# **Fiat Chrysler Automobiles NV - Climate Change 2018**

## **C0. Introduction**

## **C0.1**

### **(C0.1) Give a general description and introduction to your organization.**

Fiat Chrysler Automobiles (FCA) is a global automotive group engaged in designing, engineering, manufacturing, distributing and selling vehicles, components and production systems worldwide through 159 manufacturing facilities and 87 research and development centers. We have operations in more than 40 countries and sell our vehicles directly or through distributors and dealers in more than 140 countries. We design, engineer, manufacture, distribute and sell vehicles for the mass-market under the Abarth, Alfa Romeo, Chrysler, Dodge, Fiat, Fiat Professional, Jeep, Lancia and Ram brands and the SRT performance vehicle designation. For our mass-market vehicle brands, we have centralized design, engineering, development and manufacturing operations, which allow us to efficiently operate on a global scale. We support our vehicle shipments with the sale of related service parts and accessories, as well as service contracts, worldwide under the Mopar brand name for mass-market vehicles. In addition, we design, engineer, manufacture, distribute and sell luxury vehicles under the Maserati brand. We make available retail and dealer financing, leasing and rental services through our subsidiaries, joint ventures and commercial arrangements with third party financial institutions. In addition, we operate in the components and production systems sectors under the Magneti Marelli, Teksid and Comau brands.

In 2017, we shipped 4.4 million vehicles, had Net revenues of €110.9 billion and Net profit of €3.5 billion. At December 31, 2017, we had available liquidity of €20.4 billion (including €7.6 billion available under undrawn committed credit lines) and we had Net industrial debt of €2.4 billion.

## **C0.2**

### **(C0.2) State the start and end date of the year for which you are reporting data.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Start date** | **End date** | **Indicate if you are providing emissions data for past reporting years** | **Select the number of past reporting years you will be providing emissions data for** |
| Row 1 | January 1 2017 | December 31 2017 | No | <Not Applicable> |
| Row 2 | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Row 3 | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Row 4 | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |

## **C0.3**

### **(C0.3) Select the countries/regions for which you will be supplying data.**

Argentina

Brazil

Canada

China

Czechia

France

Germany

India

Italy

Malaysia

Mexico

Poland

Portugal

Romania

Russian Federation

Serbia

Slovakia

Spain

Turkey

United States of America

Venezuela (Bolivarian Republic of)

## **C0.4**

### **(C0.4) Select the currency used for all financial information disclosed throughout your response.**

EUR

## **C0.5**

### **(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.**

Operational control

## **C-TO0.7/C-TS0.7**

### **(C-TO0.7/C-TS0.7) For which transport modes will you be providing data?**

Light Duty Vehicles (LDV)

## **C1. Governance**

## **C1.1**

### **(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

## **C1.1a**

### **(C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.**

|  |  |
| --- | --- |
| **Position of individual(s)** | **Please explain** |
| Board/Executive board | The Board of Directors(BoD) as a whole is responsible for the strategy of the Company and given the importance of integrating the Group’s economic choices with those of a social and environmental nature, responsibility for climate change is allocated at the FCA BoD level through 1) the Governance and Sustainability Committee, that is composed of 2) certain members of the Board of Directors. The Governance and SustainabilityCommittee (a sub-committee of the Board of Directors) is responsible for, among other things, assisting and advising the Board of Directors with: A) monitoring and evaluating reports on the Group’s sustainable development policies and practices, management standards, strategy, performance and governance globally; and B) reviewing, assessing and making recommendations as to strategic guidelines for sustainability-related issues. The Governance and Sustainability Committee reports regularly to the Board of Directors regarding its actions and makes recommendation |

## **C1.1b**

### **(C1.1b) Provide further details on the board’s oversight of climate-related issues.**

|  |  |  |
| --- | --- | --- |
| **Frequency with which climate-related issues are a scheduled agenda item** | **Governance mechanisms into which climate-related issues are integrated** | **Please explain** |
| Scheduled – all meetings | Reviewing and guiding strategy  Reviewing and guiding major plans of action  Reviewing and guiding risk management policies  Reviewing and guiding business plans  Setting performance objectives  Monitoring implementation and performance of objectives  Overseeing major capital expenditures, acquisitions and divestitures  Monitoring and overseeing progress against goals and targets for addressing climate-related issues | Due to the nature of the products we produce and sell in the automotive industry, risks posed by climate change cannot be separated from other business risks. The governance mechanism items checked indicates the level of integration and overlap of general FCA core management topics with climate-related aspects. In particular, the Board of Directors is assisted by the Governance and Sustainability Committee with respect to monitoring, evaluation and reporting on the sustainable policies and practices, management standards, strategy, performance and governance globally of the Company and its subsidiaries. The FCA 2018-2022 Business Plan reflects FCA’s commitment to transitioning to a lower-carbon economy as an integral part of our overall strategy. |

## **C1.2**

### **(C1.2) Below board-level, provide the highest-level management position(s) or committee(s) with responsibility for climate-related issues.**

|  |  |  |
| --- | --- | --- |
| **Name of the position(s) and/or committee(s)** | **Responsibility** | **Frequency of reporting to the board on climate-related issues** |
| Chief Sustainability Officer (CSO) | Both assessing and managing climate-related risks and opportunities | Annually |

## **C1.2a**

### **(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.**

The Sustainability Group Coordinator (functionally equivalent to the Chief Sustainability Officer) coordinates the activities with the support of the Responsible of the Sustainability Team. The Sustainability Team, with members located in Italy, Brazil, China and the U.S., facilitates the process of continuous improvement, contributing indirectly to risk management, cost optimization, stakeholder engagement and effective communication to stakeholders of our commitments and results. Discussions between stakeholders and the Board Committee regarding sustainability issues are delegated to the Sustainability Team as part of its assignment to maintain an interchange with internal and external stakeholders. These dialogues are regularly reported to the Governance and Sustainability Committee.

The Sustainability Group Coordinator is also a member of the Group Executive Council (GEC), a group led by the CEO and composed of senior leadership from regional operations, brands, industrial processes, and support/corporate functions. The GEC approves operating guidelines and plays a vital role in ensuring that sustainability efforts are aligned with economic and business objectives.

Climate-related issues are monitored through sustainability-focused targets and progress monitored toward achievement through a three-phase approach: • In the Planning Phase, specific and measurable goals are drafted by the Sustainability Team in collaboration with FCA’s operating segments, regions and corporate functions. These proposed targets are submitted to the Group Executive Council (GEC) which evaluates their consistency with the business plan and strategy, and either approves or modifies the targets. • During the Management Phase, FCA’s various operating segments, regions or corporate functions are accountable for managing projects and achieving the targets. These organizations take responsibility for implementing the initiatives by bringing their unique resources, tools and knowledge to bear in meeting the specific targets. • The Control Phase involves a series of project updates that target owners provide to the Sustainability Team, which in turn informs the GEC of ongoing progress. The FCA Sustainability Report communicates progress toward achievement of these targets to stakeholders on an annual basis.

## **C1.3**

### **(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

Yes

## **C1.3a**

### **(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.**

### **Who is entitled to benefit from these incentives?**

Corporate executive team

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Efficiency target

### **Comment**

Overall Group sustainability performance (including matters impacting on climate change) is rewarded. A portion of executive compensation is variable, based on goal achievement. The executives responsible for – and therefore whose goals are related to – climate change issues, are consequently measured and compensated based on how well they address those risk areas.

## **C2. Risks and opportunities**

## **C2.1**

### **(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **From (years)** | **To (years)** | **Comment** |
| Short-term | 0 | 2 | 0-2 years is the timeframe used to assess impacts of climate-related risks and opportunities in the short term. This timeframe is aligned with the business practices of i) reviewing annual budget and investments; ii) monitoring level of achievements of sustainability targets; iii) annual risk assessment that includes climate change risk. |
| Medium-term | 2 | 5 | 2-5 years is the timeframe used to assess impacts of climate-related risks and opportunities in the medium term. This timeframe is aligned with the time horizon of execution of the FCA 2018-2022 Business Plan. |
| Long-term | 5 | 10 | 5-10 years is the longer timeframe used to assess impacts of climate-related risks and opportunities in the long term. A longer time horizon than 10 years introduces an increasing level of uncertainty and exposure to unpredictable scenarios whose magnitude of impact and frequency of occurrence cannot be precisely estimated, particularly given the rapid shift in technologies and consumer demand that the automotive sector is exposed to. This timeframe is aligned with the time horizon of Pure Risks management as well as compliance with CO2 regulations. |

## **C2.2**

### **(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.**

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

## **C2.2a**

### **(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Frequency of monitoring** | **How far into the future are risks considered?** | **Comment** |
| Row 1 | Annually | >6 years | The 3 primary elements of FCA's globally integrated approach are: the Enterprise Risk Mgmt process, which increases internal awareness of key risks that may hinder FCA ability to achieve strategic goals; the Business Continuity Mgmt process, which establishes and validates a structured approach to restoring normal business operations after a major disruption; the Pure Risk Mgmt process, which identifies conditions that could result in property and business interruption losses. Risks encompass a broad array of topics, including climate change; regulatory initiatives; competitive actions; industrial accidents; natural disasters; liability claims and lawsuits; portfolio management; investor decisions; similar exposures in the supply chain. This approach covers both risks and opportunities that might impact FCA continuity of operations and assets as well as image or reputation. Time horizon considered goes from 0/5 years (Company Level) to max. 10 years (Asset Level) as stated in C2.1. |

## **C2.2b**

### **(C2.2b) Provide further details on your organization’s process(es) for identifying and assessing climate-related risks.**

The overall risk management process involves identifying risks - including those posed by climate change - preemptively reducing likelihood of occurrence, developing plans for responding to risks, and securing insurance to cover potential losses. At the COMPANY LEVEL, the Group’s risk management framework (the “Framework”) is based on the COSO Framework (Committee of Sponsoring Organizations of the Treadway Commission Report - Enterprise Risk Management - Integrating with Strategy and Performance) and the principles of the Dutch Corporate Governance Code. The Framework consists of a set of policies, procedures and organizational structures aimed at identifying, measuring, managing and monitoring the principalrisks to which the Group is exposed. FCA’s Enterprise Risk Management (ERM) risk assessment process identifies and assesses risks that may affect theGroup’s ability to achieve its strategic and business objectives. A risk catalogue, with over 50 risk drivers (including climate change) further broken downinto over 85 potential events, is utilized for risk identification.

On an annual basis, an enterprise risk assessment is performed, beginning with our operating segments. Risks identified to have high or medium-high levels of potential impact on our organization and to which we have a high or medium-high level of vulnerability based on the mitigating factors within our Group are considered significant risks. Results of the assessment are consolidated into a Group report for review and validation with the Global RiskManagement Committee and Group CEO. Relative significance of risks (including those related to climate change) is determined through a risk correlation analysis which assesses the interdependencies among risks.

In addition, risk dashboards are maintained for the most significant risks to the Group to support the monitoring of risk indicators along with the currentand go-forward mitigation efforts. Once validated, results are discussed with the Audit Committee, assisting the Board of Directors in their responsibility for strategic oversight of risk management activities. Each key global focus risk has been classified by the COSO risk categories and corresponding risk factors have been assigned. Control measures and mitigating actions are subsequently defined for each identified risk.

When identifying or assessing any risk events including climate-related one, the Company also identifies any substantive impacts that could hinder FCA’s ability to achieve its strategic goals as well as having the potential to generate a substantive change in Group operations, revenue or expenditure, and Brand reputation.

At ASSET AND BUSINESS CONTINUITY LEVEL, the Pure Risk Management process identifies conditions that could result in property and business interruption losses; assigns probability and estimates the impact; implements optimized prevention, protection, and risk transfer countermeasures; andmonitors the process for effectiveness. These activities not only focus on the traditional fire and natural hazard risks, but have been extended through innovative risk engineering solutions to several other pure risks expected to increase in the future due to Climate Change. For instance, the Fiat ChryslerRisk Management center of competence which leads the development of loss expectancy scenarios as well as recovery and/or mitigation options, studieshow present and future climate may impact flood risk, using hydro-morphological datasets, hydrological modelling techniques and statistical analyses.

The Pure Risk Management process is conducted with the support of external consulting firms that specialize in industrial risk and use field audits to provide an impartial, in-depth and continual assessment of risk across the Group.

## **C2.2c**

### **(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?**

|  |  |  |
| --- | --- | --- |
|  | **Relevance & inclusion** | **Please explain** |
| Current regulation | Relevant, always included | Laws, regulations and governmental policies, including those regarding increased fuel economy requirements and reduced greenhouse gas emissions, have a significant effect on how we do business. Additional costs/investment as well as significant management resources, vehicle engineering and design attention could be required to maintain compliance with current regulatory restrictions related to climate change. |
| Emerging regulation | Relevant, always included | Laws, regulations and governmental policies, including those regarding increased fuel economy requirements and reduced greenhouse gas emissions, have a significant effect on how we do business. Additional costs/investment as well as significant management resources, vehicle engineering and design attention could be required to maintain compliance with emerging regulatory restrictions related to climate change. |
| Technology | Relevant, always included | Our future performance depends on our ability to offer innovative, attractive products. The failure to develop and offer innovative, attractive and relevant products on a timely basis that compare favorably to those of our principal competitors could have a material adverse effect on our business, financial condition and results of operations. Delays in the development of new technology for electrification as well as delays in the progress of new technology compared to competitors may result in the inability to create and sell profitable products that meet regulatory requirements. |
| Legal | Relevant, always included | Being subject to private lawsuits and inquiries from regulatory authorities may lead to further enforcement actions as well as penalties or obligations, any of which may have a material adverse effect on our business, results of operations and reputation. It is possible that the resolution of these matters may adversely affect our reputation with consumers, which may negatively impact demand for our vehicles and could have a material adverse effect on our business, financial condition and results of operations. In 2017, for instance, in Europe, we have been working with the Italian Ministry of Transport (“MIT”) and the Dutch Vehicle Regulator (“RDW”), the authorities that certified FCA diesel vehicles for sale in the European Union, and the UK Driver and Vehicle Standards Agency (“DVSA”). We also initially responded to inquiries from the German authority, the Kraftfahrt-Bundesamt (“KBA”), regarding emissions test results for our vehicles reported by KBA, and we discussed the KBA reported test results, our emission control calibrations and the features of the vehicles in question. The mediation was concluded with no action being taken with respect to FCA. |
| Market | Relevant, always included | Our future performance depends on our ability to offer innovative, attractive products. The failure to develop and offer innovative, attractive and relevant products on a timely basis that compare favorably to those of our principal competitors could have a material adverse effect on our business, financial condition and results of operations. Delays in the development of new technology for electrification as well as delays in the progress of new technology compared to competitors may result in the inability to create and sell profitable products that meet regulatory requirements. |
| Reputation | Relevant, always included | Our business operations and reputation may be impacted by various types of events/stakeholders actions (including claims, lawsuits, and other contingent obligations relating to several matters), related, among others, to emissions and fuel economy which are associated with climate change. The ultimate outcome of such events/claims is uncertain and could have a material adverse effect on our company reputation, financial condition or results of operations. |
| Acute physical | Relevant, always included | Among the industrial risks the ones that are becoming more and more important are the low frequency/high severity natural hazards events. Industrial losses from natural hazards can be caused by flooding, tornadoes and severe storms. Climate change has the potential to further influence the magnitude and frequency of hydrogeological and meteorological disasters and may introduce new hazards in areas unfamiliar with them. Acute physical risks are covered by insurances and are part of the annual reassessment with our insurance companies. Flood events are among the most relevant natural hazards that could affect FCA sites. As of today FCA Risk Management monitors 231 FCA sites in 19 countries; of these sites 23 are potentially exposed to a low flood risk while 16 are potentially exposed to a higher flood risk across the regions. |
| Chronic physical | Relevant, always included | Chronic physical risk types may impact operations of the Group and its suppliers with an indirect effect on business activity. A broad scientific consensus has concluded that the burning of fossil fuels is a primary driver of global warming, with the potential for significant environmental, economic and social consequences. Evident manifestations may include higher temperatures. To bolster the Group resilience to chronic physical risks, FCA Risk Management launched several forward-looking and innovative risk engineering approaches and solutions to better understand the impacts of natural hazards and to appropriately respond. For instance, FCA strives to implement strategies that manage both everyday and exceptional risks along the supply chain. The process begins with a simplified, semi-quantitative approach used to prioritize suppliers, which helps focus on those crucial suppliers with the greatest potential impact or loss likelihood to FCA supply chains. A second step entails a methodology and supporting tool that allows FCA to assign a risk management maturity index to the supplier risk management processes. The final step is to work with specialized third-party risk engineering advisors to conduct focused loss prevention audits of targeted suppliers to identify and quantify risks that could impact the supply of components to FCA and develop adequate action plans to mitigate those risks. The methodology and reporting tools enable focused loss prevention supplier audits to be conducted and required information to be collected to: - quantify the potential exposure to FCA - define the fire and natural hazard loss scenarios and quantify the production downtime - estimate the time to restart and time to resource - identify potential equipment bottlenecks, critical equipment and vital Tier 2 or 3 suppliers. |
| Upstream | Relevant, sometimes included | Natural disasters, which climate change has the potential to further influence in term of the magnitude and frequency, may have severe and unpredictable effects on the price of certain raw materials in the future. We face risks associated with increases in costs, disruptions of supply or shortages of raw materials, parts, components and systems used in our vehicles. Substantial increases in the prices for raw materials would increase our operating costs and could reduce profitability if the increased costs cannot be offset by changes in vehicle prices or countered by productivity gains. In particular, certain raw materials are sourced from a limited number of suppliers and from a limited number of countries. We cannot guarantee that we will be able to maintain arrangements with these suppliers that assure access to these raw materials, and in some cases this access may be affected by factors outside of our control and the control of our suppliers. |
| Downstream | Relevant, sometimes included | Fuel efficiency regulations have increased in several markets. Although we continue to evaluate their specific impact, these regulations could materially adversely affect our business, financial condition and results of operations. For example, in the EMEA region, each automobile manufacturer must meet a specific sales-weighted fleet average target for CO2 emissions as related to vehicle weight. This legislation sets an industry fleet average target of 95 grams of CO2 per kilometer starting in 2020 (130g/km until 2019), which is expected to be achieved through an FCA regulatory compliance plan. In order to promote the sale of ultra-efficient vehicles, automobile manufacturers that sell vehicles emitting less than 50 gr. of CO2 per km earn additional CO2 credits. Furthermore, automobile manufacturers that make use of innovative technologies, or eco-innovations, which improve real-world fuel economy but may not show in the test cycle, such as solar panels or low-emissivity glass, may gain a non-transferable average credit for the manufacturer's fleet of up to seven grams of CO2 per kilometer. The EU Commission has issued a proposal for the next phase beginning in 2025 having a 15% reduction from the 2021 levels. The WLTP, a new regulatory test procedure for measuring CO2 emissions and fuel consumption from light duty vehicles, is effective for new passenger car types in the EU. In Sept. 2018 the new test procedure will become effective for all new passenger cars, replacing the existing New European Driving Cycle. The test procedure is expected to provide CO2 emission and fuel consumption values that are more representative of real driving conditions. |

## **C2.2d**

### **(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.**

Risk management is an important business driver and is integral to the achievement of the Group’s Business Plan goals. We adopt an integrated approach where RISKS and OPPORTUNITIES assessment are at the core of the leadership team agenda. Our success as an organization depends on ourability to identify and capitalize on the opportunities generated by our business and the markets in which we compete. By managing the associated risks,we strive to achieve a balance between our goals of growth and return and the related risks.

