



**Module: Introduction**

**Page: Introduction**

**CC0.1**

**Introduction**

Please give a general description and introduction to your organization.

Ford Motor Company is a global automotive and mobility company based in Dearborn, Michigan. With about 201,000 employees and 67 plants worldwide, the company's core business includes designing, manufacturing, marketing, financing and servicing a full line of Ford cars, trucks, SUVs and electrified vehicles, as well as Lincoln luxury vehicles. At the same time, Ford is aggressively pursuing emerging opportunities through Ford Smart Mobility, the company's plan to be a leader in connectivity, mobility, autonomous vehicles, the customer experience, and data and analytics. The company provides financial services through Ford Motor Credit Company. For more information regarding Ford and its products worldwide or Ford Motor Credit Company, visit [www.corporate.ford.com](http://www.corporate.ford.com).

Contributing to a better world always has been a core value at Ford, and our commitment to sustainability is a key part of our company DNA. Ultimately, our vision is to make people's lives better by changing the way the world moves, just as Henry Ford did more than a century ago.

We are driving innovation in every part of our business to deliver profitable growth for all, from our employees to our supply chain partners.

We remain committed to deliver world-class vehicles that use safe and sustainable technologies and that give our customers the freedom to live, work and play where they want.

We are committed to running a strong and responsible business that treats our customers, our employees, our communities and our planet with respect.

Our sustainability efforts today can bring about a better tomorrow:

- We are investing \$4.5 billion in electrified vehicle (EV) solutions and will add 13 new EVs to our portfolio by 2020
- Our continued investment in lightweighting technologies is helping us reduce overall vehicle weight and improve fuel economy
- Ford is the only automaker named to the World's Most Ethical Company® list by Ethisphere Institute, and we have made the list for seven consecutive years
- We earned an 'A' grade for our water conservation efforts from CDP.
- By sharing best practices through our Partnership for A Cleaner Environment (PACE) program, we are lowering the collective environmental footprint of our entire supply chain.
- We celebrated the 10-year anniversary of the Ford Volunteer Corps with a Global Month of Caring, and launched new programs to develop our next generation of philanthropic leaders and to offer employees funding for new community projects.

Details of our strategies, goals and progress can be found within the 2015/16 Sustainability Report ([www.sustainability.ford.com/](http://www.sustainability.ford.com/)).

**CC0.2**

**Reporting Year**

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year. Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2011).

Enter Periods that will be disclosed  
Thu 01 Jan 2015 - Thu 31 Dec 2015

**CC0.3**

**Country list configuration**

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country  
United States of America  
Rest of world

**CC0.4**

**Currency selection**

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

**CC0.6**

**Modules**

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email [respond@cdp.net](mailto:respond@cdp.net).

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

**Further Information**

**Module: Management**

**Page: CC1. Governance**

**CC1.1**

**Where is the highest level of direct responsibility for climate change within your organization?**

Board or individual/sub-set of the Board or other committee appointed by the Board

**CC1.1a**

**Please identify the position of the individual or name of the committee with this responsibility**

The Sustainability and Innovation Committee of the Board of Directors is comprised of 8 directors, where 6 are independent. During the 2015 calendar year, the Committee convened four (4) times.

The Board has overall responsibility for the oversight of risk management at Ford, while management is responsible for day-to-day risk management.

The oversight responsibility of the Board and its Committees is supported by Company management and the risk management processes that are currently in place. Ford has extensive and effective risk management processes, relating specifically to compliance, reporting, operating and strategic risks. Compliance Risk encompasses matters such as legal and regulatory compliance (e.g., Foreign Corrupt Practices Act, environmental, OSHA/safety, etc.). Reporting Risk encompasses matters such as legal and regulatory compliance (e.g., Foreign Corrupt Practices Act, environmental, OSHA, safety, etc.). Operating Risk addresses the myriad of matters related to the operation of a complex company such as Ford (e.g., quality, supply chain, sales and service, financing and liquidity, product development and engineering, labor, etc.). Strategic Risk encompasses somewhat broader and longer-term matters, including, but not limited to, technology development, sustainability, capital allocation, management development, retention and compensation, competitive developments, and geopolitical developments.

Substantive changes to our plans for addressing climate change - whether relating to our products, facilities or policies - are highlighted and agreed to at the highest levels of Ford's executive management through the Business Plan Review process chaired by the CEO. Related emerging issues are reviewed as needed in Special Attention Review meetings. In addition, strategic product and manufacturing direction related to climate change goals is provided by a senior executive committee, made up of vice president and executive stakeholders, who guide the development of the vision, policy and business goals. Related executive planning teams are responsible for developing detailed and specific policy, product and technical analyses to meet objectives. These teams base their plans on scientific data and promote actions that will help achieve the Company's environmental ambitions, recognizing the need to use a holistic approach to effectively protect the environment. Metrics have been established and are reviewed regularly to ensure satisfactory progress. We have also developed strategic principles to guide our approach.

CC1.2

**Do you provide incentives for the management of climate change issues, including the attainment of targets?**

Yes

CC1.2a

**Please provide further details on the incentives provided for the management of climate change issues**

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Facility managers	Monetary reward	Emissions reduction target Energy reduction project Energy reduction target Efficiency target	Ford's plant managers have targets for many metrics, including environmental metrics such as water use, waste sent to landfill, energy use, CO2 emissions, etc. These targets are included in the calculation of performance incentives.
Business unit managers	Monetary reward	Emissions reduction target Energy reduction target Efficiency target	Ford's division and operations managers oversee several individual plants and, as such, have targets for many metrics, including environmental metrics such as water use, waste sent to landfill, energy use, CO2 emissions, etc. These targets are included in the calculation of performance incentives.
All employees	Monetary reward	Emissions reduction target Energy reduction target Efficiency target	The Compensation Committee of the Board of Directors approved the specific performance goals and business criteria to be used for purposes of determining the cash awards for 2015 participants, including executive officers, under the Company's shareholder-approved Annual Incentive Compensation Plan. The Corporate performance criteria and weightings used for 2015 under the plan include those relating to climate change/GHG.
Environment/Sustainability managers	Recognition (non-monetary)	Emissions reduction project Energy reduction project Efficiency project	Ford's Environmental Quality Office presents annual Environmental Leadership Awards in each different region of the globe. Projects are judged by subject matter experts within the Company on environmental benefit, cost effectiveness, replicability, and several other criteria. Awards are presented at regional workshops and also re-presented in ceremonies at the winning facilities.

Further Information

Page: CC2. Strategy

CC2.1

**Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities**

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

**Please provide further details on your risk management procedures with regard to climate change risks and opportunities**

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Senior manager/officer	Globally where we have operations	> 6 years	Ford's governance of sustainability issues builds on a strong foundation of Board of Director and senior management accountability for the Company's environmental, social and economic performance. At the Board level, the Sustainability Committee has primary responsibility for reviewing strategic sustainability issues, though some of those issues are also addressed in other committees and by the Board as a whole. Within management, the Vice President of Sustainability, Environment and Safety Engineering has primary responsibility for sustainability issues and oversees the Sustainable Business Strategies, Environmental Policy, and Safety Policies, as well as having input on technology strategies and research priorities.

CC2.1b

**Please describe how your risk and opportunity identification processes are applied at both company and asset level**

COMPANY LEVEL

The Board has overall responsibility for the oversight of risk management at Ford, while management is responsible for day-to-day risk management. Ford has extensive and effective risk management processes, relating specifically to compliance, reporting, operating and strategic risks. Operating Risk addresses the myriad of matters related to the operation of a complex company such as Ford. Strategic Risk encompasses broader and longer-term matters, including, but not limited to, technology development, sustainability, competitive developments and geopolitical developments.

We have institutionalized the Creating Value Roadmap Process (CVRP), which includes a Business Plan Review and Special Attention Review process where, on a weekly basis (more often where circumstances dictate), the senior leadership from each of the Business Units and the Functional Skill Teams reviews the status of the business, the risks and opportunities presented to the business and develops specific plans to address those risks and opportunities. Ford adopted a formal policy that requires the CVRP to be implemented by all Business Units and Functional Skill Teams. The Board recognizes the CVRP as the Company's primary risk management tool.

ASSET LEVEL

Physical Risks: We assess climate-related risks to our facilities, such as shifting patterns of extreme weather, at least annually. For instance, extreme weather has the potential to disrupt the production of natural gas, a fuel we need to manufacture our vehicles. To minimize the risk to our operations, we have established firm delivery contracts with natural gas suppliers and installed propane tank farms at key manufacturing facilities as a source of backup fuel.

Supply Chain Risks: Like Ford, our suppliers are subject to market, regulatory and physical risks related to climate change. These risks could affect their competitiveness or ability to operate, creating the potential for disruptions to the flow of supplies to Ford.

CC2.1c

**How do you prioritize the risks and opportunities identified?**

We prioritize the risks and opportunities posed by climate change consistent with our materiality analysis, the magnitude of the impact and our ability to control the outcome. Our long-term strategy is to contribute to climate stabilization by:

- 1 - Continuously reducing the greenhouse gas (GHG) emissions and energy usage of our operations;
- 2 - Developing the flexibility and capability to market lower-GHG-emission products, in line with evolving market conditions; and
- 3 - Working with industry partners, energy companies, consumer groups and policy makers to establish an effective and predictable market, policy and technological framework for reducing GHG emissions.

