and meeting the new federal standards a year earlier than required. We will introduce a special PZEV version of the popular Ford Focus in 2003. PZEV requires extremely low tailpipe emissions and no



*“Lightweight materials are an important aspect in gaining fuel economy, but the vehicles must also be safe during a crash situation. Our goal is to increase fuel economy while maximizing the safety of our vehicles.”*

**David Wagner**

Staff Technical Specialist, Vehicle Design, Research and Advanced Engineering

**FAST FACTS**

By the end of 2002, more than 10,000 suppliers had provided information on 400,000 automotive parts to an industry-wide material data tracking system.

In 2002, we offered Stage IV reduced emissions versions of all our gasoline passenger vehicles sold in Europe – three years before we were required to do so.

Jaguar reduced the amount of hazardous waste produced in total and per production unit by 64 percent during 2002.

evaporative emissions. The Focus PZEV is expected to reach approximately 35,000 units for the 2003 model year and be available in California, New York and Massachusetts. Volvo began offering vehicles meeting PZEV levels of emissions during 2002 in California. Volvo offers ULEV versions of its vehicles in all markets. During 2002, 34 percent of Volvos sold met ULEV standards.

Reducing the greenhouse gas (GHG) emissions from our fleet through improved fuel economy remains a challenge, as discussed in ‘Addressing Climate Change’ on Page 36.

**Manufacturing**

Our focus on environmental targets through our balanced scorecard has resulted in steady performance improvements, and we continue to develop the systems to support continued progress.

- Our emissions of VOCs and U.S. Toxic Release Inventory emissions have continued to drop. We are reviewing the complex trade-offs involved in choices about paint technologies to identify the best path toward continued reductions in energy use and VOC emissions, as well as quality improvements.
- We continued to cut water use worldwide – by 2.4 percent in 2002.
- Our 2002 energy efficiency index was 90.2, reflecting a near 10 percent improvement in our manufacturing energy efficiency over a 2000 baseline. The energy efficiency index is “production normalized,” based on an engineering calculation that adjusts for fixed and variable portions of energy use and production to track production energy efficiency. The index was set at 100 for the year 2000 to simplify tracking. Our target is an index of 85 in 2006.

**FORD’S NEW WASTEWATER RECYCLING PROCESS IS A WORLD FIRST**

Ford’s spare parts manufacturing plant in Cologne, Germany, is testing a new wastewater treatment process believed to be the world’s first application of its kind in the automotive industry.

The innovative project uses nanofiltration technology that has been integrated in the vehicle’s paint process. The nanofiltration process separates heavy metal ions from the wastewater stream that results from the phosphate pre-treatment of metal vehicle parts such as doors, hoods or fenders. By recirculating these heavy metals into the production process, the overall use of phosphate can be reduced by 20 percent, while the heavy metal content of zinc, manganese and nickel in the remaining wastewater sludge is reduced by 98 percent. Simultaneously, process water is regenerated and recirculated so that the need for fresh water has also been considerably reduced. Thus, in line with the Company’s overall Reduce-Reuse-Recycle strategy, the process reduces the environmental impact in several complementary ways while guaranteeing the same product quality.

The project, which integrated several state-of-the-art technologies in a new way, was developed over three years as a joint project between Ford and Henkel Surface Technologies. It is expected to provide valuable experience and knowledge for possible future application within Ford facilities worldwide.



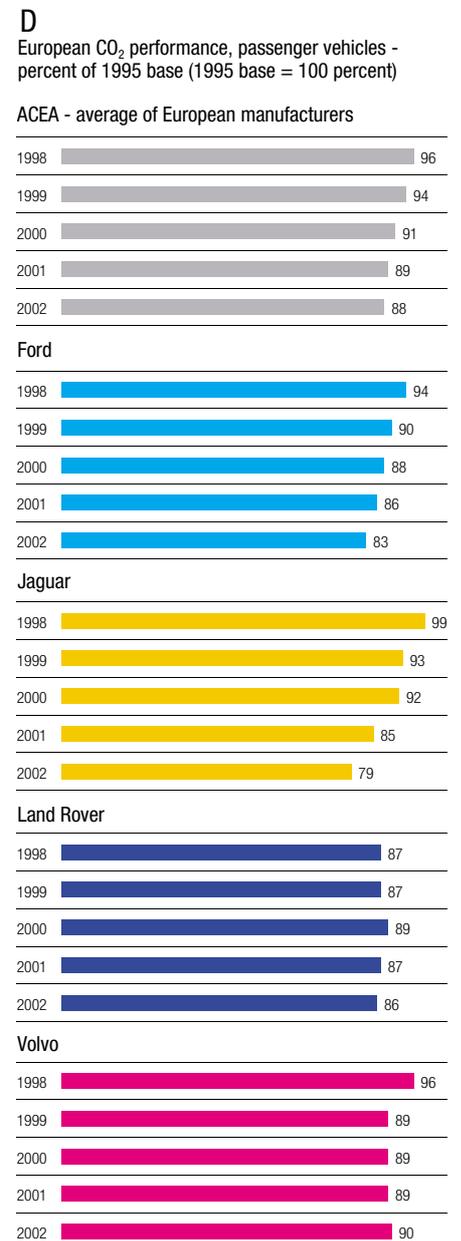
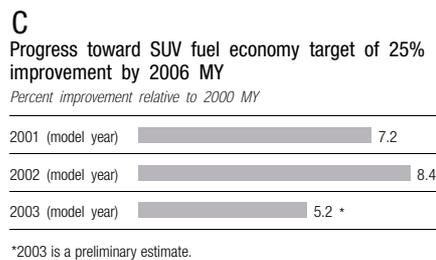
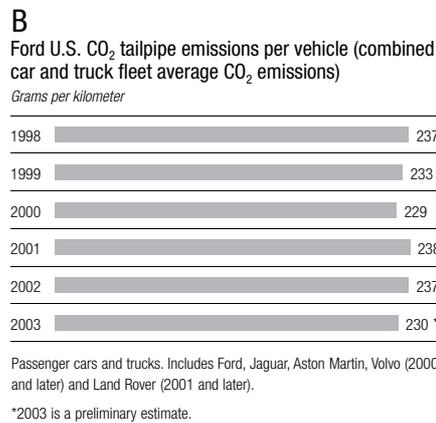
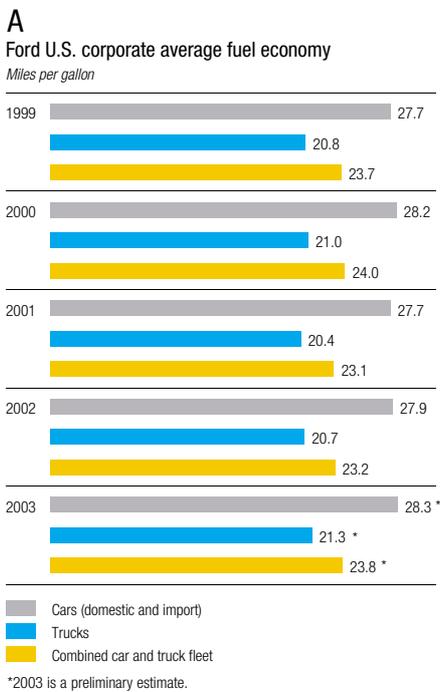
# Data

## AUTOMOTIVE OPERATIONS

**A and B** Our U.S. fleet fuel economy and average CO<sub>2</sub> emissions improved slightly for model year 2002 vehicles compared to model year 2001. We expect further improvements for model year 2003.

**C** See Pages 16 to 17 for discussion of SUV fuel economy performance.

**D** Ford brands in Europe have reduced their average CO<sub>2</sub> emissions by 10 percent to 21 percent compared to a 1995 base, reflecting improvements in fuel economy.



**E and F** Facilities worldwide cut overall energy consumption (direct and indirect) by 6.2 percent from 2001 and energy consumption per vehicle by 4.5 percent.

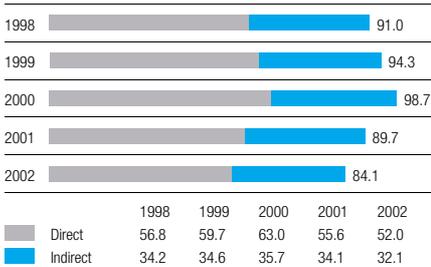
**G and H** Facilities worldwide cut CO<sub>2</sub> emissions by 5.4 percent in total and 2.9 percent from 2001 on a per-vehicle basis.

**J** We launched 85 new parts containing recycled content in 2002, bringing the total to more than 950.

**K and L** Manufacturing facilities worldwide cut water use by 2.4 percent from 2001 and per vehicle water use by 5.3 percent.

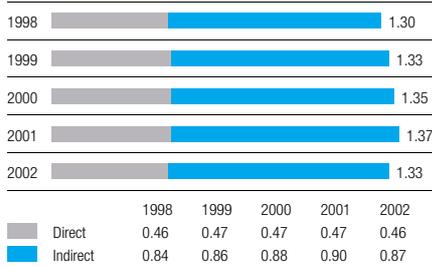
### E Worldwide facility energy consumption

Trillion BTUs



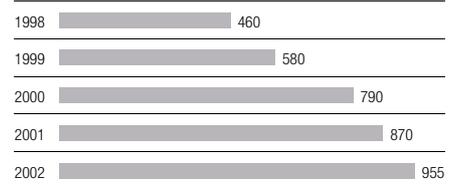
### H Worldwide facility CO<sub>2</sub> emissions per vehicle

Metric tonnes



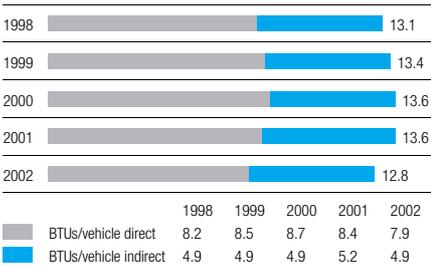
### J Cumulative number of parts launched containing recycled non-metallic materials

Parts



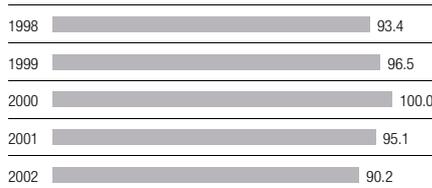
### F Worldwide facility energy consumption per vehicle

Million BTUs



### I Energy efficiency index

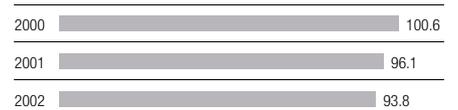
Percent



The index is 'production normalized' based on an engineering calculation that adjusts for fixed and variable portions of energy use and production to track production energy efficiency. The index was set at 100 for the year 2000 to simplify tracking against our target of improving our energy efficiency by 14 percent globally by 2005, equal to 85 percent.

### K Global manufacturing water use

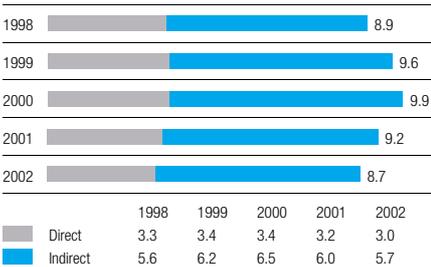
Million cubic meters



Includes all global manufacturing facilities with greater than 50 percent Ford ownership that consumed more than 30,000 cubic meters in calendar year 2000. Data for 2000 and 2001 has been restated to include a facility that began reporting in 2002.

### G Worldwide facility CO<sub>2</sub> emissions

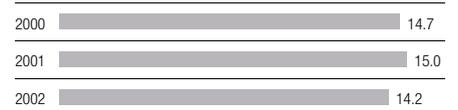
Million metric tonnes



**E-H** Energy consumption and CO<sub>2</sub> emissions per vehicle divides energy used or CO<sub>2</sub> emitted by vehicles produced. Data has been restated to include Jaguar, Volvo, Land Rover and Aston Martin for all years. Visteon has been spun off and data is not included for any year. Direct energy and emissions are those associated with the generation of electricity, heat or steam by sources owned or controlled by Ford Motor Company. Indirect energy and emissions are those associated with the generation of electricity, heat or steam purchased or imported by Ford Motor Company. CO<sub>2</sub> emissions were calculated consistent with the World Resources Institute (WRI)/World Business Council for Sustainable Development Greenhouse Gas Protocol.

### L Global manufacturing water use per vehicle

Cubic meters



**M** We expanded coverage of our comprehensive waste generation data to Mexico; waste generation for the United States, Canada and Mexico declined by 0.3 percent from 2001.

**N** Operations in North America exceeded the VOC reduction target of 31 grams per square meter by cutting VOC emissions to 30 grams per square meter of surface area coated.

**O and P** We continue to reduce emissions of substances tracked under the U.S. Toxic Release Inventory. Total releases declined by nearly 20 percent in 2001 (the most recent year for which data is available) compared to 2000, while releases per vehicle declined by nearly 8 percent.

**M**  
North American manufacturing waste (United States, Canada and Mexico)

Metric tonnes

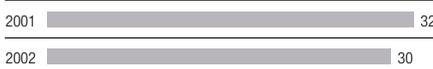


	2001	2002
Industrial	19,228	22,473
Mineral	380,084	376,000
Organic	38,718	62,070
Packaging	81,833	72,987
Sludge	74,261	69,399
Solid	85,192	74,100
Solvent	5,540	5,633
Universal	321	321

Industrial	includes acidic and alkaline solutions, etc.
Mineral	includes glass, mineral fibers, sand, etc.
Organic	includes mineral oils, greases and waxes, etc.
Packaging	includes wood, paper, cardboard, etc.
Sludge	includes electrocoat sludge, phosphating sludge, oily sludges from machining, etc.
Solid waste	includes textiles, compostable and non-compostable matter, etc.
Solvents	includes halogenated and non-halogenated solvents
Universal	includes toner cartridges, light bulbs, etc.

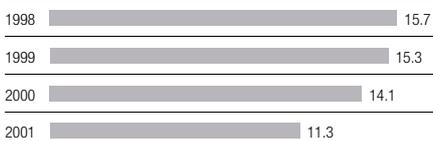
**N**  
North America volatile organic compounds released by assembly facilities

Grams/square meter of surface area coated



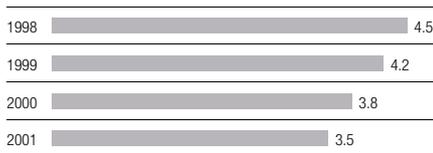
**O**  
Ford U.S. TRI releases

Million pounds



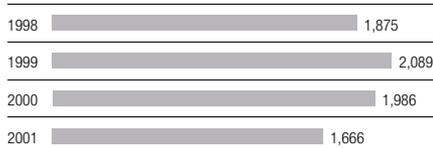
**P**  
Ford U.S. TRI releases per vehicle

Pounds



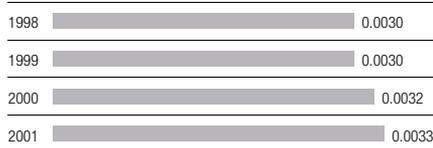
**Q**  
Ford Canada NPRI releases

Metric tonnes



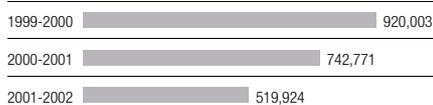
**R**  
Ford Canada NPRI releases per vehicle

Metric tonnes



**S**  
Ford Australia National Pollutant Inventory releases

Total air emissions (kilograms per year)



**O-S** Releases reported under the U.S. TRI, Canada NPRI and Australia NPI are all in accordance with the law, and many of them are subject to permits.

**T**  
Manufacturing plant notices of violations

Ford received 12 notices of violations (NOV) from government agencies in 2002. Nine of the NOV's received were in the United States, two in South America and one in the Philippines.

The issuance of an NOV is an allegation of noncompliance with anything from a minor paperwork requirement to a permit limit, and does not mean that the Company was in noncompliance or received a penalty.

**U**  
Ford had no significant spills in 2002.

We define significant spills as any that go beyond the facility's property line.

**V**  
In 2002, Ford paid approximately \$340,000 in fines and penalties globally pertaining to environmental matters.

# A closer look

## ADDRESSING CLIMATE CHANGE

Reducing greenhouse gas emissions is a key environmental and business issue that we face as we enter our second century. Though uncertainty remains about the magnitude, the climate appears to be changing, and the changes appear to be outside natural variation (see figure on Page 38). The auto industry, as a major manufacturing sector, consumes significant amounts of energy and therefore generates greenhouse gas emissions. The indirect influence of any manufacturer is even greater if emissions that result from their products are considered – in our case, vehicles as our customers use them. Climate change is a societal challenge, and all stakeholders need to share the responsibility and the burden of reducing greenhouse gas emissions, while at the same time continuing sustained economic growth.

Our impact on greenhouse gas emissions relates primarily to the fuel efficiency of vehicles we offer to the marketplace – subject to market demand – and to the greenhouse gases emitted due to the manufacture of the vehicles. Fuel providers offer fuels with varying levels of carbon content. Consumers make decisions regarding the vehicles they purchase and the type and amount of driving incurred to meet their transportation needs. Governments set incentives and policies that can encourage or discourage emission reductions. Interest groups seek to influence those policies. A combination of technological, behavioral and policy shifts across multiple sectors is required to achieve meaningful and sustainable long-term reductions.

We recognize the need both to act within our immediate sphere of influence and to cooperate with others. We have taken a series of steps that begin to address a range of greenhouse gas reduction opportunities and issues.

### COMMITMENTS AND PROGRESS

We have made a series of commitments to cut greenhouse gas emissions from our products and our manufacturing facilities. Our 2002 performance is shown in the table opposite.

