



Go Further

Sustainability 2012/13

| | | | | | | | | |
|----------------|----------------------------------|------------------|------------------------------------|-------|----------------|--------------|--------|-----------------------|
| | | | | | | | | |
| YEAR IN REVIEW | OUR BLUEPRINT FOR SUSTAINABILITY | FINANCIAL HEALTH | CLIMATE CHANGE AND THE ENVIRONMENT | WATER | VEHICLE SAFETY | SUPPLY CHAIN | PEOPLE | FORD AROUND THE WORLD |

Glossary

| | |
|------------------------------|--|
| ABF | Aligned Business Framework, Ford's strategy for working more closely with key suppliers |
| ACC | Adaptive Cruise Control, a technology that helps drivers maintain a safe distance from the vehicle in front of them |
| ADFSO | Aggressive Deceleration Fuel Shut-Off, a technology for improving fuel efficiency |
| AIAG | Automotive Industry Action Group, a U.S.-based association of automotive OEMs, suppliers and service providers |
| Annual Report on Form 10-K | An audited annual financial report required by the U.S. Securities and Exchange Commission containing more detailed information about the Company's business, finances and management than the annual report |
| APA | Asia Pacific and Africa, a Ford region |
| B car | Generic term for a small or subcompact car (e.g., the size of a Ford Fiesta) |
| BEV | Battery electric vehicle, a vehicle that has no internal-combustion engine and does not use any onboard gasoline; instead, it runs on a high-voltage electric motor |
| Biodiesel | A diesel alternative made from vegetable oils obtained from oil seeds, including soy, canola, palm and rapeseed, or from animal fat |
| BLIS | Blind Spot Information System, a technology that uses radar sensors to help inform the driver when a vehicle is detected in the blind spot zone |
| Blueprint for Sustainability | Several years ago, this term was introduced at Ford to describe the actions we are taking to achieve outstanding fuel economy and reduce greenhouse gas emissions from our products. Now we use the term more broadly to describe our sustainability strategy as a whole, in recognition of the fact that our important sustainability issues are part of a complex system that interconnects our products, plants and people and the communities in which we operate. |
| BMS | Battery Management System, a Ford technology that improves the efficiency of a vehicle's electrical system |
| BPR | Business Plan Review meetings, one of Ford's key management processes |
| CAA | U.S. Clean Air Act |
| CAFE | Corporate Average Fuel Economy, a U.S. regulation requiring auto companies to meet certain sales-weighted average fuel economy levels for passenger cars and light trucks and report these numbers annually |
| CAMP | Crash Avoidance Metrics Partnership, an association of original equipment manufacturers, suppliers and the U.S. government conducting pre-competitive research on active safety features |
| C car | Generic term for a compact car (e.g., the size of a Ford Focus) |
| CDP | Carbon Disclosure Project, a nonprofit organization to which Ford and other companies report their greenhouse gas emissions and water use |
| Ceres | A network of investors, environmentalists and other public interest groups that works with companies and investors to address sustainability challenges |
| CAF | Our Chinese joint venture, formerly known as Changan Ford Mazda Automobile Co. Ltd., (FMA) and recently restructured as Changan Ford Automobile Corporation, Ltd. (CAF) to increase our ownership percentage |
| CNG | Compressed natural gas, a type of alternative fuel |
| CO ₂ | Carbon dioxide, a primary greenhouse gas |
| DfS | Design for Sustainability, a tool for bridging the gap between product development and environmental and social issues |
| DOE | U.S. Department of Energy |
| E85 | A fuel blend of 85 percent ethanol and 15 percent gasoline |
| EcoBoost® | Ford engine technology that uses turbocharging, direct injection and reduced displacement to increase fuel economy and performance while reducing CO ₂ emissions |
| ECONetic | A line of European Ford model vehicles with reduced CO ₂ emissions |
| Electrification | The process of developing the technology and infrastructure necessary to replace traditional oil-based vehicle fuels with electricity |
| ELV | End-of-life vehicle; an EU Directive requires manufacturers to take back ELVs and ensure environmentally sound recycling and disposal |
| EMOS | Ford's Energy Management Operating System, a mechanism for integrating energy-efficient principles into the facility design, manufacturing/engineering processes, and operations of Ford Manufacturing, Office and |