Our product plans in all regions are aligned with our overall goal of contributing to climate stabilization. Our technology and product strategy to meet this goal is based on the modeling of vehicle and fuel contributions to emission reductions and an analysis of market and regulatory trends. Our climate change strategy is supported by our sustainable mobility governance, which establishes structures and accountability for implementing the strategy.

**CC2.2**

**Is climate change integrated into your business strategy?**

Yes

**CC2.2a**

**Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process**

1) **INTEGRATION INTO OUR BUSINESS STRATEGY:** Our Sustainability, Environmental & Safety Engineering organization oversees sustainability strategy development, integration and implementation by identifying emerging challenges and opportunities and mobilizing resources within the company to address them and help us remain competitive in a changing world. Our business units have set goals and targets related to sustainability and tied to the overall corporate business plan. Like all objectives related to the business plan, progress is monitored throughout the year so there is timely warning if targets are at risk of not being achieved. When that occurs, steps are identified to get back on track.

**SCIENCE-BASED APPROACH:** We set emission-reduction goals for our products by region and manufacturing operations based on stabilizing the atmospheric concentration of CO2 at 450 parts per million (ppm), the level that many scientists, businesses and government agencies believe may avoid the most serious effects of climate change. We work cooperatively with the public and private sectors to advance climate change solutions.

2) Vehicles and other forms of transportation emit greenhouse gases and contribute to climate change, where Ford is responding to these global trends and challenges by leveraging our core strengths in automotive while driving innovation to create mobility solutions of the future. Two of the most substantial decisions: Impacting Mobile Source CO2 Emissions

a) Transformation of a core product in response to regulatory requirements driven by climate change: When it came time to update the F-150, we redesigned the vehicle from the wheels up, with major changes in design and materials that make it the toughest, smartest, most capable and fuel-efficient F-150 ever. "Closed loop" aluminum and seat fabric recycling processes significantly reduce life-cycle waste and greenhouse gas emissions. Increasing the amount of high-strength steel in the new F-150's frame from 22 percent to 77 percent and dramatically expanding the use of high-strength, military-grade, aluminum alloy in its body helped Ford engineers cut overall vehicle weight by up to 700 pounds. Yet the new F-150 tows up to an additional 1,100 pounds, accelerates faster and brakes more quickly.

b) A Move toward Smart Mobility driven by changing consumer demand for low carbon transportation: We have developed what we call our Blueprint for Mobility, which is our multi-decade strategy for helping to create a better world. We have a range of experiments today that we believe will lead to all-new models of transportation and mobility within the next 10 years and beyond. We envision a future in which vehicles can communicate with one another to warn of traffic or infrastructure delays so the driver can take another route, saving time and reducing congestion; where vehicles sense each other's presence, helping to avert accidents and improve safety; and where people routinely share vehicles and use multiple forms of transportation, enabled through more and better information.

3) **Physical Risks to Climate Change influencing our strategy:**

a) Products and facilities - Continuously reducing the greenhouse gas (GHG) emissions and energy usage of our operations; Developing the flexibility and capability to market lower-GHG-emission products, in line with evolving market conditions; Working with industry partners, energy companies, consumer groups and policy makers to establish an effective and predictable market, policy and technological framework for reducing GHG emissions

b) Investors are showing greater concern about climate change as a material risk for many companies. A variety of voluntary public registries and information services are providing information to investors about greenhouse gas emissions, while in some countries, companies are required to disclose information about their climate risks.

c) **Physical Risks:** We assess the risks each of our facilities faces (with input from third-party engineers) at least annually. This takes into account the risk of exposure to hurricanes, tornadoes, other storms, flooding and earthquakes. As a result, we believe we have a good understanding of the physical risks faced by our facilities and how those risks are changing over time. Extreme weather has the potential to disrupt the production of natural gas, a fuel necessary for the manufacture of vehicles. To minimize production interruptions, we have established firm delivery contracts with natural gas suppliers and installed propane tank farms at key manufacturing facilities as a source of backup fuel. Higher utility rates have prompted Ford to revisit and implement energy-efficiency actions that previously did not meet our internal rate of return.

d) Our suppliers, located in more than 60 countries, are subject to market, regulatory and physical risks as a result of greenhouse gas regulation and the impacts of climate change and could affect their competitiveness or ability to operate, creating the potential for disruptions to the flow of supplies to Ford.

4) Near term competitive advantage is achieved by offering our customers a portfolio of products that provide fuel efficient or low carbon transportation. We continue to pursue opportunities to further improve vehicles with conventional gasoline and diesel powertrains. We are implementing a range of advanced engine and transmission technologies as well as improving aerodynamics and reducing weight. Alternative fuels and powertrains are playing a growing role in reducing carbon emissions. We now offer a range of alternatives to conventional internal combustion vehicles, including electrified vehicles – hybrids, plug-in hybrids and all-electric vehicles – plus vehicles that run on clean diesel, renewable biofuels, natural gas and propane. We are also working to advance hydrogen fuel cell vehicle technologies.

5) Ford has established science based targets for both products and facilities aligned with limiting the impacts of climate change long term. These targets are directly linked to technologies and Ford Smart Mobility to deliver low carbon transportation solutions in the future.

6) Climate change is shaping the way we do business and creates a strategic advantage. We are expanding our business model to be both an auto and a mobility company. Our strategy involves continually strengthening and investing in our core automotive business, while aggressively pursuing new emerging opportunities through Ford Smart Mobility – our plan to be a leader in connectivity, mobility, autonomous vehicles, the customer experience, and data and analytics. Addressing the risks and effects of global warming is of paramount importance to Ford, and it's not just in our manufacturing facilities where we are working to reduce our footprint and create a better world.

**CC2.2c**

**Does your company use an internal price of carbon?**

No, and we currently don't anticipate doing so in the next 2 years

**CC2.3**

**Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)**

- Direct engagement with policy makers
- Trade associations
- Funding research organizations

**CC2.3a**

**On what issues have you been engaging directly with policy makers?**

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Regulation of methane emissions	Support with minor exceptions	Ford engages on a variety of issues related to CO2 and climate change including our work with NHTSA and EPA in the development and promulgation of aggressive light and heavy duty fuel economy and GHG standards. The light duty standards put automobile manufacturers on path to reduce vehicle GHG emissions by approximately 50 percent over the life of the program. The heavy duty standards save approximately 530 million barrels of oil over the life of the program.	Ford continues to work with the Obama Administration and policy makers on these regulations and the upcoming mid-term review of the fuel economy and GHG standards and the next phase of the heavy duty program for 2019 and beyond.
Cap and trade	Support with minor exceptions	Ford will continue to engage constructively with the Ontario government (MOECC, MEDEI, MOF, etc.) on climate change through the Canadian Vehicle Manufacturers Association (CVMA).	Minimize the impact of cap and trade program on all operations – vehicle assembly and components as well as the supply chain by recognizing that automotive manufacturing and its associated supply chain is trade sensitive.
Energy efficiency	Support	Ford is a member of a governor's focus group developing and supporting energy efficiency programs in Michigan.	Regulated utility requirement to meet energy efficiency targets.

**CC2.3b**

**Are you on the Board of any trade associations or provide funding beyond membership?**

Yes

**CC2.3c**

**Please enter the details of those trade associations that are likely to take a position on climate change legislation**

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
Ford works with a broad range of industry and trade organizations to encourage debate and provide insight and background on a variety of issues related to CO2 and climate change, including alternative fuels, alternative fuel vehicles, transportation policy, emissions regulations, research and development initiatives and tax policy. One organization that we interface with corporate wide is the Alliance of Automobile Manufacturers.	Consistent	The Alliance of Automobile Manufacturers is an advocacy group for the auto industry, represented by the BMW Group, Fiat Chrysler Automobiles, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota, Volkswagen Group of America and Volvo Cars North America. The Alliance develops and implements solutions to public policy challenges that promote sustainable mobility and benefit society in the areas of environment, energy and motor vehicle safety.	We continue to actively engage and encourage debate on a wide range of issues within these groups.

CC2.3d

**Do you publicly disclose a list of all the research organizations that you fund?**

No

CC2.3f

**What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

Ford seeks to be an active participant in the political process in a manner that is transparent and supports our business interests. Across a range of issues, we strive to be part of the solution, supporting international, national, regional and local policies that are economically, environmentally and socially sustainable for our company, our customers and their communities.

On issues of the highest priority, including issues related to climate change, we maintain regular dialogue with legislators and regulatory officials in our major markets, sharing our expertise and adding our perspective to the policy-making process. Our Government Affairs offices around the world oversee these lobbying activities.

We belong to a broad range of partnerships, coalitions, industry groups and trade associations that advocate for legislation and regulation on behalf of their members. Ford's participation in the industry associations is cross-functional, including Government Affairs, Legal staff, Public Affairs and the Sustainability, Environment and Safety Engineering team. This assures a consistent internal and external policy and messaging that is aligned with our overall climate change strategy. Working with others through such organizations enables us to better leverage our resources on important issues, and to develop and promote policies that could have far-reaching benefits for our company, but also our industry and society as a whole.

Of course, we don't always agree with every position taken by these organizations; in such cases, we always reserve the right to speak with our own voice and make our own stance clear, even if our views don't align with the positions of the associations to which we belong.