At the COMPANY LEVEL, the assessment and prioritization process of risks, including those posed by climate change, starts with classification of vulnerability of the business and potential impact on profitability, business continuity and reputation. These elements determine the significance of risks (high/medium/low) and their prioritization. Risks we identify as having high- or medium-levels of potential impact and vulnerability on FCA's objectives and performance are considered significant. The top significant risks are deemed “focus risks”. As part of the consolidation, risk dashboards are created to monitor major risk indicators as well as current and go-forward mitigation efforts. Once validated, results are discussed with the Audit Committee,

assisting the Board of Directors in their responsibility for strategic oversight of risk management activities. Each key global focus risk is classified by theCOSO risk categories and corresponding risk factors is assigned. Control measures and mitigating actions are subsequently defined for each identified risk. Through the implementation of this process the TRANSITION RISK related to “our ability to manage the impact of regulatory compliance with vehicle fuel economy (“FE”), greenhouse gas (“GHG”) and zero emission vehicle (“ZEV”) requirements” has been identified.

Opportunities are prioritized based on various factors, including cost/benefit ratios. For example: the Cost Deployment of World Class Manufacturing(WCM) is the global metric used to quantify potential economic savings derived by FCA’s initiatives aimed at increase efficiency in the use of natural resources and raw material consumptions among others. WCM is an FCA-specific structured production system that promotes sustainable, systematic improvements aimed to evaluate and address all types of wastes and losses at our manufacturing operations by applying methods and standards with rigor, and with the involvement of the entire workforce.

At the ASSET LEVEL, Fiat Chrysler Risk Management evaluates, weighs and compares various risks using dedicated methodologies and tools, assigning the appropriate priority; and studying in depth the relations between the variable likely to result in losses and their potential impact. Prioritization of each risk are identified through two drivers of vulnerability and impact, and by using a scientific tool (ISORISK) to define the most efficient treatment strategy. ISORISK is a risk mapping tool created to provide an immediate view of the level of risk at plants, compare sites, decide priority where action is required and simulate the effect of prevention and protection action. The ultimate goal is to define a global risk plan with a severity and vulnerability value for each plant.

In 2017, FCA investments in targeted loss prevention and physical risk mitigation measures led to a reduction in overall loss expectancies of approximately €3.3 billion during the year (to be read as the OPPORTUNITY). An overall Global Efficiency Index (GEI) of 0.98 was achieved, representing a reduction of €100 of Loss Expectancy for every €0.98 invested. The Global Efficiency Index for loss mitigation (GEI = cost of protection/reduction of expected damage) is recognized as a measure of effectiveness for industrial risk management.

To verify whether the FCA methodologies used to identify and quantify physical risks such as flood exposures are still the most advanced available, Fiat Chrysler Risk Management has formed a working team consisting of specialists from the loss prevention engineering departments of four recognized insurance and reinsurance global leaders. Enabled by their natural hazard research centers, the reinsurance companies provide mapping tools based on geomorphological satellite imagery and mathematical modeling for the first macro analysis of the risk portfolio. The engineering departments of the insurance companies provide their risk analysis based on visual and instrumental interpretation techniques along with field checks. This methodology for industrial flood risk assessment was applied to 189 sites globally, and identified 93 sites where a second flood risk study is recommended. Forty-nine second level studies were completed in 2017.

## **C2.3**

### **(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

## **C2.3a**

### **(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

### **Identifier**

Risk 1

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Transition risk

### **Primary climate-related risk driver**

Policy and legal: Mandates on and regulation of existing products and services

### **Type of financial impact driver**

Policy and legal: Increased costs and/or reduced demand for products and services resulting from fines and judgments

### **Company- specific description**

Laws, regulations and governmental policies, including those regarding increased fuel efficiency requirements and reduced greenhouse gas and tailpipe emissions, have a significant effect on how we do business. As we seek to comply with government regulations, particularly those related to fuel efficiency, vehicle safety and greenhouse gas and tailpipe emissions standards, we must devote significant financial and management resources, as well as vehicle engineering and design attention, to these legal requirements. We expect the number and scope of these regulatory requirements, along with the costs associated with compliance, to increase significantly in the future, and these costs could be difficult to pass through to consumers. For example, in the EMEA region, each automobile manufacturer must meet a specific sales-weighted fleet average target for CO2 emissions as related to vehicle weight. This legislation sets an industry fleet average target of 95 grams of CO2 per kilometer starting in 2020 (130g/km until 2019), which is expected to be achieved through an FCA regulatory compliance plan. In order to promote the sale of ultra-efficient vehicles, automobile manufacturers that sell vehicles emitting less than 50 gr. of CO2 per km earn additional CO2 credits. Furthermore, automobile manufacturers that make use of innovative technologies, or eco-innovations, which improve real-world fuel economy but may not show in the test cycle, such as solar panels or low-emissivity glass, may gain a non-transferable average credit for the manufacturer's fleet of up to seven grams of CO2 per kilometer. The EU Commission has issued a proposal for the next phase beginning in 2025 having a 15% reduction from the 2021 levels. The WLTP, a new regulatory test procedure for measuring CO2 emissions and fuel consumption from light duty vehicles, is effective for new passenger car types in the EU. In September 2018 the new test procedure will become effective for all new passenger cars, replacing the existing New European Driving Cycle. The test procedure is expected to provide CO2 emission and fuel consumption values that are more representative of real driving conditions and is not currently expected to have a material adverse impact on our compliance strategy.

### **Time horizon**

Medium-term

### **Likelihood**

Unlikely

### **Magnitude of impact**

Medium

### **Potential financial impact**

93000000

### **Explanation of financial impact**

Estimated theoretical cost (€93 million) per gram of non-compliance, using the cost of the first gram of exceedance onwards (€95), using a scenario considering the current European fleet, without special purpose vehicles. The actual fine will be based on the number of vehicles sold, fleet composition and CO2 grams per km, and cannot be stated with certainty at the time of this questionnaire submission .

### **Management method**

The EU regulatory framework requires each automobile manufacturer to meet a specific sales-weighted fleet average target for CO2 emissions as related to vehicle weight. FCA is addressing this challenge by improving our conventional engines, offering vehicles with alternative fuels and developing alternative propulsion systems such as electric and hybrid technologies. As declared on Capital Markets Day (June 2018), FCA expects to invest more than € 9 billion in electrification for the 2018-2022 business plan. By 2022, FCA expects to implement several EV systems such as mHEV, HEV, PHEV and BEV across global vehicle architectures. The vehicle segments involved in the electrification strategy are small, compact/mid, and large. In total, over 30 nameplates are expected to utilize one or more of the EV systems by 2022.

### **Cost of management**

1800000000

### **Comment**

During the Capital Markets Day, FCA presented its plan that includes an expectation to invest €9 billion in the next five years in Electrification. The amount presented in the cell "Cost of management" represents the theoretical annual average global investment calculated by dividing €9 billion at the Group/global level over the 5 year timeframe of the Business Plan.

### **Identifier**

Risk 2

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Transition risk

### **Primary climate-related risk driver**

Policy and legal: Mandates on and regulation of existing products and services

### **Type of financial impact driver**

Policy and legal: Increased costs and/or reduced demand for products and services resulting from fines and judgments

### **Company- specific description**

Laws, regulations and governmental policies, including those regarding increased fuel efficiency requirements and reduced greenhouse gas and tailpipe emissions, have a significant effect on how we do business. As we seek to comply with government regulations, particularly those related to fuel efficiency, vehicle safety and greenhouse gas and tailpipe emissions standards, we must devote significant financial and management resources, as well as vehicle engineering and design attention, to these legal requirements. We expect the number and scope of these regulatory requirements, along with the costs associated with compliance, to increase significantly in the future, and these costs could be difficult to pass through to consumers. For example, in the U.S., fuel economy and greenhouse gas (GHG) emissions are monitored by, and disclosed to, several regulatory agencies, including the National Highway Traffic Safety Administration (NHTSA), the Environmental Protection Agency (EPA), and the California Air Resources Board (CARB). Vehicle fuel efficiency is measured by fuel economy expressed in miles per gallon (mpg). EPA and NHTSA have issued two joint final rules governing GHG and fuel economy, respectively, for light-duty vehicles, covering model years 2012 through 2025. The rules provide for year-over-year increases in fuel economy, and corresponding decreases in GHG emissions, until each automaker’s average fleet-wide fuel economy performance reaches 54.5 mpg by 2025. FCA has a target to actively pursue actions in support of the U.S. EPA/NHTSA industry goal and described the plan for achievement of this objective in the Business Plan. "Magnitude of impact" reported below does not consider the fact that the regulations are currently under review.

### **Time horizon**

Long-term

### **Likelihood**

Unlikely

### **Magnitude of impact**

Low

### **Potential financial impact**

23800000

### **Explanation of financial impact**

Estimated theoretical cost (equal to 28,800,000 US Dollar) of non-compliance, using the current CAFE civil penalty of $14 per each tenth of a mile per gallon that a manufacturers fleet average falls short of its compliance obligations, using a scenario in which around 2 million vehicles (based on 2017 U.S. vehicle shipments) are 1/10th of a mile per gallon away from compliance, in a given year. The actual civil penalty will be based on number of vehicles produced, fleet composition and miles per gallon, and cannot be stated with certainty at the time of this questionnaire submission. The EPA’s GHG regulation does not have a “fine” penalty structure, compliance must be secure.

### **Management method**

The US regulatory framework requires each automobile manufacturer to meet an average fleet-wide fuel economy performance of 54.5 mpg by 2025. FCA is addressing this challenge by improving our conventional engines, offering vehicles with alternative fuels and developing alternative propulsion systems such as electric and hybrid technologies. As declared on Capital Markets Day (June 2018), FCA expects to invest more than €9 billion in electrification for the 2018-2022 business plan. By 2022, FCA expects to implement several EV systems such as mHEV, HEV, PHEV and BEV across global vehicle architectures. The vehicle segments involved in the electrification strategy are small, compact/mid and large. In total, over 30 nameplates are expected to utilize one or more of the EV systems by 2022.

### **Cost of management**

1800000000

### **Comment**

During the Capital Markets Day, FCA presented its plan that includes an expectation to invest €9 billion in the next five years in Electrification. The amount presented in the cell "Cost of management" represents the theoretical annual average global investment calculated by dividing €9 billion at the Group/global level over the 5 year timeframe of the Business Plan.

### **Identifier**

Risk 3

### **Where in the value chain does the risk driver occur?**

Direct operations

### **Risk type**

Transition risk

### **Primary climate-related risk driver**

Policy and legal: Mandates on and regulation of existing products and services

### **Type of financial impact driver**

Policy and legal: Increased costs and/or reduced demand for products and services resulting from fines and judgments

### **Company- specific description**

Laws, regulations and governmental policies, including those regarding increased fuel efficiency requirements and reduced greenhouse gas and tailpipe emissions, have a significant effect on how we do business. As we seek to comply with government regulations, particularly those related to fuel efficiency, vehicle safety and greenhouse gas and tailpipe emissions standards, we must devote significant financial and management resources, as well as vehicle engineering and design attention, to these legal requirements. We expect the number and scope of these regulatory requirements, along with the costs associated with compliance, to increase significantly in the future, and these costs could be difficult to pass through to consumers. For example, in Brazil ROTA 2030 is under discussion. ROTA 2030 is the new regulatory framework for the period 2018-2030 that will set new targets, mid-term targets and fine mechanisms.

### **Time horizon**

Medium-term

### **Likelihood**

Unlikely

### **Magnitude of impact**

Low

### **Potential financial impact**

24000000

### **Explanation of financial impact**

Estimated theoretical cost (equal to R$0.1 billion) of non-compliance in 5 years using 2017 Inovar Auto regulatory scheme (Defined in decree: 7.819.12 (03/october/2012). Due to this scheme, for all vehicles sold from January 2013 until September 2017, the fine is R$50.00 for the first 0.73 gCO2/km out of the target. Please note that, regarding the 2017 INOVAR regulatory framework, FCA in Brazil was compliant. ROTA 2030, the new regulatory framework for the period 2018-2030 that will set new targets , mid-term targets and fine mechanisms, is under discussion.

### **Management method**

FCA is addressing this challenge by improving our conventional engines, offering vehicles with alternative fuels and developing alternative propulsion systems such as electric and hybrid technologies. In Brazil, the technology implementation rate of high voltage electrification systems is expected to be less than 1% as a result of the high usage of Flexfuel technology and the high percentage of renewable sugar cane ethanol. As declared on Capital Markets Day (June 2018), FCA expects to invest more than €6 billion in powertrain technologies over the 5 year timeframe of the Business Plan.

### **Cost of management**

1800000000

### **Comment**

During the Capital Markets Day, FCA presented its plan that includes an expectation to invest more than €6 billion in the next five years in powertrain development. The amount presented in the cell "Cost of management" represents the theoretical annual average global investment calculated by dividing more than €6 billion at the Group/global level over the 5 year timeframe of the Business Plan.

## **C2.4**

### **(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

## **C2.4a**

### **(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

### **Identifier**

Opp1

### **Where in the value chain does the opportunity occur?**

Direct operations

### **Opportunity type**

Resource efficiency

### **Primary climate-related opportunity driver**

Use of more efficient production and distribution processes

### **Type of financial impact driver**

Reduced operating costs (e.g., through efficiency gains and cost reductions)

### **Company- specific description**

Changes in regulatory framework could represent opportunities for FCA since the Group is managing them in an effective and timely manner. Fuel and energy related taxes and regulation could affect the operational costs of all automakers and thus increase total manufacturing cost. Competitive opportunities may arise for FCA if the Group is able to offset this increase in cost through a decrease in its energy consumption higher than that of its competitors.

### **Time horizon**

Short-term

### **Likelihood**

Likely

### **Magnitude of impact**

Medium-low

### **Potential financial impact**

55000000

### **Explanation of financial impact**

Any reduction in energy consumption contributes to the reduction of operating costs. The World Class Manufacturing (WCM) program, implemented at 151 Group plants worldwide, in the last 7 years led to savings of 24% of energy per vehicle produced. In 2017, energy related projects saved around €55 million. Energy related costs are less than 5% of total Group operational costs.

### **Strategy to realize opportunity**

Over the past several years, the Group has already implemented energy saving projects according to the methodologies developed by World Class Manufacturing (WCM). The objective of the WCM program implemented by FCA worldwide is to eliminate all forms of waste throughout the production process. WCM implementation in FCA’s plants covers 98% of total Group manufacturing cost base with 98 plants already recognized as WCM Gold, Silver or Bronze level. Important results in energy savings and CO2 reduction have already been achieved, due to the many initiatives implemented and the know-how gained in managing the production processes. In 2017, mass-market assembly and stamping plants worldwide registered a 33% decrease (vs the 2010 baseline) in CO2 emissions per vehicle produced, and a decrease of 24% in energy consumption per vehicle produced thus contributing to enhance during the year the likelihood and magnitude of financial opportunity linked to energy savings. For example when the transmission plant in Verrone (Italy) achieved WCM Gold level, as a result of the level of skill and involvement of personnel has reduced manufacturing costs.

### **Cost to realize opportunity**

21500000

### **Comment**

In 2017 capital costs directly linked to the implementation of energy efficiency initiatives at existing plants totaled over €21.5 million.

### **Identifier**

Opp2

### **Where in the value chain does the opportunity occur?**

Customer

### **Opportunity type**

Products and services

### **Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

### **Type of financial impact driver**

Increased revenue through demand for lower emissions products and services

### **Company- specific description**

The automotive industry is subject to complex regulations in markets throughout the world in which safety, vehicle emissions and fuel economy regulations have become increasingly stringent. National and international institutions are working on initiatives to promote the development and launch of environmentally-friendly vehicles. For this purpose, some technologies are recognized for their innovativeness and eco-friendliness. All OEMs are challenged to improve their products to meet new standards and expectations. The opportunity for FCA is represented by selling energy efficient components to other players in the industry through Magneti Marelli. Magneti Marelli, an FCA company, designs and produces state-of-the-art automotive systems and components and supplies all the leading car makers in Europe, North and South America, and Asia. Around two thirds of Magneti Marelli’s 2017 revenue is derived from sales to automakers other than FCA.

### **Time horizon**

Current

### **Likelihood**

Virtually certain

### **Magnitude of impact**

High

### **Potential financial impact**

2500000000

### **Explanation of financial impact**

Magneti Marelli is the volume company of FCA's Components segment. Magneti Marelli products that are intended to improve energy efficiency (including hybrid systems, Xenon and LED lights, gasoline direct injection systems and automated manual transmissions) contributed €2.5 billion in revenues for 2017, an increase of €0.2 billion vs 2016.

