# **Groupe PSA - Climate Change 2019**

## **C0. Introduction**

## **C0.1**

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

With its five world-renowned brands, PEUGEOT, CITROËN, DS AUTOMOBILES, OPEL, VAUXHALL and its FREE2MOVE mobility services brand, Groupe PSA sold 3.878 million vehicles worldwide in 2018. The second largest carmaker in Europe, Groupe PSA recorded sales and revenue of €61 billion in 2018 (not including Faurecia). The Group is one of the European leaders in terms of CO2 emissions, with an average of 114 grams of CO2/km for Passenger cars in 2018 (for Peugeot-Citroën and DS perimeter emissions represent 109 grams of CO2/km). Groupe PSA has sales operations in 160 countries.

Right from the design phases and for every life-cycle stage, our teams work to mitigate as much as possible the environmental impacts of vehicles (consumption management, CO2 emissions, pollutants, rational use of resources, better recyclability, etc.). Those strategic issues are handled through the roll out of our Push to Pass strategic plan.

Two acronyms are used where required to differentiate scopes within the activities defined above:

• PCD for the historical scope of PEUGEOT, CITROËN and DS AUTOMOBILES brands

• OV for the scope of OPEL and VAUXHALL brands.

Concerned with being fully compatible with sustainable development, Groupe PSA directs most of its research efforts towards clean technologies to address the major following issues:

- reducing fuel consumption and emissions of vehicles (CO2 and other particles);

- making vehicles lighter, which is virtuous in all aspects (consumption, reduced needs of raw materials, emissions);

- improving energy efficiency of vehicles.

All reported data and information cover exclusively Groupe PSA’s Automobile Division and its commercial network activities. Data from Faurecia and our financing activities are not included.

Additionally, please note that the brands OPEL and VAUXHALL have been included in the reporting for the first time this year, after they were acquired by Groupe PSA in August 2017. In addition to a significant increase in the volume of sold products, this inclusion implies some important changes on the environmental performance of Groupe PSA. Therefore, all the data are not comparable to 2017 data. Nonetheless, the Group’s ambitions and the various targets (i.e.: 2018, 2025 and 2035 targets) described in particular in the Business strategy section include the two brands Opel and Vauxhall. The two brands will benefit from Groupe PSA’s technology, expertise and knowledge to improve their environmental performance. PSA’s presented the PACE! plan, a strategic plan for OV to restore financial fundamentals, enhance sustainable competitiveness and growth, but also to become a European CO2 car manufacturer leader. For example, by 2020, OV will have four electrified carlines on the market, including the Grandland X PHEV and the next generation Corsa as a fully electric vehicle.

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> PSA general greenhouse gas (GHG) emissions profile

A life cycle analysis conducted by the Group in 2018 (certified methodology, please refer to CSR report section 2.4.4.2) provided the distribution of the overall carbon footprint of vehicles produced by the Groupe PSA over a year. This analysis showed that Scope 3 represents 98% of our total emissions inventory.

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> PSA Scope 1 & 2 Emissions profile

PSA scope 1&2 is composed of two main emissions sources:

1) The Automotive Division, that represents 1 274 ktCO2eq in 2018, which accounts for 97% of PSA total Scope 1 & 2 emissions. These emissions include 43 sites (31 manufacturing plants and 12 study centres and tertiary sites) in France and outside France and take into account OV facilities.

N.B.: our emissions inventory includes our foundry activities, *and also emissions from the 3 cogeneration plants operated by OV, to produce electricity and steam, which a part is sold to external customers*.

2) The Automotive Trade, that accounts for the remaining 3% of Scope 1 & 2. These emissions are related to our commercial activities, which cover our commercial network for our brands (headquarters of sales subsidiaries, commercial network specific to each brand, etc.).

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> PSA Scope 3 Emissions profile

The direct use of our sold products is by far the major source of GHG emissions (73 MtCO2) and accounts for more than two thirds of our emissions. The related fuel upstream accounts for 11.7% of our emissions, and maintenance represents 1.4%. Therefore, more than 76% of our total footprint depends on the use of our sold products (including fuel upstream and sold vehicles’ maintenance).

As we are one of the leaders in terms of CO2 emissions of vehicles in Europe, our climate footprint per vehicle is one of the smallest on the European market.

## **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 | janvier 1 2018 | décembre 31 2018 | No | <Not Applicable> |

## **C0.3**

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

Argentina

Austria

Brazil

France

Germany

Hungary

Poland

Portugal

Russian Federation

Slovakia

Spain

United Kingdom of Great Britain and Northern Ireland

## **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) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

|  |  |
| --- | --- |
| **Position of individual(s)** | **Please explain** |
| Board-level committee | PSA has a two-tier management structure comprised of a Managing Board (MB), responsible for strategic & operational management, and a Supervisory Board (SB), responsible for oversight & control. The SB ensures that the strategy proposed & applied by the MB, including climate strategy, fits with PSA’s long-term vision. It reviews the medium-term strategic plan, including climate-related issues, the CAPEX plan & the budget. The SB is also ensuring that climate risks are properly identified & managed. Climate sensitive issues are discussed at all SB meetings, during which the SB authorizes various strategic projects related to vehicle emissions reduction, new production locations, new mobility offers, etc. Within the SB, there is a Strategy Committee whose function is to look at the long-term future and potential avenues for growth and suggest to the SB the Group’s general orientations. Within this committee, members also handle environmental issues (i.e.: climate change & air quality). |

## **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 | ------- CEO and Executive committee (Board level) are guiding climate-related strategy through the review and the monitoring of strategic climate issues such as customers’ expectations and market risks, vehicle CO2 emissions. The main governance mechanism in which climate-related issues are integrated is through the Corporate CO2 committee. This committee is planed every month in order to: - share with Board and Executive Committee the forecast of vehicles CO2 emission average for short, medium and long term in all countries/area (especially where CAFÉ/CO2 regulation exists), and decide on action plans (technical enablers, product plan adaptation and strategy) in the case targets would not be reached; - share scenarios related on assumptions worked out by the Group’s CO2 experts using internal data related to Group’s current and future technologies, and external data related to climate scenarios and market trends (regulation assumptions, energy mix evolution, diesel shares, uptake of electrified vehicles...); - make the necessary decisions and approving action plans worldwide (technical enablers, product plan adaptation and strategy) to ensure compliance, to cover the most likely scenarios and to reach CO2 emission targets. ------- Example 1: Reflecting Groupe PSA commitment to embed CO2 issues within executive decision making, in 2018, the Group created an Industrial & Logistics CO2 Committee, in order to provide Executive bodies with a more global overview of CO2 issues across its value chain. This Committee is chaired by the Executive Vice-President, Industrial. ------- Example 2: In April 2018, in line with its strategy to have 100% of models with an alternative electrified version by 2025, Groupe PSA created a Low Emission Vehicles Business Unit (BU). It has a global scope and leverages all factors necessary to deliver models that meet customer expectations, in line with the highest service standards. The BU will be responsible for defining and deploying the Group’s electric vehicle strategy and rolling out the related products and services. The two main priorities of the BU are profitable growth and contribution to Groupe PSA CO2 objectives. The business unit Senior Vice President directly reports to the CEO of the Citroën brand, who is a member of Groupe PSA Executive Committee. |
| Scheduled – all meetings | Reviewing and guiding major plans of action | ------- CEO and Executive committee (Board level) also play a major role in the reviewing and guiding of major plans of actions in the sense that Executive Committee members are responsible for following the objectives and for all action plans necessary to achieve these objectives. ------- In regards to carbon issues, a Corporate CO2 committee is planed every month in order to: - share with Board and Executive Committee the forecast of vehicles CO2 emission average for short, medium and long term in all countries/area (especially where CAFÉ/CO2 regulation exists), and decide on action plans (technical enablers, product plan adaptation and strategy) in the case targets would not be reached; - share scenarios related on hypotheses worked out by the Group’s CO2 experts using internal data related to Group’s current and future technologies, and external data related to climate scenarios and market trends (regulation assumptions, energy mix evolution, diesel shares, uptake of electrified vehicles...); - make the necessary decisions and approving action plans worldwide (technical enablers, product plan adaptation and strategy) to ensure compliance to cover the most likely scenarios and reach CO2 emission targets. ------- Example 1: Reflecting Groupe PSA commitment to embed CO2 issues within executive decision making, in 2018, the Group created an Industrial & Logistics CO2 Committee, in order to provide Executive bodies with a more global overview of CO2 issues across its value chain. This Committee is chaired by the Executive Vice-President, Industrial. ------- Example 2: In April 2018, in line with its strategy to have 100% of models with an alternative electrified version by 2025, Groupe PSA created a Low Emission Vehicles Business Unit. It has a global scope and leverages all factors necessary to deliver models that meet customer expectations, in line with the highest service standards. The BU will be responsible for defining and deploying the Group’s electric vehicle strategy and rolling out the related products and services. The two main priorities of the BU are profitable growth and contribution to Groupe PSA CO2 objectives. The business unit Senior Vice President directly reports to the CEO of the Citroën brand, who is a member of Groupe PSA Executive Committee. |
| Scheduled – all meetings | Monitoring implementation and performance of objectives | ------- CEO and Executive committee (Board level) are monitoring the implementation and performance of objectives at various levels: 1) As the head of the Automotive Programmes Department, the Executive Vice President, Programs & Strategy ensure the implementation of product plans by steering the development of vehicle and subassembly programmes with the responsibility for their economic performance 2) The Executive Vice-President, Mobility and Connectivity Services, has also an essential role in the implementation and performance of objectives, throughout the deployment of new mobility solutions and the development of Free2Move, Groupe PSA new mobility brand. 3) As the head of the Industrial Department, the Executive Vice President Industrial also contributes to the monitoring and performance of scope 1&2 targets by coordinating and managing programs and actions relative to the reduction of direct energy consumption. 4) The Executive Vice-Presidents of the Group’s geographical business regions and brands are also ensuring the achievement of the objectives set by the Executive Committee by taking charge of the implementation of climate action plans in their area of responsibility. ------- Example 1: Reflecting Groupe PSA commitment to embed CO2 issues within executive decision making, in 2018, the Group created an Industrial & Logistics CO2 Committee, in order to provide Executive bodies with a more global overview of CO2 issues across its value chain. This Committee is chaired by the Executive Vice-President, Industrial. ------- Example 2: In April 2018, in line with its strategy to have 100% of models with an alternative electrified version by 2025, Groupe PSA created a Low Emission Vehicles Business Unit. It has a global scope and leverages all factors necessary to deliver models that meet customer expectations, in line with the highest service standards. The BU will be responsible for defining and deploying the Group’s electric vehicle strategy and rolling out the related products and services. The two main priorities of the BU are profitable growth and contribution to Groupe PSA CO2 objectives. The business unit Senior Vice President directly reports to the CEO of the Citroën brand, who is a member of Groupe PSA Executive Committee. |