We are making substantial progress in reducing our facility energy use and CO<sub>2</sub> emissions and increasing our use of energy from

**Our impact on greenhouse gas emissions relates primarily to the fuel efficiency of vehicles we offer to the marketplace – subject to market demand – and to energy consumed during vehicle manufacture. To achieve long-term reductions we recognize the need to act within our immediate sphere of influence and cooperate with others.**

renewable sources. In 2002, our per-vehicle energy use and CO<sub>2</sub> emissions were 4.5 percent and 2.9 percent lower than in 2001, respectively.

In the United States, we now supply 5 percent of our energy needs through alternative power, more than double the amount in 2001. This includes self-generated hydropower and cogeneration, as well as new purchases of power from waste blast furnace gases.

Our brands in Europe have cut CO<sub>2</sub> emissions by 13 to 17 percent under the automotive industry's voluntary agreement to reduce greenhouse gas emissions.

In 2003, Ford Australia joined with other Australian automakers in a voluntary commitment that set a target to reduce the average fuel consumption of the Australian passenger vehicle fleet to 6.8 liters per 100 kilometers by 2010 from the 2001 level of 8.28 liters per 100 kilometers. This is approximately an 18 percent reduction.

We are developing near-term and longer-term technologies that offer the promise of significantly reducing greenhouse gas emissions from our vehicles by using different fuels, engines or improvements to powertrains (see Pages 26 to 28). We are also working with public and private organizations to explore ways of meeting future mobility needs.

In the nearer term, we are improving the fuel economy of our vehicles that use conventional engines by introducing new technologies such as:

- New family of high-efficiency, low-emission I-4 engines, beginning with the Mondeo (Europe) and the Ranger (United States). The I-4 makes extensive use of lightweight aluminum components, resulting in improved weight distribution front-to-rear and higher power-to-weight ratio
- Variable cam timing, now used on the Range Rover and being considered on other SUVs
- Electronic throttle control, now used on the Lincoln LS and the Ford Thunderbird, planned for the Ford Explorer in 2004
- Continuously variable transmission, planned for the Ford Five Hundred and the Ford Freestyle (2004)

## FAST FACTS

Energy management and efficiency projects in North America saved Ford \$18 million in 2002.

Improvements to Ford's logistics system for transporting parts to plants cut 18.5 million miles of truck travel in 2002.

## STATUS OF FORD COMMITMENTS RELEVANT TO CLIMATE CHANGE

● On track (with relevant reductions or start-up requirements) ● Progress made, but target may not be achieved ● Achieved

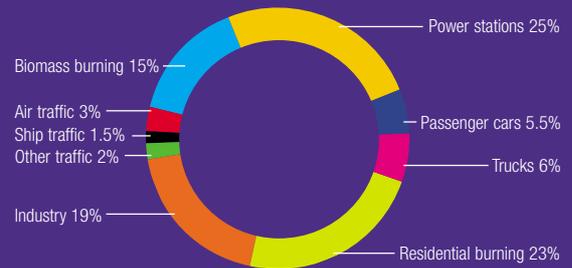
COMMITMENT	DESCRIPTION	TARGET	STATUS	PAGE
<b>PRODUCT</b> European Automobile Manufacturers Association CO <sub>2</sub> commitment	European automotive industry voluntary commitment	European Union fleet average of 140 g/km by 2008; compliance with this target translates into an average CO <sub>2</sub> reduction of 25 percent for newly registered cars compared to 1995	●	Chart D (p.33)
SUV goal	Ford voluntary commitment for U.S. SUVs	Improve average fleet fuel economy of U.S. SUVs by 25 percent by 2005	●	Chart C (p.33) Page 16–17
Australia fuel economy commitment	Voluntary commitment by Australian auto industry to improve fuel economy of passenger vehicles	Cut the amount of fuel used by new petrol passenger cars to 6.8 liters per 100 km by 2010 from the 2001 level of 8.28 liters per 100 km	●	Page 36
<b>MANUFACTURING</b> Ford Manufacturing Energy Efficiency Target	Global manufacturing operations commitment to improve facility energy efficiency	14 percent production-normalized energy efficiency manufacturing target between 2000–2005	●	Chart I (p.34)
UK Emissions Trading Scheme	Voluntary, government-sponsored "cap and trade" GHG trading program for UK emissions	5 percent absolute reduction target over 2002–2006 timeframe based upon average 1998–2000 baseline	●	Page 38
Chicago Climate Exchange	Multi-industry voluntary CO <sub>2</sub> emissions trading project	4 percent absolute reduction target over 2003–2006 timeframe based upon average 1998–2001 baseline	●	Page 38
Alliance of Automotive Manufacturers commitment under U.S. Department of Energy Business Challenge	AAM commitment with U.S. Dept. of Energy to voluntarily reduce GHG emissions from U.S. plants and facilities	10 percent reduction target per vehicle produced between 2002–2012	●	–
U.S. Department of Energy GHG Registry	Recognized voluntary "bank" for emissions reductions	Continue to track and submit annual GHG inventory reports to DoE	●	Web site
Ford Australia Greenhouse Challenge	Cooperative agreement between Ford Australia and Commonwealth governments	Variety of specific product and manufacturing commitments; verification; reporting to government	●	–
U.S. Environmental Protection Agency Green Power Partnership	Voluntary commitment in partnership with U.S. EPA	2 percent of U.S. energy from green power (0.1 percent new sources)	●	Page 30

- Six-speed automatic transmission, available in the 2003 model year Ford Mustang, Ford Focus, Mazda Miata, Jaguar XK, Jaguar S-Type, Aston Martin Vanquish, Vantage and Volante models and other vehicles. According to U.S. EPA estimates for the 2003 model year, Ford offers more models equipped with six-speed transmissions than any other manufacturer. In 2002, Ford and GM agreed to co-develop a six-speed, front-wheel-drive automatic transmission that would offer an estimated 5 percent fuel economy improvement over a traditional four-speed step-gear automatic transmission.

## TRACKING AND ACCOUNTING FOR EMISSIONS

In June of 2002, we voluntarily submitted our 1998–2001 U.S. emissions to the U.S. Department of Energy 1605(b) Greenhouse Gas Registry. We will submit this data on an annual basis. Ford has actively participated in, and supported the development of, the World Resources Institute/World Business Council on Sustainable Development Greenhouse Gas Reporting Protocol because of the need for a common voluntary greenhouse gas accounting and reporting standard.

## ADDRESSING CLIMATE CHANGE (CONTINUED)



### LOOKING BEYOND CO<sub>2</sub>

We are addressing other greenhouse gases like hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrous oxide (N<sub>2</sub>O) and sulfur hexafluoride (SF<sub>6</sub>). Low N<sub>2</sub>O emission is a requirement for exhaust treatment systems. We have prohibited SF<sub>6</sub> in tires and PFCs in open systems since 1999. We restrict the use of HFCs in vehicle air conditioning and prohibit the use of HFCs in other on-board vehicle applications (e.g. as used in some spare tire kits). We will prohibit the use of SF<sub>6</sub> in magnesium casting as of January 2004 through our Restricted Substance Management Standard. We are working with our suppliers to optimize air conditioning efficiency, reduce leakage rates and investigate alternatives.

### PARTNERSHIPS AND PILOT PROJECTS

We participate actively in partnerships that explore technological and policy approaches to reduce greenhouse gas emissions. These include FreedomCAR, which leverages the resources of U.S. automakers and the federal research labs to address critical issues in transitioning to hydrogen, and the California Fuel Cell Partnership, which is testing fuel cell vehicles and infrastructure in real-world conditions.

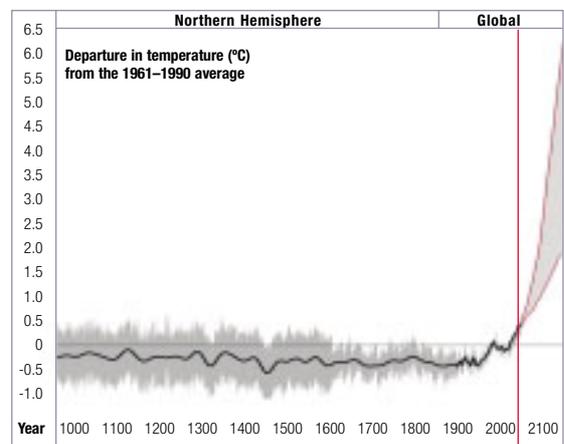
To gain practical experience in cost-effectively reducing greenhouse gas emissions, and to help shape public policy, we have joined two pioneering efforts that will develop the systems for greenhouse gas emissions trading:

- Ford, along with 11 other companies and the City of Chicago, founded the Chicago Climate Exchange, committed to reduce U.S. facility GHG emissions by 4 percent by 2006, based upon an average 1998–2001 baseline period. The Exchange marks the first time in the United States that major companies in multiple industries have made a voluntary binding commitment to use emissions trading for reducing their greenhouse gas emissions. The Exchange will enable participants to receive credit for their reductions and buy and sell credits to find the most cost-effective way of achieving reductions.

**Above: Man-made global CO<sub>2</sub> emission sources (approximately 28 gigatons per year).**

Source: H. P. Lenz and C. Cozzarini, "Emissions and Air Quality," Society of Automotive Engineers, Warrendale, PA, 1999.

**Right: Earth's surface temperature over period 1000–2100 A.D. 1000–1861: Northern Hemisphere proxy data 1861–2000: Global instrumental record 2000–2100: Projections based upon different emission scenarios from the Intergovernmental Panel on Climate Change (IPCC).**



- Ford was also one of the original companies to join the UK Emissions Trading Scheme, the first formal, economy-wide, cross-industry greenhouse gas trading program. Ford Motor Company Limited (UK) entered the program in March 2002, committing to a 5 percent CO<sub>2</sub> reduction target for eligible plants and facilities over five years. In April 2002, Ford Motor Company Limited completed its first CO<sub>2</sub> transaction.

We offer Eco-Driving training courses in Germany and are currently exploring expansion of the concept to other locations. This "real-world" training gives participants knowledge and experience on how to reduce fuel consumption through more efficient driving practices. Thousands of participants have confirmed that, on average, they can save up to 25 percent of fuel used and money spent while achieving the same average speed for a journey. Ford is also the co-chair and one of five sponsors of the UN's Environment Programme Internet-based "Greener Driving" campaign ([www.greener-driving.net](http://www.greener-driving.net)), along with BMW, the German Road Safety Council (DVR), Michelin and Renault.

Ford is in the third year of its \$15 million Carbon Mitigation Initiative partnership with Princeton University and BP, a program with a vision to "lead the way to compelling and sustainable solutions to the carbon and climate change problem." The partnership seeks to



*"We are proud of our partnership with Ford. They have provided the resources and, more importantly, the insight into implementation in real-world situations that allow better partnerships to be formed to understand, create and implement innovative new environmental strategies."*

**David H. Marks**

Director, Laboratory for Energy and Environment, Massachusetts Institute of Technology

resolve fundamental scientific, environmental and technological issues key to public acceptance of carbon management strategies. The initiative is carrying out projects addressing carbon capture, storage, science, economics and policy.

We have long been a sponsor of the Massachusetts Institute of Technology Joint Program on the Science and Policy of Global Change ([web.mit.edu/globalchange/www/](http://web.mit.edu/globalchange/www/)) and the Alliance for Global Sustainability ([/fee.mit.edu/programs/mitags](http://fee.mit.edu/programs/mitags)). The former seeks to integrate the natural and social science aspects of the climate issue, primarily through an interactive set of computer models that have been particularly important for assessing sensitivities and uncertainties in future climate projections. The latter addresses a wide variety of environmental challenges associated with the projected future demand for energy through multidisciplinary research, international partnerships, education and outreach.

#### ENGAGEMENT

During 2002, we engaged with several organizations that have expressed interest in our approach to the climate change issue, including the Coalition for Environmentally Responsible Economies (CERES), the Union of Concerned Scientists (UCS) and the Interfaith Center for Corporate Responsibility (ICCR).

In late 2002, The Sisters of St. Dominic of Caldwell, New Jersey, and other members of ICCR filed a proposal that asked us to issue a report on (1) estimated greenhouse gas emissions from our plants and products; (2) ways for the Company to significantly reduce greenhouse gas emissions from our vehicles by 2012 and 2020; and (3) an evaluation of new public policies to enable such emissions reductions.

The proposal highlighted that climate change is a matter of environmental and fiduciary responsibility. After productive discussions, The Sisters of St. Dominic withdrew the proposal because of commitments to continue the dialogue and work toward a mutually agreeable response. We will continue to work closely with them and other groups to find ways to meet our

**We don't have all the answers in addressing the broader risks and opportunities of climate change; however, we are committed to developing solutions and making steady progress.**

shared goal of responding to climate change and reducing greenhouse gas emissions proactively, affordably and in line with the interests of our shareholders and other stakeholders.

#### PUBLIC POLICY

In 2002, NHTSA proposed an increase in the corporate average fuel economy standards for light duty trucks. A new rule, passed in April 2003, raises the current standard of 20.7 miles per gallon to 21.0 mpg for 2005 MY, 21.6 for 2006 MY and 22.2 for 2007 MY. We recognize the need to improve light truck fuel economy and worked constructively with NHTSA throughout the rule-making process.

We support cohesive, market-driven policies that promote energy efficiency and conservation. Advanced vehicle technologies – like alternative fueled vehicles (e.g., hydrogen internal-combustion engine), hybrids, fuel cells and clean diesels – hold the long-term promise to reduce the consumption of fossil fuels without sacrificing customer utility, affordability or safety. The challenge for us is to implement these technologies in ways that customers value and can afford, and that can be done in high volume for maximum positive impact.

We have supported policies that encourage the development of markets for advanced environmental vehicles by providing consumer incentives to help offset the initial higher cost of these vehicles. For our positions and perspectives on key public policies, see the public policy section of [www.ford.com](http://www.ford.com).

#### GOING FORWARD

We are working to reduce greenhouse gas emissions, including our advanced product research, manufacturing targets and product commitments. We will continue seeking collaborations with governments and other partners in support of market-oriented, performance-based and flexible policies. We don't have all the answers in addressing the broader risks and opportunities of climate change; however, we are committed to developing solutions and making steady progress.

# Safety - workplace

We will protect the safety and health of those who make, distribute or use our products.

We will achieve this by:

- Working to create the safest possible workplace
- Striving to continuously reduce the risk of accidents, injuries and fatalities involving our products
- Striving to protect people and property

## A SAFER WORLD IS A BETTER WORLD

**Safety for Ford has two major aspects: workplace health and safety and vehicle safety.**

**In 1999, we began a Safety Leadership Initiative to raise the profile of health and safety issues in our plants, develop effective approaches, integrate them with our production systems and improve our performance. We have cut “lost time” injuries in our plants globally by 74 percent since then.**

**Continuously improving the safety of our vehicles is a cornerstone of our relationships with our customers and the public.**

**We develop and use effective safety technologies in our vehicles based on extensive research and real-world safety experience. We also cooperate with governmental and nongovernmental organizations to promote vehicle, driver and road safety in the regions where we sell our vehicles.**

**Our products continue to perform well according to various independent public domain rating systems (see data on Page 47). We are working to improve our solid performance in public domain testing and offer new features in an effort to enhance our reputation as a leading safety performer in real-world accidents.**

In the Web version of this report, you will find:

- More information on Ford's vehicle safety approach and innovations
- Descriptions of various safety rating systems

[www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship)

## PROVIDING A SAFE WORKPLACE

Through our globally implemented Safety Leadership Initiative, with full support and leadership from all the unions who represent our employees worldwide, we have continued to raise the visibility of safety issues and establish accountability for health and safety performance. We have done this by integrating health and safety management into key business processes, benchmarking and sharing best practices and launching targeted initiatives. We are also looking “upstream” in the production process to build safety into the workplace.

### Visibility

Safety performance is the first item reviewed at our manufacturing strategy team reviews and at all operations meetings. In North America during 2002, we halted all production twice in “safety stand-downs” designed to emphasize the importance of safety and highlight what each employee can do to help improve it.

### Accountability

We use a comprehensive set of indicators to track our progress, and we have set objectives for each. In addition to the balanced scorecard metrics of lost time and severity rate, we review annual Ford Production System ratings of each facility, safety audit scores, a safety culture survey and measures of how well each plant is rolling out safety initiatives. We have an advanced, global information technology platform that provides timely, comprehensive safety data from all of our plants. Our indicators measure not only safety outcomes, but also the preconditions that could lead to performance changes. This helps provide an early warning about how well we are meeting our objectives.

Business Operation and plant managers are accountable for performance according to the objectives set. We have realized major improvement in most of these areas (see data charts on Page 42).

### Building health and safety into business processes

Safety is not an afterthought but was part of our FPS from the beginning. Training, safety audits and workgroup review of safety issues are all routine manufacturing procedures worldwide.

*"Nothing is more critical than the health and safety of our employees. When our employees are healthy, when they are safe and feel protected on the job, we strengthen our workforce and our Company."*

**Roman Krygier**

Group Vice President, Global Manufacturing and Quality



We hold joint union–management health and safety reviews at the operating unit level and work with employee representatives to identify and address health and safety issues.

#### Benchmarking and sharing best practices

Through regular reviews of indicators and progress against objectives, we can readily identify operations that exhibit outstanding performance. For example, our Hermosillo (Mexico) Stamping and Assembly Plant was amongst the top-performing assembly plants in 2002. In early 2003, we took 48 managers to visit the Hermosillo plant (pictured above) to review the practices – particularly the extensive involvement of workgroups in managing health and safety – that led to this success.