### **Strategy to realize opportunity**

Magneti Marelli provides wide-ranging expertise in electronics through a process of ongoing innovation and environmental sustainability in order to develop intelligent systems for active and passive vehicle safety, onboard comfort and powertrain technologies. Magneti Marelli’s Automotive Lighting develops technologically advanced lighting solutions for the automotive market. The EU has announced the official decision taken by the European Commission to include in the list of “Eco-innovations” envisaged by Law 443/2009 of the European Parliament, the LED low beam lighting module called “E-Light” developed by Magneti Marelli Automotive Lighting. This solution allows simultaneous savings in energy and fuel consumption, with superior lighting performance to benefit motorists. E-Light uses about 1/6 of the energy of a traditional halogen light bulb. This solution provides those automakers that install the E-Light a bonus of 1 g CO2/km per vehicle, allowing considerable potential savings on the strict sanctions set for automobile manufacturers by European regulations on vehicle emissions. This aspect can potentially result in significant savings for carmakers in case the limits set by the European Union for the average value of CO2 emissions by vehicle fleets are exceeded. This technical solution contributed in past years to enhance the likelihood and magnitude of financial opportunity for Magneti Marelli linked to its energy-efficient products.

### **Cost to realize opportunity**

4300000000

### **Comment**

Magneti Marelli Research and Development spending is included in the "Cost to realize opportunity" (that is the total FCA Research and Development spending). Magneti Marelli Research and Development spending contributed to revenues of €2.5 billion from Magneti Marelli eco-products.

### **Identifier**

Opp3

### **Where in the value chain does the opportunity occur?**

Customer

### **Opportunity type**

Products and services

### **Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

### **Type of financial impact driver**

Increased revenue through demand for lower emissions products and services

### **Company- specific description**

Low emission technologies are constantly being encouraged through regulations that impose new standards or support sales through potential fiscal incentives. Climate change is generating new market opportunities, based on growing environmental consciousness among consumers. Public and private companies are also paying greater attention to fuel efficiency and emissions of the vehicles they purchase and are including environmental requirements in fleet tenders. The ability to take advantage of these opportunities is relevant for the future of the European automotive market. FCA is ready to respond to this opportunity with a wide range of low-emission products. As declared on Capital Markets Day (June 2018), FCA expects to invest more than €9 billion in electrification for the 2018-2022 business plan. By 2022, FCA expects to implement several EV systems, such as mHEV, HEV, PHEV and BEV, across global vehicle architectures. The vehicle segments involved in the electrification strategy are small, compact/mid, and large. In total, over 30 nameplates are expected to utilize one or more of the EV systems by 2022.

### **Time horizon**

Medium-term

### **Likelihood**

Very likely

### **Magnitude of impact**

Medium-high

### **Potential financial impact**

227000000

### **Explanation of financial impact**

The main financial implication of this opportunity is represented by the increase in sales of more ecological, flexible and efficient vehicles, for example: electric and hybrid vehicles. Based on 2017 revenues, an increase of 1% in EMEA region sales due to development and/or expansion of low emission goods and services may result in an increase in net revenues between €200 and €250 million, not considering potential production capacity constraints, segment/model dependency and any other factor and variable that may influence this range.

### **Strategy to realize opportunity**

FCA’s approach to providing mobility solutions strives to minimize the impact the environment. Publicly available results and targets on sustainable mobility are a tangible sign of FCA's commitment to combine environmental responsibility with business viability. FCA addresses this commitment by: • Developing electrification technologies, including a mild hybrid system using belt starter generator technology which offers improvements in fuel economy and a reduction in CO2 emissions (eTorque mild hybrid system available in the 2018 Jeep Wrangler) • Expecting to utilize one or more EV systems (such as mHEV, HEV, PHEV and BEV) on over 30 nameplates by 2022 • Supporting Waymo, Google’s self-driving car company, in launching the world’s first driverless ride-hailing service by supplying thousands more Chrysler Pacifica Hybrid minivans • Signing of a memorandum of understanding with BMW Group, Intel and Mobileye to create a state-of-the-art autonomous driving platform for global deployment • Optimizing the performance of conventional engines • Offering vehicles with alternative fuel propulsion systems (among the leaders for more than 20 years in compressed natural gas vehicles in Europe with more than 740,000 cars and LCVs sold since 1997) • Developing initiatives to meet new mobility needs (Enjoy car-sharing service launched in partnership with FCA) • Raising consumer awareness of their impact on fuel consumption (eco:Drive LIVE: real time eco assistant)

### **Cost to realize opportunity**

1800000000

### **Comment**

During the Capital Markets Day, FCA presented its plan that includes expectations to invest €9 billion in the next five years in Electrification. The amount presented in the cell "Cost to realize opportunity" represents the theoretical annual average global investment calculated by dividing €9 billion at the Group/global level over the 5 year timeframe of the Business Plan.

## **C2.5**

### **(C2.5) Describe where and how the identified risks and opportunities have impacted your business.**

|  |  |  |
| --- | --- | --- |
|  | **Impact** | **Description** |
| Products and services | Impacted | CO2 regulations in place for EU28, China, and the US, which are the largest markets for FCA, have an impact in terms of accelerating the demand for a technology transition to hybrid and electric vehicles. The FCA 2018-2022 Business Plan foresees the development and adoption of a mix of these technologies that will vary by market, consumer preference, and regulatory frameworks. The potential magnitude on the business could be considered "high" considering the EV system technology implementation rate in EMEA, NAFTA and APAC regions (see: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_CO2%20Regulatory%20Compliance.pdf slides 11-13). |
| Supply chain and/or value chain | Impacted | CO2 regulations in place for EU28, the US and China have an impact in terms of accelerating the demand for a technology transition to hybrid and electric vehicles. The change in terms of vehicle offers planned by FCA through the 2018-2022 Business Plan has an impact on the supply chain too, by means of new components sourced, potential changes in the supply base composition, and supplier logistics flows, among others. The potential magnitude on the business could be considered "high" considering the EV system technology implementation rate in EMEA, NAFTA and APAC regions (see: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_CO2%20Regulatory%20Compliance.pdf slides 11-13). |
| Adaptation and mitigation activities | Impacted | CO2 regulations in place for EU28, China, and the US , which are the largest markets for FCA, have an impact in terms of accelerating the demand for a technology transition to hybrid and electric vehicles. The FCA 2018-2022 business plan foresees the development and adoption of a mix of technologies that will vary by market, consumer preference, and regulatory frameworks. The potential magnitude on the business could be considered "high" considering the EV system technology implementation rate in EMEA, NAFTA and APAC regions and the phase-out of diesel engines from passenger car vehicles by 2021 (see: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_Compliance\_SM.pdf slides 14-15). |
| Investment in R&D | Impacted | FCA expects to invest more than €9 billion over the period 2018-2022 to create and industrialize electrification of its products. The potential magnitude on the business could be considered "high" considering that 20% of €45 billion of Capex contemplated in the 5 year Business Plan is dedicated to Electrification (see: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_BP%20Financial%20Overview.pdf slide 14). |
| Operations | Impacted | CO2 regulations in place for EU28, the US and China have an impact in terms of accelerating the demand for a technology transition to hybrid and electric vehicles. The change in terms of vehicle offers planned by FCA through the 2018-2022 business plan has an impact on operation activities. Production lines within the assembly process need to be adapted to accommodate the change in terms of number of components (mainly the engine+battery) that electric and hybrid vehicles require. The potential magnitude on the business could be considered "high." (see: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_CO2%20Regulatory%20Compliance.pdf slide 8 and 11-13). |
| Other, please specify | Not evaluated | No other impacts evaluated/identified |

## **C2.6**

### **(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.**

|  |  |  |
| --- | --- | --- |
|  | **Relevance** | **Description** |
| Revenues | Impacted | The 2018-2022 business plan identifies white-space products as key to financial performance. High voltage electrification vehicles are expected to generate revenues, with estimated pricing recovery on average of 60% of incremental cost. The potential magnitude on the business could be considered "high." Details on slides 10-11: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_BP%20Financial%20Overview.pdf |
| Operating costs | Impacted | The 2018-2022 business plan includes opportunities for industrial rationalization to deliver potential cost savings of about €10 billion through: - manufacturing and purchasing efficiencies. in particular: - continued focus on World Class Manufacturing - emphasis on process and quality improvements through digital manufacturing initiatives - higher volume of common components from increased architecture sharing - architectures convergence. Details on slide 9: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_BP%20Financial%20Overview.pdf |
| Capital expenditures / capital allocation | Impacted | Average spending over 2018-2022 business plan period projected to be approximately 7% of Net revenues. (see: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_BP%20Financial%20Overview.pdf slide 14) |
| Acquisitions and divestments | Not yet impacted | A captive financial services company (Finco) can also be an important enabler for participation in emerging TaaS (Transportation as a service), which in turn could reduce environmental impacts through increased vehicle sharing. FCA US intends to establish a US captive Finco either through a transaction or through a greenfield start-up. FCA has a contractual option to acquire the equity in the Chrysler Capital (CCAP) business from our partner SCUSA (in whole or in part). Potential timeframe for the impact could be considered short-medium term. See slides 4 and 7: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_US%20Finco%20Opportunity.pdf |
| Access to capital | Impacted | FCA has signed with the European Investment Bank (“EIB”) a €420 million four-year loan to support Research and Development projects to be implemented by FCA during 2018-2020. FCA investment in Research and Development for the period 2018-2020 has a number of key objectives, including electrification technology solutions for hybrid and battery electric vehicles and the development of autonomous driving. Moreover, the Research and Development activities will be dedicated to the application of connectivity technologies for the offering of telematics services for the FCA product line up. The Research and Development projects also include the development of digital technologies to be deployed in manufacturing processes. For details see: https://www.fcagroup.com/en-US/media\_center/fca\_press\_release/2018/june/Pages/FCA\_EIB\_EUR\_420\_million\_loan\_for\_RD\_projects.aspx |
| Assets | Impacted | FCA expects to invest approx. €6.75 billion over the period 2018-2022 related to infrastructure (e.g., operations and assets). The potential magnitude on the business could be considered "high" considering that this investment represents 15% of total Capex for the 5 year Business Plan period. See slide 14: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_BP%20Financial%20Overview.pdf |
| Liabilities | Impacted | Efficient capital structure achieved through deleveraging, with longer debt maturity profile. In 2022, Gross Industrial debt is planned to be reduced to around €10 billion. The potential magnitude on the business could be considered "high." See slide 15: www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_BP%20Financial%20Overview.pdf |
| Other | Not evaluated | No other impacts evaluated/identified |

## **C3. Business Strategy**

## **C3.1**

### **(C3.1) Are climate-related issues integrated into your business strategy?**

Yes

## **C3.1a**

### **(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?**

Yes, qualitative

## **C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b)**

### **(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.**

Yes

## **C3.1c**

### **(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.**

FCA business objectives incorporate climate change (CC) concerns, among others.

FCA has several concrete examples that illustrate how CC influences business strategy:

> FCA’s 2018-2022 business plan, presented in June 2018 during the FCA Capital Markets Day ([www.fcagroup.com/en-US/investors/Pages/capital\_markets\_day\_2018.aspx](http://www.fcagroup.com/en-US/investors/Pages/capital_markets_day_2018.aspx)) aligns the Company products with consumer demands and regulatory scenarios based on CC scenario forecast by improving vehicle fuel efficiency and reducing CO2 emissions. The business plan describes the expected cadence of the CO2 reduction technology plan to utilize one or more EV systems (mHEV, HEV, PHEV and BEV) on over 30 nameplates by 2022. See more details in “CO2 Regulatory Compliance“ presentation: [www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD\_CO2%20Regulatory%20Compliance.pdf](http://www.fcagroup.com/capitalmarketsday/Presentations/FCA%20June%201%202018%20CMD_CO2%20Regulatory%20Compliance.pdf)

> Sustainability targets directed to the mitigation of CC align with the UN 2030 Agenda for Sustainable Development. In particular, emission and energy reduction targets have been set for both products and processes with target owners identified within the impacted business functions (see pages 22-24, 27: <https://www.fcagroup.com/it-IT/investors/financial_information_reports/sustainability_reports/sustainability_reports/FCA_2017_Sustainability_Report.pdf>)

> FCA evaluates the impact of its vehicles on the environment throughout their entire life cycle. We promote the use of Life Cycle Assessment (LCA) tools in order to evaluate the potential impact of our processes and products throughout their lifecycle, from research and design to final dismantling or recycling.

FCA's Environmental Guidelines specify our commitment to address environmental and climate change issues by aiming to: reduce energy consumption through more efficient production processes; limit emissions of greenhouse gases and other pollutants, by reducing the amount of energy we use, implementing innovative technical solutions, and direct and indirect promotion of renewable energy sources; minimize the use of raw materials by promoting renewable and recycled materials in our production processes; encourage the use of reusable and environmentally friendly packaging and containers in order to increase material savings and reduce waste. In planning a new product or new production process, we consider its environmental compatibility in the context of technical, commercial and economic decisions.

The Company has been monitoring and reporting publicly on its environmental impacts and efforts since 1992. Sustainability topics figure in the Group CEO's communications to various stakeholders, including to the financial community.

Governance of sustainability aspects, including those related to CC, relies on an integrated approach. The Sustainability Team (ST) coordinates sustainability programs at the global level. The ST reports to the Chief Audit Officer and Sustainability Coordinator, who reports directly to the Audit Committee and to the CEO in his role as Sustainability Coordinator. He is a member of the Group Executive Council, an FCA decision-making body. Responsibility for sustainability also lies at the Board level: the Governance and Sustainability Committee evaluates proposals related to strategic sustainability initiatives, advises the full Board as necessary, and reviews the annual Sustainability Report. Group Risk Management maps strategic risk drivers including those related to CC, such as water scarcity and natural disasters (physical risks) and technology transition and regulatory compliance (transition risks). The Investor Relations team interacts with the ST to address investor inquiries on FCA sustainability results. Through this organizational structure, sustainability is integrated into the business strategy.

One example of substantial business decisions made as a result of the integration of CC into the Company strategy is embedded in the research agreement signed in November 2017 by FCA with Eni, an energy company, for joint projects to reduce CO2 emissions produced by road transport vehicles. Areas of cooperation identified include the development of new technologies for the use of gas in transport such as technologies and materials to absorb natural gas; and the assessment of new fuel types for use in existing vehicles, without the need for substantial mechanical changes;and the realization of technologies and devices for the capture and temporary storage of part of the CO2 produced by internal combustion engines. This research cooperation will also benefit from the collaboration with the Massachusetts Institute of Technology. In the same memorandum of understanding, FCA and Eni extended their cooperation in the Enjoy car-sharing program to include a research project focused on a new type of fuel containing alternative fuels (15% methanol and 5% bioethanol).

## **C3.1d**

### **(C3.1d) Provide details of your organization’s use of climate-related scenario analysis.**

|  |  |
| --- | --- |
| **Climate-related scenarios** | **Details** |
| Other, please specify (Science Based Target initiative) | The automotive sector guidance has just been released. FCA is using this guidance to evaluate the development of Science Based Targets. |

## **C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e**

### **(C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e) Disclose details of your organization’s low-carbon transition plan.**

The increase in atmospheric CO2 due to human activity has led many governments to implement control and regulatory measures to limit the resulting effects. FCA believes that effective, long-lasting actions to address these Climate Change (CC) aspects can only be achieved through an integrated approach involving energy producers, manufacturers, suppliers, academia, consumers, government and the financial community. CC scenarios are used by regulators first of all to translate long-term goals such as those of the Paris Agreement into regulatory frameworks for industry to follow.

The Transport industry (passenger cars and light commercial vehicles included) is responsible for 23% of global CO2 emissions (source: “Key CO2 Emissions Trends 2016”, IEA, 2016).

Based on this awareness, FCA steps toward its low-carbon transition plan include more than €9 billions investment in electrification by 2022 to facilitate regulatory compliance in markets of presence. FCA’s CO2 Regulatory Compliance Plan includes the following electrification technology implementation rate expected by 2022:

* EU28: 40% mHEV and 20% high voltage electrification
* US: 15% mHEV and 20% high voltage electrification
* China: 20 % mHEV and 15% high voltage electrification
* In Brazil, where ethanol fuel is widely available, FCA compliance objectives can be reached without electrification.

The challenge that could inhibit successful implementation of this transition plan to electrification could be the continued limited acceptance among customers of electrified vehicles Sales of new electric cars worldwide surpassed 1 million units in 2017 (source: “Global EV Outlook 2018”, IEA) and the need for recharging stations will increase due to the mobility electrification trend.

Transition planning for a low carbon strategy also includes FCA collaborating with other players in addressing opportunities to develop new mobility solutions. Customers are increasingly looking for innovative technologies or mobility concepts to meet their evolving transportation needs. FCA has signed a memorandum of understanding with BMW Group, Intel and Mobileye to create a state-of-the-art autonomous driving platform for global deployment. The cooperation allows the companies to leverage each other’s individual strengths, capabilities and resources. The open platform is expected to be scalable for highly automated driving (Level 3) to fully automated driving (Level 4/5) and can be used by multiple automakers around the world while maintaining each automaker's unique brand identities. FCA is also exploring other ways through which we can provide these services to our customers.

CC influence on short-term strategy: FCA’s approach focuses on: improving fuel efficiency of vehicle and powertrain technologies, both conventional, electric/hybrid and alternative fuel; developing and promoting new concepts that improve the mobility experience, such as the collaboration with Waymo (formerly Google Self-Driving Car Project) to accelerate efforts to develop fully self-driving cars; and directly involving drivers in reducing environmental impacts of vehicles during use. In addition to customers, FCA engages other stakeholders, including governments, energy companies and industry peers. FCA also works closely with business partners, i.e., suppliers and dealers, to help them reduce their environmental impact and cut greenhouse gas emissions in the short term (for example through the CDP Supply Chain program). CC influence on long and medium-term strategy: FCA's targets include: 2025: actively pursue actions in support of the U.S. EPA/NHTSA industry goal of 54.5 mpg; 2020: achieve 40% reduction in CO2 emissions vs 2006 for mass-market vehicle cars sold in Europe; 2020: achieve at least 5% to 15% improvement in fuel economy for major renewals of FCA US vehicles compared with replaced vehicles/models; 2020: develop electric/hybrid technologies, focusing on solutions that are economically viable, competitive in the marketplace, and beneficial to society; and 2020: achieve 32% reduction in CO2 emitted per vehicle produced vs 2010 at mass-market vehicle assembly and stamping plants worldwide.