| | |
|------------------------|---|
| | Engineering facilities |
| Environmental aspects | The elements of an organization's activities, products and services that can interact with the environment |
| EOS | Ford's Environmental Operating System, which is integrated with ISO 14001 and used for driving environmental compliance |
| EPA | Environmental Protection Agency, a U.S. government agency |
| EPAS | Electric power assisted steering, a technology that boosts fuel economy and decreases CO ₂ emissions |
| ERGs | Ford's Employee Resource Groups, affinity networks at the Company that are intended to foster diversity and inclusion |
| ESI | Employee Satisfaction Index, eight questions on Ford's annual Pulse survey of employees |
| Ethanol | A gasoline alternative, typically derived from plant material (e.g., corn, sugar cane, sugar beets); can also be made from petroleum. Plant-derived ethanol is also sometimes called bio-ethanol. |
| EU | European Union |
| Euro 4, Euro 5, Euro 6 | Europe's tailpipe emissions standards; Euro 5 standards have been completely phased in for light-duty vehicles in Europe as of January 1, 2012. Euro 6 standards have been developed and will be applied beginning in September 2014. |
| EV | Electrified vehicle, a generic term for any vehicle that is powered – at least in part – by an electric motor |
| EVP | Employment Value Proposition, defined as why people choose a given employer and then stay with that employer. |
| FCV | Fuel cell vehicle, a vehicle that uses an onboard fuel cell to create electrical power through a chemical reaction based on hydrogen fuel |
| Ford DSFL | Ford Driving Skills for Life, our driver education program |
| FFV | Flexible fuel vehicle, a vehicle that can be run on any blend of unleaded gasoline with up to 85 percent ethanol |
| Flexible manufacturing | The use of common platforms and shared manufacturing technologies that allow a single plant to make multiple models and switch relatively rapidly between them, allowing faster response to changing customer demand |
| FoE | Ford of Europe, a Ford region |
| FPS | Ford Production System, a continuously improving, lean, flexible and disciplined common global production system |
| FSAO | Ford South America Operations – a Ford region |
| Fuel cell | A type of power plant that generates electricity by combining oxygen and hydrogen, and can be used in different sizes and configurations to power vehicles or buildings |
| Fuel economy | The distance that can be traveled on a single gallon of fuel |
| Fuel efficiency | The amount of fuel (in ton-miles-per-gallon) needed to move a vehicle of a certain weight a certain distance |
| GEM | Ford's Global Emissions Manager database, used for measuring, monitoring and recording environmental data |
| GHG | Greenhouse gas, for example carbon dioxide (CO ₂), nitrous oxide (N ₂ O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF ₆) or water vapor |
| GMAP | Ford's Global Material Approval Process, a materials management process |
| Go Further | Ford's new global brand promise to express what we stand for as a Company |
| GPDS | Global Product Development System, Ford's system for integrating product development with manufacturing |
| GQRS | Global Quality Research System, which tracks "Things Gone Wrong" and is Ford's primary quality survey |
| GRI | Global Reporting Initiative, a multistakeholder process and independent institution whose mission is to develop and disseminate globally applicable sustainability reporting guidelines |
| GTDI | Gasoline turbocharged direct injection |
| HEV | Hybrid electric vehicle; a full hybrid can run exclusively on battery power, exclusively on gas power or on a combination of both |
| IIHS | Insurance Institute for Highway Safety, a U.S.-based nonprofit organization |
| IMDS | International Material Data System, a materials reporting system used by multiple automakers |
| ISO 14001 | The leading global environmental management system standard, developed by the International Organization for Standardization |
| JDRF | The leading global organization focused on type 1 diabetes research |
| JMC | Jiangling Motors Corporation, Ltd., one of Ford's joint ventures in China |
| LEED | Leadership in Energy and Environmental Design, the "green building" rating system of the U.S. Green Building Council |
| LEV | Low Emission Vehicle, a level of standards for tailpipe emissions (hydrocarbon, carbon monoxide and oxides of nitrogen) enforced in California and states that have adopted California standards |
| LEV program | The unique vehicle emissions program adopted by California for the control of tailpipe and evaporative emissions that provides several sets of emissions standards |
| Lifecycle assessment | Process of assessing the environmental, social and economic impacts of a product system over its entire lifecycle, from cradle to grave, including material production, product manufacture, product use, product maintenance and disposal at end of life |