## **C1.2**

### **(C1.2) Provide the highest management-level 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** |
| Other C-Suite Officer, please specify (Chief Strategy Officer) | Both assessing and managing climate-related risks and opportunities | More frequently than quarterly |
| Chief Operating Officer (COO) | Both assessing and managing climate-related risks and opportunities | More frequently than quarterly |
| Chief Sustainability Officer (CSO) | Both assessing and managing climate-related risks and opportunities | Annually |
| Chief Executive Officer (CEO) | Both assessing and managing climate-related risks and opportunities | More frequently than quarterly |
| Chief Procurement Officer (CPO) | Both assessing and managing climate-related risks and opportunities | More frequently than quarterly |

## **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 (do not include the names of individuals).**

--------> Chief Executive Officer (CEO):

(i) Position: CEO

(ii) Responsibility: The CEO is responsible for the Group’s climate strategy and manage climate change issues throughout the Managing Board and the Corporate CO2 Committee where it stands both as chairman.

(iii) Rationale: The CEO is directly concerned with climate-related issues insofar as, chairman of the Managing board, its primary function is to provide strategic decisions and anticipate the future of the Group.

--------> Chief Strategy Officer (CSO):

(i) Position: The CSO, named Executive Vice-President of Programmes and Strategy at Groupe PSA, is a member of the Managing Board and Executive Committee (ExCo) and is the head of the Automotive Programmes Department.

(ii) Responsibility: He holds direct and specific responsibility on corporate CO2 emission average and provides orientation for the development of new vehicles and in particular low-carbon vehicles. Being the head of the Automotive Programmes Department, which translates Groupe PSA strategy into product plans, it ensures their implementation by steering the development of vehicle and subassembly programmes with the responsibility for their economic performance

(iii) Rationale: The CSO is directly concerned with climate-related issues insofar as its primary function is to anticipate deep-seated changes in market structure and regulatory landscapes (including emissions and air quality), and secondly provides orientations on the development of new vehicles and in particular low-carbon vehicles.

--------> Chief Operating Officer (COO):

(i) Position: The COO, named Executive Vice-President of Industrial at Groupe PSA, is a member of the ExCO and is the head of the Industrial Environment Department.

(ii) Responsibility: His role and responsibility are to coordinate the deployment of the Group’s environmental policy for manufacturing and research sites. In addition, the COO and its Industrial Environment Department manages an annual investment plan that provides compliance operations relating to regulatory changes and the reduction of pollution and environmental risks. He is also a chairman of the Industrial and Logistics CO2 committee.

(iii) Rationale: Like the product strategy, where the emphasis is on the development of low-carbon vehicles, the COO and its Industrial Department have been assigned climate-related responsibilities since their programs and actions participate in the Group’s efforts to reduce its carbon footprint through a reduction of direct energy consumption.

--------> Chief Purchasing Officer (CPO)

(i) Position: The CPO, named Executive Vice President, Global Purchasing and Supplier Quality at Groupe PSA, is a member of the ExCO and is the head of the Quality and Supplier Department.

(ii) Responsibility: The CPO and its department determine and manage procurement policies and strategies globally and act as interface between Groupe PSA and its suppliers. They also guarantee the quality and security of the Group’s supplies, by ensuring that suppliers comply with Group standards, particularly in terms of sustainable development.

(iii) Rationale: The CPO and its department have been assigned climate-related responsibilities since their programs and actions aim to lower carbon impact associated to the supply chain and thereby participate in the Group’s efforts to reduce its global carbon footprint.

--------> Chief Sustainability Officer (CSO):

(i) Position: The CSO, head of the Sustainable Development Delegation (SDD), reports directly to the VP of Corporate Communications, who in turn reports to the CEO.

(ii) Responsibility: The role of the CSO and SDD is: (1) to ensure that progress plans that aim to improve the integration of sustainable development responsibilities within the Group’s strategy are implemented, by working with and coordinating a network of front-line correspondents present in all the Group’s departments who are experts in the different areas of CSR (human resources, environmental management, procurement, marketing, sponsorship, etc.); (2) to liaise on a daily basis with CSR rating agencies and SRI investors, in particular by making every effort to provide them with information in response to their requests; (3) to coordinate thinking and proposals for actions enabling the Group to prepare for the regulatory developments related to CSR; (4) to be a proponent of actions serving to underscore the Group’s CSR commitments; (5) to orchestrate each year’s reporting on the Group’s environmental, social and governance performance, coordinate its verification by an independent third party and oversee the preparation of the CSR Report.

(iii) Rationale: Given the horizontal function of the CSO and SDD, and the relation with many head departments such as CO2 committee or materials & recycling committee, it is coherent and logical that the responsibility of better integrating and coordinating climate policy at management levels is assigned to the CSO and SDD.

## **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 (do not include the names of individuals).**

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

Other, please specify (Chief Strategy Officer)

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Emissions reduction target

### **Comment**

(1) For the CSO, a triple trigger threshold of which one element is the level of CO2 of the vehicles in stock (car maker and European commercial network) at 31/12/2019, determines the payment of individual and collective targets of the variable compensation. (2) CO2 emissions level of the vehicles in stock represent 16% of CSO’s variable compensation. (3) The CSO can also pretend to the award of 60,000 performance shares. The shares will definitely be attributed to the CSO after 3 consecutive years, depending on several criteria, including the level of CO2 emissions over 2020 and 2021. (The trigger threshold and the level of achievement required for each of these criteria are not communicated for confidentiality reasons). In addition, the CSO, named Executive Vice-President of Programmes and Strategy is a member of the Executive Committee and has short term CO2 related targets per year aligned with the long-term ambition of the Group to reduce by 2035 average CO2 emissions of vehicles sold worldwide by 55% compared with 2012 levels.

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

Chief Operating Officer (COO)

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Emissions reduction target

### **Comment**

The COO, named Executive Vice-president Industrial Director at Groupe PSA is a member of the Executive Committee and has short term CO2 reduction targets per year on: (1) The energy consumption to ensure the ambition of carbon-neutral industrial facilities by 2050; (2) The increase of the share of renewable energies in electricity consumption; (3) meeting the 33% reduction target for logistics between 2016 and 2035. Individual salary raises and bonuses are linked to annual performance evaluation. The COO can also pretend to a performance share award. The shares will definitely be attributed to the COO after 3 consecutive years, depending on several criteria, including the CO2 emissions levels of the Group during the 3 years.

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

Chief Procurement Officer (CPO)

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Supply chain engagement

### **Comment**

The CPO, named Executive Vice-president Purchasing Director at Groupe PSA is a member of the Executive Committee and has short term CO2 reduction targets per year on: (1) The increase of the average environmental score for Group’s suppliers; (2) The percentage of strategic and core suppliers demonstrating a CO2 trend compliant with the Paris agreement to ensure that Group’s suppliers are contributors to the achievement of Environmental targets of the Group; (3) levels of local sourcing, which is a CO2 emissions reduction factor. Individual salary raises and bonuses are linked to annual performance evaluation. The CPO can also pretend to a performance share award. The shares will definitely be attributed to the CPO after 3 consecutive years, depending on several criteria, including the CO2 emissions levels of the Group during the 3 years.

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

Chief Sustainability Officer (CSO)

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Emissions reduction target

### **Comment**

The Chief Sustainability Officer has a target related to the CSR performance of PSA which covers all CSR issues including environmental impacts. Individual salary raises and bonuses are linked to annual performance evaluation.