## **C4. Targets and performance**

## **C4.1**

### **(C4.1) Did you have an emissions target that was active in the reporting year?**

Intensity target

## **C4.1b**

### **(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).**

### **Target reference number**

Int 1

### **Scope**

Scope 1 +2 (market-based)

### **% emissions in Scope**

56

### **% reduction from baseline year**

33

### **Metric**

Metric tons CO2e per vehicle produced\*

### **Base year**

2010

### **Start year**

2014

### **Normalized baseline year emissions covered by target (metric tons CO2e)**

0.62

### **Target year**

2020

### **Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

### **% achieved (emissions)**

100

### **Target status**

Underway

### **Please explain**

Target refers to mass-market vehicle assembly and stamping plants, the volume automobile sector of FCA. This represented about 57% of Group 2017 GHG manufacturing emissions. In 2020, absolute emissions are expected to decrease by 3.3% due to efficiencies and despite the expected volume increase. Most decrease in emissions has been balanced by expected energy and related emissions efficiency achievements in production processes.

### **% change anticipated in absolute Scope 1+2 emissions**

-3.3

### **% change anticipated in absolute Scope 3 emissions**

0

### **Target reference number**

Int 2

### **Scope**

Scope 1 +2 (market-based)

### **% emissions in Scope**

9

### **% reduction from baseline year**

24

### **Metric**

Metric tons CO2e per unit hour worked

### **Base year**

2010

### **Start year**

2014

### **Normalized baseline year emissions covered by target (metric tons CO2e)**

0.01

### **Target year**

2020

### **Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

### **% achieved (emissions)**

100

### **Target status**

Underway

### **Please explain**

Long-term target for Magneti Marelli, the volume company of FCA's Components segment. This represented about 9% of Group 2017 GHG manufacturing emissions. In 2020, absolute emissions are expected to increase by only 5.6% due to expected volume increase reported in the FCA 2018-2022 Business Plan.

### **% change anticipated in absolute Scope 1+2 emissions**

5.6

### **% change anticipated in absolute Scope 3 emissions**

0

### **Target reference number**

Int 3

### **Scope**

Scope 1 +2 (market-based)

### **% emissions in Scope**

3

### **% reduction from baseline year**

35

### **Metric**

Metric tons CO2e per metric ton of product

### **Base year**

2010

### **Start year**

2014

### **Normalized baseline year emissions covered by target (metric tons CO2e)**

0.99

### **Target year**

2020

### **Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

### **% achieved (emissions)**

84

### **Target status**

Underway

### **Please explain**

Long-term target for mass-market vehicles casting plants. This represented about 3% of Group 2017 GHG manufacturing emissions. In 2020, absolute emissions are expected to decrease in absolute emissions despite the expected volume increase reported in the FCA 2018-2022 Business Plan.

### **% change anticipated in absolute Scope 1+2 emissions**

-5.5

### **% change anticipated in absolute Scope 3 emissions**

0

### **Target reference number**

Int 4

### **Scope**

Scope 1 +2 (market-based)

### **% emissions in Scope**

2

### **% reduction from baseline year**

35

### **Metric**

Metric tons CO2e per unit hour worked

### **Base year**

2010

### **Start year**

2014

### **Normalized baseline year emissions covered by target (metric tons CO2e)**

0.03

### **Target year**

2020

### **Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

### **% achieved (emissions)**

100

### **Target status**

Underway

### **Please explain**

Long-term target for mass-market vehicle other plants. This represented about 2% of Group 2017 GHG manufacturing emissions. In 2020, absolute emissions are expected to decrease in absolute emissions despite the expected volume increase reported in the FCA 2018-2022 Business Plan

### **% change anticipated in absolute Scope 1+2 emissions**

-5.5

### **% change anticipated in absolute Scope 3 emissions**

0

### **Target reference number**

Int 5

### **Scope**

Scope 1 +2 (market-based)

### **% emissions in Scope**

0.6

### **% reduction from baseline year**

40

### **Metric**

Metric tons CO2e per unit hour worked

### **Base year**

2010

### **Start year**

2014

### **Normalized baseline year emissions covered by target (metric tons CO2e)**

0.01

### **Target year**

2020

### **Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

### **% achieved (emissions)**

100

### **Target status**

Underway

### **Please explain**

Long-term target for Comau, FCA's production system company. This represented about 0.5% of Group 2017 GHG manufacturing emissions. In 2020, absolute emissions are expected to decrease in absolute emissions despite the expected volume increase reported in the FCA 2018-2022 Business Plan.

### **% change anticipated in absolute Scope 1+2 emissions**

-15.4

### **% change anticipated in absolute Scope 3 emissions**

0

## **C4.2**

### **(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.**

### **Target**

Renewable energy consumption

### **KPI – Metric numerator**

100% renewable energy in Italy, European country with the majority energy consumption.

### **KPI – Metric denominator (intensity targets only)**

Electric energy in Europe bought from the grid.

### **Base year**

2013

### **Start year**

2014

### **Target year**

2020

### **KPI in baseline year**

0.5

### **KPI in target year**

1

### **% achieved in reporting year**

80

### **Target Status**

Underway

### **Please explain**

2020 target: use electricity generated from renewable sources for 100% of purchased electricity supplied from the grid and consumed by mass-market vehicle plants in the EMEA region. In 2017, FCA continued to make considerable use of energy from renewable sources. In Europe, the vast majority of renewable energy purchased for consumption by the Group is certified by the supplier, covering 100% of Italian plants’ electricity.

### **Part of emissions target**

No.

### **Is this target part of an overarching initiative?**

Please select

## **C4.3**

### **(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

## **C4.3a**

### **(C4.3a) Identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

|  |  |  |
| --- | --- | --- |
|  | **Number of projects** | **Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked \*)** |
| Under investigation | 0 | 0 |
| To be implemented\* | 37 | 1000 |
| Implementation commenced\* | 1401 | 50000 |
| Implemented\* | 2195 | 110000 |
| Not to be implemented | 0 | 0 |

## **C4.3b**

### **(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

### **Activity type**

Energy efficiency: Building fabric

### **Description of activity**

Other, please specify (Insulation and maintenance programs)

### **Estimated annual CO2e savings (metric tonnes CO2e)**

5000

### **Scope**

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in CC0.4)**

2000000

### **Investment required (unit currency – as specified in CC0.4)**

1000000

### **Payback period**

<1 year

### **Estimated lifetime of the initiative**

>30 years

### **Comment**

Insulation of buildings; installation of heat recovery technologies to improve temperature control while consuming less energy. The reported initiatives contribute to achieve the targets set in the Sustainability Plan (up to -54% in Scope 1 and Scope 2 CO2 emissions per unit from 2010 to 2020, depending on the Group company). Please note that this row includes the estimated CO2 savings of several hundred projects.

### **Activity type**

Energy efficiency: Building services

### **Description of activity**

Other, please specify (Combined heat and power, lighting...)

### **Estimated annual CO2e savings (metric tonnes CO2e)**

35000

### **Scope**

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in CC0.4)**

12000000

### **Investment required (unit currency – as specified in CC0.4)**

8500000

### **Payback period**

<1 year

### **Estimated lifetime of the initiative**

6-10 years

### **Comment**

FCA uses for heating purposes mainly fossil fuel with low-carbon content (natural gas), frequently associated with highly efficient cogeneration facilities. Software for monitoring the energy consumption of computers and lights has been installed. The reported initiatives contribute to achieve the targets set in the Sustainability Plan (up to -40% in Scope 1 and Scope 2 CO2 emissions per unit from 2010 to 2020, depending on the Group company). Please note that this row includes the estimated CO2 savings of several hundred projects.

### **Activity type**

Energy efficiency: Processes

### **Description of activity**

Other, please specify (heat recovery, refrigeration, pr. optim.)

### **Estimated annual CO2e savings (metric tonnes CO2e)**

100000

### **Scope**

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in CC0.4)**

35000000

### **Investment required (unit currency – as specified in CC0.4)**

12000000

### **Payback period**

<1 year

### **Estimated lifetime of the initiative**

6-10 years

### **Comment**

In 2017, FCA continued the implementation of activities aimed at reducing energy consumption and CO2 emissions. Energy efficiency projects focused on improvement of heat recovery, refrigeration, process optimization, fuel switch from more pollutant fuels to natural gas and machine replacement, including overhauling or refurbishing equipment in favor of more technologically advanced and efficient solutions. The reported initiatives contribute to achieve the targets set in the Sustainability Plan (up to -54% in Scope 1 and Scope 2 CO2 per unit from 2010 to 2020, depending on the Group company) and were developed mainly on a voluntary basis (more than 75%). Please note that this row includes the estimated CO2 savings of several hundred projects.

### **Activity type**

Other, please specify (Behavioral change)

### **Description of activity**

<Not Applicable>

### **Estimated annual CO2e savings (metric tonnes CO2e)**

15000

### **Scope**

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in CC0.4)**

6000000

### **Investment required (unit currency – as specified in CC0.4)**

100000

### **Payback period**

<1 year

### **Estimated lifetime of the initiative**

1-2 years

### **Comment**

Employee training activities and behavioral initiatives at all organizational levels are a key driver for improving the Group’s environmental performance. Competence, knowledge and motivation are essential attributes to ensure a deeply embedded environmental culture throughout the Company. For this reason, a variety of methods are used to spread environmental know-how, promote awareness, and encourage action planning throughout the Group. Training activities were provided to increase employee understanding of their personal impact on the environment. The reported initiatives contribute to achieve the targets set in the Sustainability Plan (up to -54% in Scope 1 and Scope 2 CO2 emissions per unit from 2010 to 2020. Please note that this row includes the estimated CO2 savings of several hundred projects.

## **C4.3c**

### **(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

|  |  |
| --- | --- |
| **Method** | **Comment** |
| Internal finance mechanisms | Employee engagement is one of the cornerstones of World Class Manufacturing (WCM), a structured, rigorous and integrated methodology that applies to production processes. FCA employees worldwide are continually encouraged to contribute to the Company's success with improvement suggestions. Every suggestion is considered and its potential application evaluated. In 2017 more than 2.6 million employee suggestions were received, covering all WCM topics. These suggestions for projects are evaluated financially by the Cost Deployment pillar of WCM and, if economically sustainable, developed and monitored. |
| Dedicated budget for low-carbon product R&D |  |
| Dedicated budget for energy efficiency |  |
| Compliance with regulatory requirements/standards |  |

## **C4.5**

### **(C4.5) 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

## **C4.5a**

### **(C4.5a) 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**

Product

### **Description of product/Group of products**

“E-Light”: Magneti Marelli LED Headlamp with E-Light Modules. The “E-Light” LED low-beam module ensures certified energy savings, allowing carmakers to obtain a credit of 1g CO2/km for every vehicle that fits this module in its headlamps. The European Union has included the “ELight” in the list of “Eco-innovations”, envisaged by Law (EC) No. 443/2009 of the European Parliament. ELight can be applied to newly developed models of cars currently in existence, and the credit of 1g CO2/km will be acknowledged for the specific model that adopts the solution.

### **Are these low-carbon product(s) or do they enable avoided emissions?**

Low-carbon product

### **Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (Other: EC Law EC.n 443/2009)

### **% revenue from low carbon product(s) in the reporting year**

2

### **Comment**

Magneti Marelli provides wide-ranging expertise in electronics through a process of ongoing innovation and environmental sustainability in order to develop intelligent systems for active and passive vehicle safety, on-board comfort and powertrain technologies. Magneti Marelli products that are intended to improve energy efficiency, including hybrid systems, Xenon and LED lights, gasoline direct injection systems and automated manual transmissions, contributed €2.5 billion in revenues for 2017, equivalent to around 2% of total FCA revenues.

## **C5. Emissions methodology**

## **C5.1**

### **(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

### **Scope 1**

### **Base year start**

January 1 2010

### **Base year end**

December 31 2010

### **Base year emissions (metric tons CO2e)**

1122062

### **Comment**

### **Scope 2 (location-based)**

### **Base year start**

### **Base year end**

### **Base year emissions (metric tons CO2e)**

### **Comment**

### **Scope 2 (market-based)**

### **Base year start**

January 1 2010

### **Base year end**

December 31 2010

### **Base year emissions (metric tons CO2e)**

3181257

### **Comment**

## **C5.2**

### **(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.**

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

## **C6. Emissions data**

## **C6.1**

### **(C6.1) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?**

### **Row 1**

### **Gross global Scope 1 emissions (metric tons CO2e)**

1101289

### **End-year of reporting period**

<Not Applicable>

### **Comment**

## **C6.2**

### **(C6.2) Describe your organization’s approach to reporting Scope 2 emissions.**

### **Row 1**

### **​Scope 2, location-based​**

We are reporting a Scope 2, location-based figure

### **Scope 2, market-based**

We are reporting a Scope 2, market-based figure

### **Comment**

## **C6.3**

### **(C6.3) What were your organization’s gross global Scope 2 emissions in metric tons CO2e?**

### **Row 1**

### **Scope 2, location-based**

3309598

### **Scope 2, market-based (if applicable)**

2713748

### **End-year of reporting period**

<Not Applicable>

### **Comment**

## **C6.4**

### **(C6.4) 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?**

Yes

## **C6.4a**

### **(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.**

### **Source**

21 out of 165 plants

### **Relevance of Scope 1 emissions from this source**

Emissions are not relevant

### **Relevance of location-based Scope 2 emissions from this source**

Emissions are not relevant

### **Relevance of market-based Scope 2 emissions from this source (if applicable)**

Emissions are not relevant

### **Explain why the source is excluded**

Data was not considered material, and was thus not reported, for plants representing collectively less than 1% of 2017 industrial turnover. These 21 plants are in start-up or closing phase, with low or null impact on overall energy consumption and GHG emissions. Furthermore, in addition to the 138 plants reported, FCA also provides full emission data for six active plants not fully consolidated, and thus not counted in the total 159 number of plants reported in the Annual Report (one joint venture in Turkey, four in China and one in India).

### **Source**

GHG other than CO2

### **Relevance of Scope 1 emissions from this source**

Emissions are not relevant

### **Relevance of location-based Scope 2 emissions from this source**

Emissions are not relevant

### **Relevance of market-based Scope 2 emissions from this source (if applicable)**

Emissions are not relevant

### **Explain why the source is excluded**

Emissions of greenhouse gases (GHGs) other than CO2 have a negligible impact and therefore are not included (CO2 accounts for over 99% of the Group’s total GHG emissions).

## **C6.5**

### **(C6.5) Account for your organization’s Scope 3 emissions, disclosing and explaining any exclusions.**

### **Purchased goods and services**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

30536470

### **Emissions calculation methodology**

For this category the Group applied the spend-based method: Σ (value of purchased goods or services (€) × emission factor of purchased goods or services per unit of economic value (kg CO2/€)), see Greenhouse Gas Protocol’s Corporate Value Chain (Scope 3) Accounting and Reporting Standard and Technical Guidance for Calculating Scope 3 Emissions. Emission factors of purchased goods or services per unit of economic value were estimated using data of suppliers who responded to the CDP Supply Chain program. In 2017, 167 suppliers (representing about 50% of FCA's 2017 direct and indirect material purchased value) responded to the CDP program. Using the CDP Supply Chain data for the reporting year 2016, as well as our related annual purchased value, we calculated the emissions figure in metric tonnes of CO2 per unit of spend. We then estimated 2017 allocated emissions per supplier using our 2017 annual purchased value, and assumed that the emissions figures are the same. Data will be updated through the 2018 CDP Supply Chain program submitted by suppliers invited. Please note that some data on CO2 emissions provided by some companies have been revised to avoid double-counting. The figures have been scaled up to be representative of 100% of direct and indirect material purchased value.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **Capital goods**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

1327453

### **Emissions calculation methodology**

For this category the Group applied the spend-based method: Σ (value of capital goods (€) × emission factor of capital goods per unit of economic value (kg CO2/€)), see Greenhouse Gas Protocol’s Corporate Value Chain (Scope 3) Accounting and Reporting Standard and Technical Guidance for Calculating Scope 3 Emissions. Emission factors of capital goods per unit of economic value were estimated using data of suppliers who responded to the CDP Supply Chain program. In 2017, 167 suppliers (representing about 50% of FCA's 2017 direct and indirect material purchased value) responded to the CDP program. Using the CDP Supply Chain data for the reporting year 2016, as well as our related annual purchased value, we calculated the emissions figure in metric tonnes of CO2 per unit of spend. We then estimated 2017 allocated emissions per supplier using our 2017 annual purchased value, and assumed that the emissions figures are the same. Data will be updated through the 2018 CDP Supply Chain program submitted by suppliers invited. Please note that some data on CO2 emissions provided by some companies have been revised to avoid double-counting. The figures have been scaled up to be representative of 100% of direct and indirect material purchased value.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **Fuel-and-energy-related activities (not included in Scope 1 or 2)**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

127320

### **Emissions calculation methodology**

The activities considered for this category are: A) Upstream emissions of purchased fuels; B) Transmission and Distribution losses (according to the activities description listed in the GHG Protocol, Technical Guidance for Calculating Scope 3 emissions). CO2e emissions = CO2e emissions of A + CO2e emissions of B. For activity A the average-data method has been applied (see GHG Protocol, Technical Guidance for Calculating Scope 3 emissions): Upstream CO2 emissions of purchased fuels = Σ (fuel consumed (e.g., kWh) × upstream fuel emission factor (kg CO2e)/kWh)) where: upstream fuel emission factor = life cycle emission factor – combustion emission factor. For activity B the average-data method has been applied (see GHG Protocol, Technical Guidance for Calculating Scope 3 emissions): CO2e emissions from energy = Σ (electricity consumed on the grid (kWh) × Transmission and Distribution loss rate (%) × electricity emission factor ((kg CO2e)/kWh) from IEA (International Energy Agency). Data refers to about 50 premises. Transmission and Distribution loss rates are specific for each country where the plants are located, national official sources such as the resolutions of the Italian Regulatory Authority for Electricity and Gas – AAEG – have been used. Other data sources are internal. For calculating this Scope 3 category a location-based scope 2 total has been used as the basis.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

The Group considers this category not relevant because it does not contribute significantly to the Company’s total anticipated Scope 3 emissions as well as because few potential emissions reductions could be undertaken or influenced by the Company.