| | |
|------------------------------|---|
| LPG | Liquefied petroleum gas (also known as propane or Autogas), a type of alternative fuel |
| MAP | Michigan Assembly Plant, a Ford facility has been transformed from a large SUV factory into a modern, flexible small-car plant |
| Materiality | <i>Materiality</i> as used in this sustainability report does not share the meaning assigned to this concept for purposes of financial reporting. For the purposes of this report, we consider material information to be that which is of greatest interest to, and which has the potential to affect the perception of, those stakeholders who wish to make informed decisions and judgments about the Company's commitment to environmental, social and economic progress. |
| MPGe | A mile-per-gallon equivalency metric for electrified vehicles |
| MQL | Ford's Minimum Quantity Lubricant machining process |
| MY | Model Year, the manufacturer's annual production period which includes January 1 of the calendar year. For example, production of 2013 model year vehicles might begin in June 2012 and end in May 2013, but could start as early as January 2, 2012, and end as late as December 2013. 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. |
| NADA | National Automobile Dealers Association, an industry association of car and truck dealers |
| NCAP | New Car Assessment Program, a term commonly used to denote an official, independent vehicle testing and/or rating system. Separate NCAPs now exist in the United States, Europe, Australia, China, and Central and South America. |
| NEDC | New European Driving Cycle, the testing procedures used to determine compliance with government fuel economy and emissions requirements. |
| NGO | Nongovernmental organization |
| NHTSA | National Highway Traffic Safety Administration, a U.S. government agency |
| NMOG | Non-methane organic gases |
| NOV | Notice of violation (e.g., from a regulatory agency) |
| NPRI | National Pollutant Release Inventory (Canada), similar to U.S. TRI |
| OEM | Original equipment manufacturer |
| OHS policy | Ford's Occupational Health and Safety policy |
| ONE Ford | Ford's accelerated restructuring plan; One Team unified in pursuing One Plan to deliver One Goal: An exciting, viable Ford |
| OSRP | Occupant Safety Research Partnership, a group within the U.S. Council for Automotive Research that researches and develops advanced crash test dummies and other pre-competitive safety systems |
| PAS | Ford's Partnership for Advanced Studies, our flagship education program |
| PDGs | Public Domain Guidelines, internal Ford guidelines that focus on ensuring that our vehicles earn top marks in public domain assessments |
| PEC | Paint Emissions Concentrator, formerly called "fumes-to-fuel", a technology that concentrates VOC emissions from the painting process by approximately 1,500:1, allowing VOCs to be burned as a fuel source. |
| PHEV | Plug-in hybrid electric vehicle, a vehicle similar to an HEV in that it is equipped with both an electric battery and a gas-powered engine; however, PHEVs are equipped with a high-capacity battery that can be charged from an ordinary household outlet |
| PowerShift | Ford's fuel-efficiency-boosting, six-speed, dual-clutch transmission system |
| PPA | Public-Private Alliance for Responsible Mineral Trade, a joint initiative among governments, companies and civil society to support supply chain solutions to conflict minerals challenges |
| PSI | Product Sustainability Index, a tool used by Ford of Europe to incorporate lifecycle analysis into product development |
| Pulse survey | Ford's annual, voluntary survey of salaried-employee satisfaction |
| PZEV | Partial Zero Emission Vehicle, a vehicle standard that is part of the LEV II Program |
| QOS | Ford's global Quality Operating System, used in our manufacturing to develop, measure and continuously improve robust processes |
| REACH | Registration, Evaluation, Authorization and Restriction of Chemical Substances (EU legislation) |
| REEs | Rare Earth Elements, a suite of mined materials widely used in consumer and automotive electronics |
| RFS | Renewable Fuel Standard, a provision within the U.S. Energy Independence and Security Act of 2007 requiring a significant increase in the use of biofuels |
| SDGs | Safety Design Guidelines, Ford's stringent internal engineering design targets |
| Six-speed transmission | A transmission using six gears, for improved fuel economy compared to typical four-speed transmissions |
| SQDCPME Scorecard | A scorecard that helps us keep focused on the vital components of a sustainable business: Safety, Quality, Delivery, Cost, People, Maintenance and Environment |
| Stakeholder | Anyone who is impacted or believes they are impacted by the operations or practices of the Company, including customers, employees, business partners, shareholders, governments, communities and nongovernmental organizations. Some also consider the environment a stakeholder. |
| Sustainability | A business model that creates value consistent with the long-term preservation and enhancement of environmental, social and financial capital. Also, meeting the needs of the present without compromising the future. |
| Sustainable Technologies and | Ford's product strategy, outlining the near-, mid- and long-term steps we are taking to develop and deploy |