We routinely identify and share best practices and require facilities to document their implementation. If serious incidents occur, we alert all similar operations to the hazard and provide a required corrective action.

#### Targeted initiatives

Among the initiatives leading to improvements in our 2002 performance were:

- A focus on pedestrian safety within our plants, that resulted in a 50 percent reduction in serious pedestrian injury incidents compared to 2001
- A challenge to our plants that resulted in a dramatic reduction in reported incidents involving machinery that was supposed to be turned off during maintenance work
- Continued emphasis on the safety of our combustion systems and the systems that monitor them. This has included training, development of detailed procedures and third-party compliance audits, operations and maintenance requirements
- Water management, with industry-leading processes and procedures to protect the health of our employees from Legionella
- A major program to reduce electricity hazards, including replacement of hundreds of thousands of fuses, training and use of personal protective equipment

**Above: In early 2003, 48 managers visited the Hermosillo (Mexico) Stamping and Assembly Plant to review the practices that led to it being amongst the top performing assembly plants in 2002.**

#### Looking “upstream” to eliminate hazards

During 2002, we created the Safety and Ergonomics Manufacturing Technology Forum. The Forum is a cross-functional group focused on supporting design engineers of manufacturing equipment to consider safety issues and workplace hazards.

At the Michigan Truck Plant, we replaced compressed air tools with tools using direct electric current. These tools are known for their potential to improve quality. Lesser known was their potential to improve ergonomics. Following introduction of the new tools, ergonomic injuries dropped 42 percent; hand and wrist injuries dropped 66 percent. These tools are also quieter, reducing a potential cause of hearing impairment or loss.

We are striving to systematically incorporate employee health into our product development process as well. A step in the design of each new vehicle requires consideration of ergonomic issues in their manufacture.

#### GOING FORWARD

In 2003, we will renew our focus on addressing potential problems before they cause an injury. Some major components of this effort are listed below:

- The UAW and Ford will use a recently developed ergonomic surveillance tool that determines risk factors and prioritizes jobs needing redesign or modification.
- We are assigning engineers to discover ways to design better tools and parts by working on the line, with a special emphasis on problem areas.
- We are encouraging our work groups to make safety improvements and promote health and safety in their own areas, especially in capturing hazards and near misses and addressing those problems before they become injuries.

# Data - workplace

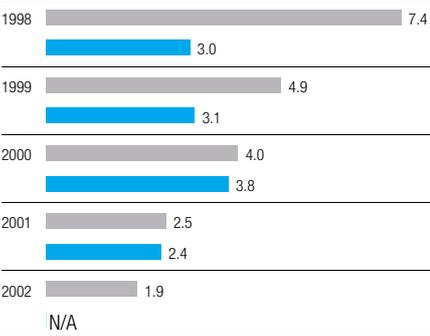
**A** We have improved our lost time safety record by 74 percent since 1998.

**FAST FACT**

In 2002, we cut the number of pedestrian accidents in our plants in half.

**A**  
Lost time case rate (per 100 employees)

*Cases with one or more days away from work per 200,000 hours*

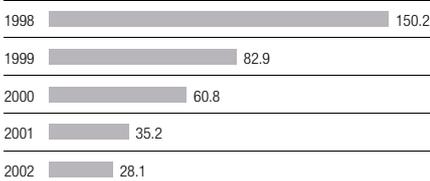


Legend:  
 Grey bar: Ford Motor Company  
 Blue bar: U.S. Bureau of Labor Statistics average for SIC Code 371 (motor vehicles and equipment)

Data has been restated to exclude Visteon, which has been spun off.

**B**  
Severity rate (per 100 employees)

*Days lost per 200,000 hours worked*



Data has been restated to exclude Visteon, which has been spun off.

**C**  
One fatality occurred in 2002 at a joint venture facility in Turkey.

**D**  
In 2002, government agency inspections of our plants in the United States resulted in 28 violations and a total of approximately \$37,000 in penalties, compared with approximately \$16,000 the prior year.



At Volvo Car's Safety Center in Gothenburg, Sweden, safety experts can reproduce full-scale collisions between a car and another car, a truck or a bus, at every conceivable angle under controlled conditions. The Center, used by Volvo and other Ford brands, provides data valuable in designing vehicles to perform well in the variety of accidents encountered in real-world driving.

# Safety - vehicle

Ford's safety vision: Ford Motor Company is committed to continuously improve our products worldwide in the area of safety and security so that our customers benefit in real-world safety and Ford Motor Company is recognized for its leadership in safety by both customers and the public.

## UNDERSTANDING ASPECTS OF SAFETY

Understanding what makes vehicle travel safe is a first step in managing the safety of our vehicles. Among the critical safety aspects are:

- Driver behavior: Studies of fatal accidents show that human factors contribute to more than 90 percent of accidents. Drivers vary in their experience, training, physical abilities and other factors. Drivers can protect themselves through their behavior, including driving safely and wearing safety belts.
- Environmental factors: Road infrastructure and weather conditions are a factor in one-third to one-half of accidents.

Aspects related to the vehicle itself include:

- Occupant protection: Safety features, including energy-absorbing "crumple" zones, safety belts, air bags, air curtains and head restraints, and systems linking and controlling these features, help reduce the likelihood of injury to drivers and passengers in an accident.
- Crash avoidance: Basic features, including the vehicle's level of comfort, ease of use, lighting, maneuverability and braking systems, can help drivers avoid collisions. In the past several years, Ford and other automakers have been adding sophisticated technologies to vehicles to help drivers maintain control in emergency situations, including traction control, stability control and rollover sensors linked to active accident avoidance and occupant protection safety features.
- Condition of the vehicle: Proper maintenance is required for the vehicle to operate safely.

## MAKING SAFER VEHICLES

Ford's ultimate objective is to produce vehicles that provide high levels of occupant protection for a wide range of people over the complete spectrum of real-world conditions. This includes considering the safety of occupants of our vehicles and of those in other vehicles.

### CROWN VICTORIA POLICE INTERCEPTOR: ADDING SAFETY FEATURES FOR EXTREME CONDITIONS

The Ford Crown Victoria Police Interceptor is the most popular police vehicle in the United States. Recently, attention has focused on the safety of these products during high-speed, rear-end collisions.

The National Highway Traffic Safety Administration conducted an investigation and found that the Ford Crown Victoria not only meets the current standard for fuel systems during a 30 mph test, but also does not leak during a 50 mph test. The NHTSA also found that the risk of fire per fatal rear crash in the Crown Victoria Police Interceptor vehicle is comparable to its main police vehicle competitor.

Concurrently, Ford cooperated with the Arizona attorney general in setting up a Technical Task Force, which looked at the Crown Victoria Police Interceptor vehicle, and a Blue Ribbon Panel, which looked at broader police safety issues.

Based on extensive accident investigation and crash testing, Ford developed special shielding kits to help further reduce the potential for fuel tank punctures in extremely high-speed, rear-end collisions.

Ford made the kits available to police departments at no cost and also implemented them in current production. In addition, the Blue Ribbon Panel developed a trunk pack as an option to reduce the risk from equipment stored in the trunks of police vehicles. The trunk pack is expected to be available for sale to police agencies in the summer of 2003. The study of other steps that might reduce the overall instances of police being involved in accidents is continuing.





*"In the auto industry, even one innovation which saves lives has an enormous multiplier. Someday, I want somebody to be alive because of something I did."*

**Steve Rouhana**

Staff Technical Specialist, Advanced Occupant Protection,  
Ford Motor Company

We actively manage vehicle safety throughout the product development process. Our Safety Design Guidelines represent stretch targets that exceed regulatory requirements. Specific safety goals are set for each new vehicle. Checkpoints during the product development process help confirm that the vehicle meets or exceeds the guidelines and relevant regulatory requirements.

During 2002, we introduced several innovative safety features to our vehicles and brought new safety technologies to additional segments of the market including:

- Volvo's XC90 SUV uses a combination of features to help reduce the risk of rollovers and enhance occupant protection should one occur (see Page 21).
- In Australia, the Falcon was launched with significant investments in safety: structural upgrades, dual stage air bags, belt minder, side air bags and a decoupling brake pedal.
- We continued our rollout of the Personal Safety System™, Safety Canopy™, Advance Trac™ and Belt minder™ into our North American products.

**EDUCATING DRIVERS**

Safe vehicles are only part of Ford's efforts. Driver behavior is so critical to safety that we consider research and education to be essential elements of continuously improving vehicle and road safety. We have begun to get results from driver distraction studies in our vehicle driving simulator that will prove useful in targeting educational campaigns. In 2002, we promoted safe vehicle operation practices through education campaigns such as "Boost America." We also established a partnership with DriveOne (formerly Top Driver), the largest integrated driver training company in the United States so that we can share our knowledge of safe driving with those learning (or re-learning) to drive.



**Ford built its \$10 million VIRTTEX simulator to test the effects of multi-tasking on driver performance. Experiments have simulated the use of cell phones and other potential distractions for a variety of drivers, including teens. Based on these results and other data, Ford has launched a three-year, \$6 million Real World Driver program that aims to improve teen driving skills through hands-on instruction, education and an interactive Web site at [www.realworlddriver.com](http://www.realworlddriver.com).**

**Managing vehicle safety throughout production is only part of Ford's efforts – we are also actively involved in driver distraction studies and educational campaigns.**

**WORKING TOGETHER FOR SAFETY**

We work cooperatively with researchers and regulators, sharing our data and perspectives to identify emerging issues and new ways to help address complex safety issues.

Ford is a major contributor to pre-regulatory research, providing advisors for studies on front and side impacts, vehicle-to-vehicle compatibility and the relationship between active and passive safety. For example, Ford Europe is actively engaged in applying our European accident data resources and U.S. experience in a European Commission-led project to investigate rollover accidents. We are also working with governments, insurance companies and consumer groups investigating soft tissue neck injuries ("whiplash"). Ford Europe has also been a key contributor and supporter in the development of the Industry Commitment on Pedestrian Protection. The binding commitment contains innovative but feasible measures, resulting in significant improvements for new models regarding both active and passive pedestrian protection.



*"Safety is about saving lives. When you talk about safety, you are talking about lives and injuries, and about improving people's quality of life."*

**Priya Prasad**

Technical Fellow in Biomechanics and Occupant Protection and Safety Manager,  
Ford Research Laboratory

## IMPROVING SUV SAFETY

Improving SUV safety was a prominent issue in 2002. Ford's family of SUVs is a leader in this area, with all our vehicles scoring either four or five stars in NHTSA frontal and side impact evaluations (see data charts on Page 47).

Ford Motor Company is focusing on improving SUV safety in two ways: reducing injuries and deaths in rollovers and improving compatibility in crashes between SUVs and other vehicles.

### Rollovers

Rollovers account for less than 3 percent of all vehicle crashes. However, rollovers are among the more serious kinds of accidents, accounting for nearly a third of all crash fatalities. The major contributor to fatalities in rollovers is a lack of seat belt use. In 2001, over 70 percent of people who died in rollovers were unbelted. Unbelted occupants are more likely to be ejected from the vehicle than belted occupants.

- Ford has implemented Beltminder™ in all its vehicle lines to remind occupants to buckle up. NHTSA has since requested that the rest of the industry adopt Ford's Beltminder™ system and Ford Motor Company is licensing this proprietary technology to other vehicle manufacturers at no cost.
- Volvo introduced the Safety Canopy™ in 1998, which was incorporated into some Ford products in 1999 and is now available on almost all Ford Motor Company SUVs in North America. The Safety Canopy™ consists of side curtain air bags and rollover sensors that



measure how fast the vehicle's lean angle is changing to determine if the vehicle is headed for a rollover. If a rollover situation is detected, the side curtain air bags are deployed, helping reduce injuries to passengers and keeping them inside the vehicle.

- Ford's active safety electronic stability control system, AdvanceTrac™, is available on the Explorer 4-door, Expedition, Mountaineer, Navigator and Aviator. It helps the driver maintain control by reducing engine power or selectively applying a brake if the vehicle appears to be deviating from the driver's intended path.
- Volvo's XC90 combines several of these technologies, linking rollover sensors to dynamic stability control, to help drivers maintain control and reduce the risk of a rollover accident.
- Other technologies that are being incorporated into new and updated vehicles include a tire pressure monitoring system, anti-lock brakes with electronic brake force distribution and Ford's Personal Safety System™, which uses sensors, dual-stage air bags and pretensioning safety belts to help tailor a response to the circumstances of a crash.

### Compatibility

Questions also have been raised about SUVs involved in multiple-vehicle accidents. The outcome of these accidents is determined in part by the relative size, weight, geometry, construction and rigidity of the vehicles involved – their "compatibility."

- Ford was the first manufacturer to introduce the BlockerBeam™ in the 2000 model year Excursion aimed at engaging the energy-absorbing front-end structures of cars in head-on collisions. The 2003 Expedition and Navigator have front rails to engage the main energy absorbing structures of cars.
- Ford supports the joint effort between the Alliance of Automobile Manufacturers and the Insurance Institute for Highway Safety in the development of voluntary design changes that make crashes involving passenger cars and SUVs safer.

We are also working with regulators and others in the industry to develop industry-wide approaches to further improve safety. In early 2003, Ford testified before the U.S. Congress supporting a voluntary partnership between automakers and NHTSA to bring additional SUV safety features and approaches to market faster than they could be provided through regulation.

**FAST FACTS**

Four million new teen drivers take to the roads each year, and half of those drivers are involved in accidents within their first year of driving.

Vehicle crashes cost nearly \$300 billion annually in property damage, lost productivity, increased insurance premiums, medical premiums, workers' compensation and disability in the United States alone.

**SAFETY MEASUREMENT SYSTEMS**

● High ● Medium ● Low

TYPE OF TEST	FEATURES OF TEST		CAPABILITY OF TEST	
	Occupant protection	Accident avoidance	Controllability/replicability	Range of variable assessed
Crash Test (e.g. U.S. NCAP, Euro NCAP, IIHS)	●		●	●
Expert Assessment (e.g. European Secondary Safety Rating System)	●		●	●
Retrospective Analysis ("real-world" data)	●	●	●	●

**MEASURING SAFETY**

A number of organizations and governments throughout the world have developed systems for comparing the relative safety performance of particular vehicle models. These rating systems have expanded in number and are being introduced in more and more markets. The three major kinds of safety ratings systems have different strengths and weaknesses (see the table above).

The most comprehensive measure of a vehicle's safety is its "real-world" safety statistics, i.e. the rate of fatalities and injuries for a particular vehicle. Given a large enough data set, this kind of information encompasses all the various safety aspects. Ford has one of the largest worldwide data banks of real-world accident information in the industry, and we use this data extensively in designing vehicles and safety technologies.

Real-world data, however, is available only after a vehicle has been in use for some time. Therefore, in addition to real-world accident experience, we use a variety of data inputs in designing vehicles for safety:

- Our own crash test results
- Computer-simulated crash testing
- Computer-simulated vehicle behavior for accident avoidance
- Select and relevant external rating methods
- Ergonomics data to provide supportive driving environment, including proper placement of controls
- Partnerships with U.S. governmental agencies to study real-world vehicle experiences

We understand how complex it is to measure safety. Thus, we work cooperatively with organizations carrying out safety assessments to encourage systems that reward "real" safety and provide value to our customers in markets all over the world.

**Ford has one of the largest worldwide data banks of real-world accident information in the industry, and we use this data extensively in designing vehicles and safety technologies.**

**HOW ARE WE DOING?**

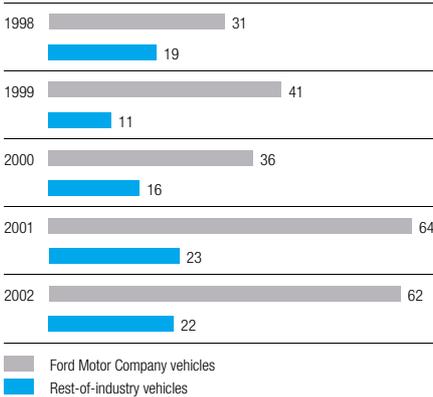
Our products continue to perform well in the real world according to various independent public domain rating systems (see data section on the facing page). For example, Ford has double 5-star ratings in the NHTSA frontal crash testing program for the 2003 Ford Windstar, Ford Taurus, Mercury Sable, Ford Mustang 2-door, F-150 Supercrew, Ford Crown Victoria, Mercury Grand Marquis, Mercury Marauder, Ford Expedition, Lincoln Navigator, Lincoln Town Car, Mazda 6, Mazda MPV and Volvo S80. We also received "Best Pick" from the Insurance Institute for Highway Safety for the 2003 Ford Explorer, Mercury Mountaineer, Lincoln Aviator, Ford Taurus, Mercury Sable, Lincoln LS and Volvo S80.

# Data - vehicle

A Ninety-seven percent of 2002 model year Ford vehicles tested attained either a 4- or 5-star rating in the U.S. NCAP frontal crash test, compared with 96 percent in the previous year.

## A 5-star ratings in frontal crash tests (U.S. NCAP)

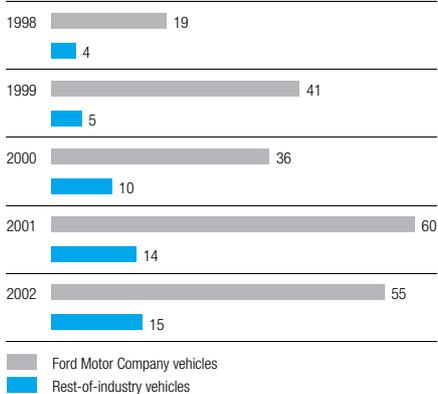
Percent of models tested



1999 and earlier MYs do not include Volvo or Mazda scores in the Ford totals. 2000, 2001 and 2002 MYs include Volvo scores in the Ford totals but do not include Mazda scores.