### **Upstream transportation and distribution**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

877438

### **Emissions calculation methodology**

Data refers to 2017 CO2 emissions relating to both UPSTREAM logistics processes and SPARE PARTS distribution. The calculation of CO2 emissions is based on the criteria illustrated in the Greenhouse Gas Protocol’s Corporate Value Chain (Scope 3) Accounting and Reporting Standard and Technical Guidance for Calculating Scope 3 Emissions . Real activity data related to routes, distances, frequencies and transport capacities are used in the calculation process. Although the procedure to calculate CO2 emissions follows a similar approach for each mode of transportation, different coefficients or emission factors were used for each specific modality. Routes, number of transports and capacity utilization are extracted from Supply Chain Management Tools. Fuel efficiency is established in the base rate for truck carriers (included in payment terms), collected directly from carriers and shippers or refers to industry or international standards or local legislation and guidelines. Emission factors are taken from international standards or governmental agency guidelines, among which: standard EN16258, U.S. Environmental Protection Agency, DEFRA - U.K. Department for Environment, Food and Rural Affairs.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **Waste generated in operations**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

1612

### **Emissions calculation methodology**

For this category the Group uses the waste-type-specific method (see the GHG Protocol, Technical Guidance for Calculating Scope 3 emissions); emission factors are sourced for specific waste treatment methods. The methodology has been applied to sludge from paint processes sent to waste-to-energy plants.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

The estimated CO2 emissions for this type of waste in 2017 can be considered negligible compared to other Scope 3 categories. Activities are still ongoing in order to determine the value of CO2 emissions for all types of waste.

### **Business travel**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

39326

### **Emissions calculation methodology**

The CO2 emissions recorded in 2017 are calculated and provided by the Group’s travel providers. For each paid trip, emissions are calculated automatically. This calculation is made according to the DEFRA standard (DEFRA is the U.K. Department for Environment, Food and Rural Affairs). A detailed breakdown of emissions is provided by destination, city pairs, seat class and distance class.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **Employee commuting**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

9087

### **Emissions calculation methodology**

The calculation is based on real data collected in past years from 6% of employees worldwide. According to GHG Protocol – Technical Guidance for Calculating Scope 3 Emissions - data gathered on distances covered and means of transport was then multiplied for emission factors taken from international standards or governmental agencies' guidelines.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

The Group considers this category not relevant because it does not contribute significantly to the Company’s total anticipated Scope 3 emissions as well as because few potential emissions reductions could be undertaken or influenced by the Company.

### **Upstream leased assets**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

0

### **Emissions calculation methodology**

This category is accounted as 0 (zero) because upstream leased assets are already incorporated in our Scope 1 and Scope 2 emissions since we have operational control over these sites. Total CO2 emissions were measured by multiplying the electricity emission factor specific for countries or fuel emission factor for the quantity of fuel/electricity consumed. Emission factors were taken from the International Energy Agency publication.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **Downstream transportation and distribution**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

643850

### **Emissions calculation methodology**

Data refers to 2017 CO2 emissions relating to DOWNSTREAM logistics processes worldwide. The calculation of CO2 emissions is based on the criteria illustrated in the Greenhouse Gas Protocol’s Corporate Value Chain (Scope 3) Accounting and Reporting Standard and Technical Guidance for Calculating Scope 3 Emissions. Real activity data related to routes, distances, frequencies and transport capacities are used in the calculation process. Although the procedure to calculate CO2 emission follows a similar approach for each mode of transportation, different coefficients or emission factors were used for each specific modality. Routes, number of transports and capacity utilization are extracted from Supply Chain Management Tools. Fuel efficiency is established in the base rate for truck carriers (included in payment terms), collected directly from carriers and shippers or refers to industry or international standards or local legislation and guidelines. Emission factors are taken from international standards or governmental agency guidelines, among which: standard EN16258, U.S. Environmental Protection Agency, DEFRA - U.K. Department for Environment, Food and Rural Affairs.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **Processing of sold products**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

### **Emissions calculation methodology**

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

A negligible portion of the mass-market vehicle portfolio undergoes further processing before being sold to customers, as well as chassis sold to other manufacturers. This category of the Group's overall Scope 3 emissions can be considered of minor relevance for its environmental footprint.

### **Use of sold products**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

90152474

### **Emissions calculation methodology**

Data is based on 3,591,574 vehicles sold in EU+EFTA, the US, Brazil and China markets. This figure includes passenger cars sold in EU+EFTA, Brazil and China and passenger cars and light duty trucks sold in model year 2017 in the US. Estimated average annual mileage of approximately 15,000 km for all fuel and engine types and 10 years of vehicle life. Emissions of greenhouse gases (GHG) other than CO2 have a negligible impact and therefore are not included (CO2 accounts for over 99% of FCA’s total GHG emissions).

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **End of life treatment of sold products**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

889023

### **Emissions calculation methodology**

Data is estimated using Life Cycle Assessment according to ISO 14040-14044; performed with Gabi 8.7 software, using CML 2001 method (updated January 2016) in order to calculate the GWP of the end of life of an average FCA vehicle. This result was multiplied for the number of vehicles sold worldwide during 2017. The results take into account the environmental debits due to the following ELV management activities: depollution (oil, fluids), dismantling for component reuse and material recycling, shredding activities, landfilling of the Automotive Shredder Residue. The environmental credits due to the reuse, recycling and recovery of the materials sorted are out of the boundaries of the LCA. Data quality is good: majority of data is primary data and comes from internal FCA activities and from FCA partners involved in the end of life management activities in Europe (where the 2000/53 European Directive gives responsibilities to the Economic Operators of the chain), some high quality data comes from LCA software GABI 8.7 database; data on the vehicles sold worldwide refer to 2017. Data sources used are FCA internal ELV management activities; European ELV management chain partners; Gabi 8.7 SW database ; https://www.fcagroup.com/en-US/investors/financial\_regulatory/financial\_reports/files/FCA\_NV\_2017\_Annual\_Report.pdf

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

According to auto industry studies and FCA's internal calculations, the carbon footprint in terms of Global Warming Potential – GWP – (CO2eq) of the end-of-life treatment of sold products accounts for 1-3% of products' environmental impact throughout their entire life cycle (manufacturing process, use and disposal phases). Nevertheless the Group continues to analyze existing leading methodologies and initiatives and monitors developments in Europe of a common voluntary methodology in order to facilitate the future establishment of a range of possible policy scenarios related to these issues. The Group recognizes that in order to reach the targets set in 2015 by the European Directive 2000/53/EC (85% recycling and 95% recovery) it is essential to strengthen its commitment and intensify dedicated activities and programs. To maximize the recoverability of its end-of-life vehicles, the Group has developed a network of approved agents who are trained and instructed in dismantling reusable components and properly separating materials so that they can be recycled. In addition, the Group developed a website designed to provide customers with information and facilitate communication between dismantling agents and non-metallic materials recycling companies (www.carecycling.fiat.com). This website is continually updated and includes news and announcements about new relevant regulations, activities to promote recycling and new research projects for handling materials coming from the vehicle dismantling businesses.

### **Downstream leased assets**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

0

### **Emissions calculation methodology**

This category is accounted as 0 (zero) as the Group incorporates emissions from products leased to customers into the category "use of sold products" in order to avoid double-counting between the two categories. In fact the same product is provided to customers both through sales or lease contracts and it's not considered relevant to separate them in terms of efforts aimed at developing strategies for emissions reduction. The accounting of CO2 emissions for products leased to customers is the same as for products sold to customers. Data is based on the main markets of Europe, U.S., Brazil and China, and calculated from the following elements: passenger cars leased in 2017 in Europe, Brazil and China and passenger cars and light duty trucks leased in model year 2017 in the U.S.; average vehicle CO2 emissions for 2017; estimated average annual mileage of approximately 15,000 km for all fuel and engine types and 10 years of vehicle life. Emissions of greenhouse gases (GHG) other than CO2 have a negligible impact and therefore are not included (CO2 accounts for over 99% of FCA’s total GHG emissions).

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **Franchises**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

125535

### **Emissions calculation methodology**

Figures refer to the distribution network in the EMEA region. Data estimated according to the GHG Protocol – Technical Guidance for Calculating Scope 3 Emissions. Through data collected in past years in selected dealerships, relying on directly monitored information about Scope 1 and Scope 2 energy consumption, we were able to calculate the energy consumption factor per square meter specific for car dealerships. Total CO2 emissions estimated by multiplying the energy consumption factor for the average surface dimension of dealerships, the number of points of sale in each EMEA market and applying emission factors specific for countries or fuels. Emission factors were taken from international standards such those released by the IEA.

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

The Group considers as not relevant the Scope 3 emissions from the privately owned dealership network as we do not have direct control or influence on these activities and the related emissions. However, several initiatives are in place to increase sustainability awareness and efficient use of resources in the network of independent dealers.

### **Investments**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

### **Emissions calculation methodology**

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

CO2 emissions from 6 Group plants operated through joint ventures on which the Group has operational control are already included in our Scope 1 and 2 figures. Emissions from other investments not included in Scope 1 and/or 2 are considered not relevant for the Group global carbon footprint as they are primarily relevant for financial sector companies. Even if the Group operates in a financial business providing financing and leasing packages as well as insurance services (i.e., credit protection insurance, car insurance, extended warranties), any possible emissions from these activities is negligible, and is estimated to represent less than 1% of total Scope 3 emissions.

### **Other (upstream)**

### **Evaluation status**

### **Metric tonnes CO2e**

### **Emissions calculation methodology**

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

### **Other (downstream)**

### **Evaluation status**

### **Metric tonnes CO2e**

### **Emissions calculation methodology**

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

## **C6.7**

### **(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

No

## **C6.10**

### **(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

### **Intensity figure**

0.0000343902

### **Metric numerator (Gross global combined Scope 1 and 2 emissions)**

3815037

### **Metric denominator**

unit total revenue

### **Metric denominator: Unit total**

110934000000

### **Scope 2 figure used**

Market-based

### **% change from previous year**

2.1

### **Direction of change**

Decreased

### **Reason for change**

In 2017, FCA revenues were in line with 2016, with a decrease of just 0.1% (from approximately €111.0 billion in 2016 to €110.9 billion in 2017). Total GHG emissions decreased 2.2% (from around 3.9 to 3.8 million tons of CO2) thanks to an additional impact of emission reduction activities (around 3,600 projects) identified to reduce energy consumption and GHG emissions (160,000 tons of CO2 estimated savings) and to additional use of renewable energy (+1%).

## **C7. Emissions breakdowns**

## **C7.1**

### **(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?**

No

## **C7.2**

### **(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

|  |  |
| --- | --- |
| **Country/Region** | **Scope 1 emissions (metric tons CO2e)** |
| Argentina | 3955 |
| Brazil | 96937 |
| Canada | 156541 |
| China | 15121 |
| Czechia | 2414 |
| France | 1127 |
| Germany | 2072 |
| India | 4542 |
| Italy | 153133 |
| Malaysia | 36 |
| Mexico | 99467 |
| Poland | 19204 |
| Portugal | 2359 |
| Romania | 499 |
| Russian Federation | 1023 |
| Serbia | 14218 |
| Slovakia | 463 |
| Spain | 620 |
| Turkey | 52032 |
| United States of America | 475444 |
| Venezuela (Bolivarian Republic of) | 81 |

## **C7.3**

### **(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By business division

## **C7.3a**

### **(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

|  |  |
| --- | --- |
| **Business division** | **Scope 1 emissions (metric ton CO2e)** |
| Mass-market vehicles assembly and stamping | 769896 |
| Mass-market vehicles engines and transmissions | 66083 |
| Mass-market vehicle casting | 38746 |
| Mass-market vehicle others | 17554 |
| Maserati | 22048 |
| Magneti Marelli | 53598 |
| Teksid | 127103 |
| Comau | 6261 |

## **C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4**

### **(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Gross Scope 1 emissions, metric tons CO2e** | **Net Scope 1 emissions , metric tons CO2e** | **Comment** |
| Cement production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Chemicals production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Coal production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Electric utility generation activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Metals and mining production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (upstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (downstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Steel production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Transport OEM activities | 914327 | <Not Applicable> | Scope 1 emissions related to mass-market vehicles activities in the four regions (APAC, EMEA, LATAM and NAFTA) and to Maserati vehicles. |
| Transport services activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |

## **C7.5**

### **(C7.5) Break down your total gross global Scope 2 emissions by country/region.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Country/Region** | **Scope 2, location-based (metric tons CO2e)** | **Scope 2, market-based (metric tons 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)** |
| Argentina | 6950 | 6893 | 18089 | 148 |
| Brazil | 119332 | 774 | 762990 | 758046 |
| Canada | 61567 | 17172 | 405580 | 0 |
| China | 135146 | 135146 | 213805 | 0 |
| Czechia | 26717 | 22346 | 57357 | 9384 |
| France | 1322 | 1229 | 24397 | 1720 |
| Germany | 8184 | 5737 | 19471 | 5822 |
| India | 31635 | 15969 | 41015 | 20310 |
| Italy | 791407 | 425651 | 2484794 | 900749 |
| Malaysia | 14591 | 14591 | 21238 | 0 |
| Mexico | 296731 | 292047 | 645629 | 7954 |
| Poland | 323416 | 296394 | 522989 | 39387 |
| Portugal | 21639 | 13152 | 64614 | 25342 |
| Romania | 453 | 454 | 1370 | 0 |
| Russian Federation | 3939 | 3939 | 12189 | 0 |
| Serbia | 39255 | 35043 | 58765 | 0 |
| Slovakia | 2385 | 2385 | 13011 | 0 |
| Spain | 9552 | 9449 | 32611 | 353 |
| Turkey | 91226 | 91227 | 214147 | 0 |
| United States of America | 1322662 | 1322662 | 2035367 | 0 |
| Venezuela (Bolivarian Republic of) | 1488 | 1488 | 5272 | 0 |

## **C7.6**

### **(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

By business division

## **C7.6a**

### **(C7.6a) Break down your total gross global Scope 2 emissions by business division.**

|  |  |  |
| --- | --- | --- |
| **Business division** | **Scope 2, location-based emissions (metric tons CO2e)** | **Scope 2, market-based emissions (metric tons CO2e)** |
| Mass-market vehicle assembly and stamping | 1676892 | 1398577 |
| Mass-market vehicle engines and transmissions | 793426 | 661740 |
| Mass-market vehicle casting | 93583 | 93583 |
| Mass-market vehicle others | 66877 | 55777 |
| Maserati | 64473 | 43844 |
| Magneti Marelli | 363274 | 295943 |
| Teksid | 237774 | 152139 |
| Comau | 13300 | 12145 |

## **C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7**

### **(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Scope 2, location-based, metric tons CO2e** | **Scope 2, market-based (if applicable), metric tons CO2e** | **Comment** |
| Cement production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Chemicals production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Coal production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Metals and mining production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (upstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Oil and gas production activities (downstream) | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Steel production activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Transport OEM activities | 2695251 | 2253521 |  |
| Transport services activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |

## **C-TO7.8**

### **(C-TO7.8) Provide primary intensity metrics that are appropriate to your indirect emissions in Scope 3 Category 11: Use of sold products from transport.**

### **Activity**

Light Duty Vehicles (LDV)

### **Emissions intensity figure**

0.000104

### **Metric numerator (Scope 3 emissions: use of sold products) in Metric tons CO2e**

90152474

### **Metric denominator**

p.km

### **Metric denominator: Unit total**

53873610000

### **% change from previous year**

### **Vehicle unit sales in reporting year**

3591574

### **Vehicle lifetime in years**

10

### **Annual distance in km or miles (unit specified by column 4)**

15000

### **Load factor**

The calculation of emissions intensity figure is based on average occupancy rates for passengers cars used in MoMo ( Mobility Model), 2017 :equal to 1.6. This load factor value could change in the coming years depending on several factors such as mobility trends and future services offered (e.g., TaaS, Transport as a Service ) https://sciencebasedtargets.org/wp-content/uploads/2018/05/SBT-transport-guidance-Final.pdf.