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

Board/Executive board

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Emissions reduction target

### **Comment**

PSA Managing Board and Executive Committee members have targets dealing with PSA’s leading position in car efficiency (energy consumption, market share of LEV and levels of vehicles CO2 emissions) and new mobility services development. Individual salary raises and bonuses are linked to annual performance evaluation. Members of the Executive Committee can also pretend to a performance share award. The shares will definitely be attributed to the members after 3 consecutives years, depending on several criteria, including the CO2 emissions levels of the Group during the 3 years.

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

Energy manager

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Efficiency target

### **Comment**

Managers operationally involved in facilities environmental management and energy saving, or CO2 emissions reduction of products, have targets related to energy savings or CO2 emissions reduction. These objectives are defined and reviewed during the annual performance review. Individual salary raises and bonuses are linked to annual performance evaluation.

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

Environment/Sustainability manager

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Efficiency target

### **Comment**

Managers operationally involved in facilities environmental management and energy saving, or CO2 emissions reduction of products, have targets related to energy savings or CO2 emissions reduction. These objectives are defined and reviewed during the annual performance review. Individual salary raises and bonuses are linked to annual performance evaluation.

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

Facilities manager

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Efficiency target

### **Comment**

Managers operationally involved in facilities environmental management and energy saving have targets related to energy savings or CO2 emissions reduction. These objectives are defined and reviewed during the annual performance review. Individual salary raises and bonuses are linked to annual performance evaluation.

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

Other, please specify (Vehicle Project Manager)

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Efficiency target

### **Comment**

Vehicle project managers have targets based on weight improvements and fuel consumption (directly linked to the cars CO2 performance).

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

All employees

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Efficiency target

### **Comment**

(1) For all employees, a triple trigger threshold of which one element is the level of CO2 of the vehicles in stock (car maker and European commercial network) at 31/12/2019, determines the payment of individual and collective targets of the variable compensation. (2) CO2 emissions level of the vehicles in stock represent 20% of employees’ variable compensation. (The trigger threshold and the level of achievement required for each of these criteria are not communicated for confidentiality reasons.)

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

All employees

### **Types of incentives**

Recognition (non-monetary)

### **Activity incentivized**

Other, please specify (Various indicators related to climate change)

### **Comment**

Groupe PSA organizes an annual internal event for employees called Inventors Awards to reward inventiveness and creativity for the employees who patented their inventions. The best projects are selected by a jury which includes Executive Committee members. The projects are also presented and submitted to the vote of the entire company for the “Prize of the public”. The winning teams receive prizes and many of the projects selected in the previous year were climate-focused.

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

Chief Executive Officer (CEO)

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Emissions reduction target

### **Comment**

(1) For the CEO, a triple trigger threshold of which one element is the level of CO2 of the vehicles in stock (car maker and European commercial network) at 31/12/2019, determines the payment of individual and collective targets of the variable compensation. (2) CO2 emissions level of the vehicles in stock represent 14% of CEO’s variable compensation. (3) The CEO can also pretend to the award of 130,000 performance shares. The shares will definitely be attributed to the CEO after 3 consecutive years, depending on several criteria, including the level of CO2 emissions over 2020 and 2021. (The trigger threshold and the level of achievement required for each of these criteria are not communicated for confidentiality reasons)

## **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 | 6 | Short term actions reflect the implementation of the strategic plan. The level of achievement is published in the annual CSR report. |
| Medium-term | 6 | 16 | The medium-term horizon (2025-2035) is monitored by the Group’s Executive Committee and presented to the Supervisory Board. |
| Long-term | 16 | 31 | Long term commitments (2035 and further) are monitored by the Group’s Executive Committee and presented to the Supervisory Board |

## **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 | Six-monthly or more frequently | >6 years | Climate change risks are identified and tackled in the same framework as all risks. Regulatory risks are considered for a time horizon of 3 years. However, because climate change risks are specific (especially risks related to vehicle emissions), a dedicated team (the CO2 team in the Programme Division) regular leads sensitivity analysis for a longer time horizon (>6 years). Indeed, the development of vehicles is exposed to continuous changes in regulations, which impose stringent requirements, particularly in terms of CO2 emissions. The decision to develop new vehicle models is also backed by marketing and profitability studies carried out several years prior to their launch. In the context of an increasingly responsive automotive market, this time gap puts forecast volumes at risk and ultimately generates a financial risk. |

## **C2.2b**

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

————————— > Definition of risks: PSA considers two types of risks, which can have an impact on the Company’s financial results: (1) physical risks – the consequences of more frequent extreme weather events or natural disasters, which can damage production facilities owned by the Group and its supply chain, disrupt production and lead to costly delivery delays for the end customer, result in plant repair costs, etc. (2) transition risks that would arise from a low carbon economy and that would alter the financial viability of a part of the capital stock and business models, such as regulatory risks, technological risks, market risks or reputation-related risks.

————————— > Assessment at company level: PSA uses a Group­wide risk analysis framework to assess, manage and report risk, including climate change risks. All departments are expected to identify and constantly update the risks inherent to their activities. They identify the major risks to which the Group is exposed. The “Top Risks” map is validated by the Board and presented to the Supervisory Board before decision­making. This risk management system also includes Action Plans and quality indicators, which are audited by the risk department of the company. The Risk Management and Control Department reports to the Corporate Secretary, who is more specifically in charge of identifying the environment and climate change regulation risks and opportunities. Concerning industrial risks, Groupe PSA has implemented assertive industrial risk prevention strategies designed to: prevent the occurrence of major incidents; limit high­risk situations; ensure that the various Group structures are capable of dealing with emergency and crisis situations; promote a risk prevention culture; optimize the transfer to the insurance market of high frequency risks.

————————— > Assessment at asset level: The deployment of the Risk Management System’s process is managed by Executive Risk Controllers and by the Site Risk Managers, backed as needed by a network of specialists capable of managing specific risks, such as financial risks and risks to physical assets. The Risk Management and Control Department works in close cooperation with the network of Executive Risk Controllers and Site Risk Managers, who submit the information that the Department consolidates and analyses to prepare an updated risk map.

————————— > Process used: The Group identified its CSR and climate-related risks when updating its materiality matrix. To identify the CSR issues and macro-risks, the Group availed itself of the business expertise of its network of CSR contributors, representing all of its business activities. The result was confirmed by a review of issues reported by industry peers, an analysis of worldwide CSR reference frameworks (including Global Reporting Initiative) and a review of information in the media, before a representative sample of the Group’s stakeholders were interviewed to ascertain their opinion.

————————— > Definition of the level of impact of risks: In order to evaluate and to compare the strategic impact of climate-related risks, Groupe PSA evaluates first the importance for business performance according to three criteria: (1) likelihood of the threat materializing and opportunities created by the issue, (2) the seriousness of the impact for the Group, (3) impact on long-term performance. For each issue, the opportunities and threats were put into three categories (business, operations and reputation) and their impact was quantified in monetary terms by the department affected. Secondly, Groupe PSA measures the importance of stakeholder expectations related to each climate risk, taking account of the legitimacy of each stakeholder to express an opinion on each issue. The Group eventually uses an external provider to ensure each issue was scored strictly and fairly using a standard methodology.