Further Information

Page: CC3. Targets and Initiatives

CC3.1

**Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?**

Intensity target

CC3.1b

**Please provide details of your intensity target**

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1+2 (location-based)	100%	30%	Metric tonnes CO2e per unit of production	2010	0.99	2025	Yes	The normalized base year emissions have been adjusted for facility divestitures and acquisitions. Ford has been a leader in facilities-related greenhouse gas (GHG) and energy-use reductions, public reporting of our GHG emissions, and participation in GHG reduction and trading programs. In 2010, Ford adopted a goal to reduce our facility carbon dioxide emissions by 30 percent by 2025 on a per-vehicle basis. The 2025 target is based on model calculations of stabilizing atmospheric CO2 concentrations at 450 ppm. This goal complements our longstanding facility energy use targets. The U.S. Environmental Protection Agency (EPA) awarded Ford a Goal Setting Certificate for this strategy at its inaugural Climate Leadership Awards Ceremony. Ford was the only automaker to be recognized.
Int2	Scope 3: Use of sold products	70%	48%	Grams CO2e per kilometer*	2010	174	2030	Yes	The normalized base year emissions represent the fleet average of light-duty vehicles in the US and passenger cars in the EU, based on the regulatory drive cycles used in each respective region. Please note that aggregate on-road customer usage patterns may differ from the regulatory drive cycles in various ways. The 2030 target is approximate, and is used as guidance for long-term planning pending final vehicle regulations applicable to that time frame. The 2030 target is based on model calculations of stabilizing atmospheric CO2 concentrations at 450 ppm. A detailed description of the 450 ppm CO2 glide path model is provided in our Sustainability Report <a href="http://corporate.ford.com/microsites/sustainability-report-2015-16/sustainability-strategies-climate.html">http://corporate.ford.com/microsites/sustainability-report-2015-16/sustainability-strategies-climate.html</a>

CC3.1c

**Please also indicate what change in absolute emissions this intensity target reflects**

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	10	No change	0	Given past trends Ford expects the absolute CO2 emissions from manufacturing operations to decrease by at least 10%.
Int2	No change	0	Decrease	48	Absolute emissions reductions are dependent on unknown future sales volumes. We have assumed the same future share as the 2010 sales share giving the same percent reduction in absolute and intensity targets.

CC3.1e

**For all of your targets, please provide details on the progress made in the reporting year**

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Int1	33%	91%	Ford's total CO2 emissions increased by 2.5 percent from 2014 to 2015, but CO2 emissions per vehicle produced decreased by 5.2 percent during that period, reflecting increased overall energy efficiency in our facilities. While Ford's CO2 emissions are linked to the amount of energy used, they do not necessarily increase or decrease by exactly the same amount as our energy use, due to variations in energy sources and related emissions factors. Ford reduced our overall facilities-related CO2 emissions by 14.2 percent, or 0.2 million metric tons, from 2010 to 2015. During this same period, we reduced facilities-related CO2 emissions per vehicle produced by 27.2 percent.
Int2	25%	20%	While Ford's product development plans are based upon delivering these long-term reductions in CO2 emissions, we anticipate that the year-over-year reductions will vary somewhat. In some years the reductions will be greater and in other years they will be less. That is because delivering on these targets will be dependent to some degree on market forces that we do not fully control (e.g., changes in energy prices and changes in the mix of vehicles demanded by the consumers in the markets in which we operate). Furthermore, our product strategy is based on multiple inputs, including regulatory requirements, competitive actions and technology plans.

CC3.2

**Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?**

Yes

CC3.2a

**Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions**

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of products	Hybrid electric vehicles and plug-in hybrid electric vehicles	Avoided emissions	Other: Internal calculation			HEVs and PHEVs provided lower fuel consumption resulting in reduced CO2 emissions. In the US, for example, Fusion Hybrids and Fusion Energis (PHEV) using US average electricity have saved over 1.1 million tonnes of CO2 compared to a conventional 2.5L Fusion since 2009.

CC3.3

**Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)**

Yes

CC3.3a

**Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings**

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	4	29026
Implemented*	61	113240
Not to be implemented	0	0

CC3.3b

**For those initiatives implemented in the reporting year, please provide details in the table below**

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	LED Lighting Conversion: Replace approximately 3,600 400 watt metal halide and high pressure sodium fixtures with LED high bay fixtures.	5194.9	Scope 2 (location-based)	Voluntary	510000	3800000	4-10 years	6-10 years	
Energy efficiency: Building services	Compressed Air System Optimization	7985.8		Voluntary			4-10 years	11-15 years	Multiple Locations
Energy efficiency: Building services	Steam system Conversion	25296.7		Voluntary			4-10 years	11-15 years	
Energy efficiency: Processes	Paint Spray Booth Heat Recovery	8181.0		Voluntary			4-10 years	11-15 years	
Energy efficiency: Building services	Boiler/Hot Water system optimization	14860		Voluntary			4-10 years	11-15 years	Multiple locations
Energy efficiency: Building services	Cooling system optimization	8726.4		Voluntary			4-10 years	11-15 years	Multiple locations
Energy efficiency: Processes	Coolant system VSDs	975.1		Voluntary			4-10 years	11-15 years	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Other	Ford Partnership for a Cleaner Environment (PACE) supply chain program		Scope 3	Voluntary				Ongoing	In 2015 we expanded our pilot Partnership for a Cleaner Environment (PACE) program to include 25 strategies suppliers, representing 800 manufacturing sites in 41 countries. Our goal is to teach our suppliers about the energy and water savings and waste reduction initiatives Ford has implemented across our plants, with the hope that our suppliers will implement some of these initiatives in their own manufacturing facilities. To further amplify environmental responsibility and sustainability impact further down the supply chain, we are also encouraging our Tier 1 suppliers to share these best practices with their own suppliers.

### CC3.3c

**What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Other	In North America, Ford continues to use energy performance contracting as a financing tool to upgrade and replace infrastructure at its plants, commercial buildings and research facilities. Through these contracts, Ford partners with suppliers to replace inefficient equipment, funding the capital investment over time through energy savings. Projects have been implemented to upgrade lighting systems, paint-booth process equipment and compressed air systems, and to significantly reduce the use of steam in Ford's manufacturing facilities.
Partnering with governments on technology development	In 2013, Ford joined the U.S. Department of Energy's (DOE) Better Buildings, Better Plants program, a national partnership initiative to drive a 25 percent reduction in industrial energy intensity in 10 years against a 2011 baseline. Twenty four of Ford's U.S. plants are part of this initiative.
Dedicated budget for low carbon product R&D	For the past eight years, Ford has been following an ambitious plan of vehicle technology and alternative powertrain and fuel actions. By implementing this consistently, we are improving fuel economy and reducing CO2 emissions across our product portfolio, and working toward a more sustainable future. Our Global Technology Migration Path for CO2 Reduction detailing near, mid and long-term actions is available at <a href="http://corporate.ford.com/microsites/sustainability-report-2015-16/products-greener.html">http://corporate.ford.com/microsites/sustainability-report-2015-16/products-greener.html</a> .
Partnering with governments on technology development	Ford developed a Paint Emissions Concentrator (PEC) technology (formerly referred to as "fumes-to-fuel"), which uses a fluidized bed adsorber and desorber and condensation equipment to collect and concentrate solvent emissions into a liquid. The intent of the technology is to collect a portion of the VOCs from the spray-booth exhaust, superconcentrate them in the PEC, then condense and store them on-site for use as fuel source. In this way, the solvent emissions are recycled back into the production process and overall VOC emissions are reduced. Ford is currently using this technology at our Oakville facility. Ford's PEC technology has the potential to reduce CO emissions by 70 to 80 percent compared to traditional abatement equipment. PEC technology coupled with the recycling of collected solvents also has the potential to eliminate nitrogen oxide emissions compared to conventional abatement approaches, which involve the oxidation of the solvents. In addition, there is potential to reform the captured VOCs into hydrogen, which could be used as a fuel for fuel cells. Ford is working with a Canadian company to advance the PEC technology and evaluate the potential for producing and using hydrogen fuel.