### **Please explain the changes, and relevant standards/methodologies used**

## **C7.9**

### **(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

## **C7.9a**

### **(C7.9a) 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.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Change in emissions (metric tons CO2e)** | **Direction of change** | **Emissions value (percentage)** | **Please explain calculation** |
| Change in renewable energy consumption | 38000 | Decreased | 1 | In 2017, FCA increased the investment in renewable energy procurement, avoiding the emission of an additional 38,000 tons of CO2 compared to previous year. Our total Scope1 and Scope 2 emissions in the previous year was 3,900,005 tons of CO2. We calculated -1% through (-38,000 / 3,900,005) \* 100 = - 1.0% |
| Other emissions reduction activities | 160000 | Decreased | 4.1 | The World Class Manufacturing (WCM) system reflects FCA’s commitment to environmental and sustainability issues. WCM, and in particular the Environment pillar, is an integral part of the Group’s Environmental Management System. This pillar is dedicated to the development of instruments and methods that provide support in reaching targets to reduce the environmental impact of plants while aiming to cut waste and optimize energy use. The Energy sub-pillar, included under the Environment pillar, plays a key role in improving energy performance through specific projects targeted at eliminating inefficient energy use. Various energy efficiency initiatives were implemented throughout the Group to reduce energy consumption and thus GHG emissions. In 2017, around 3,600 specific energy projects were implemented, resulting in an estimated 160,000 fewer tons of CO2 emissions. Each project is tracked and energy efficiency improvements are part of internal program reporting (subject to WCM audit). Our total Scope1 and Scope 2 emissions in the previous year was 3,900,005 tons of CO2. We calculated -4.1% through (-160,000 / 3,900,005) \* 100 = - 4.1% |
| Divestment |  | <Not Applicable> |  |  |
| Acquisitions |  | <Not Applicable> |  |  |
| Mergers |  | <Not Applicable> |  |  |
| Change in output | 120000 | Increased | 3.1 | Increase in production volumes (output) for some Group companies, mainly in the Automotive sector, resulted in a corresponding increase in energy consumption and thus in GHG emissions. Our total Scope1 and Scope 2 emissions in the previous year was 3,900,005 tons of CO2. We calculated +3.1% through (+120,000 / 3,900,005) \* 100 = + 3.1% |
| Change in methodology |  | <Not Applicable> |  |  |
| Change in boundary | 6000 | Decreased | 0.2 | 0.2% decrease in boundary is mainly due to a Teksid decrease of plant. Our total Scope1 and Scope 2 emissions in the previous year was 3,900,005 tons of CO2. We calculated -0.2% through (-6,000 / 3,900,005) \* 100 = -0.2% |
| Change in physical operating conditions |  | <Not Applicable> |  |  |
| Unidentified |  | <Not Applicable> |  |  |
| Other |  | <Not Applicable> |  |  |

## **C7.9b**

### **(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Market-based

## **C8. Energy**

## **C8.1**

### **(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

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

## **C8.2**

### **(C8.2) Select which energy-related activities your organization has undertaken.**

|  |  |
| --- | --- |
|  | **Indicate whether your organization undertakes this energy-related activity** |
| Consumption of fuel (excluding feedstocks) | Yes |
| Consumption of purchased or acquired electricity | Yes |
| Consumption of purchased or acquired heat | Yes |
| Consumption of purchased or acquired steam | Yes |
| Consumption of purchased or acquired cooling | Yes |
| Generation of electricity, heat, steam, or cooling | Yes |

## **C8.2a**

### **(C8.2a) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Heating value** | **MWh from renewable sources** | **MWh from non-renewable sources** | **Total MWh** |
| Consumption of fuel (excluding feedstock) | LHV (lower heating value) | 0 | 5735392 | 5735392 |
| Consumption of purchased or acquired electricity | <Not Applicable> | 1755863 | 4396641 | 6152504 |
| Consumption of purchased or acquired heat | <Not Applicable> | 1296 | 1142162 | 1143458 |
| Consumption of purchased or acquired steam | <Not Applicable> | 0 | 0 | 0 |
| Consumption of purchased or acquired cooling | <Not Applicable> | 11694 | 347043 | 358737 |
| Consumption of self-generated non-fuel renewable energy | <Not Applicable> | 873 | <Not Applicable> | 873 |
| Total energy consumption | <Not Applicable> | 1769726 | 11621211 | 13390936 |

## **C8.2b**

### **(C8.2b) Select the applications of your organization’s consumption of fuel.**

|  |  |
| --- | --- |
|  | **Indicate whether your organization undertakes this fuel application** |
| Consumption of fuel for the generation of electricity | No |
| Consumption of fuel for the generation of steam | Yes |
| Consumption of fuel for the generation of cooling | No |
| Consumption of fuel for co-generation or tri-generation | Yes |

## **C8.2c**

### **(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

### **Fuels (excluding feedstocks)**

Natural Gas

### **Heating value**

LHV (lower heating value)

### **Total fuel MWh consumed by the organization**

5506932

### **MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

0

### **MWh fuel consumed for self-generation of steam**

5463782

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self- cogeneration or self-trigeneration**

43150

### **Fuels (excluding feedstocks)**

Diesel

### **Heating value**

LHV (lower heating value)

### **Total fuel MWh consumed by the organization**

19059

### **MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

0

### **MWh fuel consumed for self-generation of steam**

19059

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self- cogeneration or self-trigeneration**

0

### **Fuels (excluding feedstocks)**

Coal

### **Heating value**

LHV (lower heating value)

### **Total fuel MWh consumed by the organization**

180731

### **MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

0

### **MWh fuel consumed for self-generation of steam**

180731

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self- cogeneration or self-trigeneration**

0

### **Fuels (excluding feedstocks)**

Fuel Oil Number 1

### **Heating value**

LHV (lower heating value)

### **Total fuel MWh consumed by the organization**

27

### **MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

0

### **MWh fuel consumed for self-generation of steam**

27

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self- cogeneration or self-trigeneration**

0

### **Fuels (excluding feedstocks)**

Liquefied Petroleum Gas (LPG)

### **Heating value**

LHV (lower heating value)

### **Total fuel MWh consumed by the organization**

28643

### **MWh fuel consumed for the self-generation of electricity**

<Not Applicable>

### **MWh fuel consumed for self-generation of heat**

0

### **MWh fuel consumed for self-generation of steam**

28643

### **MWh fuel consumed for self-generation of cooling**

<Not Applicable>

### **MWh fuel consumed for self- cogeneration or self-trigeneration**

0

## **C8.2d**

### **(C8.2d) List the average emission factors of the fuels reported in C8.2c.**

### **Coal**

### **Emission factor**

0.0946

### **Unit**

metric tons CO2 per GJ

### **Emission factor source**

2006 IPCC Guidelines

### **Comment**

### **Diesel**

### **Emission factor**

0.0741

### **Unit**

metric tons CO2 per GJ

### **Emission factor source**

2006 IPCC Guidelines

### **Comment**

### **Fuel Oil Number 1**

### **Emission factor**

0.0774

### **Unit**

metric tons CO2 per GJ

### **Emission factor source**

2006 IPCC Guidelines

### **Comment**

Low Sulfur Fuel Oil

### **Liquefied Petroleum Gas (LPG)**

### **Emission factor**

0.0631

### **Unit**

metric tons CO2 per GJ

### **Emission factor source**

2006 IPCC Guidelines

### **Comment**

### **Natural Gas**

### **Emission factor**

0.0561

### **Unit**

metric tons CO2 per GJ

### **Emission factor source**

2006 IPCC Guidelines

### **Comment**

## **C8.2e**

### **(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Total Gross generation (MWh)** | **Generation that is consumed by the organization (MWh)** | **Gross generation from renewable sources (MWh)** | **Generation from renewable sources that is consumed by the organization (MWh)** |
| Electricity | 10773 | 10537 | 451 | 451 |
| Heat | 0 | 0 | 0 | 0 |
| Steam | 211535 | 211535 | 60 | 60 |
| Cooling | 785 | 785 | 0 | 0 |

## **C8.2f**

### **(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.**

### **Basis for applying a low-carbon emission factor**

Energy attribute certificates, Guarantees of Origin

### **Low-carbon technology type**

Hydropower

### **MWh consumed associated with low-carbon electricity, heat, steam or cooling**

742662

### **Emission factor (in units of metric tons CO2e per MWh)**

0

### **Comment**

### **Basis for applying a low-carbon emission factor**

Energy attribute certificates, Guarantees of Origin

### **Low-carbon technology type**

Other low-carbon technology, please specify (geothermal)

### **MWh consumed associated with low-carbon electricity, heat, steam or cooling**

53785

### **Emission factor (in units of metric tons CO2e per MWh)**

0

### **Comment**

### **Basis for applying a low-carbon emission factor**

Energy attribute certificates, Guarantees of Origin

### **Low-carbon technology type**

Solar PV

### **MWh consumed associated with low-carbon electricity, heat, steam or cooling**

1090

### **Emission factor (in units of metric tons CO2e per MWh)**

0

### **Comment**

### **Basis for applying a low-carbon emission factor**

Energy attribute certificates, Guarantees of Origin

### **Low-carbon technology type**

Wind

### **MWh consumed associated with low-carbon electricity, heat, steam or cooling**

3145

### **Emission factor (in units of metric tons CO2e per MWh)**

0

### **Comment**

### **Basis for applying a low-carbon emission factor**

Contract with suppliers or utilities ( e.g. green tariff), supported by energy attribute certificates

### **Low-carbon technology type**

Hydropower

### **MWh consumed associated with low-carbon electricity, heat, steam or cooling**

101695

### **Emission factor (in units of metric tons CO2e per MWh)**

0

### **Comment**

### **Basis for applying a low-carbon emission factor**

Contract with suppliers or utilities (e.g. green tariff), not supported by energy attribute certificates

### **Low-carbon technology type**

Hydropower

### **MWh consumed associated with low-carbon electricity, heat, steam or cooling**

194

### **Emission factor (in units of metric tons CO2e per MWh)**

0

### **Comment**

### **Basis for applying a low-carbon emission factor**

Off-grid energy consumption from an on-site installation or through a direct line to an off-site generator owned by another company

### **Low-carbon technology type**

Solar PV

### **MWh consumed associated with low-carbon electricity, heat, steam or cooling**

873

### **Emission factor (in units of metric tons CO2e per MWh)**

0

### **Comment**

## **C-TO8.4**

### **(C-TO8.4) Provide any efficiency metrics that are appropriate for your organization’s transport products and/or services.**

### **Activity**

Light Duty Vehicles (LDV)

### **Metric figure**

25

### **Metric numerator**

tCO2

### **Metric denominator**

Production: Vehicle

### **Metric numerator: Unit total**

90152474

### **Metric denominator: Unit total**

3591574

### **% change from previous year**

-3

### **Please explain**

Please note that: intensity factor calculated with 2017 data is based on the following parameters: 1) different scope 3 perimeter with the inclusion of Chinese and Brazilian data compared to 2016 disclosures 2) different vehicle sales data with the inclusion of Chinese and Brazilian data compared to 2016 disclosures

## **C9. Additional metrics**

## **C9.1**

### **(C9.1) Provide any additional climate-related metrics relevant to your business.**

### **Description**

Waste

### **Metric value**

982050

### **Metric numerator**

### **Metric denominator (intensity metric only)**

### **% change from previous year**

29

### **Direction of change**

Decreased

### **Please explain**

Tons of total waste generated by FCA plants worldwide. This figure decreased by 29% in 2017 vs previous year and by 42% compared with 2010.

### **Description**

Waste

### **Metric value**

31906

### **Metric numerator**

### **Metric denominator (intensity metric only)**

### **% change from previous year**

0.3

### **Direction of change**

Please select

### **Please explain**

Tons of total hazardous waste generated by FCA plants worldwide. This figure decreased by 0.3% in 2017 vs previous year and by 45% compared with 2010.

### **Description**

Waste

### **Metric value**

230417

### **Metric numerator**

### **Metric denominator (intensity metric only)**

### **% change from previous year**

28

### **Direction of change**

Increased

### **Please explain**

Tons of total waste to landfill generated by FCA plants worldwide. This figure increased by 28% in 2017 vs previous year but decreased by 55% compared with 2010. The quantity of waste sent to landfills by the Group is significantly influenced by a single type of waste from an FCA company that operates in the iron and casting components sector; Teksid generates inert industrial process sand, which must be sent to landfill at the present time due to technological constraints. Teksid has several projects in progress aimed at optimizing the management of this type of waste.

### **Description**

Energy use

### **Metric value**

48207473

### **Metric numerator**

### **Metric denominator (intensity metric only)**

### **% change from previous year**

1.6

### **Direction of change**

Increased

### **Please explain**

GJ of energy consumed by FCA plants worldwide. This figure increased by 1.6% in 2017 compared with previous year but decreased by 1.4% compared with 2010.

## **C-TO9.3/C-TS9.3**

### **(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.**

### **Activity**

Light Duty Vehicles (LDV)

### **Metric**

Sales

### **Technology**

Vehicle using LPG/CNG

### **Metric figure**

20000

### **Metric unit**

Units

*units refers only to CNG propulsion*

### **Explanation**

FCA was a pioneer and has been among the leaders for more than 20 years in natural gas vehicles in Europe. Since 1997, the Group has sold more than 740,000 natural gas-powered cars and commercial vehicles. Natural gas is one of the most economical fuels available and a viable alternative to traditional fuels. It produces a low level of regulated emissions and generates 23% less CO2 emissions compared with gasoline. In addition, natural gas has the potential to become a renewable fuel source in the form of biomethane. Natural gas is also a key element in the European Union’s strategy for low emission mobility. In line with the principles set in the EU Directive on the deployment of alternative fuels infrastructure (DAFI), FCA is cooperating with leading energy players in Europe. The Group offers a wide range of eco-friendly, bi-fuel (natural gas/ gasoline) vehicles that meet the needs of private and commercial consumers. In the U.S., FCA offers a factory-built compressed natural gas (CNG) pickup, the Ram 2500 Heavy Duty CNG. In February 2017, the 300,000th Fiat Panda Natural Power was manufactured in the Pomigliano plant (Italy); this was the first mass-produced CNG city car and, from 2007 to date, is the best-selling CNG car in Europe. Biomethane, which is produced by upgrading biogas, has the same properties and uses as fossil natural gas. Biogas is derived from organic materials such as manure, crop residues and organic municipal waste. A natural gas vehicle can also run on Biomethane and, on a well-to-wheel basis, produces roughly the same level of CO2 emissions as an electric-powered vehicle running on electricity generated from renewable fuel. During 2017, FCA was engaged in several projects to promote biomethane as a sustainable solution for transportation. Among these initiatives, a Fiat Panda Natural Power was delivered to the CAP Group, the utility company that manages water works, sewage and treatment facilities in metropolitan Milan (Italy). The Fiat Panda Natural Power is operating on biomethane made by the CAP Group from sewage sludge and waste water, in a virtuous and innovative circular economy approach. Please note that the 20,000 vehicles declared only refer to CNG propulsion.

### **Activity**

Light Duty Vehicles (LDV)

### **Metric**

Sales

### **Technology**

Vehicle using bio-fuel

### **Metric figure**

336000

### **Metric unit**

Units

### **Explanation**

In Brazil, FCA has a full range of Flexfuel vehicles that run on varying blends of gasoline and bioethanol. Brazil has an extensive bioethanol distribution network, supported by long-standing government policies and readily available raw materials. In Brazil, the major market in the LATAM region, more than 336,000 Flexfuel vehicles were registered in 2017, accounting for approximately 89% of vehicles licensed by the Group in this market. FCA participates in the government’s INMETRO vehicle fuel consumption monitoring program (PBEV - Brazilian Labeling Program Vehicle). For PBEV 2017, 103 FCA models were involved. FCA's global family of small gasoline engines, launched in Latin America in 2016 under the Firefly family name, was designed to improve vehicle fuel economy and emission levels. It covers a large range of vehicle applications with different power outputs and introduces new features and technologies to improve efficiencies, focusing on a reduction in friction and thermal management to maximize the efficiency of the engine's internal combustion.

## **C-TO9.6/C-TS9.6**

### **(C-TO9.6/C-TS9.6) What is your investment in research and development (R&D), equipment, products and services and which part of it would you consider a direct investment in the low-carbon transition?**

### **Activity**

Light Duty Vehicles (LDV)

### **Investment start date**

January 1 2017

### **Investment end date**

December 31 2017

### **Investment area**

R&D

### **Technology area**

Other, please specify (Autonomous Driving, Connectivity, EV)

### **Investment maturity**

Applied research and development

### **Investment figure**

4300000000

### **Low-carbon investment percentage**

81-100%

### **Please explain**

FCA’s global research and development activities are aimed at improving the design, performance, safety, fuel efficiency, reliability, consumer perception and sustainability of the Group’s products and services. In 2017, the Group invested approximately €4.3 billion in research and development, representing around 3.9% of net revenues from industrial operations. Approximately 21,000 employees at 87 locations worldwide were involved in the Group’s innovation activities, continuing to generate a significant intellectual property portfolio. At year-end 2017, FCA had 11,853 patents and patent applications, and 1,854 protected product designs. Patent applications are filed in Europe, the US and around the world to protect technology and improvements considered important to our business. Important areas of focus for the Group’s research and development activities include: • enhancing vehicle safety and connectivity – through the development of safer and smarter vehicles that are increasingly integrated into a secure and intelligent transport system • increasing product competitiveness – with a focus on new vehicle architectures, performance, comfort, perceived quality, and innovative production technologies while ensuring affordability and economic sustainability • minimizing the environmental footprint – reducing the environmental impact of vehicles over their entire life cycles, from the use of raw materials to vehicle end-of-life, improving vehicle energy efficiency and performance while reducing carbon and polluting emissions and noise. The primary Research and Development facilities at FCA are located in Turin and Modena (Italy) and in Auburn Hills (U.S.) and Windsor (Canada). During 2017, a new FCA research center dedicated to autonomous driving solutions (SAE Level 3) in Trento (Italy) was opened as the first privately-owned site in Italy to test urban scenarios, including a focus on preventive safety and Advanced Driver Assistance Systems (ADAS).

### **Activity**

Light Duty Vehicles (LDV)

### **Investment start date**

July 1 2018

### **Investment end date**

June 30 2020

### **Investment area**

R&D

### **Technology area**

Other, please specify (Electrification, Autonomous Driving, )

### **Investment maturity**

Applied research and development

### **Investment figure**

420000000

### **Low-carbon investment percentage**

81-100%

### **Please explain**

In June 2018, Fiat Chrysler Automobiles N.V. signed with the European Investment Bank (“EIB”), a € 420 million four-year loan to support Research and Development projects to be implemented by FCA during 2018-2020. FCA investment in Research and Development for the period 2018-2020 has a number of key objectives including electrification technology solutions for hybrid and battery electric vehicles and the development of autonomous driving. Moreover, the Research and Development activities will be dedicated to the application of connectivity technologies for the offering of telematics services on the FCA product line up. The Research and Development projects also include the development of digital technologies to be deployed in manufacturing processes. Please note that the €420 million are a part of the expected €9 billion Research and Development investment plan declared during FCA Capital Markets Day related to the 2018-2022 electrification plan.