## **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 | (i) Relevance explanation: Standards and regulations are becoming more stringent and prolific in response to climate change issues. This entails both large-scale investment in R&D and active monitoring to ensure that products and services fully conform to the regulations. Regulations are also deterring investors from investing in carbon-intensive activities, with the result that manufacturers must upgrade their production facilities and their product plan to make them less energy-intensive. Failing this, their assets will be devalued, and their borrowing costs will increase. Given the major financial risks related to these regulations, Groupe PSA evaluates this risk as relevant in its global risk assessment. ii) Example of a specific risk: ---- Since 1 September 2017, under EU regulations (EU 2017/1151) to obtain vehicle approval, two new measurement protocols must be applied: the WLTP (Worldwide harmonized Light vehicles Test Procedure), which is conducted in a laboratory; and the RDE (Real Driving Emissions) procedure, conducted on the road in “real-life driving conditions”, which measures pollutant emissions using a PEMS (Portable Emissions Measurement System) and calculates the admissible conformity factor (the permitted discrepancy between the real-life values in-use and the statutory WLTP thresholds). Additionally, since September 2017, the admissible NOx conformity factor has been 2.1 but this will be reduced to 1 in 2020 (excluding measurement dispersion which cannot exceed 0.5). In the event of a failure to obtain approval on NOx threshold, Groupe PSA would have to engage new investment in order to comply with these regulations. ---- Industrial emissions for some sites of Groupe PSA are covered by the EU ETS scheme, including in the Great Britain. Given the ongoing negotiations for the Brexit and the uncertainty in the scenario, a regulatory risk remains for British industrial sites. In a no deal scenario, all stationary installations currently participating in the EU ETS are likely to leave the EU ETS scheme and would be required to pay for a carbon tax of £16 according to the UK government. As a consequence, Groupe PSA closely monitors and tracks the advances of Brexit discussions and the impacts on the EU ETS scheme. |
| Emerging regulation | Relevant, always included | (i) Relevance explanation: In the decade between 2015 and 2025, regulatory requirements such as CAFE (Corporate Average Fuel Efficiency) standards will be tightened worldwide and will be reflected in CO2 and fuel consumption targets that must be achieved on the average number of vehicles sold annually. Failure to achieve these annual targets will result in hefty fines or suspensions of sales, depending on the geographical area. Similarly, in October 2017, China officially published a new regulation to impose electric and hybrid vehicle quotas from 2019. Given the major financial risks related to these regulations, Groupe PSA evaluates this risk as relevant in its global risk assessment. (ii) Example of a specific risk: Europe set a target for each car manufacturer based on the average weight of vehicles sold (target for average car manufacturers: 95 gCO2/km in 2020 for 95% of the fleet in 2020 and 100% of the fleet in 2021) If these objectives are exceeded, a penalty will be applied amounting to €95 per gCO2/km and per vehicle. For Groupe PSA, this could represent approximately €240 million for 1 g/km of CO2 exceeding the target, taking into account the order of magnitude of total sales of Passenger cars in Europe, including Opel-Vauxhall. |
| Technology | Relevant, always included | (i) Relevance explanation: Changes in consumers’ mobility expectations due to environmental considerations amid rapid technological upheaval, the emergence of new competitors and financial penalties for carbon-intensive products require manufacturers to keep pace with the market (as a minimum) and to invest heavily in new environmental technologies. If not, they will inevitably disappear from the market and the value of their assets will plummet. For these reasons, Groupe PSA evaluates this risk as relevant in its global risk assessment. (ii) Example of a specific risk: Studies project an autonomous car revolution amid technologies vehicle landscape. Fully autonomous cars could represent 10% of car sales by 2035 and a market of $42 billion by 2025. If this could represent an opportunity for Groupe PSA, this is also a major risk in the sense that new competitors are emerging on this market such as Google, Tesla and Uber. This represents a challenge and a technological risk for PSA and automotive manufacturers because new participants to the market (1) are multibillion dollar companies with strong research and development teams, regional or global market leadership positions, and with an appetite for large, game-changing growth opportunities, and (2) are technology companies with know-how in apps and operating systems, while automotive manufacturers have been historically focused on the hardware of the vehicle rather than on the software. |
| Legal | Not relevant, included | (i) Relevance explanation: the Legal Affairs Department produces or checks the Group’s contractual commitments and ensures they comply with the relevant statutory and regulatory provisions, there is so far no disputes with third-parties in relation to climate change issues. In addition, PSA has implemented a robust compliance and ethics system, supported by an Ethics Committee and five Compliance Officers, which ensures that compliance programmes are effective in the most vital areas (Competition; Anti-corruption; Export control; Data privacy; Type approval). For this reason, Groupe PSA does not consider this risk as relevant in its global risk assessment. |
| Market | Relevant, always included | (i) Relevance explanation: There are market risks related to (1) the fall of diesel vehicles and the increase of new energy vehicles, and (2) the development of a new mobility markets. The first market risk leads to the decrease of demand for traditional products sold by PSA (i.e. diesel vehicles) and generate a change in revenue mix. The second risk is the changes in customer behaviors and expectations in mobility matters. Traditionally perceived as a tangible asset, the car is now more likely to be perceived as an object of mobility, especially by new generations. The risk for PSA is to maintain its core business model of selling petroleum and diesel vehicles, without answering this new consumer trend. This gap between the market and the potential business strategy of Groupe PSA would put forecast volumes at risk and ultimately generates a loss of fixed assets since production plants would be underutilized. For these reasons, Groupe PSA evaluates this risk as relevant in its global risk assessment. (ii) Example of a specific risk: Towns and cities are reviewing their transport policies by increasingly discouraging the use of ICE (internal combustion engine) cars and encouraging investment and new mobility schemes. This is the case with Paris and Mexico City that decided in 2017 to implement a diesel ban in 2025 and incentivize the use of electric, hydrogen and hybrid vehicles. A more recent example is the UK government that announced in September 2018 a target of zero-emission vehicle sales (ban of internal combustion engines in new vehicles) for all new cars and vans by 2040.These local markets will be profoundly altered, which leads Groupe PSA and other automobile manufacturers to develop non-ICE vehicles as well as new mobility services in order to respond to these market changes. |
| Reputation | Relevant, always included | (i) Relevance explanation: The harmful effects of atmospheric pollutants on climate, ecosystems, and natural habitats as well as human and animal health are a major public concern. Although the automotive industry is progressively moving away from the emissions diesel scandal, this revelation and the on­going investigations can still undermine the confidence and trust in the automotive industry. These threats can have two potential consequences (1) Investors can still be reluctant to invest in the automotive industry as long as there will be suspected emissions frauds in some carmakers’ vehicles. (2) Consumers might still be influenced by the Volkswagens revelation and the on­going suspicions, and could alter their preferences to the benefit of petrol vehicles. Given the significant share of diesel vehicles in total sales, this situation could slow down PSA car sales, and decrease our economic performance. . Moreover, the automotive parts supplied might contain critical materials like cobalt (used for the lithium ion batteries of electrified vehicles) whose production is massively located in Democratic Republic of Congo and where sourcing might face some human rights issues. For these reasons, Groupe PSA evaluates this risk as relevant in its global risk assessment. (ii) Example of a specific risk: This reputation risk is particularly relevant for the on-going debate on real-emissions procedure (RDE) versus the laboratory test procedure (WLTP). Manufacturers that lack transparency on this issue might see their vehicle sales decrease. This is the reason why Groupe PSA established a partnership with Transport & Environment and France Nature Environnement in order to publish the real-world fuel consumption for over 1,000 of the Group’s vehicle models. To date, Groupe PSA is the only car manufacturer to have made such a commitment of transparency towards its customers. In addition, Groupe PSA passenger cars were all certified under the WLTP new laboratory test before the end of August 2018 thanks to sound technological choices made in anticipation of the regulations. In regards to human rights risks, Groupe PSA set up a risk mapping process for each purchasing commodity using the EcoVadis Rating Framework methodology. A new clause has also been added to our purchase contract for certain critical commodities. |
| Acute physical | Relevant, always included | (i) Relevance explanation: More frequent extreme weather events or natural disasters can damage production facilities owned by the Group and its supply chain, disrupt production and lead to costly delivery delays for the end customer, result in plant repair costs, etc. This risk tends to be even higher in 2018 since its manufacturing footprint has increased with the acquisition of Opel-Vauxhall with new plants in the United Kingdom, Germany, Hungary, Poland and Austria. These risks also have an impact on the cost of insurance. For these reasons, Groupe PSA evaluates this risk as relevant in its global risk assessment. (ii) Example of a specific risk: Groupe PSA has been impacted by the floods in the East of France, where its historical plant in Sochaux was temporarily shut down in January 2018. 900 vehicles could not be produced during this episode and 1,800 employees were forced to stop working because of failure of one of its suppliers. |
| Chronic physical | Not relevant, included | (i) Relevance explanation: Groupe PSA does not consider chronic climate events as a significant risk for our activity, insofar as a rise of temperature or a change in annual precipitations are progressive evolutions upon which Groupe PSA can be prepared. |
| Upstream | Relevant, always included | (i) Relevance explanation: The Group’s Automotive Division is exposed to upstream risks through its direct and indirect purchases of commodities. Indeed, the direct parts purchased represent more than 75% of a vehicle’s production cost. Based on this situation, the Group has identified two main types of raw materials risk: 1) the supply risk related to the availability of materials; 2) the economic risk relating to price fluctuations that could not be further passed on to the Group’s product selling prices. Whether it is a supply risk or economic risk, it could lead to an increase in operating costs and a decrease in revenue due to the interruption of production activity. For these reasons, Groupe PSA evaluates this risk as relevant in its global risk assessment. (ii) Example of a specific risk: The increasing part of electrified powertrains with batteries integrating rare raw material represents a risk of batteries procurement. This is particularly the case with cobalt resources that are used to manufactured lithium battery cathodes. According to a study of the MIT (Olivetti and al, 2017), the supply of cobalt would be at most 290,000 metric tons in 2025 while the demand for cobalt could reach 330,000 metric tons, mainly because of the surge of electric vehicles sales. There is in consequence a risk of resources shortage, which is compounded by geopolitical factors, since most of the production takes place in the politically unstable Democratic Republic of the Congo. |
| Downstream | Relevant, always included | (i) Relevance explanation: The impact of automobiles on the environment also occurs via the issue of their recycling at their end of life, i.e., the recycling of scrapped vehicles, electric batteries, etc. This issue of downstream activity is progressively becoming a serious risk for Groupe PSA insofar as consumers, stakeholders and regulators are asking for more transparency and advances on this topic. This downstream risk could generate fines in the situation of not complying with the regulation but also reputation risks, both having effects on the revenue and the operation costs. Moreover, there is a downstream risk related to the link of market uptake of alternatively-powered vehicles and the infrastructure roll-out. While automobile manufacturers including PSA are expanding their portfolio of electric cars, there are insufficient charging infrastructures so far, which in return do not foster market penetration of these vehicles. The consecutive risk is that the major investments undertaken by automobile manufacturers would not be met by customer demands. For these reasons, Groupe PSA evaluates this risk as relevant in its global risk assessment. (ii) Example of a specific risk: There is a growing regulatory pressure worldwide on the processing of end-of-life products, such as in China where the government launched in 2018 a pilot electric vehicle battery recycling scheme in 17 cities and regions, with the objective of fostering car producers to establish recycling service outlets and cooperate with battery producers and scrap merchants to build regional recycling systems. |

## **C2.2d**

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

— > Risks process: each climate-related risk is managed through specific and expert entities.