## B Double 5-star ratings in frontal crash test (U.S. NCAP)

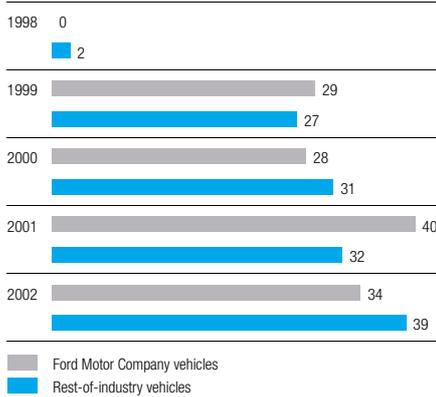
Percent of models tested



1999 and earlier MYs do not include Volvo or Mazda scores in the Ford totals. 2000, 2001 and 2002 MYs include Volvo scores in the Ford totals but do not include Mazda scores.

## C Double 5-star ratings in side crash test (U.S. NCAP)

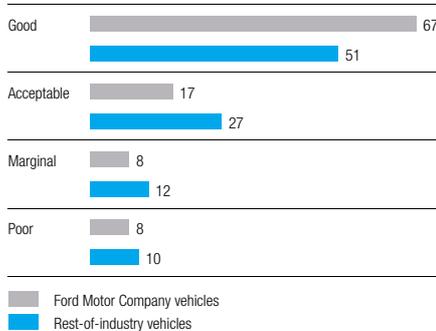
Percent of models tested



1999 and earlier MYs do not include Volvo or Mazda scores in the Ford totals. 2000, 2001 and 2002 MYs include Volvo scores in the Ford totals but do not include Mazda scores.

## D Comparison of Ford vehicle ratings to rest-of-industry ratings in the IIHS 40 mph frontal offset crash test

Percent

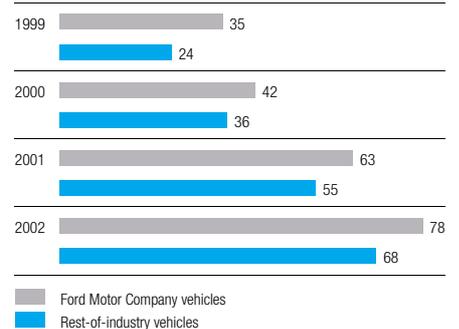


Data as of February 25, 2003.

Current model years include 2003 MY vehicles and/or vehicles with carry-over designs.

## E European vehicle sales attaining 4- and 5-star ratings (Euro NCAP)

Percent

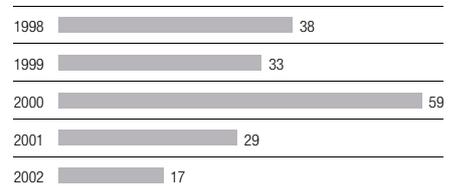


Data as of March 20, 2003.

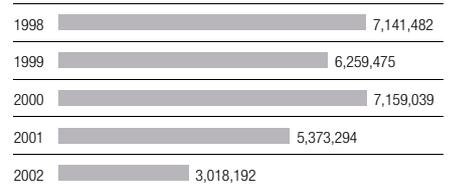
1999 and earlier MYs do not include Volvo or Mazda scores in the Ford totals. 2000, 2001 and 2002 MYs include Volvo scores in the Ford totals but do not include Mazda scores.

## F Safety recalls

Number of safety recalls



Number of units



Recalls are by calendar year rather than model year.

A single recall may affect several vehicle lines and/or several model years. The same vehicle may have multiple recalls.

Source: National Highway Traffic Safety Administration

# Community

We will respect and contribute to the communities around the world in which we work.

We will achieve this by:

- Respecting and supporting, in line with the legitimate role of business, the basic human rights of all people within our businesses and throughout our entire value chain
- Being sensitive to, and engaging in, the cultures of the communities in which we participate
- Making responsible and mutually beneficial investment in the communities we serve

**Making a contribution to the people who live in the communities where we work is one of our core values.**

**We have traditionally expressed this value by creating jobs, making investments in community facilities and providing charitable donations and volunteer resources for important community projects.**

**And when business conditions require us to reduce or eliminate jobs, we work closely with union and local government leaders to provide transitional support for the affected employees and communities.**

**As we go forward, we will continue these time-honored traditions.**

**But in a world of changing economic, social and environmental conditions, we need to expand our model of community involvement. By engaging in an open, respectful, ongoing dialogue about the opportunities and challenges we face together, we can create mutually beneficial strategies for sustaining the growth of our Company and the communities we serve.**

**In 2002, we continued our philanthropic and economic development efforts and initiated community impact assessment pilot projects at the Ford Rouge Center and at the AutoAlliance International Flat Rock Plant. In addition, we adopted a Code of Basic Working Conditions, which helps ensure fair labor practices and healthy, safe workplaces in our plants and encourages the same in facilities operated by our global business partners. Finally, we began to develop a global response to the HIV/AIDS virus, based on our experience in South Africa.**

In the Web version of this report, you will find additional information about:

- Projects and organizations supported by the Ford Motor Company Fund, corporate giving programs and employee volunteer efforts
- Ford Motor Company Code of Basic Working Conditions
- Ford of Southern Africa HIV/AIDS Policy
- Profiles of our Salute to Dealers award recipients
- Ford Motor Company Conservation and Environmental Grants Program

[www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship)

## CONNECTING WITH COMMUNITIES

Our business touches communities around the globe. We operate nearly 200 production, distribution, customer support and research facilities, and our dealerships are found in thousands of locations.

Our employees, retirees, suppliers and dealers work with local leaders to identify community projects that could benefit from philanthropic and/or volunteer support. Our plant managers and employees engage with community leaders to address issues, including economic development opportunities, environmental protection and traffic and noise management.

Our governmental affairs staff works with local, state, national and international government officials on public policy issues affecting our business and industry.

Here's a look at some of our more significant community involvement efforts in 2002.

## CONTINUING TO GIVE

In 2002, our global charitable contributions – comprised of Ford Motor Company Fund grants, corporate giving and product donations – equaled \$131 million.

### In the United States

The Ford Motor Company Fund ("the Fund"), which is supported by company profits, contributes to nonprofit organizations that enhance and improve opportunities for those who live in communities where Ford Motor Company does business.

During 2002, the Fund contributed \$84 million to a broad range of education, environmental quality, safety and arts and cultural projects. Supporting education at all levels remained the Fund's top priority. Special emphasis is placed on preparing promising young people for careers in engineering, math and science that are critical to automotive manufacturing. The Fund's scholarship and education programs support diversity and inclusion. For example, the Ford Advanced Education Program provides opportunities for students and promotes diversity in education at 31 schools, including five

*“The Ford Conservation Awards over the past 20 years turned the spotlight on thousands of people and groups who through their own vision and endeavor have spearheaded what we like to call the ‘Green Renaissance.’ The program’s wide geographic reach is proof that Ford really came on board with all its might.”*

**Professor David Bellamy**

President and Cofounder of The Conservation Foundation



*“For the 78 years we have been a Ford Motor Company dealer, part of our mission has been to support our surrounding communities. Our employees embrace the opportunity to be involved, whether riding in a bike-a-thon, participating in a Day of Caring or contributing to the \$500,000 we raise annually for our local United Ways.”*

**Mindy Holman**

President, Holman Enterprises

**2002 CHARITABLE CONTRIBUTIONS** \$ million

Year	1998	1999	2000	2001	2002
Ford Motor Company Fund	35	58	83	113	84
Corporate	21	27	27	24	47*
Total	56	85	110	137	131

\*Increase in 2002 reflects more comprehensive reporting of corporate contributions.

historically black colleges and universities and one all-female institution.

The Fund makes grants to projects and research that help develop new ways to reduce our industry’s environmental footprint and enhance safety. In 2002, the Fund continued its relationship with Conservation International and its Center for Environmental Leadership in Business, as well as the Environmental Careers Organization’s Sustainable Transportation Fellowship Program. The Fund continued to support the Proud Partner program, a joint effort between the National Park Foundation, the U.S. National Park Service and private industry to reduce vehicle congestion, improve visitor mobility, promote sustainability and enhance the National Park experience. The Fund also partnered with the National Latino Children’s Institute and the NHTSA to fund a child passenger safety program for the Spanish-speaking community.

**Rural America**

Our business units also make corporate contributions and product donations. For example, Ford Division has increased its commitment to rural America through the Ford Country Scholars and Provider Pals programs. Ford Country Scholars will provide more than 750 \$5,000 scholarships over a three-year period to students who exemplify a past and continuing commitment to rural life and livelihood. Provider Pals, sponsored in part by a \$1.5 million grant from Ford, is a cultural exchange program to connect rural and urban students.

**During 2002, the Ford Motor Company Fund contributed \$84 million to a broad range of education, environmental quality, safety and arts and cultural projects.**

**Beyond the United States**

Outside of the United States, our corporate donations and volunteer programs are managed through our Business Operations and plant-level committees. Some of their work in 2002 included:

**Ford India** – Supports the Sanjeevi Health Center, which provides free primary medical services to local communities, and a Trauma Care program, which funds two fully equipped ambulances with paramedical teams. More than 1,000 accidents and 2,500 medical emergencies have been attended since the Center was established in 1999.

**Ford Vietnam** – Works with businesses, governmental agencies and nonprofit organizations, including the Asia Injury Prevention Foundation, to run the Helmets for Kids project to reduce traffic fatalities. In 2002, Ford Vietnam donated more than 1,000 helmets to students.

**Ford Australia** – Leads the “Ford Alive” educational program designed to provide insight into the workings of one of Australia’s leading manufacturing companies and allows older students to see career opportunities that exist in the industry.

**Ford Italy** – Raised \$3 million from Ford employees and dealers to open the Ford Neuropsychiatry Pavilion at the Bambino Gesù Children’s Hospital.

**Ford UK (Dunton Technical Centre)** – Sponsors the Greenpower Electric Car Marathon in which secondary school students design, build and race their own electric vehicles. The program is meant to encourage interest in engineering, as well as develop students’ team and interpersonal skills.

**Ford of Southern Africa** – In 1990, funded and helped launch the Mazda Wildlife Fund in cooperation with its network of Mazda dealers. The Fund commits vehicle donations and approximately \$270,000 per year for education, research and the direct preservation of endangered species and habitats. The Mazda Wildlife Fund currently supports 32 projects with 34 vehicles.

**Ford Brazil** – Sponsors the “Odontomobile” which has provided dental services free of charge to 5,400 people in needy communities through a mobile dental clinic.



**FAST FACT**

In 2002, Ford employees, family, friends and business partners participated in the Juvenile Diabetes Research Foundation Global Walk at 39 sites around the world and made a total contribution of over \$2.6 million.

**Around the world** – Over the past 20 years, thousands of people in more than 60 countries around the world have participated in the Henry Ford Conservation Awards. In 1996, the award program was expanded globally to form the Ford Motor Company Conservation and Environmental Grants Program supporting a wide variety of grassroots environmental initiatives. For example, in Indonesia in 2002, Ford funded six environmental projects, including establishing an environment education program in the Thousand Islands; managing and monitoring coral reefs on the south Sumatra coast; promoting mangrove reforestation in Sulawesi; establishing a fish hatchery in East Java; and supporting archeological preservation of an ancient site in Java.

*Ford Motor Company*



*Conservation & Environmental Grants*

**The Ford Motor Company Conservation and Environmental Grants Program supported a wide variety of grassroots environmental initiatives in 2002.**

**Testing our approach**

During 2002, we established pilot projects at the Ford Rouge Center in Dearborn, Michigan, and the AutoAlliance International plant in Flat Rock, Michigan, to test the approach reflected in the graphic (below).

We assembled teams representing major functions within the plant and community organizations to conduct an assessment of our impacts and resources. The teams at each location are working together to identify shared goals and develop strategies for achieving them. We will report the results of these efforts in 2004.

**DEALERS**

Each year, our dealers give countless dollars and hours of time to organizations and projects in their communities around the world. Outstanding dealers are recognized through our Salute to Dealers awards program.

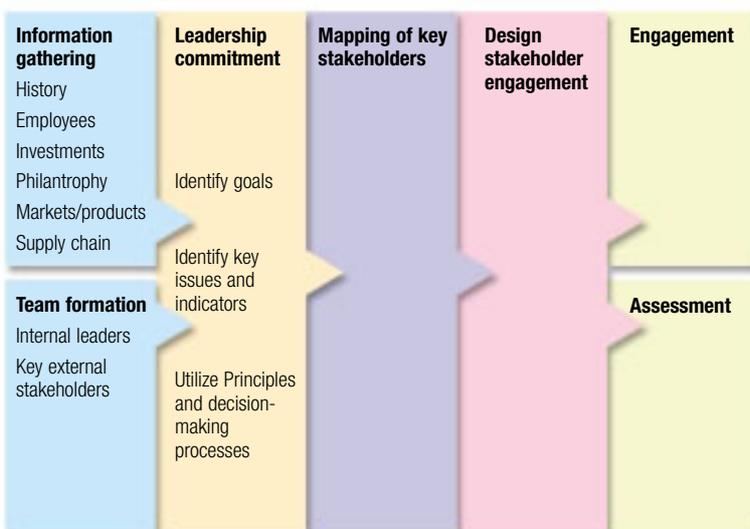
**DEVELOPING A NEW MODEL OF COMMUNITY INVOLVEMENT**

An expanded approach to community involvement requires us to look at the totality of our decisions and resources and their full impact on, and benefit to, the community – ranging from our employment practices, to our selection of suppliers, to our decisions about land use at our facilities. We are also looking for our community partners to consider how their decisions and actions affect Ford.

To accomplish this, leaders from our business and organizations in the community must come together to identify and agree upon shared goals, strategies and ways to measure and report progress.

Moving beyond immediate, tactical issues to tackle longer-term, systemic challenges takes time, but will contribute to sustainable growth of our Company and the communities in which we do business.

**COMMUNITY IMPACT ASSESSMENT**





*"Ford is a family business, in fact, the largest extended family in the world. Our employees, suppliers and dealers carry on the Ford family tradition of not just being in every community, but being of each community. For six generations we have recognized and encouraged community involvement everywhere we live and serve."*

**Edsel B. Ford II**

Member of the Board of Directors, Ford Motor Company

#### FAST FACT

In 2002, Ford employees in the United States logged 116,434 volunteer hours as a part of our community outreach programs. According to the Independent Sector, a nonprofit organization that tracks corporate volunteer programs, the economic value of these contributions exceeds \$1.9 million.

#### COMMUNITY REVITALIZATION: DAGENHAM ESTATE

Business is not always the story of continuous growth. Although we have corporate citizenship responsibilities when expanding into new markets, those responsibilities apply equally to our established operations and their communities as the nature of our activities change. An example of our approach can be seen in the work we have done in Dagenham, England.

In the late 1990s, as a part of our European restructuring efforts, we decided to end vehicle production at Dagenham and transform the Estate to become Ford's global center of excellence for diesel engines. European diesel engine engineering and manufacturing efforts were consolidated at one site, including the building of a new engine assembly hall. As a result of this and increased production at our Bridgend Plant, 25 percent of Ford engines worldwide will be produced in the UK.

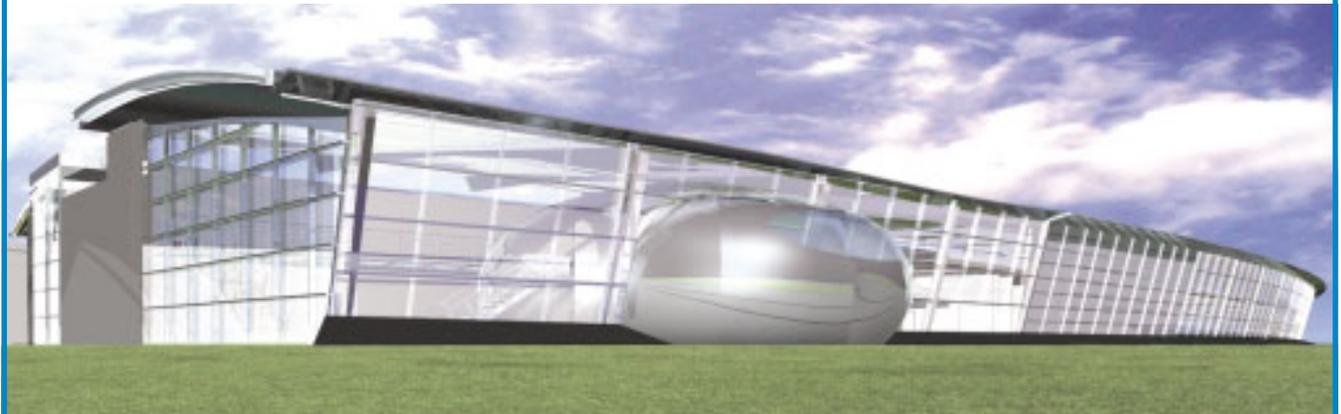
Since making that decision, we have worked collaboratively with local, regional and national governments, as well as the Heart of Thames Gateway Partnership, the London Development Agency and several academic organizations, to redevelop the unoccupied land into a "catalyst for the continued commercial growth and regeneration of the Thames Corridor."