### **Activity**

Light Duty Vehicles (LDV)

### **Investment start date**

June 1 2018

### **Investment end date**

June 1 2022

### **Investment area**

R&D

### **Technology area**

Electrification

### **Investment maturity**

Applied research and development

### **Investment figure**

9000000000

### **Low-carbon investment percentage**

81-100%

### **Please explain**

During Capital Markets Day (June 2018), FCA announced an expected investment of more than €9 billion in electrification for the new 2018-2022 business plan. By 2022, FCA will implement several EV systems such as mHEV, HEV, PHEV and BEV across global vehicle architectures. The vehicle segments involved in the electrification strategy are small, compact/mid and large. In total, over 30 nameplates are expected to utilize one or more of the EV systems by 2022.

## **C10. Verification**

## **C10.1**

### **(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

|  |  |
| --- | --- |
|  | **Verification/assurance status** |
| Scope 1 | Third-party verification or assurance process in place |
| Scope 2 (location-based or market-based) | Third-party verification or assurance process in place |
| Scope 3 | Third-party verification or assurance process in place |

## **C10.1a**

### **(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.**

### **Scope**

Scope 1

### **Verification or assurance cycle in place**

Annual process

### **Status in the current reporting year**

Complete

### **Type of verification or assurance**

Limited assurance

### **Attach the statement**

[FCA\_Assurance Report on CDP18.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/SefYH1bqtEWgZG5x7guD4Q/FCAAssuranceReportonCDP18.pdf)

### **Page/ section reference**

Pages 1-2

### **Relevant standard**

ISAE3000

### **Proportion of reported emissions verified (%)**

100

### **Scope**

Scope 2 location-based

### **Verification or assurance cycle in place**

Annual process

### **Status in the current reporting year**

Complete

### **Type of verification or assurance**

Limited assurance

### **Attach the statement**

[FCA\_Assurance Report on CDP18.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/SefYH1bqtEWgZG5x7guD4Q/FCAAssuranceReportonCDP18.pdf)

### **Page/ section reference**

Pages 1-2

### **Relevant standard**

ISAE3000

### **Proportion of reported emissions verified (%)**

100

### **Scope**

Scope 2 market-based

### **Verification or assurance cycle in place**

Annual process

### **Status in the current reporting year**

Complete

### **Type of verification or assurance**

Limited assurance

### **Attach the statement**

[FCA\_Assurance Report on CDP18.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/SefYH1bqtEWgZG5x7guD4Q/FCAAssuranceReportonCDP18.pdf)

### **Page/ section reference**

Pages 1-2

### **Relevant standard**

ISAE3000

### **Proportion of reported emissions verified (%)**

100

## **C10.1b**

### **(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

### **Scope**

Scope 3- at least one applicable category

### **Verification or assurance cycle in place**

Annual process

### **Status in the current reporting year**

Complete

### **Attach the statement**

[FCA\_Assurance Report on CDP18.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/SefYH1bqtEWgZG5x7guD4Q/FCAAssuranceReportonCDP18.pdf)

### **Page/section reference**

Pages 1-2 Categories verified: Category 1 - Purchased goods and services Category 2 - Capital goods Category 4 - Upstream transportation and distribution Category 9 - Downstream transportation and distribution Category 11 - Use of sold products

### **Relevant standard**

ISAE3000

## **C10.2**

### **(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

Yes

## **C10.2a**

### **(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?**

[FCA\_Assurance Report on CDP18.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/SefYH1bqtEWgZG5x7guD4Q/FCAAssuranceReportonCDP18.pdf)

|  |  |  |  |
| --- | --- | --- | --- |
| **Disclosure module verification relates to** | **Data verified** | **Verification standard** | **Please explain** |
| C4. Targets and performance | Year on year change in emissions (Scope 1 and 2) | ISAE3000 | Since several years FCA data related to targets has been verified. During yearly CO2 emission verification, the auditors assess both year emission and change to previous years. |
| C4. Targets and performance | Year on year emissions intensity figure | ISAE3000 | Since several years FCA data related to targets has been verified. During yearly CO2 emission verification, the auditors assess both year emission and change to previous years. |
| C4. Targets and performance | Progress against emissions reduction target | ISAE3000 | Since several years FCA data related to targets has been verified. During yearly CO2 emission verification, the auditors assess both year emission and change to previous years. |

## **C11. Carbon pricing**

## **C11.1**

### **(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

Yes

## **C11.1a**

### **(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.**

EU ETS

Ontario CaT

## **C11.1b**

### **(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.**

### **EU ETS**

### **% of Scope 1 emissions covered by the ETS**

5

### **Period start date**

January 1 2017

### **Period end date**

December 31 2017

### **Allowances allocated**

48239

### **Allowances purchased**

27000

### **Verified emissions in metric tons CO2e**

59634

### **Details of ownership**

Facilities we own and operate

### **Comment**

### **Ontario CaT**

### **% of Scope 1 emissions covered by the ETS**

14

### **Period start date**

January 1 2017

### **Period end date**

December 31 2017

### **Allowances allocated**

158078

### **Allowances purchased**

0

### **Verified emissions in metric tons CO2e**

156541

### **Details of ownership**

Facilities we own and operate

### **Comment**

## **C11.1d**

### **(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?**

Much of the energy used at FCA plants comes from third-party power generation plants, with around 40% produced by company power plants. At year-end 2017, the Group only had six directly owned power generation plants that qualified for a trading system. Five qualified for the European emissions trading system (EU-ETS), all of them located in Italy, and one located in Ontario qualified for the Ontario CaT. CO2 emissions allocated to these generation plants for 2017 have to date resulted in around 206,000 tons compared to the verified emissions of 216,000 tons. The Group purchased around 27,000 allowances. As FCA is under the two schemes and the EU-ETS 3rd phase (2013-2020) has already started, the Group strategy is structured on four main drivers with the aim of increasing efficiency in terms of energy consumed and CO2 emitted (reducing energy consumption and using cleanest fuels, as well as renewable sources) and reducing the financial cost of energy generation: A) Energy efficiency initiatives: the Group benefits from significant synergies among FCA companies through sharing of best practices, increased engagement and awareness among plant employees, and the implementation of around 3,600 energy improvement projects under the World Class Manufacturing program. In support of these activities, further training and awareness initiatives were delivered to personnel. B) Efficient energy generation: for the production of energy, FCA favors high efficiency power generation systems: cogeneration and trigeneration plants capable of providing heating and electricity for manufacturing and climate control needs. C) Renewable energy: the Group is committed to use, where possible and economically viable, renewable energy sources. The electricity purchased externally in Italy by the mass-market vehicle segment is already 100% renewable, and almost all the electricity purchased in Brazil has been renewable for several years. D) Financial instruments: in order to minimize the financial impact of fluctuations in energy prices, several actions are available from a procurement perspective; Fuel markets allow a vast range of flexible procurement methodologies depending on the risk appetite (mainly represented by fixed-term vs indexed formulas). The impact on financials is also monitored providing a monthly forecast according to market price volatility and consumption needs expressed by manufacturing plants and their modifications while the energy contracts are in effect.

## **C11.2**

### **(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

No

## **C11.3**

### **(C11.3) Does your organization use an internal price on carbon?**

Yes

## **C11.3a**

### **(C11.3a) Provide details of how your organization uses an internal price on carbon.**

### **Objective for implementing an internal carbon price**

Identify and seize low-carbon opportunities

### **GHG Scope**

Scope 2

### **Application**

Plants' electric energy

### **Actual price(s) used (Currency /metric ton)**

1.4

### **Variance of price(s) used**

FCA applies a differentiated pricing depending on the country or Region where we buy renewables.

### **Type of internal carbon price**

Implicit price

### **Impact & implication**

FCA calculates its implicit carbon price by dividing the cost of abatement / procurement by the tons of CO2.

## **C12. Engagement**

## **C12.1**

### **(C12.1) Do you engage with your value chain on climate-related issues?**

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

## **C12.1a**

### **(C12.1a) Provide details of your climate-related supplier engagement strategy.**

### **Type of engagement**

Information collection (understanding supplier behavior)

### **Details of engagement**

Collect climate change and carbon information at least annually from suppliers

### **% of suppliers by number**

7

### **% total procurement spend (direct and indirect)**

50

### **% Scope 3 emissions as reported in C6.5**

50

### **Rationale for the coverage of your engagement**

To promote awareness among suppliers of their impact on the climate, particularly regarding greenhouse gas emissions, 237 suppliers were invited to participate in the CDP supply chain program in 2017. Suppliers invited were selected among those with the highest spending and/or significant expected environmental impact.

### **Impact of engagement, including measures of success**

Of those invited, 167 suppliers disclosed (70% response rate), attaining an average score of C- (on a scale from A to D-). This response rate was due in part to dedicated supplier training webinars that FCA provided in cooperation with the CDP supply chain program to support this engagement and to convey the importance and benefits from transparently reporting on impacts. Approximately 86% of responding suppliers reported scope 1 and scope 2 emissions. By 2020, the Group expects to monitor 90-100% of top Group suppliers’ CO2 emissions (accounting for about 57% of annual purchases by value) through the CDP supply chain program. In 2017, suppliers disclosing accounted for approximately 50% of FCA annual purchases by value from direct and indirect material suppliers. 2017 represented a significant improvement in the impact of engagement compared with the previous year. In 2016, suppliers disclosing through the CDP supply chain program accounted for approximately 37% of FCA annual purchases by value from direct and indirect material suppliers.

### **Comment**

## **C12.1b**

### **(C12.1b) Give details of your climate-related engagement strategy with your customers.**

### **Type of engagement**

Education/information sharing

### **Details of engagement**

Share information about your products and relevant certification schemes (i.e. Energy STAR)

### **Size of engagement**

29

### **% Scope 3 emissions as reported in C6.5**

21

### **Please explain the rationale for selecting this group of customers and scope of engagement**

FCA regularly engages with customers to provide information regarding the proper use of our products and services while accommodating brand values, local requirements and different customer needs. This information is provided through a variety of methods, which includes owner and vehicle maintenance manuals. For example, in Europe the manuals include recommendations on driving style, appropriate maintenance and other topics that can contribute to reducing fuel consumption and lowering the amount of harmful emissions released into the atmosphere. The environmental impacts of the suggestions provided in the manuals can change due to several factors and external parameters. For example, one suggestion is that electric devices should only be used for the amount of time needed, such as the heated rear window, windscreen wipers and heater fan, which require a considerable amount of energy. These devices can increase fuel consumption by up to +25% in an urban driving cycle.

### **Impact of engagement, including measures of success**

Please note: engagement size refers to the owner manuals for vehicles sold in Europe.

## **C12.1c**

### **(C12.1c) Give details of your climate-related engagement strategy with other partners in the value chain.**

Central to FCA’s approach is the belief that effective, lasting solutions to climate change and other pressing environmental and social issues can only be achieved through an integrated approach that combines individual and collective commitment; an effective multi-stakeholder strategy; investment in enabling premium processes and technologies; and the incorporation of circular economy principles in operations. All of these elements are an integral part of FCA’s model of operating responsibly.

FCA is also committed to support the monitoring and progressive reduction of the environmental footprint attributable to the Dealer Network, despite the fact that it only has operational control over Company-owned dealerships and that the majority of the dealer network is privately-owned.

FCA is working on initiatives to reduce the environmental impact of the network based on local network opportunities. These programs relate to increasing awareness on sustainability topics while improving daily business operations. One example is the program launched in 2017 to assist U.S. dealers in converting to LED lighting. FCA and our partners in the program offer an LED retrofit solution that not only provides a brighter and safer environment at night, but also decreased the dealers’ total electricity cost more than 40% by reducing consumption by more than 50%, based on pilot results. This program supports FCA’s commitment to reducing the overall environmental impact, in addition to offering a positive financial impact for dealerships and a better experience for customers.

## **C12.3**

### **(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

Direct engagement with policy makers

Trade associations

Other

## **C12.3a**

### **(C12.3a) On what issues have you been engaging directly with policy makers?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Focus of legislation** | **Corporate position** | **Details of engagement** | **Proposed legislative solution** |
| Other, please specify (Alternative fuels and technologies) | Support | The Clean Power for Transport Package consists of a Communication which aims at establishing a long-term policy framework to guide technological development and investments in the deployment of alternative fuels. In 2014 the EU issued the Directive (2014/94/EU) on the deployment of an alternative fuel infrastructure (DAFI), which requires that each EU member state ensure an adequate number of publicly accessible refueling points for alternative fuels, including electricity, natural gas and biofuels. In line with the principles set in the Directive, FCA is cooperating with leading energy players in Europe. | The Group supports the DAFI Directive and believes that a single solution does not exist for sustainable mobility. In the current context, only the combination of alternative and conventional technologies can offer immediate, concrete results. Natural gas is one of the most economical fuels available and a viable alternative to traditional fuels (23% less CO2 emissions compared with gasoline). In addition, natural gas has the potential to become a renewable fuel source in the form of biomethane. Regarding alternative technologies, on June 1 2018, FCA presented the Group’s 2018-2022 Business Plan to financial analysts and institutional investors. Among the topics presented, in the CO2 Regulatory Compliance presentation FCA described the role of the automotive sector as part of the process in which government activities include the establishment of a regulatory framework, the deployment support of infrastructure (i.e. DAFI) and help drive consumer demand. In this scenario, the automotive industry role includes the task to develop and offer a broad portfolio of technologies. FCA expects to utilize one or more EV systems on over 30 nameplates by 2022, including PHEV and BEV models. The Group aims to contribute positively to the future development of regulations and standards in the automotive industry and in all other sectors related to the mobility of people and goods. |

## **C12.3b**

### **(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

## **C12.3c**

### **(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

### **Trade association**

Natural Gas Vehicle Associations (NGV America, NGVA Europe, NGV Italy)

### **Is your position on climate change consistent with theirs?**

Consistent

### **Please explain the trade association’s position**

Natural Gas Vehicle Associations (NGVAmerica, NGVA Europe & NGV Italy) support the adoption of government policies that stimulate the development and use of natural gas vehicles (NGVs) to help achieve a number of national and international policy goals, including reducing urban air pollution and greenhouse gases. NGVAmerica advocates for U.S. federal and state legislation and policies that would provide incentives to retail consumers and fleets to purchase and operate NGVs, to original equipment manufacturers (OEMs) to produce NGVs, and to entities to install natural gas home refueling appliances and public refueling infrastructure; support the expansion of NGVs in public transportation and government fleets; and government funding for natural gas vehicle and infrastructure research, development and demonstration. The association also advocates for federal legislation that would provide regulatory incentives to OEMs to produce NGVs.

### **How have you, or are you attempting to, influence the position?**

FCA is represented on the Board of Directors of the NGVAmerica, NGVA Europe and NGV Italy associations. Natural gas is one of the most economical fuels available and a viable alternative to traditional fuels. It produces a low level of regulated emissions and generates 23% less CO2 emissions compared with gasoline. FCA was a pioneer and has been in a leading position for more than 20 years in natural gas vehicles in Europe. Since 1997, the Group has sold more than 740,000 natural gas-powered cars and commercial vehicles. The Group offers a wide range of eco-friendly, bi-fuel (natural gas / gasoline) vehicles that meet the needs of private and commercial consumers. FCA US support of this technology was demonstrated by the introduction in North America in 2012 of the Ram 2500 Heavy Duty bi-fuel CNG pickup truck, the only factory-built bi-fuel CNG pickup truck available in the U.S. market. FCA Transport, the NAFTA region’s Group-owned trucking fleet, launched its CNG fleet of 185 tractors in 2015. FCA believes that advocating the use of natural gas in many different ways will help to secure sustainable mobility. FCA continues to support efforts of the associations to establish and advance industry positions on a range of issues to reduce market hurdles and promote the development of an NGV market. This includes support for the association’s efforts to advance government legislative and regulatory policies that would encourage and support the production, purchase and use of NGVs; incentivize the installation of natural gas fuel pumps at service stations and commercial facilities; support government funding for NGV and infrastructure research and development, and particularly for NGVAmerica, the installation of home refueling infrastructure.

### **Trade association**

EDTA (Electric Drive Transportation Association)

### **Is your position on climate change consistent with theirs?**

Consistent

### **Please explain the trade association’s position**

EDTA is a leading U.S. cross-industry trade association that works with its members to advance electric drive vehicles and technologies, including hybrid, pure battery electric, plug-in hybrid and fuel cell electric vehicles, through public policy advocacy and education. EDTA’s membership includes vehicle manufacturers, equipment manufacturers, energy companies, technology developers, component suppliers, government entities, fleet managers, and end users. The association advocates for U.S. federal and state legislation and policies that would maintain current tax incentives for purchasing electric vehicles and installing electric vehicle charging infrastructure; advance non-financial incentives and initiatives for electric vehicles; extend existing financial incentives for light-duty hybrid and electric vehicles to trucks; standardize regulatory policies and requirements for electric drive vehicles and infrastructure; and maintain U.S. federal support for research and development to accelerate technology breakthroughs for electric drive and other advanced vehicles. EDTA also educates media, policymakers and the public regarding the environmental benefits of electric vehicles.

### **How have you, or are you attempting to, influence the position?**

FCA is represented through FCA US as a member of the association. FCA US, with its expertise in hybrid and electric technologies, is the vehicle electrification center for the entire FCA Group. The challenge is to deliver cost-effective, high-value solutions while ensuring the improvement and evolution of internal combustion engines in this rapidly developing technical area. Accordingly, FCA is developing technologies that can be used in a range of electrified vehicles, including conventional hybrids, plug-in hybrids, fully electrified and range-extended electric vehicles. FCA’s first battery electric vehicle for mass production, the Fiat 500e, began production in late 2012. The Chrysler Pacifica Hybrid – the industry’s first electrified minivan - started production in late 2016 and the electric-powered Chrysler Portal Concept was revealed at the 2017 U.S. Consumer Electronics Show. The new 2018 Jeep Wrangler includes the new eTorque mild hybrid system, which will also be available on the 2019 Ram 1500. On June 1, 2018, FCA presented the 2018-2022 business plan. It disclosed that in the U.S., FCA expects to electrify 20% of its overall fleet, including commercial vehicles, in 2022 with a focus on plug-in hybrid electric vehicle systems; 15% is expected to be equipped with a mild hybrid system. Worldwide, FCA is preparing to offer electric vehicle systems on over 30 nameplates. FCA US supports efforts of the association to establish and advance industry positions on a range of issues to reduce market hurdles and promote the development of an electric vehicle market. This includes support for the association’s efforts to advance U.S. federal and state legislative and regulatory policies that would encourage and support the purchase and use of electric vehicles; the installation of public and home electric vehicle charging infrastructure; and U.S. government funding for electric vehicle and infrastructure research and development.