### Further Information

Page: **CC4. Communication**

### CC4.1

**Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)**

Publication	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	Pages 8-10, 16/2015 10-K	<a href="https://www.cdp.net/sites/2016/95/6595/Climate%20Change%202016/Shared%20Documents/Attachments/CC4.1/CC4.1%20-%20GHG%20info%20from%202015%2010-K.pdf">https://www.cdp.net/sites/2016/95/6595/Climate Change 2016/Shared Documents/Attachments/CC4.1/CC4.1 - GHG info from 2015 10-K.pdf</a>	
In other regulatory filings	Complete	Pages 4 - 6/Climate Change and Strategy section of the 2015/16 Sustainability Report.	<a href="https://www.cdp.net/sites/2016/95/6595/Climate%20Change%202016/Shared%20Documents/Attachments/CC4.1/CC4.1%20-%20Climate%20Change%20Strategy%20response.pdf">https://www.cdp.net/sites/2016/95/6595/Climate Change 2016/Shared Documents/Attachments/CC4.1/CC4.1 - Climate Change Strategy response.pdf</a>	
In voluntary communications	Complete	Pages 66-67/CO2 emissions data section of the 2015/16 Sustainability Report	<a href="https://www.cdp.net/sites/2016/95/6595/Climate%20Change%202016/Shared%20Documents/Attachments/CC4.1/CC4.1%20-%20Climate%20CO2%20emissions%20data%20response.pdf">https://www.cdp.net/sites/2016/95/6595/Climate Change 2016/Shared Documents/Attachments/CC4.1/CC4.1 - Climate CO2 emissions data response.pdf</a>	

### Further Information

## Module: Risks and Opportunities

Page: **CC5. Climate Change Risks**

### CC5.1

**Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply**

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

### CC5.1a

**Please describe your inherent risks that are driven by changes in regulation**

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Product efficiency regulations and standards	If governments (US, EU, China, Saudi Arabia, Brazil, etc.) seek to enforce extreme fuel economy or GHG standards in spite of unfavorable market conditions or inadequate technology development, we likely would be forced to take actions that could have adverse effects on our sales volume and profits. Such actions could include restricting engines and options; increasing market support programs for our most fuel-efficient vehicles; and curtailing the production and sale of certain vehicles in order to maintain compliance.	Reduction/disruption in production capacity	>6 years	Direct	About as likely as not	Medium-high	Financial implications would vary depending on the specific details of a given scenario, including the stringency of the standard relative to market conditions, and the degree of flexibility in the regulatory framework. For illustration purposes, a regulatory program that drove a 1% decrease in sales within North America and Europe could lead to an estimated decrease in net income of nearly \$100 million, based on 2015 regional sales and profit. It should be noted that financial impacts are not necessarily "linear" in nature. The adverse financial impacts of large initiatives that drive product restrictions and/or production shutdowns could be exponentially greater than the impacts of less drastic initiatives.	We manage the risk by being an active participant in the legislative and regulatory processes used to set standards, and by providing information to governmental authorities regarding the effect of proposed regulations on our business while supporting the general direction of decreasing CO2 emissions with our scientific approach. On issues of the highest priority, we maintain regular dialogue with legislators and regulatory officials in our major markets, sharing our expertise and adding our perspective to the policy-making process. In Sept. 2015 we hosted an information exchange with US EPA, NHTSA and California ARB emphasizing capabilities and challenges related to future light-duty fuel economy and GHG emission standards. We also manage the risk through our Power of Choice strategy, through which we offer a wide range of fuel efficient vehicles and powertrains. We believe this approach puts us in a good position to be able to meet regulatory requirements yet respond to changes in market demand.	Ford's Engineering, Research and Development expenses were \$6.7 billion in 2015. There are limits on our ability to achieve fuel economy improvements over a given timeframe primarily relating to the cost and effectiveness of available technologies, consumer acceptance of new technologies, the appropriateness of certain technologies for use in particular vehicles, the availability of supporting infrastructure for new technologies, and the resources necessary to deploy new technologies across a wide range of products and powertrains in a short time.
Carbon taxes	Carbon taxes have the potential to add significant costs to our business through the imposition of taxes directly on Ford, and indirectly through the imposition of taxes on our suppliers. We are continuing our work to better understand the risks and opportunities of such measures on our suppliers and, by extension, on our Company.	Increased operational cost	3 to 6 years	Indirect (Supply chain)	More likely than not	Medium-high	If governmental agencies seek to enforce extreme fuel economy or GHG standards in spite of unfavorable market conditions or inadequate technology development, we likely would be forced to take actions that could have adverse effects on our sales volume and profits. Such actions could include restricting engines and options; increasing market support programs for our most fuel-efficient vehicles; and curtailing the production and sale of certain vehicles in order to maintain compliance.	Beginning in 2010, we launched a program with a select group of our suppliers to better understand the collection and reporting of greenhouse gas emissions data in our supply chain. Our goal is to better understand the carbon footprint of our supply chain and to use the data to create a broad-based carbon management (related to risks and opportunities) approach for our supply chain. Suppliers were chosen to participate in the GHG survey based on a variety of criteria, which included the following: The GHG intensity of the commodities supplied; the nature of the business relationship with Ford; and the geographic footprint of the supplier's global operations. We manage the risk by being an active participant in the legislative and regulatory processes used to set standards, and by providing information to governmental authorities regarding the effect of proposed regulations on our business. We also manage the risk through our Power of Choice strategy, through which we offer our customer a wide range of vehicles and powertrains. We believe this approach puts us in a good position to be able to respond to changes in market demand and/or regulatory requirements.	There are limits on our ability to achieve fuel economy improvements over a given timeframe primarily relating to the cost and effectiveness of available technologies, consumer acceptance of new technologies, the appropriateness of certain technologies for use in particular vehicles, the availability of supporting infrastructure for new technologies, and the resources necessary to deploy new technologies across a wide range of products and powertrains in a short time.

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
-------------	-------------	------------------	-----------	------------------	------------	---------------------	----------------------------------	-------------------	--------------------

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitation extremes and droughts	Global climate change has the potential to lead to increased extreme precipitation events that produce flooding which can disrupt production either directly or through interruptions to the supply chain. Ford has both direct operations plants and indirect suppliers' facilities in areas at the risk of flooding. In 2011, flooding in Thailand led to 34,000 units of lost production.	Reduction/disruption in production capacity	1 to 3 years	Indirect (Supply chain)	About as likely as not	Medium	Based on data from our experience with flooding in Thailand in 2011, over \$5000 was lost for each unit of reduced production.	Our purchasing operations has implemented a Risk Exposure Index developed by the Ford-MIT Alliance. The REI enables us to identify the key elements in the supply chain that we should monitor, along with the industry as a whole, for potential disruptions to production due to climate change-induced weather events or other natural or man-made disasters. Our model includes GDACS (Global Disaster Alert and Coordination System) and HEWS(Humanitarian Early Warning Service) as a part of our monitoring process for potential disruptions related to weather. As weather is difficult to predict, we use this for exposure assessment and recovery planning. Recently, we used these tools to understand the potential business disruption exposure of typhoons hitting the Philippines. We assess the risks each of our facilities faces (with input from third-party engineers) at least annually. This risk assessment is updated based on new data and takes into account the risk of exposure to hurricanes, tornadoes, other storms, flooding and earthquakes. Extreme weather has the potential to disrupt the production of natural gas, a fuel necessary for the manufacture of vehicles. Supply disruptions raise market rates and jeopardize the consistency of vehicle production. To minimize the risk of production interruptions, Ford has established firm delivery contracts with natural gas suppliers and installed propane tank farms at key manufacturing facilities as a source of backup fuel.	Ford has made over \$1.5 million in research and capital investments to implement the supply chain monitoring program. There are plans to continue investing more over the next 3-4 years. Higher utility rates have prompted Ford to revisit and implement energy-efficiency actions that previously did not meet our internal rate of return.
Change in precipitation extremes and droughts	Global climate change has the potential to exacerbate droughts. We cannot be certain that we will always have access to water of the quantity and quality that our operations require. We have identified that approximately 25 percent of our operations, including the Cuautitlán, Mexico facility, are at risk to be water-scarce based on the Global Water Tool, developed by the World Business Council for Sustainable Development (WBCSD). Water availability is a local issue, therefore we conducted our analysis using detailed watershed-level data. According to our analysis, about 25 percent of our operations are located in regions that are now or will be considered to be at risk for water scarcity by 2025.	Reduction/disruption in production capacity	>6 years	Direct	About as likely as not	Medium	Our facilities in Mexico are located in water-scarce regions. Our manufacturing facility in Cuautitlán, Mexico, for example, is already subject to water-withdrawal limitations. The Cuautitlán plant produced over 100,000 vehicles in 2015, or 3% of North American production. If Cuautitlán production was stopped due to the unavailability of water, 3% of 2015 North American income before taxes is over \$300 million.	Our water strategy aligns with the core elements of the CEO Water Mandate, a private-public initiative launched by the UN Secretary-General in 2007. Companies that support the CEO Water Mandate commit to implementing the framework's six core elements for water management and pledge to publicly report their progress annually. Ford endorsed the Water Mandate in 2014. We developed our water strategy to prioritize addressing our water use, supplier water use and community water issues in water-stressed regions identified using the Global Water Tool, developed by the World Business Council for Sustainable Development (WBCSD). We are investing in water-saving technologies and process improvements across our global operations. Wherever feasible, we take successful projects and mirror them in other locations. Our newest plants use a set of advanced and environmentally friendly technologies to dramatically cut water use such as implementing membrane biological reactors (MBR) and reverse-osmosis processes to recycle water from our on-site wastewater treatment plants in arid	Many of these new systems require substantial capital investments, so we have been adding them on a rolling basis as we update equipment and bring new facilities online, especially in areas where water is more scarce. In Pretoria, for example, our \$2.5 million on-site wastewater treatment plant at the Silverton Assembly Plant is increasing the amount of water that can be reused by up to 15 percent.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								regions, such as at plants in Chihuahua and Hermosillo, Mexico; Pretoria, South Africa; Chennai, India; and Chongqing, China.	