The centerpiece of the redevelopment effort focuses on developing the Centre for Engineering and Manufacturing Excellence (CEME) – a unique partnership involving business, education and government. We have joined with Havering and Barking colleges, Loughborough, Cardiff and East London universities and the Warwick Business School to create a

state-of-the-art \$60 million educational and training facility. The CEME will support the skills base and competitiveness of the local community by providing a seamless route from basic skills to higher education and research programs. The facility is capable of accommodating more than 1,500 students per day, including employees on continuous professional development programs and those studying for professional qualifications. Programs will be based around engineering, manufacturing, business and IT disciplines. In addition to technical workshops, classrooms and lecture halls, the CEME will also include a new Conference Center, an e-library, a Business Innovation Center that can house 45 business start-ups, a childcare facility and a hotel. It will also host AbilityNet, a charity providing IT learning solutions for people with disabilities.

Construction of the CEME began at the end of 2001 and will be completed in September 2003. We will fund a portion of the CEME operational budget in return for a guaranteed proportion of space to use for employee training and development, and sponsor a Ford professorship to be based at the facility.

In addition to the CEME facilities, the Dagenham Estate regeneration also includes development of one of the UK's largest solar arrays, and planning permission is being sought for up to three 1.8 megawatt wind turbines. A new Visitors Center is being planned that will work with schools and teachers on related areas of the National Curriculum like citizenship, engineering, manufacturing and local history.



**FAST FACTS**

Ninety-five percent of Ford India employees have been through a four-hour HIV/AIDS awareness program offered at a Chennai medical center.

Approximately 200,000 Ford Motor Company employees belong to unions worldwide.

**HUMAN RIGHTS STRATEGY DEVELOPMENT**



**RESPECTING AND SUPPORTING HUMAN RIGHTS AROUND THE WORLD**

At our Emerging Issues Dialogue in August 2000, leaders of social and environmental organizations urged us to put human rights – in the broadest sense of the term – on our corporate agenda.

They asked us to look rigorously at the aspects of human rights most directly under our control – including wages and compensation, labor practices and working conditions – and ensure they were consistent with internationally accepted standards. They encouraged us to use our influence with our business partners to get them to do the same.

**MAKING THE COMMITMENT**

In 2001, we decided to develop core principles governing employee human rights. Although we understood that these principles would not represent a significant departure from current practice in our plants or in our relationships with our business partners, the Code was intended to bring together many important principles articulated elsewhere in existing policies and give them greater focus and clarity.

**Since committing to the development of a human rights strategy in 2000, we have taken steps to create and implement a Code of Basic Working Conditions.**

**DEVELOPING A CODE**

In 2002, a cross-functional team developed and tested the Ford Motor Company Code of Basic Working Conditions with individuals inside and outside of Ford. We sought feedback on the implementation challenges within our own operations and the meaning of such a Code to suppliers. We also engaged leading human rights organizations – e.g. the Interfaith Center on Corporate Responsibility, the Lawyers Committee for Human Rights and the Prince of Wales International Business Leaders Forum – in the development process.

In March 2003, we formally adopted the Code of Basic Working Conditions and began its implementation throughout our global operations. The Code can be found on [www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship) and contains the following elements: Child Labor, Compensation, Forced Labor, Freedom of Association and Collective Bargaining, Harassment and Discrimination, Health and Safety, Work Hours and Verification.

Our Code will be implemented in all of our global operations, and we are planning site visits to evaluate many of our facilities. We included independent third-party verification, as appropriate, and believe this will make our implementation process more credible. We are encouraging our business partners to adopt and enforce similar policies, and we intend to integrate elements of the Code into the Terms and Conditions governing our agreements with suppliers.

# A closer look

## ADDRESSING THE HIV/AIDS CRISIS



### THE CHALLENGE OF HIV/AIDS

In many of the communities we serve, we are involved in solving what appears to be a local problem. But when we step back, we find the issue reflects a larger global challenge. As a global Company, we are able to make a unique contribution to its resolution. Our experience with HIV/AIDS provides an insightful example.

#### Understanding the scale of the problem

In 1999, our Ford South Africa managers confronted some very difficult truths. HIV/AIDS infection rates in South Africa were increasing dramatically. According to the United Nations, Southern Africa had, and still has, one of the the fastest growing rates of HIV incidence in the world. By 2015, one study recently estimated, nearly 9 percent of South Africa's highly skilled labor force and 19 percent of all skilled laborers are likely to be infected with HIV.

Without immediate and significant action, infection rates in our 3,000-person workforce would mirror those within the country. That would almost certainly mean greater social isolation and economic distress for employees with HIV/AIDS, greater rates of infection in the employees' family and social circles and many premature deaths. Our South African business could not operate successfully if the infection rate was not checked.

#### Developing a comprehensive local response

Our South African organization launched an education and prevention effort in conjunction with governmental and community organizations, aimed at the employee, family and societal level.

We focused on giving people the information and tools they needed to understand how the virus was transmitted and how to protect themselves and their loved ones. This included:

- Providing every employee with HIV/AIDS-awareness training during working hours and access to condoms in the workplace. Currently, more than 40,000 condoms are distributed per quarter in our South African operations
- Organizing HIV/AIDS-awareness days for employees, their spouses and their children

**The Ford Motor Company of Southern Africa (FMCSA) has invested in the training of 77 HIV/AIDS Peer Educators at the Company's Silverton (Pretoria) and Port Elizabeth facilities. Their role is to educate, support, counsel and communicate on HIV/AIDS-related issues to employees and contractors to the Company, as well as people in the wider community. Above: The Peer Educators based at the FMCSA Silverton plant.**

- Sharing information with other companies and community organizations to help heighten societal awareness about HIV/AIDS prevention

In addition to HIV/AIDS education and prevention, our South African HIV/AIDS Policy strictly prohibits discrimination in our workplaces, protects the privacy of workers, provides for the health and safety of all Ford employees and supports prevention and access to medical and other services for those with the virus. The full policy is available at [www.fordmotorcompany.co.za](http://www.fordmotorcompany.co.za).

#### Making our response global

In early 2003, we established an HIV/AIDS team to create a global corporate policy on HIV/AIDS and programs to support its implementation. Their work will include engaging stakeholders like individuals from the St. Joseph Health System and other interested parties.

We want to share our lessons learned and progress on HIV/AIDS education and prevention, and are pilot testing the Global Reporting Initiative HIV/AIDS Resource Document. Later in 2003, we will report about the effect of the health pandemic on the Company's operations in sub-Saharan Africa. Our report will include a "gap analysis" of our South African HIV/AIDS Policy and company practices, as well as performance indicators.

When it comes to the common good, national distinctions often blur and a sense of mission creates solidarity that crosses national and corporate boundaries. We have shared our ideas, our plans and our program within South Africa – with competitors and others alike. We look forward to doing more on a global level in 2003 and beyond.

# Quality of relationships

We will strive to earn the trust and respect of our investors, customers, dealers, employees, unions, business partners and society.

We will achieve this by:

- Building and maintaining a caring culture of partnership and mutual benefit
- Developing individual and team skills so employees may reach their full potential and contribute to the success of the Ford Motor Company
- Creating a business climate that encourages innovation, learning and exceptional performance
- Actively pursuing the benefits derived from a diverse workforce, as well as those from the diversity of perspectives provided by our stakeholders

**Our ability to succeed over time is influenced by the quality of our relationships with key stakeholders.**

**As the level of trust and respect grows in our relationships, so do the possibilities for collaboration. And through collaboration, opportunities for learning, development and innovation can create competitive advantage.**

**But trust and respect don't exist in a vacuum. They are gained and lost in our everyday interactions with our customers, business partners and society in general.**

**Our Revitalization Plan recognizes this and makes rebuilding and enhancing our relationships a core focus for the Company over the next few years. We want to be the company of choice for our stakeholders.**

**By taking a systematic look at each of our key relationships and reporting annually on our progress, we believe that we can improve the quality of our stakeholder relationships over time.**

**In 2002, we spent time listening to our stakeholders and learning more about their expectations of us as a company, a business partner and a trusted brand. We shared information about issues of mutual concern and worked to find mutually beneficial ways to move forward. We also took the first steps in developing a new way to measure and report the level of trust and respect in our key relationships through a Trust Index.**

In the Web version of this report, you will find additional information about:

- Our key stakeholders
- How we manage our relationships
- How we measure satisfaction

[www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship)

## TAKING THE NEXT STEPS WITH STAKEHOLDER ENGAGEMENT

We are expanding the number and type of stakeholders we regularly engage with and have created new forums for communication and dialogue. The table below provides a snapshot of our significant stakeholders and some of our major venues for engagement. While communication is essential to building strong relationships, it alone is not sufficient. In the end, using stakeholder feedback when making our decisions will foster trust and respect.

STAKEHOLDER	COMMUNICATION AND ENGAGEMENT FORUMS
SOCIETY 110 plants in 25 countries	Community Relations Committees Interactions with local, state, federal and international governments Membership in associations NGO dialogues and campaigns
INVESTORS 1.8 billion shares	Investment community forums Quarterly earnings communications Annual Shareholders Meeting Annual Report Proxy Statement S.E.C. Filings (e.g. 10-K, 10-Q, 8-K)
CUSTOMERS 7 million vehicles	Consumer Insight process Customer care programs Dealer interactions
SUPPLIERS 2,000+ production suppliers 9,000+ nonproduction suppliers Over \$90 billion annual buy	International Supplier Advisory Council Executive champion program Top supplier meetings Supplier quality roundtables Supplier Environmental Forum Supplier Diversity Development Third-party industry forums
DEALERS 28,000 dealers	Intranet communications Brand sales and service representatives Brand Dealer Councils Dealer roundtables President's Circle
EMPLOYEES 350,000 employees	Town meetings Labor-management committees PULSE survey Union representation Intranet surveys and chats Executive Council on Diversity Local Diversity Councils Employee Resource Groups



*"My position is unique in the automotive industry. We have nearly 500 people with reduced abilities working to produce the new Fiesta. I help match people to jobs that fit their skills and abilities. This project demonstrates Ford's diversity strategy and shows that people are at the heart of all we do."*

**Heinz Breidenbach**  
Disability Manager, Cologne Plant, Ford Germany



*"I appreciate Ford's positive approach in focusing on what I can do, not what I can't do. It shows that they care for us and respect me for what I am able to contribute – just like every other employee."*

**Rocco Manolio**  
In-Station Process Control, Cologne Plant, Ford Germany

## EMPLOYEES

As a global employer, we are striving to create a diverse and inclusive Company culture where our employees can maximize their potential. This helps us attract and retain talented employees and business partners.

We offer competitive compensation and benefits packages, invest in the development of managerial talent, promote skill development and life-long learning efforts and encourage work-life integration. We have many policies and programs that support each of these areas.

### Creating a more open and accessible management culture

Throughout the year, senior executives held Town Hall meetings with employees to listen and respond to their concerns and hopes and to place them in the context of our revitalization efforts. Our employees also received regular updates on the Company's current financial condition and progress on key priorities through a variety of communication channels.

### Restructuring our business

As part of our Revitalization Plan, by mid-decade more than 35,000 employees around the world have or will be affected by a voluntary separation program and other related actions. These include: 21,500 in North America – 15,000 hourly, 5,000 salaried and 1,500 agency employees – and 13,500 in the rest of the world. We will work with union leaders to reduce manufacturing capacity by 1 million units by 2007 in a socially responsible manner.

We reached successful contract agreements with the Canadian Auto Workers union and in the UK with AMICUS, ACTS and the T&G, and we began preparations for our 2003 negotiations with the UAW.

Based on our financial performance, modest profit sharing was granted to about 100,000 hourly employees and modest performance bonuses to eligible nonmanagement and a limited number of lower-level management employees. However, we are not yet in a position to resume other employee benefits like matching contributions to employee 401(k) plans.

**Ford of Germany's FILM project has placed approximately 300 workers with reduced abilities in normal assembly line work.**

## Making progress on diversity

Our employee base continues to become more diverse in many different parts of the world. For example:

- In the United States, the number of women and people of color in our executive and hourly ranks continue to increase.
- The proportion of women in leading positions at Volvo increased from 11 percent to 12 percent.
- Our management team in the Philippines is predominately Filipino, in comparison with other international auto companies that are managed primarily by expatriates.

Ford of Germany's approach to including workers with reduced abilities is a good illustration of the benefits of addressing diversity issues. At the end of 2000, 500 of the assembly line workers producing Fiestas and Pumas at the Cologne Plant (Germany) had serious medical conditions that resulted in reduced abilities or impairments. About half of those employees worked in a separate workshop that was scheduled to close when the new Fiesta and Fusion production line opened in 2002. Ford of Germany assembled in-house and external experts to develop a new approach to fostering integration of employees with reduced abilities, known by its German acronym of "FILM." Using a newly established scientific method, as well as a computer-based program, both aimed at assessing the abilities and needs of the workers (focusing on their abilities, not their disabilities), the FILM project's interdisciplinary team was successful in integrating about 300 of the workers with reduced abilities in normal assembly line work. For most of the remaining workers, appropriate positions have been identified in other areas of the plant or are still being explored.

#### FAST FACTS

In 2002, Volvo launched corporate citizenship training in its purchasing department. One-quarter of the department's personnel had completed the course by the end of the year, and the rest will complete the program in 2003.

Ford New Zealand's Life Skills program encourages personal development by offering financial assistance towards any sport, interest or study activity of choice that is instructor-led.

*"It's a good way of integrating your out-of-work interests with work. Through Life Skills, the Company enables you to do something you wouldn't otherwise have done."*

**Karen Amor**

Employee, Ford New Zealand

Ford has been recognized for its efforts to promote diversity in the workplace, in its dealer and supplier networks and in its customer base:

- DiversityInc Top 50 Companies for Diversity – Ford was ranked No.1, recognizing its progressive employee and supplier diversity policies
- Families and Work Institute – Work-Life Innovator Award
- Diversity Best Practices & Business Women's Network – Best of the Best for Women & Diversity
- Working Mothers' 100 Best Companies to Work For
- Best Companies for Women in Taiwan – Ford Lio Ho, awarded by 104 Job Bank and *ELLE* fashion magazine
- Swedish National Automotive Association Golden Sparkplug Award to Volvo Cars' "My Concept Car" project (car designed by women)

#### Employee satisfaction is down slightly

To better understand how our business decisions, management activities and employee policies and programs affect our employees, we conduct an annual employee satisfaction survey called PULSE. The PULSE survey is distributed globally to all of our salaried employees. In 2002, 71 percent of our employees – an all-time record – participated in the survey.

The PULSE survey produces an Employee Satisfaction Index by measuring 12 different dimensions of employee satisfaction: Business Issues; Diversity; Empowerment; Job & Company; Quality; Reward and Recognition; Stress; Supervision; Survey Process; Training and Development; Workgroup and Teamwork; and Workload. Individual workgroups use the results from the PULSE survey to help improve the workplace.

Our overall Employee Satisfaction Index fell by 3 percentage points in 2002. Taking a closer look at the scores for different dimensions provides some insights into the factors contributing to this decline.

**Our overall Employee Satisfaction Index fell by 3 percent; however, Stress, Quality, and Workgroup and Teamwork showed improvements.**

Nine of the 12 dimensions showed declines from 2001 levels, with five dimensions having reductions of two points or more. The Supervision dimension, with a five-point drop, measured the greatest decline in satisfaction. The Reward and Recognition dimension had a three-point decline, and Diversity, Training and Development, Empowerment and Survey Process had declines of two points.

Three dimensions – Stress, Quality, and Workgroup and Teamwork – showed improvements of 4 percent, 3 percent and 1 percent, respectively.

#### Looking across brands, functions and regions

The six countries with the largest concentrations of Ford employees – the United States, Canada, Germany, Brazil, Mexico and the UK – had scores for the 12 PULSE dimensions that reflected those found for the Company as a whole. But some countries – Greece and Taiwan – saw improvements across all dimensions when compared with last year. Japan, Puerto Rico and Spain increased satisfaction levels in 10 of the 12 dimensions.

Ford Credit continues to have the highest levels of employee satisfaction of all the brands on all dimensions of the PULSE survey. Ford Brand Asia-Pacific was highest scoring among Business Operations.

**FAST FACT**

In 2002, 7 percent of Ford's dealerships in the United States (more than 360 out of a total of 5,100) were minority-owned. This is more than any other automaker in the country.



*"There is no doubt in my mind that Ford Corporate and Division Management takes seriously their Revitalization Plan commitment to build relationships with dealers. It is not just about their listening and being more responsive, it is about interpersonal relationships. When Bill Ford, Jim Padilla and Nick Scheele come to meet with the Dealer Council informally, after normal meeting hours, just to talk, it shows us more than anything they care and want to improve our relationship."*

**Michael Kennedy**

Chairman, Ford National Dealer Council

**PROVIDING FAMILY SUPPORT AND DEVELOPMENT OPPORTUNITIES TO FORD EMPLOYEES AND RETIREES**

*"It's about integrating the many responsibilities we all have – to our communities, our families and each other. The Center reaches out to people and provides the opportunity for success in our everyday lives. Take the child development center, for example. It's reassuring for families to know that their children are being cared for in a safe and nurturing environment. We all win when we can meet our employees' needs."*

**Rob Bryce**

Family Service and Learning Center Co-Chair and Kansas City Ford Assembly Plant Human Resource Manager

**In November 2000, in conjunction with the UAW, we announced the creation of our Family Service and Learning Centers program, a comprehensive union-management partnership to support working families, individuals, retirees and the communities in which they live.**

**The FSLC program offers U.S.-based Ford employees, retirees and their families access to a wide array of integrated programs and services ranging from high-quality day-care, before- and after-school programs for school-aged children, adult and family education and volunteer support networks.**

**The FSLC program will bring services and programs to more than 30 locations around the United States. In the locations with large concentrations of Ford employees – e.g. Detroit, Cleveland, Louisville, Chicago and Kansas City – state-of-the-art service centers offering 24-hour child care will be built.**

**Two centers opened in 2002 in Louisville and Kansas City. The number of children using our FSLC child development centers in the first quarter of 2003 increased 85 percent from the same period last year.**



**DEALERS**

Almost all of our dealerships are independently owned businesses. Dealers rely on us to provide exciting, high-quality products at a good value to our customers. We rely on them to build long-lasting relationships with our customers through superior sales and service experiences. Our economic fortunes and commercial identities are inextricably linked, and the quality of this partnership requires constant improvement.