> Risks related to emissions of products are managed by the CO2 unit that monitors and reports on the emissions performance of vehicles developed by the Group, and by the CO2 committee that makes the necessary decisions and approves action plans worldwide (technical enablers, product plan adaptation and strategy) with the objective of ensuring compliance and reaching CO2 emission targets.

> Risks related to technology are managed by the Quality and Engineering Department (QED) that leads the Group’s work on technological innovation and carries out eco-design, in particular, life cycle analysis and monitoring of the use of green or recycled materials.

> Risks related to climate change (physical risk) are evaluated through the use of natural disaster risk analyses from insurance databases, such as NatCatService from Munich RE or Sigma from Swiss RE. They monitor and analyze the number of past geophysical, meteorological, hydrological and climatological events and their related financial losses. They also project future occurrences of natural disasters and their potential physical impacts. Based on these data, Groupe PSA evaluates the probability of future impacts due to earthquakes, flooding, and storms/hurricanes on all its sites.

— > Opportunities process: the process to manage climate-related opportunities is identical with the one used to manage risks, in the sense that they are embedded within the company’s business lines, with entities managing a specific climate issue that falls within their area of expertise.

— > Case study 1: in regard to water issues: each plant director has a mapping of its water consumption, which means that each building knows its main sources of consumption. Then, each plan director sets up a water consumption management plan that aims to reduce water withdrawal and increase recycling. For that, they regularly monitor the performance of their plants through the widespread use of metering systems and the evaluation of the water consumption per car produced. This management process is also verified and certified throughout the ISO 14001 certification. With the adoption of management plans associated with actions plan and performance objectives, plant directors are thereby managing this specific risk of water issues.

— > Case study 2: The diesel market share for Groupe PSA’s passenger cars is gradually decreasing, with now less than 40% of vehicles sold compared to more than 60% in 2010. This change in consumer preferences to the benefit of petrol and electric engines vehicles is directly impacting the output capacity of PSA and its industrial model. In reply, industrial processes are modified with the opening of new production lines and new plants (e.g.: Tremery) in order to cope with those risks. For instance, a new production line was launched in Trémery (France) late 2017, that has increased the potential of production capacity to almost 700,000 engines per year. Early 2019, the Group inaugurated a new assembly line for this engine in the Tychy plant, in Poland, for a production capacity projected up to 460,000 engines. All these strategic decisions are part of the Group’s deployment of its technological offensive to adapt to the changing market and to reduce its transition risk related to diesel technology.

## **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: Enhanced emissions-reporting obligations

### **Type of financial impact**

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

### **Company- specific description**

(i) Clear Description: In the decade between 2010 and 2020, regulatory requirements have been tightened worldwide and are reflected in CO2 emission and fuel consumption targets. The risk is CO2 thresholds would be too stringent for car manufacturers, with two financial consequences. (1) Firstly, complying with these new regulations require to develop CO2 efficient technologies in a very short period. Therefore, capital cost is likely to dramatically increase, while change in revenue would not be sufficient to offset those additional costs. (2) Secondly, since CO2 thresholds are particularly stringent, car manufacturers might not be able to reach these thresholds in time. In case of non­compliance with the CO2 emission thresholds, carmakers would have to pay fines and taxes. This triggers once again additional costs for car manufacturers. ———————— (ii) Specific: These risks apply for all car manufacturers. However, PSA is specifically exposed to those risks because of its geographic activities. PSA is selling light vehicles in countries where regulations on fuel consumption are severe: ­ CAFE Europe (Corporate Average Fuel Efficiency): objective for the average weighted CO2 emissions of car manufacturers of 95g/km in 2021 (95g/km on 95% of the fleet in 2020 and starting 2021 for 100% of the fleet). ­ CAFE China: a target of 4.9l/100km in 2020. ­ CAFE Brazil, applicable as from 2017: if the target is exceeded, locally produced vehicles will be taxed at the same rate as imported vehicles, i.e. 30% more. ­ Other existing or forthcoming regulations: Japan, South Korea, Mexico, Saudi Arabia, India, Iran where Groupe PSA is present. Tax incentives have also been set up in countries like France, the Netherlands, Germany and China, together with fuel efficiency labeling measures for vehicles in Brazil, India and Korea.

### **Time horizon**

Short-term

### **Likelihood**

Virtually certain

### **Magnitude of impact**

Medium-high

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

4000000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

A non­-control of operational risks (non-­approval of vehicles) and financial risks (payment of fines, increase in taxes) in case of non­compliance with the fuel consumption or CO2 emission thresholds set by regulations in the various Group markets could have negative financial implications. For example, CO2 regulations in Europe set a fine of €95 per vehicle sold for each gram over the set target in 2020. The annual risk for a group of PSA’s size is a shortfall of €1 to 2 billion in case of a failure to reach the regulatory targets in regards to European sales. For other non­European countries, the financial risk due to a non-­approval of new vehicles or the payment of fines is evaluated around 2 billion euros as well. The financial impact disclosed is hence the sum of 2 billion euros + 2 billion euros (2 + 2 = 4 billion euros) but no further details on calculation are disclosed due to confidentiality reasons.

### **Management method**

To reach fuel consumption targets and CO2 thresholds, PSA is developing an increasingly low carbon offer drawing on a wide array of technological solutions, structured around 4 main objectives: 1. Deploying hybrid technologies with different size engines and battery capacity to meet a wide range of types of use and budgets; 2. Developing electric vehicles for both fleets and individual customers; 3. Optimizing powertrains, including more widespread use of Stop & Start systems; 4. Improving the overall fuel efficiency, in particular by optimizing vehicle equipment and architecture. This strategy is oversighted and monitored by the CO2 Committee, which is headed by the CEO and takes place on a monthly basis. This strategy is also based on ambitious R&D and innovation programs. Almost 18700 employees are devoted to R&D, including the new R&D center in Germany (since the acquisition of Opel/Vauxhall) that will notably develop expertise on fuel cells and alternative fuels. For instance, in 2018, Groupe PSA launched a multi-energy Powertrain Expertise Centre in Carrières-sous-Poissy (France) that will develop and test new competitive powertrains and support the recent electrification strategy of the Group. Another example to manage this risk is the creation of the Low Emission Vehicles Business Unit in April 2018 whose objective is to implement product plans elaborated by the CO2 Committee and to deliver models that meet customer expectations.

### **Cost of management**

1500000000

### **Comment**

R&D and innovation programs regarding low emissions vehicles, that enable PSA to build the future, introduce exciting new concepts and offer a comprehensive range of innovative models, were backed by substantial budgets: 1.5 billion euros in 2018, or around 2% of the total revenue of the automotive division. No further details on calculation are disclosed due to confidentiality reasons.

### **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**

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

### **Company- specific description**

(i) Clear Description: Due to the intensity of smog pollution in urban areas, an increasing number of cities and governments are progressively adopting more stringent regulations towards automotive vehicles, by setting thresholds for fine particles and NOx emissions. This is the case in Europe, with the Air Quality Directive 2008/50/EC on ambient air quality and cleaner air. Additionally, many cities governments have recently announced their ambition to ban diesel vehicles in congested urban areas. For instance, the Mayor of Paris wants to ban diesel cars by 2020. Finally, France has recently adopted a new legislation called Crit’Air that imposes to have air quality certificates (round sticker) for every road vehicle, with the aim of restricting access of the most polluting vehicles from urban areas in periods of pollution peaks. The risk from these regulations is the loss of revenues for car manufacturers, at the benefit of soft and shared mobility services. ———————— (ii) Specific: Although all vehicles manufacturers are facing this risk, PSA is more exposed as a producer of diesel engines. In 2018, we have sold for example 1,368,342 diesel cars in Europe (LCV and PV perimeter), or approximately 40% of the total of sold vehicles in Europe. Therefore, our sales and revenues could significantly be affected insofar as regulations tend to be strictly limited to diesel engines.

### **Time horizon**

Short-term

### **Likelihood**

Likely

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

1000000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

The non-approval of vehicles or the necessity to recall products with unstable performances could represent an annual financial loss of around 1 billion euros for Groupe PSA. No further details on calculation are disclosed due to confidentiality reasons. In addition, more stringent regulations in terms of air pollutants impose car manufacturers to develop more efficient technologies that eventually increase the price of the vehicle (e.g.: the SCR (Selective Catalytic Reduction) system comes at an extra cost of €200 to €500 per car). The potential impact is either a decrease in Groupe PSA’ sales or a decrease in profitability if this higher cost is fully supported by the Group.