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behaviour	Climate change has increased consumer demand not only for "green" vehicles but also for alternative transportation solutions. This reduces demand for our vehicles overall, and for the type of vehicles consumers buy. Consumers are dealing with inconvenient, congested transportation systems that create pollution, reduce fuel efficiency and waste travelers' time. With more people living in congested urban areas, consumers demand more and different forms of mobility. As a provider of personal transportation vehicles, Ford needs to respond to these changing customer preferences.	Reduced demand for goods/services	>6 years	Direct	Likely	Medium-high	Our ability to satisfy changing consumer preferences with respect to type or size of vehicle, as well as design and performance characteristics, affects our sales and earnings significantly. Financial risk due to changing consumer behavior is possible as the demand for our vehicles can be reduced as consumers seek alternatives to personal vehicle transportation. Financial implications would vary depending on the specific details of a given scenario, including the type and extent of changes in the marketplace and personal transportation. For illustration purposes, changing consumer behavior that drove a 1% decrease in North American sales could lead to an estimated decrease in net income of nearly \$100 million, based on 2015 earnings and sales rates. It should be noted that financial impacts are not necessarily "linear" in nature. The adverse financial impacts of large changes in consumer behavior could be exponentially greater than the impacts of less drastic changes.	We created a new subsidiary, Ford Smart Mobility LLC, to develop commercially ready mobility services and invest in promising mobility-related ventures. The strategy is to maintain strength in core business that generates profits, helping to kick-off new mobility business until it is self-sustaining and profitable. Ford is disrupting itself instead of waiting to be disrupted. We manage the risk of consumer demand for alternative transportation solutions through our Blueprint for Mobility, setting near-, mid- and long-term goals for solutions to mobility systems. It highlights our thinking about transportation in 2025 and beyond, and identifies the types of technologies, business models, products, and partnerships needed. We will add 13 new EVs to our portfolio by 2020. We are researching technology and using human ingenuity to make car-sharing easier; remotely move vehicles across cities; use vehicles and bicycles to gather information about traffic and parking conditions. For example, Our Smart Mobility plan's focus areas are two key areas of mobility – flexible use and ownership, and multimodal urban travel solutions. We made our GoDrive car-sharing service in London available to the public in May 2015.	Ford's Engineering, Research and Development expenses were \$6.7 billion in 2015. For reference, E,R&D expenses were \$6.7 billion in 2014 and \$6.2 billion in 2013. We are investing \$4.5 billion in electrified vehicle (EV) solutions.
Uncertainty in market signals	Fuel prices are volatile. Consumers are sensitive to fuel price and buy small, fuel-efficient vehicles when gasoline is expensive, but historically choose larger, less efficient vehicles when fuel prices are low. From 2006 to 2010 gasoline prices increased significantly, and sales of more fuel-efficient cars increased. But from mid-2014 through 2016, there was a significant decline in gasoline prices, leading to decreased sales of fuel-efficient and alternative powertrain vehicles. This poses challenges in achieving fuel economy and CO2 targets as consumers have less interest in fuel efficient engines and technologies.	Other: Challenges meeting regulations	3 to 6 years	Direct	Likely	Medium-high	When fuel prices are low, customers choose less fuel-efficient vehicles. This fluctuation may not follow long-term cycle planning for compliance with CO2 regulations. Negative financial implications result if we have to provide price support to encourage the purchase of advanced-technology vehicles to meet the regulations.	We manage the risk of fuel price volatility through our Power of Choice strategy, through which we offer our customers a wide range of fuel-efficient vehicles and powertrains including EcoBoost turbocharged direct-injection gasoline engines, hybrid vehicles, plug-in hybrid electric vehicles and battery electric vehicles. We will add 13 new electrified vehicle (EV) solutions to our portfolio by 2020. We have increased EcoBoost offerings to include more than 80 percent of our global nameplates. This approach puts us in a better position to be able to respond to changes in market demand due to fuel price volatility.	Ford's Engineering, Research and Development expenses were \$6.7 billion in 2015. We are investing \$4.5 billion in electrified vehicle (EV) solutions and will add 13 new EVs to our portfolio by 2020.

Further Information

CC6.1

**Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply**

- Opportunities driven by changes in regulation
- Opportunities driven by changes in other climate-related developments

CC6.1a

**Please describe your inherent opportunities that are driven by changes in regulation**

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Fuel/energy taxes and regulations	CO2-related taxation in Europe drives the market to low CO2 vehicles and incentivizes the up-take of new fuel efficient vehicles. Because our portfolio includes a range of fuel-efficient technologies including EcoBoost, hybrids, plug-in hybrids, and electric vehicles, Ford is well-positioned to meet the need of such a shift and should perform well relative to other manufacturers, providing opportunities for growth and increased market share.	Increased demand for existing products/services	1 to 3 years	Indirect (Client)	Virtually certain	Medium-high	Investments in vehicle technology can potentially be recouped if there is sufficient customer demand for the advanced-technology vehicles. Financial implications would vary depending on the specific details of a given scenario, including the extent of market demand for advanced-technology vehicles and the profitability of the vehicles responsible for an increase in sales. For illustration purposes, an increase in sales within Europe of 0.5% could lead to an estimated increase in net income by around \$1 million, based on 2015 EU sales and profit. It should be noted that financial impacts are not necessarily "linear" in nature. The financial impacts of increased sales of advanced technology vehicles could be different than those of conventional vehicles, and could be positive or negative.	Ford has institutionalized the Creating Value Roadmap Process, which includes a Business Plan Review and Special Attention Review process where, on a weekly basis (and more often where circumstances dictate), the senior leadership of the Company from each of the Business Units and the Functional Skill Teams reviews the status of the business, the risks and opportunities presented to the business (once again in the areas of compliance, reporting, operating and strategic risks), and develops specific plans to address those risks and opportunities. If consumer demand shifts toward smaller vehicles and advanced technology powertrains in response to tax incentives, our European product offerings under our Power of Choice strategy include a variety of low-CO2 vehicles: small diesel and gasoline vehicles, EcoBoost engines, and hybrid, plug-in hybrid, and battery electric vehicles. We will add 13 new electrified vehicle (EV) solutions to our portfolio by 2020. We have increased EcoBoost offerings to include more than 80 percent of our global nameplates.	Ford's Engineering, Research and Development expenses were \$6.7 billion in 2015. If the tax break-points still allow efficient technology like EcoBoost and if the tax break-points are harmonized across regions, costs can be managed via economies of scale. We are investing \$4.5 billion in electrified vehicle (EV) solutions.
Carbon taxes	Ford participates in the mandatory EU Emissions Trading System, which commenced in January 2005. This type of CO2-related taxation and emissions reporting obligations in Europe drive energy efficiency projects at our manufacturing facilities.	Investment opportunities	3 to 6 years	Direct	About as likely as not	Low-medium	Achieving the corporate goal of improving global facility energy use per vehicle produced by 25 percent between 2011 and 2016 also reduces our costs for the energy.	We take a rigorous and holistic approach to reducing the environmental impacts of our manufacturing facilities. Our manufacturing management team translates our comprehensive global environmental targets into annual regional- and facility-level targets, which differ depending on the relevant regulations and financial and production constraints in each region. Ford's Environmental Operating System (EOS), which is fully integrated into the Ford Production System (FPS), provides a standardized, streamlined approach to maintaining compliance with all legal, third-party and Ford internal requirements, including government	Most costs are internal in nature. The trading scheme requires us to apply for emissions permits, meet rigid emissions monitoring and reporting plans, arrange for third-party verification audits and manage tax and accounting issues related to emissions transactions.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								regulations, ISO 14001 and Ford's own environmental policies and business plan objectives and targets. In 2015, we continued the global roll out of the Energy Management Operating System (EMOS) within the FPS (Ford Production System) throughout Europe, enabling our teams to manage demand and remotely control plant energy and heating systems for greater energy efficiency.	

CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behaviour	As consumers become more climate aware and increasingly "think green," our projected vehicle fleet mix is expected to significantly shift to more fuel-efficient smaller vehicles and advanced technology powertrains. As a customer- and product-driven company, our vehicles are the foundation of our business. Our products are also a major focal point of our environmental impacts and our efforts to reduce those impacts. The Company's product plans are well positioned to accommodate this shift in consumer demand.	Increased demand for existing products/services	3 to 6 years	Direct	Very likely	Medium-high	Neutral. Our Power of Choice strategy gives us flexibility, within limits, to shift production toward relatively high-demand powertrains, and away from powertrains that are relatively less in demand. In this way we try to be well-positioned to maintain our sales volumes and market share in any market. Vehicle revenue could decrease as product choice shifts to smaller vehicle models that earn less revenue than larger vehicles.	Ford has institutionalized the Creating Value Roadmap Process, which includes a Business Plan Review and Special Attention Review process where, on a weekly basis (and more often where circumstances dictate), the senior leadership of the Company from each of the Business Units and the Functional Skill Teams reviews the status of the business, the risks and opportunities presented to the business (once again in the areas of compliance, reporting, operating and strategic risks), and develops specific plans to address those risks and opportunities. The Sustainability and Innovation Board of Directors Committee evaluates and advises on the Company's pursuit of innovative practices and technologies that improve environmental and social sustainability, enrich our customers' experiences, and increase shareholder value. The Committee also discusses and advises on the innovation strategies and practices used to develop and commercialize technologies. We are exploring the integration of mobility solutions, connectivity, autonomy and data analytics from a consumer perspective and developing more ways to transform the consumer experience. An example is FordPass®, our innovative and free platform (currently under development; planned Q1 2016 launch) supports both our core and emerging businesses through digital, physical and personal experiences to help consumers move more efficiently.	There are costs associated with maintaining such flexibility, in terms of continuing to offer and produce a wide range of vehicles. Ford's Engineering, Research and Development expenses were \$6.7 billion in 2015. We are investing \$4.5 billion in electrified vehicle (EV) solutions.
Reputation	Innovative and fuel efficient products help the reputation of Ford Motor Company. For example, Ford's fuel-efficient and powerful 1.0-litre EcoBoost was named International Engine of the Year in 2012-2014, and Best Sub-1 Liter engine in 2012-2015. Launched in Europe in 2012, the engine is now available in 10 Ford vehicles in Europe and in 72 countries	Increased production capacity	1 to 3 years	Direct	Virtually certain	High	We launched the EcoBoost engine in 2009 and have produced more than 5 million. We produced more than 2.2 million EcoBoost engines in 2015, up nearly 40 percent from 2014. In 2015, annual global EcoBoost engine capacity reached approximately 2.5 million units, and more than 80 percent of our global nameplates	Democratizing fuel efficiency - i.e. enabling also conventional, affordable vehicles to be extremely fuel efficient.	Using economies of scale across Asia, Europe and North America in a multitude of nameplates manages the costs very well.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	worldwide. The engine is produced in Cologne, Germany; Craiova, Romania; and Chongqing, China. This positions Ford as an innovative company that is democratizing fuel economy technology for all customers now - rather than focusing only on expensive future technologies.						were available with EcoBoost.		