In 2002, we made a concerted effort to address the underlying issues that affect this key relationship.

**Reaching out and listening**

As part of our ongoing business, we hosted meetings throughout the world that brought regional dealers together with our executives. In the United States, all brands actively participated in the National Auto Dealers Association annual convention in San Francisco and met with a large number of their dealers to discuss issues relevant to their business. Most importantly, each brand has an active Dealer Council that meets several times each year, providing a forum to hear from our dealers about their concerns, their needs and ways in which we could work more productively together. Dealer advisory committees were also important and provided input into future product offerings.

Through these various methods of interaction, Ford management had the opportunity to meet with, and hear from, the majority of the dealers in their respective franchises.

The feedback gathered through these interactions has helped us develop various programs, change policies and enhance processes to improve customer handling and other significant elements of the dealers' business.



*"Ford Motor Company shares our vision to create economic empowerment in emerging communities. We both recognize the strength and growth of the minority consumer market and have the desire to increase dealerships in all communities across the United States."*

**Hector Baretto**

Administrator, U.S. Small Business Administration

**Supporting dealer sales, customer satisfaction and enhancing profitability**

Our dealers look to us to provide attractive vehicles, help generate customer demand and support their sales and service activities. Some of the efforts we undertook in 2002 to help increase dealer sales, customer satisfaction and profits are listed below:

- We provided competitive marketing incentives, and Ford Credit developed innovative financing options, to help increase the affordability and appeal of our vehicles.
- Ford Motor Company, Ford and Lincoln Mercury dealers also contribute to advertising associations that support our national advertising. We enhanced the Ford.com Web site to generate more customer leads for our dealers in the United States.
- Nearly all U.S. dealers participate in our brand-specific customer satisfaction programs (e.g. Blue Oval Certified, Lincoln Premier Experience, Mercury Advantage and PAG programs). These programs help increase consumer trust and confidence in the sales and service experience they receive from our dealers and enhance our dealers' revenues. We are committed to working with our dealers to strengthen and build upon existing programs that continuously improve customer satisfaction.
- We helped dealers reduce customer downtime and inventory costs through programs such as Ford Customer Service Division's (FCSD) Daily Parts Advantage. During 2002, FCSD's Parts Supply and Logistics team opened nine new parts facilities to help dealers easily access parts when they need them.
- In Europe, the European Union Block Exemption legislation governing the market distribution of cars has recently changed. Ford Europe is working hard to develop new business relationships with our dealer partners to ensure that we meet the customers' needs for a dependable sales, service and brand experience, while ensuring a viable business equation.
- We continued initiatives to expand diversity in the operations and ownership of our dealerships. For example, Ford and the U.S. Small Business Administration announced a partnership to help

**Relationships with our dealers and suppliers are incredibly important to us. These relationships are inextricably linked to our economic fortune.**

meet the capital needs of Ford minority dealers and explore ways to provide assistance to other minority-owned businesses in the automotive industry. Ford and the National Association for Minority Automotive Dealers formed a task force to increase the percentage of Ford's minority-owned dealerships.

**Measuring dealer satisfaction**

We measure dealer satisfaction within all of our brands and regions through various methods. Day-to-day interaction with our dealers, ongoing meetings with our Dealer Councils and input from third-party surveys assist us in assessing the state of our important relationship with our dealers.

Feedback from members of our various brand Dealer Councils and the National Auto Dealer Association suggests our relationships are improving. There is wide variation of dealer satisfaction results among the various Ford brands sold in the United States. Efforts are underway to share best practices among the brands and take actions to continuously improve dealer relations.

**SUPPLIERS**

Our relationship with our suppliers has become increasingly interconnected. We work together at all stages of our product life cycle – from product development to sale, to use and service, to end of life.

By setting clear expectations for quality cost, delivery and environmental and social performance for our suppliers, we can work together to deliver a desirable and affordable product to Ford customers.

It sounds straightforward, but making this happen requires a shared vision, constant communication, ongoing investment in training and technology and a commitment to continuous improvement. This is done through work with our International Supplier Advisory Council and interactions with thousands of individual suppliers.

*"Being a good corporate citizen means above all, to preserve and take care of our personnel, respecting their rights and capitalizing on their differences in ideas, experiences, gender, ages, religions, etc. In my work place, it means to work for a better internal mood, with employees being proud of working for Ford. This will directly impact the quality of the service we provide to our customers, our suppliers and our community."*

**Maria Inés Calvo**

HR Business Operations Finance & IT and PULSE Survey Coordinator, Ford Argentina



**Above: 2002 meeting of the Supplier Environmental Forum at SKF Group.**

### Taking a team approach to drive out cost and waste

Improving product quality and reducing product cost are two key elements in our Revitalization Plan. They are also areas where collaboration and teamwork with our suppliers are essential. An improvement in the way we do business as a team can result in dramatic performance improvements.

In the area of quality, we have joined with our suppliers in a concerted 6-Sigma effort. We are addressing quality issues through better design, engineering and manufacturing practices. We are also asking our suppliers to do the same. We support our suppliers in this area by providing training and technical assistance. In 2002, the Lean Resource Center directed operations through eight learning organizations to deliver 43 interactive, hands-on classes with more than 1,000 Ford and supplier participants.

Ford Europe launched Team Value Management (TVM) in 2001 to improve Ford's competitive position on material cost, including design. TVM brings together engineering, purchasing, manufacturing and finance with our suppliers in commodity-focused teams (e.g. brakes) to manage value while maximizing quality.

The positive reception to TVM and results of TVM teams in Ford of Europe led to the adoption of TVM in North America in 2002 and the Premier Automotive Group in 2003. Using the TVM process steps developed by Ford Europe, these brands are finding similar opportunities to improve value through the use of benchmark data. In addition, Ford deployed TVM for its nonproduction purchases in 2003.

### Increasing supplier diversity

Our Supplier Diversity Development Office works with individuals, organizations and communities to develop opportunities for minority- and women-owned small businesses.

In 2002, we purchased \$3.2 billion in goods and services from 306 minority- and women-owned businesses in the United States. In recognition of Ford's continuing leadership in this area, Ford was named "Corporation of the Year" by DiversityInc. and received

the 2002 Corporation of the Year award from the Michigan Minority Supplier Development Council, and two Ford employees were named the 2002 Advocate and Buyer of the Year.

The Volvo Car Corporation's Purchasing Department and the Swedish Institute for Industrial Research and Development launched the Diversity in Swedish Industry project in August 2002 to increase the competitiveness of supplier companies through greater awareness and knowledge of diversity.

### Contributing to environmental improvement

In the environmental arena, our work continued to focus on improving environmental management capacities and performance at supplier facilities. Ford is requiring all Q1 supplier manufacturing sites shipping products to Ford to be ISO 14001 certified by July 1, 2003. In 2001, we focused on engaging our major supplier companies in ISO 14001 certification. More than 90 percent of our major supplier companies certified at least one location by the end of 2001. In 2002, we focused on certification of all supplier manufacturing sites with potentially high environmental impacts, and approximately 80 percent of these sites were certified. The remaining 20 percent had confirmed plans in place.

Our Supplier Environmental Forum met three times in 2002 and was instrumental in understanding and addressing supplier concerns regarding the International Material Data System. The forum also covered a wide range of new topics like sustainability reporting, climate change and sustainable mobility.

As the highest honor a supplier can earn, our World Excellence Awards recognize and acknowledge significant and outstanding supplier contributions to the vision of Ford Motor Company. Based on their environmental achievements and innovations, SKF Group was the 2002 recipient of the Corporate Citizenship Award for Environmental Leadership. Johnson Controls and Delphi were selected as the 2002 recipients of the Corporate Citizenship Award for Social Responsibility, in part for their excellence in community involvement, minority supplier development and overall working conditions strategy.



*"We have to recognize that there are some disconnects. We need to be open, transparent and honest with suppliers, as we have had to be with every other group we interface with. Honesty, openness, transparency – these have got to be the clear parameters by which we work together."*

**Nick Scheele**

President and Chief Operating Officer

### Exploring trust

Although the results of our collaborations with suppliers can be clearly measured in the cost and quality of our products, the level of satisfaction with our relationship is more elusive.

We gather feedback from our suppliers about the state of our relationship through dialogue at our Supplier Council meetings, surveys and interviews. Although these efforts are valuable, we have decided to go further to understand and measure what drives trust and respect in the relationship.

In 2002, we commissioned a third-party research company to help develop and administer a pilot "Trust Index" program with suppliers to examine how trust is created and maintained, how it is measured and how we can enhance our relationships.

We expect this information to provide new insights into our relationship. It has the potential to measure and track levels of trust in the supplier community over time. We hope to use what we learn from this pilot test to explore how it would apply to employees and other stakeholders.

### SOCIETY

It can be difficult to define who "represents" society because in a sense we all do. However, we engage "society" by working with community leaders and government officials in the places where we do business around the world. (More detailed descriptions can be found in the Accountability and Community sections.) In addition, we work with leading environmental, social and corporate responsibility organizations around the globe. We have developed and still maintain relationships at the corporate level with many such organizations. For example, we participate in the World Business Council for Sustainable Development's Sustainable Mobility Project and are working with the Global Reporting Initiative and the UN Environment Programme to develop automobile sector-specific sustainability indicators and reporting guidelines.

**We are piloting a 'Trust Index' program which has the potential to measure and track levels of trust in the supplier community – we hope to explore how it would apply to employees and other stakeholders in the future.**

Our brands and regions have their own set of relationships with nongovernmental organizations to gain their perspectives about issues important to their organization and society. For example, in late 2002, Volvo conducted dialogues with various human rights organizations, consumer associations, trade unions, researchers and others to understand what is expected of their contribution to corporate citizenship.

### Gauging satisfaction

Because of the diversity of nongovernmental organizations that we work with, it is difficult to make a broad statement about their satisfaction with our relationship and actions.

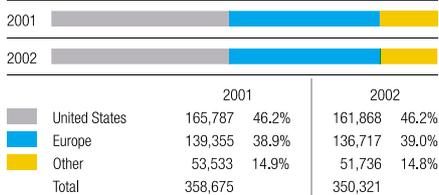
In 2002, our relationships with the environmental organizations we work closest with in the United States were strained by the ongoing Corporate Average Fuel Economy (CAFE) legislative debate. Despite our differences in this regard, we have continued to maintain an open dialogue with many of our partners, including Coalition for Environmentally Responsible Economies (CERES), the Union of Concerned Scientists (UCS) and the Interfaith Center on Corporate Responsibility (ICCR).

We share a commitment to reduce greenhouse gas emissions, although we differ on how best to achieve the desired outcomes. Our dialogues this year have been geared toward a better understanding of the assumptions, technical and otherwise, that lead to our different perspectives.

We also have achieved mutually desirable results in some important areas. In our human rights work, our engagement with the ICCR, the Lawyer's Committee on Human Rights and others has resulted in a more robust Code of Basic Working Conditions. We look forward to involving these and other partners in developing our global HIV/AIDS Policy.

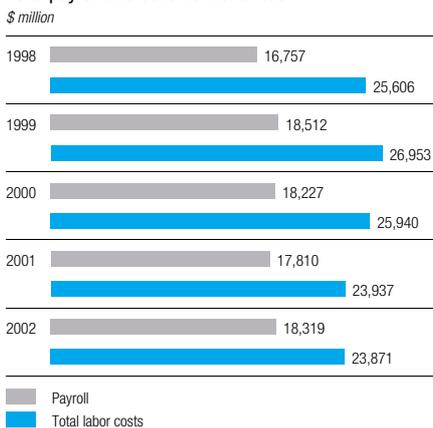
# Data

## A Average number of people employed by geographic area

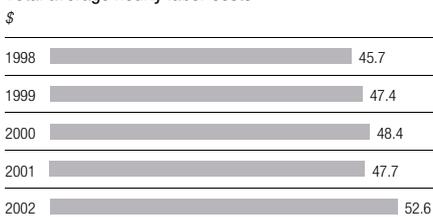


Changes in employment numbers reflect voluntary separations, spin-off of Visteon and sale of Quikfit.

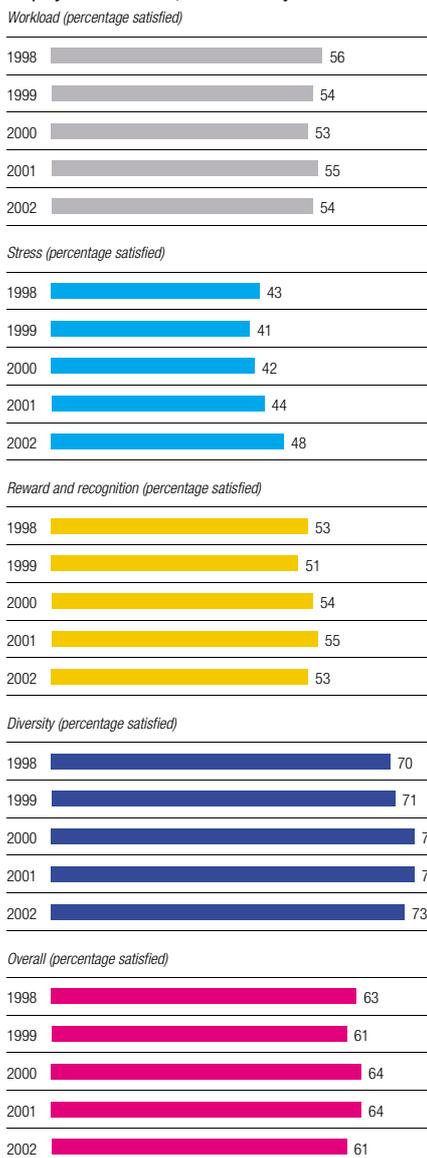
## B Total payroll and benefits worldwide



## C Total average hourly labor costs



## D Employee satisfaction, PULSE survey



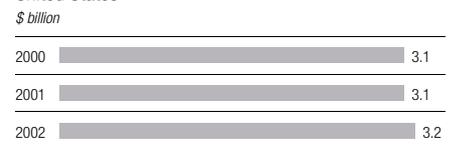
## E Number of dealers worldwide

At the end of 2002 the approximate number of dealers and distributors worldwide distributing our vehicle brands was:

Ford	13,000
Mercury	2,141
Lincoln	1,561
Volvo	2,500
Jaguar	787
Land Rover	1,808
Aston Martin	100

Because many dealerships distribute more than one of our brands from the same sales locations, a single dealership may be counted under more than one brand.

## F Total purchases from minority-owned businesses - United States



# Financial health

We will make our decisions with proper regard to the long-term financial security of the Company.

We will achieve this by:

- Striving to create value for our shareholders that is sustainable over the long term
- Seeking enhanced stakeholder loyalty as a route to competitive advantage and long-term growth

**In a world of global competition, rapid technological change and instantaneous communication, our Financial Health Principle focuses on finding business solutions that generate sustainable growth now and over time.**

**In January 2002, we announced our Revitalization Plan designed to bring the Company back to sustained profitability by mid-decade. We met the financial milestones contained in the Plan for 2002 and are on track to achieve our long-term objectives.**

**This section describes the progress we've made on implementation of the Revitalization Plan, our actions on key issues of concern to investors and our next steps.**

In the Web version of this report, you will find:

- Links to our Annual Report and our Annual Report on Form 10-K
- Sustainable Asset Management's assessment of Ford Motor Company

[www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship)

## KEEPING OUR FOCUS ON SUSTAINED PROFITABILITY

Our Revitalization Plan sets the strategic direction for improving our pre-tax income to \$7 billion by mid-decade and returning the Company to sustained profitability. It focuses on:

- Improving quality
- Introducing a portfolio of exciting products
- Reducing cost
- Rebuilding relationships

## MEETING OUR 2002 MILESTONES

In 2002, we made progress in all areas of the Revitalization Plan. Overall, product quality, performance and customer satisfaction improved by all internal and external measures, in all major regions. We reduced nonproduct costs by \$2 billion, divested noncore assets resulting in cash proceeds and commitments from third parties of \$1 billion and continued on course with our capacity-restructuring efforts at 11 plants. We also took steps to enhance our relationships with all of our stakeholders through better communication and collaboration on issues of mutual concern (see Quality of Relationships section).

As a result of these and other efforts, our financial performance improved in 2002. Revenue in 2002 was \$162.6 billion, up more than 1 percent from \$160.8 billion a year ago. This was achieved despite the fact that vehicle unit sales were down slightly from 2001 levels. We reported a net loss of \$980 million, or 54 cents per diluted share, for 2002. This compares to a net loss of \$5.45 billion for 2001.

## ADDRESSING STAKEHOLDER CONCERNS

Changing market and economic conditions, as well as new regulatory requirements, prompted us to take actions in 2002 in several specific areas.

### Pensions

The funded status of our pension funds, as for many other companies, has been adversely affected by the recent declines in equity markets and interest rates. On a financial reporting basis,

#### FAST FACT

According to an analysis of Lipper data commissioned by the Social Investment Forum, between January and June 2002 there was a net outflow from U.S. diversified funds of approximately 9.5 percent of total assets. However, the opposite occurred with socially responsible investment mutual funds. According to that same analysis of Lipper data, SRI mutual funds experienced a net inflow of 3 percent during the same time period.

our worldwide pension plans were underfunded by \$15.6 billion at the end of 2002. To improve the funded status, we contributed \$1 billion to our U.S. pension fund in the first quarter of 2003 and also intend to contribute to our non-U.S. pension funds during 2003. Our pension management strategy is designed to recognize the long-term nature of our pension obligations, and we believe these obligations are manageable.