### **Management method**

Groupe PSA is currently managing the issue of air quality in two main ways. 1- PSA has developed 2 main disruptive technologies to reduce pollutant emissions of its diesel vehicles: 1.1- The first one is the Diesel Particulate Filter (DPF). The DPF screens out all fine and ultrafine particles very effectively (more than 99.9% by particle number). Today, more than 17.2 million vehicles are fitted with DPF. 1.2- The second technology is an after­treatment system called the SCR (Selective Catalytic Reduction) solution, which eliminates up to 90% of nitrogen oxides (NOx) emitted by the engine. Both technologies have been successfully integrated in PSA industrial process, with the Blue HDi label. Launched in 2013, BlueHDi represents 14.3 million cumulated vehicles sold worldwide at the end of 2018. 2- In parallel, the Group prepares the growing demand from customers for gasoline and electric engines by modifying its industrial process. Regarding petrol technologies, the Group has doubled its production of the three-cylinder turbo gasoline engine in France in 2018, with the new production line launched in Trémery late 2017, in addition to the production of Douvrin. Regarding electrified technologies, PSA made several business decisions to foster vertical integration of electrified traction motor, such as the “Nidec-PSA emotors” joint venture which has been operational since June 2018 and whose aim is to design, manufacture and sell a range of efficient electric traction machines.

### **Cost of management**

680000000

### **Comment**

More than 7,000 employees are involved in the research and implementation studies for low carbon products (mostly in the powertrain division) for a global cost of 570 million Euros in 2018, which represents 1% of the Automobile Division revenue. In addition, the joint venture with Nidec, which helps to reduce to the environmental and technological risk, represents an investment cost of 110 million euros for Groupe PSA. The cost of management is hence the sum of 570 million euros + 110 million euros (570 + 110 = 680 million euros) but no further details on calculation are disclosed due to confidentiality reasons.

### **Identifier**

Risk 3

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

Supply chain

### **Risk type**

Transition risk

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

Market: Increased cost of raw materials

### **Type of financial impact**

Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatement)

### **Company- specific description**

(i) Clear Description: The transition from internal combustion engines to electrified vehicles is modifying the need for raw materials, with a risk of insufficient supply of critical raw materials (e.g.: lithium, cobalt, nickel, etc.) to satisfy the production needs of automotive manufacturers. Nickel and lithium demand are for instance expected to be almost 20 times higher between today and 2030 in the last report of McKinsey (RACE 2050, 2019), due to the large increase of batteries components. These imbalances between supply and demand may increase the price of raw materials and eventually the price of intermediate equipment sold by PSA suppliers. ———————— (ii) Specific: PSA is highly exposed to this risk for two reasons: (1) As a car manufacturer, PSA needs precious metals and rare earth materials to produce its vehicles and are generally contained in intermediate products. It represented around 3% of total value of purchases. If we add the rest of raw materials, then more than 17% of the total value of purchases is dedicated to raw materials. (2) This risk of scarcity of natural resources is driven by the fact that the PSA supply chain for raw materials is globally spread. This has 2 implications: It Increases risk due to the global spread, but second also enables PSA to much faster change a raw material source / supplier if required as part of our risk management and global presence. For instance, the Group has a contractual relationship with more than 800 supplier groups, but 90% of purchases of direct material and spare parts are made with 146 supplier groups, representing 18% of the referenced supplier groups. Thus, it is still difficult to reduce the dependency on suppliers.

### **Time horizon**

Medium-term

### **Likelihood**

More likely than not

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

2000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

€2M represent the sensitivity analysis of the additional raw material cost for Groupe PSA that would be caused by a 1% increase of the price of rare earth and precious metals. These sensitivity analysis are conducted for all critical materials, including those linked to the transition from petrol-based vehicles to electric vehicles. They are used by Groupe PSA to evaluate the potential additional costs due to the sensitivity of raw materials pricing and the risk of market tensions due to insufficient supply. Price evolution scenarios and further details on calculation are not disclosed due to confidentiality reasons.

### **Management method**

In order to cope with natural resources scarcity, a Materials Strategy Committee has been set up to map materials risks, establishing a list of “strategic” materials in terms of their criticality, potential scarcity, and questionable CSR conditions. The mapping contains a Priority list of the top30 Materials as well as a strategy for each of the different materials. This mapping is designed to enable the Group to manage and secure its supply over the long term and focus its R&D work on replacement materials. Additionally, PSA is committed to using green materials. The average integration rate of green materials in PCD vehicles sold in 2018 was more than 31% (OV excluded). It includes: (1) Recycled materials: PSA is using for instance recycled polypropylene and polyamide in its production process. (2) Bio­sourced materials: To spur faster development of the biomaterials industry, PSA is involved in a large number of scientific partnerships, such as the BIOMass for the future/Miscanthus project. The Group’s involvement consists of taking part in the validation tests of materials containing miscanthus fibres. (3) Natural materials (wood, plant fibers). This policy of expanding green materials, initially launched in EU, has now been rolled out to Latin America where, for example, the vehicles have bumpers made from 100% recycled thermoplastics and rear seat trays made from locally sourced natural fibres. In 2018, 5 new green materials have been validated in Latin America.

### **Cost of management**

570000000

### **Comment**

Research and Development department has for objective to improve the recovering and recycling process. For that, more than 7,000 employees are involved in the research and implementation studies for low carbon products (mostly in the powertrain division) for a global cost of 570 million Euros in 2018, which represents 1% of the Automobile Division revenue. No further details on calculation are disclosed due to confidentiality reasons.

### **Identifier**

Risk 4

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

Customer

### **Risk type**

Transition risk

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

Reputation: Shifts in consumer preferences

### **Type of financial impact**

Reduced revenue from decreased demand for goods/services

### **Company- specific description**

(i) Clear Description: The economic crisis in Europe substantially changed the people’s attitude towards vehicle ownership. In fact, with the decrease of the purchasing power, consumers are more reluctant to buy new cars, and are rather looking for new mobility services in order to optimize the use of individual cars. Carpooling is a good example of the on­going trend among the mobility market, with consumers preferring flexible and economical transportation solutions. The number of users of car- sharing services worldwide is expected to increase from 8 million to 36 million between 2015 and 2025 according to a study by Frost & Sulllivan (2016). ­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­ ———————— (ii) Specific: Given this potential shift from manufacturing a product to delivering a car service, PSA could face two principal risks. (1) As a car manufacturer, the primary risk for PSA is not to be able to define and offer the most accurate mobility solutions. This risk is particularly high in Europe, where many competitors are emerging on the market of mobility services. The byproduct of this risk would be the decrease of car sales. (2) The second risk is to engage investments for building a new business model, without knowing the financial returns. As a traditional carmaker, adapting to new customers’ expectations takes time (at least 5 years) and requires major development costs.

### **Time horizon**

Medium-term

### **Likelihood**

Likely

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

400000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

Groupe PSA projections see the European mobility market growing to more than €13.6 billion in 2020, from €7.7 billion in 2014, an explosion of over 56%. If Groupe PSA was not positioning itself on this emerging market (through the Push to Pass plan), it is estimated that the financial losses undergone by PSA would be around €400 million by 2021. No further details on calculation are disclosed due to confidentiality reasons.

### **Management method**

PSA has developed a portfolio of mobility services that can be divided into 2 segments: 1. B2C car-sharing: 1.1. Urban car­sharing. PSA is participating in the development of several urban car-sharing solutions. For example, a car­sharing service was launched in Lisbon in April 2018 (i.e. emov project), with a total number of users that reach more than 200,000 by the end of 2018. PSA also launched in 2018 its Free2Move car-sharing service in 3 new cities: Washington, Paris & Wuhan. End of 2018, Free2Move has about 500 000 active B2C customers in Europe, China & the USA. 1.2. Short­term rental and driver service with PEUGEOT CITROEN, DS RENT, RENT & SMILE, and Opel Rent. This service aims at satisfying the new mobility by providing short term rental cars for specific purposes. PEUGEOT RENT had a fleet of 7,000 vehicles in 2018. -------------- 2. B2B carsharing and leasing services. 2.1. Leasing services. Free2Move Lease is a mobility service launched in 2017 and dedicated to long-term leasing with services that target a corporate clientele. With 430,000 vehicles leased and nearly 110,000 professional customers in 2018, Free2Move Lease is currently operating in seven European countries and continues to be rolled out in the rest of Europe. 2.2 Business car-sharing. PSA also launched the service Free 2Move Fleetsharing. This service allows employees to reserve their vehicles online via an user-friendly electronic platform, and access them without keys using an ID card system.

### **Cost of management**

106400000

### **Comment**

PSA has a dedicated business unit for mobility services: the “Connected Vehicles and Services & Mobility” business unit whose objective is to think through the future of connectivity and mobility. With 80 employees, this business unit represents a total cost of 6400k€ per year. Additionally, Short term rental is implemented in the Peugeot, Citroën and DS brands commercial networks where staff is dedicated to this service where staff is dedicated to this service. Moreover, as part of the Push to Pass plan, elaborated for the period 2016­2021, the Group intends to invest €100 million in risk capital in order to expand its portfolio of mobility solutions, primarily by investing in start­ups. The cost of management is hence the sum of 6.4 million euros + 100 million euros (6.4 + 100 = 106.4 million euros) but no further details on calculation are disclosed due to confidentiality reasons.