| | |
|--|--|
| Alternative Fuels Plan | vehicle and fuel technologies to implement our blueprint for sustainability |
| SUMURR | Sustainable Urban Mobility with Uncompromised Rural Reach, a pilot program successfully launched in India that is finding ways to use Ford vehicles and connected technologies to address critical social needs, such as health care |
| SUV | Sport utility vehicle |
| SULEV | Super Ultra-Low Emission Vehicle, a level of standards for tailpipe emissions enforced in California and states that have adopted California standards |
| Tank-to-wheels CO ₂ emissions | A subset of well-to-wheels CO ₂ emissions; includes the CO ₂ generated by burning the fuel in the vehicle |
| TCR | The Climate Registry, a voluntary carbon-emissions reporting project |
| TGW | "Things Gone Wrong," a metric measured by the Global Quality Research System (GQRS) |
| Tier 1 Suppliers | Suppliers sourcing directly to our assembly plants |
| Tier 2 Suppliers | Suppliers not sourcing directly to our assembly plants |
| Tier 2 and Tier 3 Emissions Standards | The U.S. federal program, starting with the 2004 model year, to control vehicle emissions standards. Tier 3 emissions standards, which are more stringent than Tier 2 standards, were proposed in 2013. |
| TRI | Toxics Release Inventory, an inventory of releases and transfers of certain chemicals that are required to be reported to the U.S. government |
| TÜV Rheinland | A German-based product-testing company |
| UAW | The International Union, United Automobile, Aerospace and Agricultural Implement Workers of America |
| UNGC | United Nations Global Compact, a global policy initiative through which businesses agree to align their operations with 10 principles in the areas of human rights, labor, environment and anti-corruption |
| URP | University Research Program, a Ford program for collaborating with researchers at more than 100 universities worldwide |
| V2I | Vehicle-to-infrastructure communications, technologies that enable vehicles to "talk" to roadway infrastructure (such as traffic lights) via advanced Wi-Fi signals or dedicated short-range communications |
| V2V | Vehicle-to-vehicle communications, technologies that enable vehicles to "talk" to each other via advanced Wi-Fi signals or dedicated short-range communications |
| VIAQ specifications | Ford's Vehicle Interior Air Quality specifications, which require the consideration of the air-quality and allergen impacts of the materials and components in our vehicles |
| VOCs | Volatile organic compounds, compounds that vaporize (become a gas) at relatively low temperature |
| WBCSD | World Business Council for Sustainable Development |
| Well-to-tank CO ₂ emissions | A subset of well-to-wheels CO ₂ emissions; measures the CO ₂ generated by excavating the feedstocks and producing and distributing the fuel or electricity |
| Well-to-wheels CO ₂ emissions | Accounts for emissions from the vehicle itself, as well as CO ₂ emissions resulting from the production and distribution of fuel |
| WET | Water Estimation Tool, a Ford software program that helps facilities to predict their water usage |
| WHO | World Health Organization, the international organization providing leadership on global health matters |
| WRI | World Resources Institute, a U.S.-based nonprofit organization |
| ZEV | Zero Emission Vehicle, the lowest level of standards for vehicle emissions enforced in California and states that have adopted California standards |