**CC6.1e**

**Please explain why you do not consider your company to be exposed to inherent opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure**

- i. We evaluate the impacts of physical climate changes on our facilities and products. Our Global Technology Migration Path identifies product actions and implementation timing that met corporate approval criteria to assist in reducing carbon dioxide emissions. We continually look to improve the environmental performance of our manufacturing facilities due to severe weather and changing climate. Climate impacts to our products and facilities are evaluated for extreme weather events, shifting patterns and natural disasters.
- ii. Impacts to products and facilities are evaluated via the institutionalized Creating Value Roadmap Process (CVRP), which includes a Business Plan Review and Special Attention Review process where, on a weekly basis (and more often where circumstances dictate), the senior leadership of the Company from each of the Business Units and the Functional Skill Teams reviews the status of the business, opportunities presented to the business and develops specific plans to address those opportunities. The evaluation for our vehicles design process establishes vehicle specifications that cover a wide range of climate conditions (heating and cooling, winter weather capabilities, performance in all terrains, etc.). Vehicle opportunities driven by climate change are not substantial. Climate control, winter weather capabilities and all-wheel drive for operating in climate-impacted terrain are standard for all vehicles in the industry and do not offer new opportunities.
- iii. Impacts are not relevant to our products as they are already robustly designed and evaluated to operate in extreme conditions. Corporate test procedures account for weather extremes, are updated with prevalent real world conditions and are becoming more stringent to meet increasing customer expectations. Impacts are not relevant to our facilities because the associated uncertainties of weather and climate do not supersede our robust site selection and capital investment process.

**Further Information**

**Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading**

**Page: CC7. Emissions Methodology**

**CC7.1**

**Please provide your base year and base year emissions (Scopes 1 and 2)**

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Fri 01 Jan 2010 - Fri 31 Dec 2010	1641944
Scope 2 (location-based)	Fri 01 Jan 2010 - Fri 31 Dec 2010	3590736
Scope 2 (market-based)	Fri 01 Jan 2010 - Fri 31 Dec 2010	3590736

**CC7.2**

**Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions**

Please select the published methodologies that you use
Australia - National Greenhouse and Energy Reporting Act
Brazil GHG Protocol Programme
Programa GEI Mexico
The Climate Registry: General Reporting Protocol
US EPA Mandatory Greenhouse Gas Reporting Rule
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
India GHG Inventory Programme
China Corporate Energy Conservation and GHG Management Programme
Other

**CC7.2a**

**If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions**

Ontario's GHG Emissions Reporting Regulation, Ontario Regulation 452/09

**CC7.3**

**Please give the source for the global warming potentials you have used**

Gas	Reference
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	IPCC Fourth Assessment Report (AR4 - 100 year)

**CC7.4**

**Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page**

Fuel/Material/Energy	Emission Factor	Unit	Reference
Anthracite	2624.1	Other: kg per metric tonne	WRI
Distillate fuel oil No 2	3186.3	Other: kg per metric tonne	WRI
Natural gas	2692.8	Other: kg per metric tonne	WRI
Propane	2984.63	Other: kg per metric tonne	WRI

**Further Information**

CC8.1  
**Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory**

Operational control

CC8.2  
**Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e**

1407403

CC8.3  
**Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?**

Yes

CC8.3a  
**Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e**

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
3313898	3313898	No comment

CC8.4  
**Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

CC8.5  
**Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations**

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Data Gaps	Ford has established comprehensive internal controls including centralized tracking of all emissions data globally, internal procedures for establishing emissions trading strategies and status reports, and central coordination of all CO2-related audits and reporting. This global, centralized approach has supported Ford's participation in facility CO2 initiatives in a more cost-effective and operationally efficient manner. Ford has established global roles and responsibilities and policies and procedures to help ensure compliance with emissions trading initiatives worldwide. Ford adopted the Global Emissions Manager (GEM) database that serves as a central repository for our facilities to consistently input and assess energy and CO2 data. We have found that emissions data management is performed most efficiently when centralized in this manner. We subsequently expanded GEM to include water usage, waste management, and other environmental metrics that support Ford's sustainability objectives. GEM captures the majority of emissions including all of our manufacturing facilities which have robust data included in the GHG inventory. Emissions that are less significant and more difficult to capture, such as, non-manufacturing facilities are included as data becomes available.
Scope 2 (location-based)	Less than or equal to 2%	Data Gaps	Ford has established comprehensive internal controls including centralized tracking of all emissions data globally, internal procedures for establishing emissions trading strategies and status reports, and central coordination of all CO2-related audits and reporting. This global, centralized approach has supported Ford's participation in facility CO2 initiatives in a more cost-effective and operationally efficient manner. Ford has established global roles and responsibilities and policies and procedures to help ensure compliance with emissions trading initiatives worldwide. Ford adopted the Global Emissions Manager (GEM) database that serves as a central repository for our facilities to consistently input and assess energy and CO2 data. We have found that emissions data management is performed most efficiently when centralized in this manner. We subsequently expanded GEM to include water usage, waste management, and other environmental metrics that support Ford's sustainability objectives. GEM captures the majority of emissions including all of our manufacturing facilities which have robust data included in the GHG inventory. Emissions that are less significant and more difficult to capture, such as, non-manufacturing facilities are included as data becomes available.
Scope 2 (market-based)	Less than or equal to 2%	Data Gaps	Ford has established comprehensive internal controls including centralized tracking of all emissions data globally, internal procedures for establishing emissions trading strategies and status reports, and central coordination of all CO2-related audits and reporting. This global, centralized approach has supported Ford's participation in facility CO2 initiatives in a more cost-effective and operationally efficient manner. Ford has established global roles and responsibilities and policies and procedures to help ensure compliance with emissions trading initiatives worldwide. Ford adopted the Global Emissions Manager (GEM) database that serves as a central repository for our facilities to consistently input and assess energy and CO2 data. We have found that emissions data management is performed most efficiently when centralized in this manner. We subsequently expanded GEM to include water usage, waste management, and other environmental metrics that support Ford's sustainability objectives. GEM captures the majority of emissions including all of our manufacturing facilities which have robust data included in the GHG inventory. Emissions that are less significant and more difficult to capture, such as, non-manufacturing facilities are included as data becomes available.

CC8.6  
**Please indicate the verification/assurance status that applies to your reported Scope 1 emissions**

Third party verification or assurance process in place

CC8.6a  
**Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements**

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Underway but not complete for reporting year – previous statement of process attached	Reasonable assurance	<a href="https://www.cdp.net/sites/2016/95/6595/Climate Change 2016/Shared Documents/Attachments/CC8.6a/Ford NA 2014EY Signed Verification Statement.pdf">https://www.cdp.net/sites/2016/95/6595/Climate Change 2016/Shared Documents/Attachments/CC8.6a/Ford NA 2014EY Signed Verification Statement.pdf</a>	Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions	ISO14064-3	100

CC8.7  
**Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures**

Third party verification or assurance process in place

CC8.7a  
**Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements**

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Underway but not complete for reporting year – previous statement of process attached	Reasonable assurance	<a href="https://www.cdp.net/sites/2016/95/6595/Climate%20Change%202016/Shared%20Documents/Attachments/CC8.7a/Ford%20NA%202014EY%20Signed%20Verification%20Statement.pdf">https://www.cdp.net/sites/2016/95/6595/Climate Change 2016/Shared Documents/Attachments/CC8.7a/Ford NA 2014EY Signed Verification Statement.pdf</a>	Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions	ISO14064-3	100

CC8.8

**Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2**

Additional data points verified	Comment
No additional data verified	

CC8.9

**Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

No

Further Information

Page: [CC9. Scope 1 Emissions Breakdown - \(1 Jan 2015 - 31 Dec 2015\)](#)