### **Identifier**

Risk 5

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

Direct operations

### **Risk type**

Transition risk

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

Technology: Substitution of existing products and services with lower emissions options

### **Type of financial impact**

Research and development (R&D) expenditures in new and alternative technologies

### **Company- specific description**

(i) Clear Description: With the combination of stringent regulations on CO2 threshold and the shift in consumer preferences, new technologies of vehicles have emerged, in particular plug-in hybrid vehicles (PHEVs) and battery-electric vehicles (BEVs) that generate low emissions if electricity is low carbon. Indeed, the registration of this new type of vehicles with alternative engines is skyrocketing, with a worldwide stock according to the International Energy Agency that surpassed 3 million vehicles in 2017 after crossing the 2 million threshold in 2016 and the 1 million mark in 2015. Automotive manufacturers that do not track and follow this rapid technological upheaval are facing the risk of lagging behind, with potential impacts of losing markets and eventually disappear ———————— (ii) Specific: There is a technological risk specifically for Groupe PSA given the historical choices on vehicles technologies. Groupe PSA has been investing massively in internal combustion engine (ICE) and mostly in diesel vehicles. As a result, the diesel’s market share for Groupe PSA has always been superior to the European average market share. For instance, in 2018, diesel vehicles make up for 43% of PSA European sales while they only represent 36% of total sales in the EU-13 market according to the ICCT (European Vehicle Market Statistics, 2018) Given our greater dependency on diesel vehicles and the low penetration of BEVs and PHEVs in our annual sales, the technological risk is prominent.

### **Time horizon**

Short-term

### **Likelihood**

More likely than not

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

1500000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

PSA is currently investing 38% of its R&D budget (=1.5 billion euros) in clean technologies. Therefore, this risk is currently having an impact on the expenditures of the Group. No further details on calculation are disclosed due to confidentiality reasons.

### **Management method**

The Automotive Programmes Department has a “Strategy” unit for anticipating deep-seated changes in market structure. This facility helps predict future-year changes in the energy mix (internal-combustion/PHEV/electric). In addition, Groupe PSA has created in 2018 a Business Unit dedicated to EVs. The new BU is responsible for defining and deploying the Group’s electric vehicle strategy and rolling out the related products and services. As a result of this management method, Groupe PSA is working on developing and extending two types of vehicles with low-emission vehicles: plug-in hybrid vehicles (PHEV), and electric vehicles (EV). Indeed, in its Push to Pass strategic plan, the Group has committed to put 8 PHEV and 7 EV vehicles with different-size engines and battery capacity on the market between 2019 and 2021. In 2025, 100% of models marketed will include an electrified version. To help it meet these targets, the Group is currently developing an EV programme with DONGFENG MOTOR CORP. Based on an electric version of the CMP platform (e-CMP), it will spawn a new generation of EVs with lithium-ion battery technology, enabling them to run for up to 350 km (WLTP) on one charge. Groupe PSA is also developing electric mobility offers with the aim of encouraging the use of their EVs. For instance, the Group has a “ChargeMyPeugeot” and “ChargeMyCitroen” offer, whereby customers can charge their EVs in an extensive network of public charging points.

### **Cost of management**

570000000

### **Comment**

Research and Development department has for objective to reduce the emissions of Groupe PSA products. For this specific purpose, more than 7,000 employees are involved in the research and implementation studies (mostly in the powertrain division) for a global cost of 570 million Euros in 2018, which represents 1% of the Automobile Division revenue. No further details on calculation are disclosed due to confidentiality reasons.

### **Identifier**

Risk 6

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

Direct operations

### **Risk type**

Transition risk

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

Technology: Other

### **Type of financial impact**

Costs to adopt/deploy new practices and processes

### **Company- specific description**

(i) Clear Description: The automotive sector is currently under deep transformation, notably driven by electrification trends. According to the IEA (Global EV Outlook 2018, 2018), sales of new electric battery vehicles (BEVs) worldwide surpassed 1 million units in 2017, which represents an increase of 54% compared with 2016. When considering the New Policies Scenario from the IEA, sales of BEVs are expected to increase by a 24% annual growth from 2020 to 2030. This high demand for electric vehicles, although fostered by national governments for climate change reasons, may pose serious employment risks in the EU, including for Groupe PSA. The manufacturing of an electric vehicle is a less complex process, which tends to reduce the number of workers per produced vehicle. In addition, BEVs require less maintenance than ICE vehicles as fewer parts need to be replaced over vehicles’ lifetimes. The transition to BEVs technologies could also create a loss of added value by carmakers if they continue to invest in traditional power-train technologies and fail to obtain competence and expertise in batteries and other specific electrified technologies. ———————— (ii) Specific: Groupe PSA is particularly exposed to this risk for two main reasons. 80% of Groupe PSA sales in 2018 were located in Europe, where the share of BEVs is expected to increase the most and where regulations in favor of electric vehicles are the most stringent. Moreover, manufacturing facilities are still mainly dedicated to the production of internal combustion engines (ICE) vehicles, as well as for sales where ICE vehicles account for 89% of total sales in 2018. Given its presence in Europe and its traditional position as a carmaker, Groupe PSA is exposed to this social/employment risk.

### **Time horizon**

Medium-term

### **Likelihood**

More likely than not

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

1000000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

This change of industrial system due to the rise of electrified models will be generating at least a financial impact of 1 billion euros for Groupe PSA (2018 figure disclosed in FY2018 Registration Document), shared almost equally between PCD (Peugeot Citroën DS) and OV (Opel Vauxhall). This amount of cost corresponds to the restructuring program implemented and still under implementation by Groupe PSA. No further details on calculation are disclosed due to confidentiality reasons. This financial figure is likely to increase in the future given the investments Groupe PSA will have to engage in order to stay competitive in the market of electrified vehicles. However, there is too much uncertainty to provide robust and serious financial figures in a mid-term future.

### **Management method**

In order to minimize the social risk related to technological shift, Groupe PSA made strategic business decisions. Groupe PSA launched, in partnership with DongFeng Motor Corp, the Common Modular Platform in October 2018, which is a multi-energy platform that aims to develop ICE and electrified vehicles on the same production line. Groupe PSA also entered into a partnership with Nidec Leroy-Somer on December 2017 with the aim to design, develop, manufacture and sell a range of efficient electric traction machines. The “Nidec-PSA emotors” joint venture has now been operational since June 2018. Another achievement is the highly strategic decision announced in June 2018 by Groupe PSA to select Punch Powertrain as the supplier of its next–generation electrified transmission systems. This range of business decisions has direct impacts on jobs, in the sense that Groupe PSA is developing in-house assets and expertise, with the objective to maintain its value added. Additionally, Groupe PSA is working to anticipate transformation demands for skills and to boost its workers’ employability. For instance, the “Top Compétences” programme aims to meet the Group’s competitiveness and skill reallocation needs through training programmes. In 2018, 1,380 employees took part in the Group’s “Top Compétences” internal retraining programme, and 1,885 internal reconversions were counted, with employees eventually acquiring new skills that are highly valuable for the Groupe’s future.

### **Cost of management**

730000000

### **Comment**

Research and Development department has for objective to reduce the emissions of Groupe PSA products. For this specific purpose, more than 7,000 employees are involved in the research and implementation studies (mostly in the powertrain division) for a global cost of 570 million Euros in 2018, which represents 1% of the Automobile Division revenue. In addition, the joint ventures with Nidec and Punch Powertrain, which help to reduce to the environmental and social risk, represent an investment cost of 160 million euros for Groupe PSA. The cost of management is hence the sum of 570 million euros + 160 million euros (570 + 160 = 730 million euros) but no further details on calculation are disclosed due to confidentiality reasons.

## **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?**

Customer

### **Opportunity type**

Products and services

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

Development of new products or services through R&D and innovation

### **Type of financial impact**

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

### **Company-specific description**

(i) Clear Description: With the combination of stringent regulation on CO2 threshold and the shift in consumer preferences, new technologies of vehicles have emerged, in particular plug-in hybrid vehicles (PHEVs) and battery-electric vehicles (BEVs) that generate low emissions if electricity is low carbon. Indeed, the registration of this new type of vehicles with alternative engines is skyrocketing, with a worldwide stock according to the International Energy Agency that surpassed 3 million vehicles in 2017 after crossing the 2 million threshold in 2016 and the 1 million mark in 2015. ————————— (ii) Specific: In order to seize this opportunity, Groupe PSA has taken the lead in developing innovative alternative fuels. By developing breakthrough technologies such as plug­in hybrid and electric vehicles, PSA is providing efficient solutions to mitigate climate change issues. Those environmental innovations relating to the product can represent major sales development opportunities for PSA. ————————— (ii) Specific: In order to seize this opportunity, PSA has taken the lead in developing innovative alternative fuels. By developing breakthrough technologies such as plug­in hybrid and electric vehicles, PSA is providing efficient solutions to mitigate climate change issues. Those environmental innovations relating to the product can represent major sales development opportunities for PSA.

### **Time horizon**

Short-term

### **Likelihood**

Likely

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

3300000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

Groupe PSA evaluates that the deployment of plug-in hybrid and electric powertrains offers potential additional revenue for the Group estimated at between 4% and 5%, or roughly 3.3 billion euros (Revenue X 4.5% = 74 billion € X 4.5% = 3.3 billion euros). No further details on calculation are disclosed due to confidentiality reasons.