### **Trade association**

Alliance of Automobile Manufacturers

### **Is your position on climate change consistent with theirs?**

Consistent

### **Please explain the trade association’s position**

The Alliance of Automobile Manufacturers is the leading advocacy group for the US auto industry. The Alliance focuses on developing and implementing constructive solutions to public policy challenges that promote sustainable mobility and benefit society in the areas of environment, energy and motor vehicle safety. The organization provides FCA US and the auto industry with a united voice on U.S. federal and state regulatory and legislative matters. The Alliance supports an economy-wide greenhouse gas (GHG) emission reduction program, with supporting roles for state and local government. All sectors of the economy share responsibility for reducing GHGs and should be linked into one comprehensive program that allows businesses to trade off costs and benefits. It advocates a comprehensive multi-stakeholder approach to energy security and climate change progress. The Auto Alliance supports a harmonized National Program to improve fuel economy and reduce tailpipe GHG emissions.

### **How have you, or are you attempting to, influence the position?**

FCA is represented through FCA US on the Board of Directors of the association. FCA US supports the development of a harmonized U.S. National Program for improving fuel economy and reducing GHG emissions and plays an active role in the association, for example by participating in working groups, events and contributing to the preparation of technical supporting documents.

### **Trade association**

ACEA (European Automobile Manufacturers Association)

### **Is your position on climate change consistent with theirs?**

Consistent

### **Please explain the trade association’s position**

The European Automobile Manufacturers Association (ACEA) represents the interests of the 15 major Europe-based car, van, truck and bus makers in the EU. Using limited resources responsibly and protecting our environment: these are among the most important tasks facing society today. In both respects, European automobile manufacturers have an important role to play and they are embracing this challenge. Vehicle makers are technology leaders, driving innovation towards cleaner, "greener" transport. The auto industry shares concerns about climate change and is contributing actively to finding sustainable solutions. As a result of significant efforts by industry and billions of euros of investments in Research and Development, the sector is on the right path to reducing CO2 emissions. With respect to long-term CO2 targets, the ACEA position is that the 2025 and 2030 targets set by the EU Commission are very ambitious and will require breakthroughs in technologies, a new refueling infrastructure and a swift renewal of the car fleet on Europe’s roads. This will be a tough challenge, and all relevant players will have to combine their efforts, including the fuel and energy sectors and policy makers. It is essential that personal mobility remain affordable, to ensure that new technologies are accepted by the consumer. Market demand will be key in reaching today’s and future targets.

### **How have you, or are you attempting to, influence the position?**

Through ACEA, which interfaces on a regular basis with the major European institutions, FCA has promoted a constructive dialogue with institutions in in the following priority fields: connected and automated driving; competitiveness; international trade; market and economy; environment and sustainability; R&D; safety; and transport policy. FCA is a founding member of the Association and contributes both financially through a membership fee and operationally through the Group experts’ participation in specific working groups and task forces.

### **Trade association**

ANFAEVA (Associacao Nacional dos Fabricantes de Veiculos Automotores )

### **Is your position on climate change consistent with theirs?**

Consistent

### **Please explain the trade association’s position**

In Brazil, the Group has long been an active member of the Associacao Nacional dos Fabricantes de Veiculos Automotores (ANFAVEA). This nationwide association unites the country’s automakers with the purpose of addressing industry and market issues affecting the automotive sector.

### **How have you, or are you attempting to, influence the position?**

FCA is represented on the Board of Directors of the ANFAVEA. As a member, FCA engages in constant dialogue with the government to monitor legislation on fuel consumption such as the INOVAR-Auto program which establishes a minimum average vehicle energy efficiency for 2017 expressed in MJ/km. The goal of energy efficiency of each company will be determined by the mass weighted by sales volume. FCA is a signatory to the INOVAR-Auto legislation and voluntarily participates in PBEV, the government’s INMETRO vehicle fuel consumption labeling program. The Group plays an active role in several technical committees and coordinates the Energy and Environmental Commission.

### **Trade association**

AEA (Brazilian Association of Automotive Engineering)

### **Is your position on climate change consistent with theirs?**

Consistent

### **Please explain the trade association’s position**

The Brazilian Association of Automotive Engineering (AEA) is a nonprofit organization that aims to be a neutral forum for discussion on strategic issues relating to national automotive engineering with the direct involvement of the automotive industry, government agencies, educational and research institutions, international organizations and society in general. Currently, the organization has more than 70 member companies from different segments of the automotive sector that actively participate in technical committees, working groups, workshops, events, courses and projects for the development of the national automotive engineering field.

### **How have you, or are you attempting to, influence the position?**

AEA participates, as an independent association, in national discussions on significant topics either for society or for the industry. FCA participates actively in ongoing discussions on the development of new fuels and blends with renewable fuels such as ethanol and biodiesel and coordinates the Committee of Car Emission and Consumption.

## **C12.3e**

### **(C12.3e) Provide details of the other engagement activities that you undertake.**

FCA, through CRF, our research center in Europe, plays an active role in the European Technology Platforms. It is the focal point for collaborative research programs on topics related to, among others, autonomous driving; connectivity; electrification and eco-driving; lightweighting and materials; and circular economy initiatives. During 2017, CRF was involved in 114 collaborative projects. FCA is involved in several stakeholder organizations that support the European Commission with the mission to define priorities and guidelines on mobility research, such as the European Technology Platforms (e.g., ERTRAC for road transport, NANOfuture on nanotechnologies, EuMaT for advanced material and technologies, EPoSS for smart systems integration and MANUFUTURE for manufacturing and production processes), Public-Private Partnerships (e.g., European Green Vehicle Initiative, Factories of the Future) and research and development organizations (e.g., EUCAR, the European Council for Automotive R&D). FCA, via OICA, contributes with senior expertise to the UN-ECE Working Party 29 (WP29) ITS-AD informal group. The WP29, as a UN technical task force, will develop worldwide regulatory proposals about automated driving systems and technologies. In Italy, dialogue focuses on the achievement of a sustainable, safe and efficient national transport system supported by smart connectivity services. With the aim of fostering strategic priorities, the Italian Ministry for Research has established 8 “National Technology Clusters” that will operate in accordance with EU planning, especially with regard to the European Horizon 2020 research program. FCA is playing a leading role in the “Land and sea surface mobility vehicles and systems” Cluster to support central and regional policies for sustainable mobility of people and freight.

FCA also collaborates as a Group on research projects with key institutions across the NAFTA region. FCA’s Automotive Research & Development Centre in Canada works with leading North American engineering institutions in the areas of materials and virtual engineering and validation.

FCA US is a member of the U.S. Council for Automotive Research (USCAR), a collaborative technology organization aimed at strengthening the technology base of the U.S. auto industry through cooperative research and development. Participation in USCAR provides the Company with access to more than 300 projects with national laboratories, research centers, industry partners and universities in conjunction with USDRIVE, (United States Driving Research and Innovation for Vehicle efficiency and Energy sustainability), a partnership among the U.S. Department of Energy (DOE), USCAR and, energy and utility companies. USCAR is also involved, through collaboration with the United States Advanced Battery Consortium (USABC), with 17 advanced battery technology programs with a total cost-shared value of nearly $74 million. The USCAR/USABC/DOE collaboration allows for a total of $125 million of cost-shared funding over a five-year period for the advancement of battery technology.

FCA played an active role in the G7 Summit held in Italy in 2017, providing a fleet of roughly 90 vehicles – including natural gas powered models – that were made available to the event organizers and sponsoring dedicated events to promote natural gas as a sustainable solution for responsible mobility. Regarding biomethane, FCA was engaged in an innovative pilot project: a Fiat Panda Natural Power is operating on biomethane from sewage sludge and waste water in collaboration with CAP Group, the utility company that manages water works, sewage and treatment facilities in metropolitan Milan (Italy). In addition, FCA has kicked off its own biomethane tour de France to demonstrate its portfolio, which is broad enough to satisfy diverse mobility needs.

## **C12.3f**

### **(C12.3f) 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?**

The FCA Group is committed to conducting its government and public institution relations including lobbying in accordance with applicable laws and ethics rules as well as in full compliance with the FCA Code of Conduct and any applicable local procedures. The FCA Group aims to contribute positively to the future development of regulations and standards in the automotive industry and in all other sectors related to the mobility of people and goods. The FCA Group’s relations with government agencies and public institutions shall be managed only by duly designated departments such as Institutional Relations and External Affairs. The results of these activities are reviewed by the highest management levels, thus assuring consistency of all engagement activities with the Group’s strategy on multiple topics, including climate change. At the operational level, FCA’s companies and operating regions have their own institutional relations/external affairs departments, with representative offices in key areas of presence (e.g., Brussels for EMEA, Washington D.C. for NAFTA), directly reporting to the respective Chief Operating Officers (COOs). COOs are members of the Group Executive Council (GEC), a group led by the CEO and composed of senior leadership from regional operations, brands, industrial processes, and support/corporate functions. The GEC approves operating guidelines and plays a vital role in ensuring that sustainability efforts are aligned with economic and business objectives. It approves Sustainability Targets, and evaluates their consistency with the Business Plan and strategy. These targets include long term commitments from FCA to fight climate change, such as reducing the CO2 emissions of its products and processes. FCA believes that effective, long-lasting results to address climate change can only be achieved through an integrated approach involving energy producers, manufacturers (including suppliers), academia, consumers, government and the financial community. The value of continual multi- stakeholder engagement on material aspects such as CO2 emissions is leveraged and maximized by sector memberships and collaboration with public institutions. Europe: the Group belongs to trade associations such as ACEA for passenger cars and commercial vehicles. FCA is also a member of NGV Italy, NGVA Europe and NGV America. FCA participates in working groups such as the ERT for industrial leaders. The U.S.: the Alliance of Automobile Manufacturers is the leading advocacy group for the U.S. auto industry. The organization provides FCA US and the auto industry with a united voice on U.S. federal and state regulatory, and legislative matters. Brazil: FCA is an active member of the Associação Nacional dos Fabricantes de Veículos Automotores (ANFAVEA). This association addresses industry and market issues affecting the sector as well as coordinates/protects collective interests of its members. FCA engages in constant dialogue with government to monitor legislation on fuel consumption. Currently Brazil’s INOVAR-Auto program establishes a minimum average vehicle energy efficiency for 2017 expressed in MJ/km. The goal of energy efficiency of each company will be determined by the mass weighted by sales volume. FCA is a signatory to the INOVAR-Auto legislation and voluntarily participates in PBEV, the government’s INMETRO vehicle fuel consumption labeling program. China: FCA also plays an active role across the APAC region, consistent with our overall climate change strategy. The Group product portfolio, technological solutions and R&D activities are the best examples of how the Company pursues its responsibility against climate change and positively effects change within the country. At the 2017 Shanghai Auto Show, FCA presented Jeep Yuntu Concept that includes a plug-in-hybrid powertrain. SUVs are the fastest-growing segment in China and the Jeep Yuntu Concept showcases the potential for the Jeep brand to keep expanding in the country. In general, the definition of regulations for CO2 emission limits in the various regions aligns with FCA product strategy focused primarily on the development of increasingly efficient technologies for conventional engines; the expansion of the use of alternative fuels (such as natural gas and biofuels); the development of alternative propulsion systems (such as hybrid or electric solutions), based on the specific energy needs and fuel availability of the various countries; the continuous efforts to cut plant energy consumption levels and the promotion of renewable energy and the adoption of low-emission transport.

## **C12.4**

### **(C12.4) 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**

In mainstream reports

### **Status**

Complete

### **Attach the document**

[2017\_Annual\_Report\_FCA.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/SZvRKowerESshKNFzwMkBQ/2017AnnualReportFCA.pdf)

### **Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

### **Publication**

In voluntary sustainability report

### **Status**

Please select

### **Attach the document**

[2017\_Sustainability\_Report\_FCA.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/fp_3AvtQ2U2Xz_Mnh2L7LA/2017SustainabilityReportFCA.pdf)

### **Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

### **Publication**

In voluntary communications

### **Status**

Complete

### **Attach the document**

[2017\_Brocure\_FCA.pdf](https://www.cdp.net/en/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/4IHrC5OEh0ut8Dyk5RqLaA/2017BrocureFCA.pdf)

### **Content elements**

Governance

Strategy

Emissions figures

Other metrics

## **C14. Signoff**

## **C-FI**

### **(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

FORWARD-LOOKING STATEMENT: this document and the related presentation contain forward-looking statements. In particular, these forward-looking statements include statements regarding future financial performance and the Company’s expectations as to the achievement of certain targeted metrics, including net debt and net industrial debt, revenues, free cash flow, vehicle shipments, capital investments, research and development costs and other expenses at any future date or for any future period are forward-looking statements. These statements may include terms such as “may”, “will”, “expect”, “could”, “should”, “intend”, “estimate”, “anticipate”, “believe”, “remain”, “on track”, “design”, “target”, “objective”, “goal”, “forecast”, “projection”, “outlook”, “prospects”, “plan”, “virtually certain”, “very likely”, “likely”, “more likely than not”, “about as likely as not”, “unlikely”, “very unlikely”, “exceptionally unlikely” or similar terms. Forward-looking statements are not guarantees of future performance. Rather, they are based on the Group’s current state of knowledge, future expectations and projections about future events and are by their nature, subject to inherent risks and uncertainties. They relate to events and depend on circumstances that may or may not occur or exist in the future and, as such, undue reliance should not be placed on them.

Actual results may differ materially from those expressed in forward-looking statements as a result of a variety of factors, including: the Group’s ability to launch new products successfully and to maintain vehicle shipment volumes; changes in the global financial markets, general economic environment and changes in demand for automotive products, which is subject to cyclicality; changes in local economic and political conditions, changes in trade policy and the imposition of global and regional tariffs or tariffs targeted to the automotive industry, the enactment of tax reforms or other changes in tax laws and regulations; the Group’s ability to expand certain of the Group’s brands globally; the Group’s ability to offer innovative, attractive products; the Group’s ability to develop, manufacture and sell vehicles with advanced features including enhanced electrification and autonomous driving characteristics, various types of claims, lawsuits, governmental investigations and other contingent obligations affecting the Group, including product liability and warranty claims and environmental claims, investigations an lawsuits; material operating expenditures in relation to compliance with environmental, health and safety regulations; the intense level of competition in the automotive industry, which may increase due to consolidation; exposure to shortfalls in the funding of the Group’s defined benefit pension plans; the Group’s ability to provide or arrange for access to adequate financing for the Group’s dealers and retail customers and associated risks related to the establishment and operations of financial services companies including capital required to be deployed to financial services; the Group’s ability to access funding to execute the Group’s business plan and improve the Group’s business, financial condition and results of operations; a significant malfunction, disruption or security breach compromising the Group’s information technology systems or the electronic control systems contained in the Group’s vehicles; the Group’s ability to realize anticipated benefits from joint venture arrangements; the Group’s ability to successfully implement and execute strategic initiatives and transactions, including the Group’s plans to separate certain businesses; disruptions arising from political, social and economic instability; risks associated with our relationships with employees, dealers and suppliers; increases in costs, disruptions of supply or shortages of raw materials; developments in labor and industrial relations and developments in applicable labor laws; exchange rate fluctuations, interest rate changes, credit risk and other market risks; political and civil unrest; earthquakes or other disasters and other risks and uncertainties.

Any forward-looking statements contained in this document and the related presentations speak only as of the date of this document and the Company disclaims any obligation to update or revise publicly forward-looking statements. Further information concerning the Group and its businesses, including factors that could materially affect the Company’s financial results, is included in the Company’s reports and filings with the U.S. Securities and Exchange Commission, the AFM and CONSOB.

PLEASE NOTE THAT: all information reported in this questionnaire relates to FCA as a whole, unless otherwise indicated; the term "FCA US" is used to identify "FCA US LLC" (formerly known as "Chrysler Group LLC"), together with its direct and indirect subsidiaries. Unless otherwise specified, the terms “FCA”, or simply “Group” are used to identify Fiat Chrysler Automobiles N.V., together with its direct and indirect subsidiaries. Consistent with the reporting format used for the 2017 Sustainability Report and Annual Report, some of the required information is broken down by company/operating segment. Accordingly, beginning in Quarter 1 2012, the operations of mass-market vehicles are attributed to the four Regions: EMEA (Europe, the Middle East and Africa), NAFTA (U.S., Canada and Mexico), LATAM (South and Central America), APAC (Asia Pacific). For additional details see FCA 2017 Annual Report at the link: www.fcagroup.com/en-US/investors/financial\_regulatory/financial\_reports/Pages/2017.aspx. WHEN NEEDED FOR SPACE LIMITS in comment boxes, we use abbreviations as follows: FCA = Fiat Chrysler Automobiles; MM = Magneti Marelli; WCM = World Class Manufacturing; EMS = Environmental Management System; EnMS = Energy Management System; AR = Annual Report; SR = Sustainability Report; ST = Sustainability Team; CSR = Corporate Social Responsibility; SSSA = Supplier Sustainability Self Assessment; ACEA= European Automobile Manufacturers’ Association; NGV= Natural Gas Vehicle; CNG=Compressed Natural Gas; FFV= Flexible-Fuel Vehicles; ERT=European Round Table; IACS=International After Sales Customer Satisfaction Survey. When discussing vehicles sold in the U.S., reference is often made to Model Year (MY) meaning the year used to designate a discrete vehicle model, irrespective of the calendar year in which the vehicle is actually produced, provided that the production period does not exceed 24 months.

## **C14.1**

### **(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

|  |  |  |
| --- | --- | --- |
|  | **Job title** | **Corresponding job category** |
| Row 1 | Group Executive Council (GEC) member, Chief Audit Executive and Sustainability Group Coordinator (functionally equivalent to CSO) of FCA N.V. The GEC is a decision-making body at FCA | Chief Sustainability Officer (CSO) |