CC9.1

**Do you have Scope 1 emissions sources in more than one country?**

Yes

CC9.1a

**Please break down your total gross global Scope 1 emissions by country/region**

Country/Region	Scope 1 metric tonnes CO2e
North America	933706
South America	62311
Europe, the Middle East, Africa and Russia (EMEAR)	272203
Asia Pacific (or JAPA)	139183

CC9.2

**Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)**

Further Information

Page: [CC10. Scope 2 Emissions Breakdown - \(1 Jan 2015 - 31 Dec 2015\)](#)

CC10.1

**Do you have Scope 2 emissions sources in more than one country?**

Yes

CC10.1a

**Please break down your total gross global Scope 2 emissions and energy consumption by country/region**

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
North America	1959280	1959280	0	0
South America	52822	52822	0	0
Europe, the Middle East, Africa and Russia (EMEAR)	653576	653576	0	0
Asia Pacific (or JAPA)	648220	648220	0	0

CC10.2

**Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)**

Further Information

Page: [CC11. Energy](#)

CC11.1

**What percentage of your total operational spend in the reporting year was on energy?**

More than 0% but less than or equal to 5%

CC11.2

**Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year**

Energy type	Energy purchased and consumed (MWh)
Heat	0
Steam	770592.6

Energy type	Energy purchased and consumed (MWh)
Cooling	0

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

7510782.2

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	7297984
Diesel/Gas oil	48170.3
Liquefied petroleum gas (LPG)	38900.5
Distillate fuel oil No 2	9981
Coke oven coke	115746.4

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
6336934.3	6336934.3	0	0	0	

Further Information

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Increased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	1.55	Decrease	Last year 71,220 tCO2e were reduced by our emissions reduction projects, and our total S1 and S2 emissions in the previous year was 4,604,117 tCO2e, therefore we arrived at 1.55% through $(71,220 / 4,604,117) * 100 = 1.55\%$
Divestment	0	No change	No divestments
Acquisitions	0	No change	No acquisitions
Mergers	0	No change	No mergers
Change in output	3.52	Increase	Last year 162,487 tCO2e were reduced by our emissions reduction projects, and our total S1 and S2 emissions in the previous year was 4,604,117 tCO2e, therefore we arrived at 3.52% through $(162,487 / 4,604,117) * 100 = 3.52\%$
Change in methodology	0	No change	No changes in methodology
Change in boundary	0	No change	No boundary changes
Change in physical operating conditions	0	No change	No change in physical operating conditions
Unidentified	0	No change	Not applicable
Other	0	No change	No other

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0000336	metric tonnes CO2e	1406000000	Location-based	1	Decrease	From 2014 to 2015, both total CO2 emissions and revenue increased but CO2 emissions increased by 2.5%, while revenue increased by 3.5% (a larger percentage value). The intensity figure decreased due to Ford's various emission reduction activities.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.72	metric tonnes CO2e		6512647		5.3	Decrease	

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
		unit of production		Location-based			Ford's total scope 1+2 emissions increased by 2.5% from 2014 to 2015. Ford's vehicle production increased by 7.7% from 2014 to 2015. The percent increase of production was greater than the percent increase of emissions, resulting in a decrease in emissions per unit of production for 2014-2015. This is due to Ford's emissions reduction activities.

Further Information

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

Yes

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union ETS	Thu 01 Jan 2015 - Thu 31 Dec 2015	142274	0	121383	Facilities we own and operate
Other: Carbon Reduction Commitment	Tue 01 Apr 2014 - Tue 31 Mar 2015	0	22691	22691	Facilities we own and operate

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Ford's strategy to comply with the schemes is to leverage our CO2 emissions reduction and energy use reduction strategies. Our target is a corporate reduction of energy use of 25% kWh/vehicle. To achieve this we stopped operation of the combined heat & power plant in Valencia, decommissioning wasteful absorption chillers and introducing smaller modulating hot water boilers. At Dagenham & Bridgend, we decommissioned oversized boiler plant and replaced them with modern, efficient, fully automated systems. Likewise, Bridgend received a smaller modulating boiler for summer process heating. Further, we executed many projects to enable heat recovery from paint shop exhaust processes and implemented air recirculation controls on facility heating systems.

Compliance with the schemes rules is achieved through ongoing monitoring of our actual emissions via our Global Emissions Monitoring Database. Based on this information, total annual emissions are forecast and evaluated against our emissions allowance status. Data is internally and externally reviewed to ensure data integrity.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	13133594	The basis for our calculation is the Ford-allocated emissions data reported voluntarily to Ford by our suppliers through the CDP supply chain program. A subset of our 250 selected suppliers responded to the questionnaire and provided allocated emissions to Ford. This is a preliminary estimate of Ford's scope 3 emissions for this category and the estimate will continue to improve as the quality and quantity of data reported increases.	100.00%	In 2015, Ford asked 250 selected production and indirect suppliers to report their greenhouse gas emissions and management through CDP Supply Chain's climate change questionnaire. These suppliers are about 80% of production spend and over 20% of indirect spend which combined is a total of about 60% of global spend. Ford suppliers invited to respond were selected based on a combination of the energy intensity of the commodities supplied, their business relationship with Ford among others.
Capital goods	Relevant, not yet calculated				In 2015, we do not have enough data reported from our suppliers through the CDP Supply Chain program to provide a calculated value for

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					this category. We plan to develop a methodology for calculating our Scope 3 emissions for this category in the future.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not relevant, explanation provided				Not in our direct control. Likely small compared to Scope 2. GREET1_2014 (Argonne National Labs) indicates the GHG emissions from upstream feedstock provisioning and electricity T&D losses are less than 20% of the combustion emissions. Relevance may change with better understanding of all scope 3 emissions.
Upstream transportation and distribution	Relevant, not yet calculated		Ford carries out comprehensive CO2 emissions reporting for our upstream & downstream freight networks. We use a standardised approach and procedures that we originated back in 2006. Over subsequent years we have expanded the coverage to include all regions and developed the calculation processes in line with industry best practices. From 2011, we began reporting CO2e figures to take account of emissions of other greenhouse gases including N2O and Methane. We now also report well to wheel figures in addition to tank to wheel to take account of the different environmental impacts of different energy sources. Our calculation methods are aligned to the Greenhouse Gas Protocol and to EN 16258 and similar initiatives. We base our calculations on secondary data of distance travelled, loading etc provided by our logistics service providers and use detailed emissions factors appropriate to the transport mode. For road freight we use emissions factors based on average fuel economy of our own carrier base. For rail and ocean we get data direct from our freight operators. Our inbound freight network is generally on a collect basis using contracted carriers. For reporting purposes we include all emissions from collected tier 1 suppliers to our manufacturing sites as well as an allowance for transport of empty packaging back to our supply base. This includes road, rail and ocean modes. We consider freight emissions from suppliers upstream of our tier 1 suppliers to be covered within their own scope 3 submissions. Our outbound data considers transport from factory gate to handover to dealer. Our standard metric is CO2e per vehicle produced, rather than an overall total. This allows us to compare the relative performance for different vehicle programs and against year on year improvement targets.		The great majority of greenhouse gas emissions from our transportation and distribution operations consists of CO2 exhaust emissions from our transport. We have a clear policy to measure & reduce our CO2 emissions as part of our functional business plan. Our corporate business policies include specific objectives on monitoring freight CO2 emissions, reducing fleet fuel usage, improving average fleet emissions levels, improving freight utilisation and carrying out business case studies to improve the % usage of green routes. Activities that directly reduce our reported emissions include network redesign, use of alternative fuels and lubricants, use of aerodynamics and driver training. We recognise that work on reducing CO2 emissions has additional benefits in reducing levels of other pollutants and reducing volumes of heavy goods traffic. Our reporting processes are aligned to the GHG Protocol and the recently published European Standard EN 16258 We work pro-actively with industry bodies (such as the AIAG) to promote best practice in freight GHG reporting. In Europe we project led the initiative by Odette to publish standard guidelines for freight GHG emissions reporting for the Automotive Sector.
Waste generated in operations	Relevant, calculated	96242	The United States Environmental Protection Agency WARM Model, version 12 was used in order to estimate emissions in CO2 equivalents. The model accounted for waste treated in various classifications and gave an overall emissions value.	100.00%	Though this is a very small element in our overall GHG footprint, we are continuing to reduce the amount of waste sent to landfill every year through our Global Waste Strategy.
Business travel	Not relevant, calculated	59061	Ford utilized total GLOBAL booked air and rail travel miles for 2015 and applied emission factors based on the methodology provided in Section 2.2 and Section 2.4 of the USEPA guidance document noted below. Ford utilized the guidance document provided by the USEPA and recommended by The Climate Registry located at: <a href="http://www.epa.gov/climateleadership/documents/resources/commute_travel_product.pdf">http://www.epa.gov/climateleadership/documents/resources/commute_travel_product.pdf</a> Document title: USEPA, Climate Leaders Greenhouse Gas Inventory Protocol Core Module Guidance, Optional Emissions from Commuting, Business Travel and Product Transport (EPA430-R-08-006).	100.00%	Though this is a very small element in our overall GHG footprint, we are reducing employee travel and commuting emissions in a number of ways, including allowing telecommuting, encouraging virtual meetings, and facilitating employees' use of electric vehicles by offering on-site vehicle charging at many