#### Health care

In 2002, our health care costs for U.S. employees were \$2.8 billion, with about \$1.9 billion attributable to retirees and \$900 million attributable to active employees. These costs have been rising at about 16 percent per year over the last two years, with the cost of prescription drugs increasing most rapidly and accounting for approximately 30 percent of total U.S. costs. We have taken measures to have salaried employees and retirees bear a higher portion of the costs of their health care benefits. We expect these trends to continue over the next several years.

#### Marketing incentives

In an effort to help boost the U.S. economy in late 2001 and maintain vehicle demand, Ford Motor Company and other auto manufacturers provided zero percent financing and other marketing incentives to customers. These practices continued into 2002, and have helped create a strong vehicle-buying market. Customers have come to expect the continued use of relatively high incentives, and we have adjusted accordingly.

#### Financial disclosure

In 2002, the Sarbanes-Oxley Act, providing higher levels of corporate accountability, transparency and disclosure, became law in the United States. We operated in compliance with the new law and its related Securities and Exchange Commission (SEC) requirements.

In the past, we have presented our automotive results in an aggregated and geographic fashion. In alignment with our new management structure, and to reflect the way we are running the business, in 2003, we began reporting our automotive results on a

**Some investors and analysts question whether we are going far enough fast enough. We must accelerate our efforts to keep up with a more competitive market, in more demanding economic times.**

business unit basis, with two major segments – North America and International Automotive Operations. Within International Automotive Operations, we will also report results for South America, Asia-Pacific, Europe and the Premier Automotive Group. This reporting will enable investors to better evaluate how we are performing.

Stock options are an important part of Ford's employee compensation program aimed at recognizing and retaining key employees who contribute improvement to our long-term business and financial performance. In 2002, we announced that we would voluntarily expense employee stock options in our financial statements beginning Jan. 1, 2003. Our first quarter 2003 financial results reflect expenses of \$27 million for stock-based employee compensation in accordance with Statement of Financial Accounting Standard No. 123.

#### WE MUST MOVE FARTHER AND FASTER

While our 2002 financial performance was largely on target, some of our investors, and the analysts who serve them, remain cautious in their assessment of our Company's future prospects. While many recognize that we have delivered on our commitments toward meeting our Revitalization Plan objectives, some question whether we are going far enough fast enough.

Our Revitalization Plan is a five-year plan, and just over a year into implementing it, we are on track to deliver our mid-decade objectives. We are confident in our strategic direction, though we recognize that we must accelerate our efforts in 2003 to keep up with a more competitive market, in more demanding economic times.

#### INTEGRATING SUSTAINABILITY CONSIDERATIONS GENERATES VALUE

Over the past few years, we have received inquiries about our approach to sustainability and social responsibility from ranking and rating agencies. They seek to know whether we are aware of important trends that could influence our business, whether we understand, measure and are accountable for our impacts on the world and whether and how this knowledge is incorporated into our business decisions.

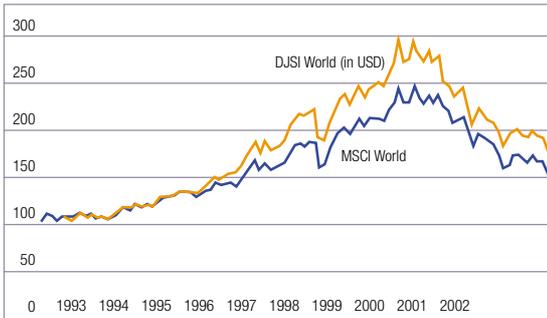
# Data

*"Social investors tend to be 'sticky.' In other words, they trust that the financial, social and environmental strengths of their investment will create long-term value, even when bearish short-term prospects scare other investors."*

**Jay Falk**

SRI World Group President

COMPARISON OF PERFORMANCE OF DOW JONES SUSTAINABILITY INDEX WORLD VERSUS MSCI WORLD, 1993–2002



December 1993–September 2002 USD price index.

Their interest in business integration is well-placed. During the past four years, mutual funds using some form of sustainability performance screen have generally equaled or outperformed conventionally managed funds. For example, a comparison of the returns earned by companies listed in the Dow Jones Sustainability Index compared to the MSCI World Index shows significantly higher returns being earned by companies identified as sustainability leaders (see above). This is an important piece of evidence that suggests our corporate citizenship efforts will enhance shareholder value.

We have responded to the requests for information from ranking and rating agencies and found that their questions and corresponding assessments help us understand performance expectations and better gauge our strengths and weaknesses.

This past year, Ford Motor Company was added to the Dow Jones Sustainability Index, FTSE4Good and Storebrand Socially Responsible indices. These selections are a sign that we are heading in the right direction with our corporate citizenship efforts. However, we recognize the inherent challenge of continuous improvement that our inclusion implies.

**Want to see how Sustainable Asset Management views our performance? Please visit [www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship), which contains their most recent review of Ford Motor Company.**

DJSI World/MSCI World:  
 Correlation 0.9747  
 DJSI volatility 16.09%  
 Tracking error 3.73  
 MSCI volatility 14.68%

## A

### Global vehicle production

	2002	2001	2000
General Motors <sup>1</sup>	8,276,000	7,786,000	8,494,000
Ford Motor Co. <sup>2</sup>	6,973,000	7,008,000	7,424,000
Toyota Motor Corp. <sup>3</sup>	6,309,616	5,848,094	5,888,260
Volkswagen AG <sup>4</sup>	5,023,264	5,107,945	5,156,455
DaimlerChrysler AG <sup>5</sup>	4,471,900	4,424,200	4,677,894
PSA/Peugeot-Citroën SA	3,262,100	3,136,300	2,877,400
Hyundai Motor Co. <sup>6</sup>	2,913,726	2,517,719	2,545,958
Honda Motor Co.	2,900,787	2,651,661	2,485,213
Nissan Motor Co.	2,690,295	2,466,995	2,605,155
Renault SA <sup>7</sup>	2,343,954	2,375,084	2,444,370

1 Includes Holden, Hummer, Opel, Vauxhall and Saab

2 Includes Aston Martin, Jaguar, Land Rover and Volvo Car Corp.

3 Includes 2002 Daihatsu and Hino (Hino's global production in 2001 = 53,391, 2000 = 47,482; global sales in 2001 = 53,056, 2000 = 50,584); 2001 and 2000 Daihatsu

4 Includes Audi, Bentley, Bugatti, Lamborghini, Rolls-Royce, Seat, Skoda and Volkswagen

5 Includes Chrysler Group, Freightliner, Mercedes-Benz, Setra, Smart, Sterling, Thomas Built Buses and Western Star

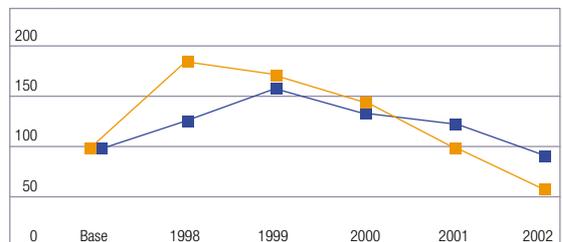
6 Includes Hyundai Motors and Kia Motors

7 Includes 2002 and 2001 Dacia and Samsung Motors; 2000 Dacia, Mack Trucks, RVI and Samsung Motors

Source: Automotive News 2003 Market Data Book

## B

### Five-year cumulative shareholder return



Graph assumes an initial investment of \$100, quarterly reinvestment of dividends and, in the case of Ford common stock, an adjustment to reflect the impact of the spin-off of Ford's interest in Associates First Capital Corporation on April 7, 1998 and Visteon Corporation on June 28, 2000, as well as the Company's recapitalization and merger, also known as the Value Enhancement Plan, August 2, 2000.

Ford ■  
 S&P 500 ■



## C Ford 2002 financial milestones

FINANCIAL RESULT	MILESTONE	PROGRESS
Corporate pre-tax earnings	Positive	●
Capital spending	\$7 billion	●
Europe	Improve results	●
South America	Improve results	●
<b>RESTRUCTURING</b>		
Communicate/implement plans	Report on progress	●
Quality (U.S.)	Improve J.D. Power's IQS	●
Capacity utilization	Improve by 10 points	●
Non product-related cost	Reduce by \$2 billion	●
Divest non core operations*	\$1 billion cash realization	●
*In 2002 we received about \$930 million in cash proceeds and entered into commitments from third parties to receive the balance in 2003.		Achieved ● Not achieved ●

Our 2003 Financial Milestones are available in our Annual Report on Form 10-K and Form 8-K filed in April 2003.

## D Worldwide taxes paid

\$ BILLION	2000	2001	2002
U.S. (Federal, State and Local)	3,772	1,876	2,049*
Non U.S.	817	1,300	594
Total	4,589	3,176	2,643

\*Excludes 2002 Federal refunds

## E Selected financial performance indicators

INDICATOR	2000	2001	2002
Annual revenue (\$ billion)	169.1	160.8	162.6
Income/(loss) from continuing operations (\$ billion)	5.5	(5.3)	0.3
Net income/(loss) (\$ billion)	3.5	(5.5)	(1.0)
Stock price range <sup>1</sup> (per share)	21.69–31.46	14.70–31.42	6.90–18.23
Diluted per share amount of income/(loss) from continuing operations	3.62	(2.96)	0.15
Diluted per share amount of net income/(loss)	2.30	(3.02)	(0.54)
Cash dividends <sup>2</sup>	1.80	1.05	0.40
Earnings retained for use in business (\$ billion)	17.88	10.50	8.66

<sup>1</sup> Common stock price range (NYSE Composite) has been adjusted to reflect the Visteon spin-off and a recapitalization known as our Value Enhancement Plan.

<sup>2</sup> Adjusted for the Value Enhancement Plan effected in August 2000, cash dividends were \$1.16 per share in 2000.

## F Profile of Ford investors

INVESTOR	1999	2000	2001	2002
Institutional investors:	49%	58%	44%	38%
Top 15	20%	17%	16%	15%
Others	29%	41%	28%	23%
Employees and management	16%	20%	20%	21%
Individuals*	35%	22%	36%	41%

\*The ownership by individuals includes shares owned by the Ford family and by Ford employees and management outside of the Company savings plans.

# The Ford Rouge Center



**The Ford Rouge Center (FRC) captures Ford's heritage while pointing the way to its future. Like a canvas painted over and over, the history of the Ford Rouge Center is many-layered. Each layer tells a story: The story of an industrial pioneer who brought to life his vision of an industrial complex able to turn ore and coal into a car for the masses. The story of generations of people – immigrants, refugees, local folk, members of five generations – finding opportunity for their families and their futures. The story of clashes between those who sought to unionize the Rouge workforce and the management that opposed it. The story of a new model of industrial production that spread manufacturing out to different locations and companies. Most recently, the recognition that reinvestment and reinvention of the production processes and the relationships that support them could reconnect the Rouge to its history and establish it as a model of sustainable manufacturing for a new century.**

This vision is now taking shape through the Ford Rouge revitalization project, launched in 1999 to provide a model as compelling as Henry Ford's vision was in his time.

The forces that will revitalize Ford Motor Company are already revitalizing the Ford Rouge Center: great products, lean and flexible manufacturing, vital relationships and a vision of making the world a better place. At the Rouge, we can also see the Business Principles in action: their power to inspire and guide, and the challenge they pose to realize. Let's see what the Ford Rouge Center looks like today through the lens of the Business Principles.

## PRODUCTS AND CUSTOMERS

The Ford Rouge Center is currently home to five Ford manufacturing operations: assembly, stamping, tool and die, frame and engine plants. The Ford Mustang has been built at the Rouge since its 1964 debut. Following completion of the new assembly plant in 2004, Dearborn Truck Plant will begin assembling the newly designed 2004 Ford F-150 pickup truck.

Even more significant is the fact that the plant is being rebuilt from the ground up as a lean and flexible manufacturing facility capable of producing nine different vehicle models based on three platforms. Flexible manufacturing enables the Company to shift production at the Rouge to other models or entirely different products quickly and efficiently as market conditions demand.

Just as flexibility enables the Company to meet customer demand for popular models when they want them, lean manufacturing processes like the Ford Production System enable production of those products at a high-quality level with the least amount of waste. The Ford Rouge Center is designed for full implementation of the FPS. Just-in-Time Manufacturing uses a combination of Synchronous Material Flow to get the right parts to the line at the right time and In-Line Vehicle Sequencing makes sure the right vehicle is there at the same time the parts arrive. Team-based processes make sure that every unit leaving the work station is right and problems are resolved on the factory floor with the full support of management.



Tooling, such as the direct current power tools that were pioneered at the Michigan Truck Plant, help ensure quality and are safer and more ergonomic for the operator. Direct current power tools are quieter, more energy-efficient and cleaner than the compressed-air tools they replaced. They also provide feedback through a computerized system to ensure that specifications (e.g., nut tightening) are met every time. These and other quality feedback processes are monitored by a centralized quality system that verifies that every unit leaving the assembly plant has been built correctly. The Dearborn Truck Plant provides an empowered supportive environment for people to come to work every day and build high-quality vehicles that meet customer demand.

#### SAFETY

Many people at all levels of Ford have made a major effort to build a safe work environment throughout the Company. Improvements in health and safety performance indicators bear out this singular focus. Construction of the new assembly plant, however, offered an opportunity to build the latest thinking on preventing accidents and working in a safe and comfortable way into the design of the plant.

Dedication to safety started with the construction site itself. Proactive construction safety practices have resulted in a rate of accidents and lost time injuries that is a third of the industry average. It continues at the mezzanine level of the assembly plant, which provides elevated walkways, meeting rooms and eating areas, helping to separate pedestrian traffic from material-handling equipment on the main assembly floor below.

On the final assembly line, operators will work on “skillets” – individual pallets for each vehicle on which the operator rides. The height of the vehicle can be raised or lowered to provide the optimum ergonomics for the task. Areas of the plant are designated for “no forklifts.” The new plant has wide aisles and dedicated pedestrian walkways on the plant floor. Noise levels have been reduced so hearing protection is not required. And by delivering the right number of parts at the right time, lean manufacturing helps create a safe work environment by cutting down on cluttered workspaces.

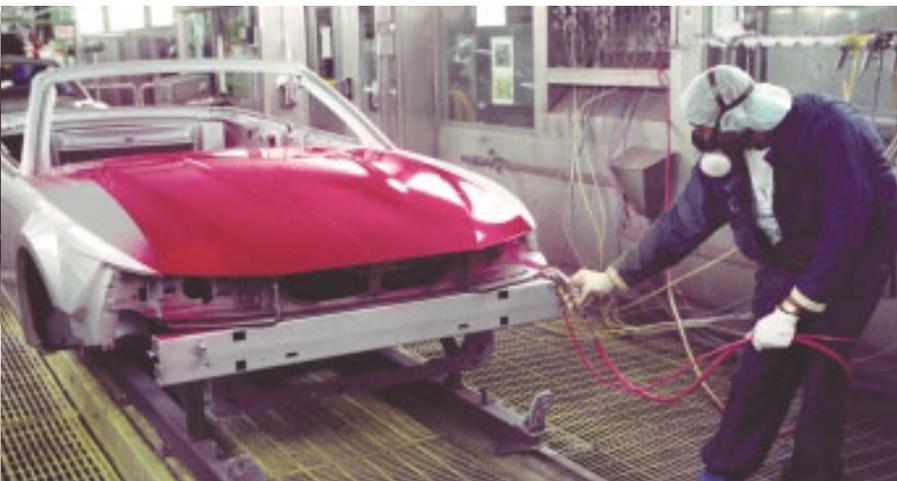
**Left to right: Bill Ford with the 2004 F-150 in the Dearborn Truck Plant during construction; workers building the Assembly Plant; the Rouge project uses natural landscaping to protect water quality.**

#### ENVIRONMENT

Looking at the Ford Rouge Center, nature might not be the first thing to come to mind. Only its embrace by a bend of the Rouge River is a reminder of its deep connection to the environment. The Rouge revitalization project is helping reconnect the industrial creation of human might back to natural systems. This is seen in some of the project’s most visible features:

- Bright, natural light flooding in through 10 giant rooftop monitors and 60 skylights will reduce the need for artificial light in the new assembly plant by up to half on sunny days.
- A variety of sedum plants that absorb rainwater and carbon dioxide cover the assembly plant roof – more than 10 acres in size – and produce oxygen. The “living roof” also provides insulation and is expected to cut heating and cooling costs by about 5 percent while doubling the useful life of the roof. Vines on the walls of the building will perform similar functions.
- Roughly 330 million gallons of stormwater flows off Ford Rouge Center in a typical year. The Rouge stormwater management system will use processes seen in natural stream and wetland systems to slow the flow of stormwater and cleanse it before release to the river. Swales (open, vegetated culverts) are being planted with native and wetland vegetation. Portions of the site use porous pavement, which allows rain and snow to seep through into underground rock storage beds connected to the swale drainage system.
- Ford is testing a process called “phytoremediation,” in conjunction with Michigan State University, that uses plants to clean soil that may be impacted with non-metallic organics.
- A new paint shop, already serving the existing assembly plant, is a world-class facility using advances in paint technology designed to minimize volatile organic emissions and provide a superior quality paint job.

Ford Rouge Center employees have actively participated in the environmental improvement of the facility, including restoring ecosystems important to the Rouge River corridor. Their efforts



were recognized in 2002, when the Wildlife Habitat Council, an international nonprofit organization, certified the Rouge Center as a wildlife habitat for its use of native vegetation and wildlife-sensitive design.

#### COMMUNITY

The communities hosting the giant industrial facility and its corporate headquarters are dependent on Ford and its investment decisions. Rouge site managers have recognized this interdependence and have built relationships with these communities throughout the facility's history.

For example, as part of the Heritage Project, Ford, UAW-Ford Local 600, the City of Dearborn, State of Michigan, Wayne County and other companies have renovated Miller Road, which provides entry to the site. The aging two-lane road has been replaced with a four-lane road. Stormwater will be managed using vegetated swales for natural drainage. Twenty acres of new green space landscaped with native vegetation has been created.

The project also includes reconstruction of a pedestrian overpass commemorating the 1937 "Battle of the Overpass," which set in motion events leading to official recognition of the United Auto Workers by Ford Motor Company in 1941, and a memorial to six workers who lost their lives in a 1999 explosion at the Rouge Powerhouse.

In 2002, Ford Rouge Center site management committed to conduct a Community Impact Assessment that would add rigor to the Company's community relationship. The impact assessment process (described in more detail on Page 50) will identify and engage key stakeholders, set goals and objectives and use assessment and indicators to track progress. We expect this process to strengthen our understanding and management of the vital relationships with our communities.

**Left to right: The Gate 4 entrance to the Ford Rouge Center; the paintshop; rooftop glass monitors, under construction, will provide natural lighting for the Assembly Plant; sedum plants on the "living roof."**

#### QUALITY OF RELATIONSHIPS

The Rouge complex is awesome in its scale and scope, and the innovation shown in the new construction at the site will attract attention for years to come. But the real infrastructure of the Ford Rouge Center is its human relationships. Without strong ties to its employees, customers, suppliers, communities and investors, the Rouge would have its history, but it would lack a future. Generations of plant management and union leadership at the Rouge have built these relationships – at times sorely tested – and planned the revitalization to provide benefits for all involved.

Employees will be among those to benefit. Recognizing the era of knowledge-based work for the new assembly plant, Ford is using a novel approach to training, a "plan for every person" that combines needs assessment, traditional training, on-the-job training and single-point lessons.

The Community Impact Assessment will involve assessment of relationships with the Ford community broadly defined and thus will identify and provide a forum for addressing a range of stakeholder concerns.

#### FINANCIAL HEALTH

The Rouge has been integral to the financial health of Ford since its opening, but when Bill Ford announced the Rouge revitalization project in 1999, some observers questioned the wisdom of investing \$2 billion in an aging industrial site. Among the reasons Ford has articulated for the investment are:

- Ford has invested in the Ford Rouge Center for 85 years, something we can quantify. Our roots run deep, something on which it is hard to put a dollar value. Among these connections are our relationships with the community and the UAW.
- The Rouge provides the opportunity to demonstrate that brownfield renovation can be a solid investment in a knowledgeable workforce and established leadership team.



- Innovative and replicable approaches are being tested for their possible application throughout the Company.
- The environmental sustainability features of the project were designed to be cost effective, rather than done at a premium.

The hard “business case” for investing in the Ford Rouge Center will take years to prove, but the intangible and indirect benefits in improved employee satisfaction, pride and stronger relationships are already being felt.

#### ACCOUNTABILITY

Site managers at the Ford Rouge Center are taking several steps to increase openness and accountability to the full range of stakeholders. In 2003, we issued the site’s first public Environmental Report, which provides detailed data and sets a baseline for continuous improvement. This commitment will expand, following the Community Impact Assessment, to a Corporate Citizenship Report covering the environmental, social and economic performance of the Ford Rouge Center.

Greater openness is also taking physical form at the Rouge with construction of a new Visitor Center. In the past, the Rouge was a destination for all kinds of people studying industrial production and those simply interested in seeing a plant at work. Public tours ceased in 1980, however, because of the Company’s financial condition.

The new Visitor Center will provide a glimpse of the manufacturing processes pioneered by Henry Ford at the Rouge. It will also give visitors insight into modern lean and flexible manufacturing. During their tour, visitors will be lifted 80 feet in the air to an observation tower to get a birds-eye view of the green roof and the full sweep of the site. The tour will continue into the Final Assembly Area of the new Dearborn Truck Plant, where a window provides a view of the assembly operations at the site.



*“People are very passionate about the history of this place and also what it’s accomplished for workers. They feel very comfortable with the Rouge as their second home.”*

**Jerry Sullivan**  
President, UAW Local 600



*“We have always used people’s hands and their bodies. Now we are trying to develop together a relationship that’s knowledge-driven. We’re entering a point in time as a society – not just at Ford – where knowledge is recognized as the key ingredient to go forward in the future.”*

**Dennis Proffitt**  
Ford Rouge Center Site  
Manager

#### LEARNING AND SHARING

Every change presents the opportunity for learning. And Ford Rouge Center is seeing a lot of change these days. From the beginning, we intended to learn from change. We set an ambitious goal: Remake the Rouge as “an icon of sustainable manufacturing.” We engaged our partners in the community – including elected officials and the UAW – in sketching the outlines of our business plan for the site, including construction of the new state-of-the-art assembly plant. We brought in noted architect William McDonough to help us learn to build sustainability concepts into every aspect of the project.

The learning has continued as we adapt and modify our plans to make them better and address challenges that arise. Project engineers modified the initial roof design to cut its weight and cost, making it a potential model for use on existing roofs at other Ford facilities. We reviewed all our building specifications and made changes to favor more sustainable materials. We are structuring our Community Impact Assessment as a pilot project that could be used elsewhere in the Company.

Evolution, adaptation and replication are natural processes. They are what we are using to capture the tremendous learning taking place at the Rouge and share it throughout our Company and the communities interested in our work.

# Glossary and acronyms

<b>AAM</b>	Alliance of Automobile Manufacturers (U.S.)
<b>ACEA</b>	European Automobile Manufacturers Association (Association des Constructeurs Européens d'Automobiles)
<b>Alternative Fueled Vehicles</b>	Vehicles that run on fuels other than gasoline or diesel (e.g., natural gas, hydrogen)
<b>ASEAN</b>	Association of Southeast Asian Nations, composed of Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam
<b>Balanced Scorecard</b>	A management system (not only a measurement system) that Ford uses to clarify its vision and strategy and translate them into action. It is used at various levels of the Company to track performance on strategic and business plans.
<b>Bin</b>	A set of emissions standards under the new U.S. Tier 2 emissions program. The lower the bin number, the lower the vehicle's tailpipe emissions.
<b>Brownfield</b>	Land previously used for industrial activities (as opposed to "greenfield" vacant land previously unused for industrial purposes)
<b>Business Operation</b>	Ford's major operating unit, generally a region (e.g., Ford Europe), group of brands (e.g., Premier Automotive Group) or service (e.g., Ford Financial)
<b>CAFE (Corporate Average Fuel Economy)</b>	A U.S. regulation requiring auto companies to meet certain salesweighted average fuel economy levels for passenger cars and light trucks and report these numbers annually
<b>CCX</b>	Chicago Climate Exchange
<b>CERES</b>	Coalition for Environmentally Responsible Economies
<b>CI (Compression Ignition Engine)</b>	A type of internal-combustion engine that uses compression to ignite the fuel. Diesel engines use compression ignition
<b>Clean Diesel Fuel</b>	Low-sulfur diesel fuel (below 10 parts per million) required for advanced tailpipe pollution control equipment to work effectively
<b>Continuously Variable Transmission</b>	A type of automatic transmission that uses an essentially infinite number of "gears" to achieve superior performance and fuel economy
<b>Customer Service Index</b>	A J.D. Power and Associates index that assesses customer satisfaction with service experiences during the first three years of vehicle ownership
<b>Electronic Throttle Control</b>	Electronically controls air flow through the throttle valve based on engine operating status, providing performance and fuel economy benefits
<b>Euro NCAP</b>	European New Car Assessment Program (vehicle safety assessments)
<b>Flexible Manufacturing</b>	Using common platforms and manufacturing technologies that allow a single plant to make multiple models and switch relatively rapidly between them, allowing faster response to changing customer demand
<b>FPDS (Ford Product Development System)</b>	A structured process Ford uses to develop cars and trucks. It defines the process, associated timing and other requirements for new products and associated manufacturing systems.
<b>FPS (Ford Production System)</b>	A structured process Ford uses to organize and manage production at all Ford manufacturing plants globally
<b>Fuel Cell</b>	A type of power plant that generates electricity by combining oxygen and hydrogen to form electricity
<b>Fuel Economy</b>	The distance that can be traveled on a single gallon of fuel
<b>GHG (Greenhouse Gases)</b>	Gases (e.g. CO <sub>2</sub> , H <sub>2</sub> O, HFC, PFC, SF <sub>6</sub> , CH <sub>4</sub> , etc.) that trap heat in the earth's atmosphere
<b>Hybrid Electric Vehicle</b>	A vehicle utilizing a hybrid engine which combines an electric powertrain with an internal-combustion engine to meet peak demands for power more efficiently and to capture and store energy that is wasted during braking. They can run on conventional fuels and never need to be plugged in.

<b>I-4 engine</b>	Ford's new, high-performing lightweight four-cylinder engine	<b>SI (Spark Ignition)</b>	A type of internal-combustion engine that uses spark plugs to ignite the fuel. Conventional gasoline engines are SI engines
<b>ICCR</b>	Interfaith Center on Corporate Responsibility	<b>6-Sigma</b>	A structured process of analysis and problem solving. Ford uses Consumer Driven 6-Sigma to reduce process variability and waste for improved customer satisfaction
<b>ICE (Internal-Combustion Engine)</b>	An engine powered by fuel ignited (by either spark or compression) inside a cylinder	<b>Six-Speed Automatic Transmission</b>	A transmission using six gears for improved fuel economy compared to typical four-speed transmissions
<b>IIHS</b>	Insurance Institute for Highway Safety	<b>Stakeholder</b>	Anyone who is impacted or believes they are impacted by the operations or practices of the Company is a stakeholder, including customers, employees, business partners, shareholders, governments, communities, NGOs and the media. Some also consider the environment a stakeholder.
<b>International Material Data System</b>	An industry-wide, Web-based database that collects information on materials used in the auto industry	<b>SULEV (Super Ultra-Low Emission Vehicle)</b>	A level of standards for tailpipe emissions (hydrocarbon, carbon monoxide and oxides of nitrogen) enforced in California and states that have adopted California standards. A SULEV II vehicle meets the same smog forming tailpipe emissions standards as a federal Tier 2 bin 2 vehicle
<b>ISG (Integrated Starter Generator)</b>	A fuel-fired electric generator that works with the vehicle's engine to give it start-stop capability – a form of "mild" electric hybridization	<b>Supplier Council</b>	A forum for communication and engagement between Ford and our suppliers. Forums provide opportunities to develop collaborative strategies
<b>ISO 14001</b>	Global environmental management system standard	<b>Supplier Environmental Forum</b>	A Ford-supplier forum, formed in 2001, that meets periodically to explore environmental issues
<b>Lawyers' Committee on Human Rights</b>	Nonprofit organization that has worked in the United States and abroad to "create a secure and humane world by advancing justice, human dignity and respect for the rule of law"	<b>SUV</b>	Sport Utility Vehicle
<b>Lean Manufacturing</b>	The application of a number of proven manufacturing principles to improve efficiency and reduce the time it takes to go from raw materials and basic components to a finished product	<b>TGW (Things Gone Wrong)</b>	The number of problems reported by owners of new vehicles after three months in service
<b>LEV (Low Emission Vehicle)</b>	A level of standards for tailpipe emissions (hydrocarbon, carbon monoxide and oxides of nitrogen) enforced in California and states that have adopted California standards. A LEV II vehicle meets the same tailpipe standards as a federal Tier 2 bin 5 vehicle	<b>Tier 2</b>	The new U.S. federal program, starting with the 2004 model year, to control vehicle tailpipe and evaporative emissions. The program provides several sets of vehicle emissions standards, called bins.
<b>LEV Program</b>	The unique vehicle emissions program adopted by California for the control of tailpipe and evaporative emissions that provides several sets of emissions standards (LEV, ULEV, etc.). The LEV II Program starts with the 2004 model year and offers approximately the same air quality benefit as the new federal Tier 2 program.	<b>TRI (Toxic Release Inventory)</b>	Releases and transfers of any of a list of chemicals that are required to be reported to the U.S. government
<b>Living Roof</b>	The use of plants to cover a roof, absorb water, save energy and extend the life of the roof	<b>TVM (Team Value Management)</b>	A philosophy under which Ford's purchasing, engineering, manufacturing and finance staff are effectively integrated with suppliers in commodity-focused teams to identify waste in the entire value chain and work together to achieve better-value products and further quality improvements
<b>Model U</b>	Ford concept vehicle showcasing innovative design and technologies	<b>UAW</b>	United Automobile Workers
<b>MY (Model Year)</b>	The manufacturer's annual production period which includes Jan. 1 of the calendar year. For example, production of 2004 model year vehicles might begin in June 2003 and end in May 2004, but could start as early as Jan. 2, 2003, and end as late as December 2004. We report fuel economy by model year because that is how it is reported to government agencies, and therefore, this data corresponds to what is available in the public domain.	<b>UCS</b>	Union of Concerned Scientists
<b>NCAP</b>	New Car Assessment Program, the U.S. government "crash testing" program	<b>ULEV (Ultra-Low Emission Vehicle)</b>	A level of standards for tailpipe emissions (hydrocarbon, carbon monoxide and oxides of nitrogen) enforced in California and states that have adopted California standards. A ULEV II vehicle meets tailpipe emissions standards slightly higher than a federal Tier 2 bin 4 vehicle.
<b>NHTSA</b>	National Highway Traffic and Safety Administration (U.S. government)	<b>Variable Cam Timing</b>	Improves fuel economy by allowing valves to be operated at different points in the combustion cycle, and provides performance that is precisely tailored to the engine's specific speed and load at that moment
<b>NPI</b>	National Pollutant Inventory (Australia), similar to U.S. TRI	<b>Vehicle Dependability Index</b>	A J.D. Power and Associates index that evaluates vehicle quality after four to five years of ownership
<b>NPRI</b>	National Pollutant Release Inventory (Canada), similar to U.S. TRI	<b>VOCs (Volatile Organic Compounds)</b>	Compounds that vaporize (become a gas) at relatively low temperature. They are a concern for indoor and outdoor air quality and contribute to smog formation. VOCs are emitted from manufacturing facilities (including painting operations) and from vehicles (as hydrocarbon tailpipe emissions and from evaporation of fuel and other fluids).
<b>Phytoremediation</b>	Use of plants to clean contaminated soil	<b>Well-to-Wheels CO2 Emissions</b>	Accounts for emissions from the vehicle itself, as well as CO2 emissions resulting from the production and distribution of the fuel
<b>Platform</b>	An engineering term that describes the group of parts that support the drive line and link the suspension components of the vehicle. Multiple distinct vehicles can be built on a common platform using shared technologies.	<b>ZEV (Zero Emission Vehicle)</b>	The lowest level of standards for vehicle emissions (zero emissions) enforced in California and states that have adopted California standards. A federal Tier 2 bin 1 vehicle is also a "zero emission vehicle."
<b>PULSE Survey</b>	An annual, voluntary survey of Ford salaried-employee satisfaction		
<b>PZEV (Partial Zero Emission Vehicle)</b>	A vehicle standard that is part of the LEV II Program. A vehicle that meets SULEV tailpipe emissions and has zero fuel evaporative emissions.		
<b>Restricted Substance Management Standard</b>	Ford standard that applies to Company operations and production suppliers, used to determine which substances should be avoided, eliminated or phased out in Ford plants and products		
<b>SHARP</b>	A structured process Ford uses to evaluate health and safety in Ford facilities globally (element of FPS)		

# GRI index

This index shows where to find full or partial information relating to the Global Reporting Initiative (GRI) core elements and indicators in this report.

Elements and indicators listed in silver are covered only in the Web version of this report ([www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship)), either by providing the information or discussing why it is not covered. Also in the Web version is a complete index of core and additional GRI elements and indicators.

GRI is a multi-stakeholder process and independent institution whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines. More information about GRI is available at [www.globalreporting.org](http://www.globalreporting.org).

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# Feedback and further information

## FEEDBACK

Preparing this report is a valuable opportunity for us to assess and improve upon our economic, environmental and social progress and performance. To continue to do so, we need your feedback. We welcome your opinion and perspective through several means:

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### Taking our online survey at:

[www.ford.com/go/globalcitizenship](http://www.ford.com/go/globalcitizenship)

## FURTHER INFORMATION

### Other Ford reports:

Ford Motor Company Annual Report  
Ford Motor Company Annual Report on Form 10-K  
Proxy Statement  
Ford Motor Company Fund Annual Report

Available from

Ford Motor Company  
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One American Road  
Dearborn, MI 48126  
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+1 (313) 845 8540  
[www.ford.com](http://www.ford.com)

### Brand reports:

Jaguar Environmental & Social Report 2002  
[www.jaguar.com/uk](http://www.jaguar.com/uk)

Volvo Corporate Citizenship Report 2002  
[www.volvocars.com/citizenship](http://www.volvocars.com/citizenship)

### Regional, country and facility environmental and corporate citizenship reports:

Ford Australia  
[www.ford.com.au/inside\\_ford/community/environment/Environment\\_Reports.asp](http://www.ford.com.au/inside_ford/community/environment/Environment_Reports.asp)

Ford China (forthcoming)

Dagenham UK  
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