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					facilities Relevance may change with better understanding of all scope 3 emissions.
Employee commuting	Not relevant, explanation provided				Though this is a very small element in our overall GHG footprint, we are reducing employee travel and commuting emissions in a number of ways, including allowing telecommuting, encouraging virtual meetings, and facilitating employees' use of electric vehicles by offering on-site vehicle charging at many facilities. Relevance may change with better understanding of all scope 3 emissions.
Upstream leased assets	Not relevant, explanation provided				Leased assets are very small relative to Ford owned assets, so these are not included.
Downstream transportation and distribution	Relevant, not yet calculated		Ford carries out comprehensive CO2 emissions reporting for our upstream & downstream freight networks. We use a standardised approach and procedures that we originated back in 2006. Over subsequent years we have expanded the coverage to include all regions and developed the calculation processes in line with industry best practices. From 2011, we began reporting CO2e figures to take account of emissions of other greenhouse gases including N2O and Methane. We now also report well to wheel figures in addition to tank to wheel to take account of the different environmental impacts of different energy sources. Our calculation methods are aligned to the Greenhouse Gas Protocol and to EN 16258 and similar initiatives. We base our calculations on secondary data of distance travelled, loading etc provided by our logistics service providers and use detailed emissions factors appropriate to the transport mode. For road freight we use emissions factors based on average fuel economy of our own carrier base. For rail and ocean we get data direct from our freight operators. Our inbound freight network is generally on a collect basis using contracted carriers. For reporting purposes we include all emissions from collected tier 1 suppliers to our manufacturing sites as well as an allowance for transport of empty packaging back to our supply base. This includes road, rail and ocean modes. We consider freight emissions from suppliers upstream of our tier 1 suppliers to be covered within their own scope 3 submissions. Our outbound data considers transport from factory gate to handover to dealer. Our standard metric is CO2e per vehicle produced, rather than an overall total. This allows us to compare the relative performance for different vehicle programs and against year on year improvement targets.		The great majority of greenhouse gas emissions from our transportation and distribution operations consists of CO2 exhaust emissions from our transport. We have a clear policy to measure & reduce our CO2 emissions as part of our functional business plan. Our corporate business policies include specific objectives on monitoring freight CO2 emissions, reducing fleet fuel usage, improving average fleet emissions levels, improving freight utilisation and carrying out business case studies to improve the % usage of green routes. Activities that directly reduce our reported emissions include network redesign, use of alternative fuels and lubricants, use of aerodynamics and driver training. We recognise that work on reducing CO2 emissions has additional benefits in reducing levels of other pollutants and reducing volumes of heavy goods traffic. Our reporting processes are aligned to the GHG Protocol and the recently published European Standard EN 16258 We work proactively with industry bodies (such as the AIAG) to promote best practice in freight GHG reporting. In Europe we project led the initiative by Odette to publish standard guidelines for freight GHG emissions reporting for the Automotive Sector.
Processing of sold products	Not relevant, explanation provided				
Use of sold products	Relevant, calculated	116000000	2015 sales and gCO2/km emissions data for cars and light commercial vehicles was collected for US, EU, China, Canada, Mexico, Brazil, Australia and India. These regions represent about 80% of all vehicles sold in 2015. The fleet average sales-weighted gCO2/km was calculated. Assuming 150,000 km lifetime, the total CO2 emissions of the 2015 fleet were calculated.	0.00%	The CO2 emissions represent the lifetime tailpipe CO2 from passenger cars and light trucks and vans sold in 2015. This represents about 80% of total sales. The data for heavy duty vehicles sold is unavailable as they are not regulated and tested.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
End of life treatment of sold products	Not relevant, explanation provided				The emissions from the ELV stage are not relevant as shown in many internal and external studies (e.g. Life Cycle Assessment of Lightweight and End-of-Life Scenarios for Generic Compact Class Passenger Vehicles, see attached). In addition they depend very much on the local conditions of the ELV treatment operator on which Ford has no influence. However, of course the ELV stage is considered in all Ford LCA activities and part of the Sustainability strategy.
Downstream leased assets					Compared to vehicle use phase and other, larger scale categories this is small impact. Relevance may change with better understanding of all scope 3 emissions.
Franchises	Not relevant, explanation provided				Dealerships have a small footprint relative to other categories. The dealership emissions are likely the same order of magnitude as our Scope 1 emissions which are small compared to use of sold products. Nonetheless, we are continuing to expand the "Go Green" Dealer Sustainability Program we launched in 2010. The goal of the Go Green program is to address efficiency improvements and cost savings at dealerships in the areas of lighting, HVAC, building envelope, water use and renewable energy applications. To enter the program, dealers undergo a Go Green Assessment, which identifies opportunities to increase their utility efficiencies, lower their energy costs and reduce their carbon footprints. As of the end of 2014, nearly half of our 3,263 U.S. dealers had enrolled in the Go Green program as part of the electric vehicle (EV) and "Trustmark" programs. Completion of the first 270 Assessment reports identified that the average dealership has the opportunity to reduce their energy consumption by 27 percent, resulting in an annual savings of \$33,000 with a payback of 3.5 years. In 2014, we also launched a new wind energy program for select EV dealers in partnership with Wind Energy Corporation. Under a pilot program exclusive to Ford, Wind Energy will install wind sail and solar panel systems at four Ford dealerships, a nearly \$750,000 investment. Each Windy System™ includes highly efficient wind sail technology that harvests wind energy, along with an integrated 7 kw solar array. Ford dealers will use the electricity to power their

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					buildings, EV charging stations and lot lighting. The system is expected to deliver 20,000 kWh of electricity annually and offset nearly 14 tons of greenhouse gases per year. The installations are occurring in 2015.
Investments	Not relevant, explanation provided				Compared to vehicle use phase and other, larger scale categories this is small impact. Relevance may change with better understanding of all scope 3 emissions.
Other (upstream)					
Other (downstream)					

**CC14.2**

**Please indicate the verification/assurance status that applies to your reported Scope 3 emissions**

No third party verification or assurance

**CC14.3**

**Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?**

Yes

**CC14.3a**

**Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year**

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Use of sold products	Emissions reduction activities	3	Decrease	The fleet average gCO2/km intensity decreased due to sales of fuel efficient vehicle technologies such as EcoBoost and electrified vehicles, as well as smaller vehicles.
Use of sold products	Change in boundary	7	Increase	Added 2 regions (Canada and Mexico) to the calculations in 2015, increasing sales and emissions by 7%.
Use of sold products	Change in output	7	Decrease	Absolute emissions decreased as product sales decreased 7% from 2014 to 2015 (including the new regions, Canada and Mexico, in both 2014 and 2015).

**CC14.4**

**Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)**

Yes, our suppliers

**CC14.4a**

**Please give details of methods of engagement, your strategy for prioritizing engagement and measures of success**

I) Method of engagement - Ford has surveyed an increasing number of suppliers using the CDP Supply Chain program's Climate Change questionnaire to better understand the GHG emissions of our supply base. The questionnaire gathers qualitative and quantitative information about the suppliers' management of climate risks and GHG emissions. In 2015, Ford asked 250 selected production and indirect suppliers to report their greenhouse gas emissions and management through CDP Supply Chain's climate change questionnaire. These suppliers are about 80% of production spend and over 20% of indirect spend which combined is a total of about 60% of global spend.

II) Strategy for prioritization: Supplier were asked to respond to the questionnaires are selected based on a combination of:

- The GHG intensity of the suppliers' activities or commodities supplied,
- The geographic footprint of the supplier's global operations, and
- The strategic nature of the business relationship with Ford.

III) Measure of success: In 2015, we achieved our internal target of 80% for voluntary response to the CDP Supply Chain questionnaire; 80% of suppliers asked to respond did so.

**CC14.4b**

**To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent**

Number of suppliers	% of total spend (direct and indirect)	Comment
250	60%	These suppliers are about 80% of production spend and over 20% of indirect spend which combined is a total of about 60% of global spend.

**CC14.4c**

**If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data**

How you make use of the data	Please give details
Managing physical risks in the supply chain	Surveyed supplier GHG emission management and data is being further evaluated to inform a comprehensive supply chain GHG management approach, including evaluation and support for supplier measurement and reporting in face of regulation, as well as prioritized opportunities for supplier collaboration on emissions reductions programs and development of low carbon technologies and processes.
Identifying GHG sources to prioritize for reduction actions	In 2015 we expanded our pilot Partnership for a Cleaner Environment (PACE) program to include 25 strategies suppliers, representing 800 manufacturing sites in 41 countries. Data reported to Ford by our suppliers through the CDP Supply Chain questionnaires was used to select suppliers for engagement. Our goal is to teach our suppliers about the energy and water savings and waste reduction initiatives Ford has implemented across our plants, with the hope that our suppliers will implement some of these initiatives in their own manufacturing facilities. To further amplify environmental responsibility and sustainability impact further down the supply chain, we are also encouraging our Tier 1 suppliers to share these best practices with their own suppliers.

---

Further Information

**Module: Sign Off**

**Page: CC15. Sign Off**

---

CC15.1

**Please provide the following information for the person that has signed off (approved) your CDP climate change response**

<b>Name</b>	<b>Job title</b>	<b>Corresponding job category</b>
Mark Fields	President and Chief Executive Officer	Chief Executive Officer (CEO)

---