### **Strategy to realize opportunity**

In order to maximize the potential opportunity related to low-carbon and low energy-consumption vehicle, Groupe PSA has engaged a strategy that consists in deploying 2 major green technologies: (1) the plug-in hybrid-electric vehicle (PHEV) and (2) the battery electric vehicle (BEV). 8 PHEV and 7 BEV will be launched by 2021, with the first BEV reaching the market in 2019. PSA eventually aims to develop an electrified offer covering its entire range by 2025. These objectives are supported by the creation of Low Emission Vehicles Business Unit in April 2018, whose function is to define and deploy the Group’s electric vehicle strategy and rolling out the related products and services. In order to respond to these market developments and reach its targets, Groupe PSA is also re-allocating its industrial process towards the development of electric powertrains. For instance, in May 2018, PSA and Nidec Leroy-Somer created a joint venture named “Nidec PSA e-motors” to face the technological challenges ahead and develop cutting-edge electric traction motors. The aim of the partnership is to design, develop, manufacture and sell a range of electric traction engines of the highest market standard. Another example is the ongoing negotiations since October 2018 between PSA and Punch Powertrain for the signature of a joint-venture agreement, named “Punch Powertrain PSA e-transmissions”, that will produce the future generation of the electrified transmission (e-DCT), starting in 2022.

### **Cost to realize opportunity**

570000000

### **Comment**

More than 7,000 employees are involved in the research and implementation studies for low carbon products (mostly in the powertrain division) for a global cost of 570 million Euros in 2018, which represents 1% of the Automobile Division revenue. No further details on calculation are disclosed due to confidentiality reasons.

### **Identifier**

Opp2

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

Supply Chain

### **Opportunity type**

Resource efficiency

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

Use of recycling

### **Type of financial impact**

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

### **Company-specific description**

(i) Clear description: The automotive industry is a resource-intensive industry, insofar as the production of a vehicle requires energy, metals, rare earth materials etc. A McKinsey study evaluates that 101 million tons of materials were used for the production of vehicles in 2010 and it is estimated that the volume of materials will increase to 140 million tons by 2030. ————————— (ii) Specific description: This situation is also the case for Groupe PSA given that the direct parts purchased represent more than 75% of a PSA vehicle’s production cost. If this resource dependency is usually perceived as a risk for automobile manufacturers, Groupe PSA considers that resource management and efficiency allow to combine competitiveness with the preservation of resources.

### **Time horizon**

Short-term

### **Likelihood**

Very likely

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

9500000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

The use of recycled polypropylene and polyamid rather than the use of the same virgin materials yielded saving of €9.5 million in 2019 for Groupe PSA. No further details on calculation are disclosed due to confidentiality reasons. This financial figure is one example of the various financial gains that are achieved with the green materials policy and circular economy approach that Groupe PSA is actively deploying.

### **Strategy to realize opportunity**

In order to exploit this opportunity of resource efficiency, the strategy of Groupe PSA is threefold: (1) Groupe PSA seeks to optimize production processes to reduce the use of resources by using only the quantity of raw materials necessary. Design efforts are initially carried out to optimize the packaging necessary to build a vehicle to avoid producing waste. The efforts of design have shown results since the weight of waste per vehicle produced has been halved in 20 years. (2) Groupe PSA also pursuing research efforts to increase the rate of recycled and natural materials in the production of new vehicles. (e.g.: recycled polymers that come from renewable resources rather than the petrochemical industry). So far, the average integration rate of green materials in PCD vehicles sold in 2018 was more than 30%. (3) When waste production is unavoidable, the most environmentally-friendly method of recycling or recovery should be identified and implemented, so that a portion of the Group’s waste is incorporated into the circular economy, where it is reused. The program Carry Over is a good example of resource efficiency action: the approach consists in recycling and adapting machines rather than purchasing new equipment. Machines and tools that are no longer used can be reused within the same plant, in other Group plants, or even sold outside of the Group. Carry Over practices helped to save 30% on capital expenditure costs to launch new projects in assembly plants in 2018.

### **Cost to realize opportunity**

0

### **Comment**

The cost to realize this opportunity can be considered as 0 because there is no investment needed except maintenance and transportation of machines from one plant to another.

### **Identifier**

Opp3

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

Customer

### **Opportunity type**

Markets

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

Access to new markets

### **Type of financial impact**

Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks)

### **Company-specific description**

(i) Clear Description: the automotive industry is facing disruptive trends that range from the emergence of the mobility services market to the acceleration of new technologies such as the autonomous vehicle. The automotive aftermarket is for instance expected to grow at a rate of 3% per year through 2030 according to a McKinsey study (2017) with major changes related to changing consumer preferences, digitization etc. The autonomous vehicle market is also likely to grow in the future. According to an international study by KPMG, fully autonomous cars could represent 10% of car sales by 2035, or 12 million vehicles a year, and a market of $42 billion by 2025. If tech players and start-ups might play an important role in the development of this new market, it also represents a huge opportunity for traditional carmakers. ————————— (ii) Specific Description: this autonomous vehicle market is particularly attractive for Groupe PSA given its pioneer position in the development of communicating systems for cars, with the launch of emergency call service (eCall) in 2003. This historical capacity and agility of integrating innovative connectivity solutions will help the Group to exploit and maximize this market opportunity. The aftermarket also represents an opportunity for Groupe PSA since Groupe PSA consistently strives to ensure the sustainability of its products through various commercial repair channels.

### **Time horizon**

Short-term

### **Likelihood**

Very likely

### **Magnitude of impact**

Medium

### **Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

### **Potential financial impact figure (currency)**

7400000000

### **Potential financial impact figure – minimum (currency)**

<Not Applicable>

### **Potential financial impact figure – maximum (currency)**

<Not Applicable>

### **Explanation of financial impact figure**

According to an international study by KPMG, fully autonomous cars could represent 10% of car sales by 2035, so we considered the opportunity to represent 10% of our actual sales revenue, which could give 7,400 billion euros of additional revenue by 2035 (74 000 billion euros X 10% = 7.4 billion euros). No further details on calculation are disclosed due to confidentiality reasons.

### **Strategy to realize opportunity**

In 2017, Groupe PSA introduced its AVA (“Autonomous Vehicle for All”) programme, bringing together all the functionalities of driving assistance to create a simple, intuitive autonomous vehicle that offers a safe and comfortable driving experience. This program aims to continue and accelerate the deployment of driving assistance systems until achieving the launch of autonomous vehicles. This program relies on the test and the introduction of innovative technologies. It began with level 1 functionality (Hands on) technology in 2016, and the Group plans to introduce in 2020 level 2 (Hands Off) and then level 3 (Eyes Off) technologies at low speeds and in high-traffic conditions. Fully automated level 4 (Mind Off) technologies will be marketed beginning in 2025. For instance, since early 2018 Groupe PSA has made road test demonstrations in partnership with Qualcomm in order to develop and test C-V2X communication technology, that allows vehicles to exchange information and hence improve automotive safety and traffic efficiency. Regarding the aftermarket opportunity, the Groupe PSA has created in April 2018 the Circular Economy Aftermarket Business Unit, with the objective to build a sustainable and profitable business based on circular economy principles everywhere (worldwide scope) and whenever (technical limitation) it makes sense.

### **Cost to realize opportunity**

57000000

### **Comment**

More than 7,000 employees are involved in the research and implementation studies for low carbon products (mostly in the powertrain division) for a global cost of 570 million Euros in 2018, which represents 1% of the Automobile Division revenue. The development of the autonomous vehicles represents around 10% of this amount (€570 x 10% = 57 million €). No further details on calculation are disclosed due to confidentiality reasons.

### **Identifier**

Opp4

### **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**

Increased revenue through demand for lower emissions products and services

### **Company-specific description**

(i) Clear Description: In the next decade, regulatory requirements will be tightened worldwide and will be reflected in air pollutant emissions (NOx). One example of environmental standards is the second stage of Euro 6 with the mandatory inclusion of Real-test Driving Emissions (RDE). While many carmakers are currently facing the risk of being fined because their diesel cars emit substantially higher levels of pollution when tested in RDE, other car manufacturers that meet the new standards could have comparative advantage. ————————— (ii) Specific: Operationally speaking, this strategic advantage of PSA in terms of air pollutant emissions means that PSA is not facing additional operational cost in order to comply with these regulations. As a consequence, PSA is able to propose, due to its outstanding position in terms of air pollutant emissions, vehicles with competitive price, which is in the end likely to stimulate the demand for our products.

### **Time horizon**

Short-term

### **Likelihood**

Virtually certain

### **Magnitude of impact**

Medium-high

### **Are you able to provide a potential financial impact figure?**

Yes, an estimated range

### **Potential financial impact figure (currency)**

<Not Applicable>

### **Potential financial impact figure – minimum (currency)**

1000000000

### **Potential financial impact figure – maximum (currency)**

2000000000

### **Explanation of financial impact figure**

For approval of its new vehicles in Europe, Groupe PSA committed to meet a NOx conformity factor in RDE of less than 1 (excluding measurement dispersion which cannot exceed 0.5) from 1 September 2017, i.e. three years in advance of the 2020 statutory requirement. If Groupe PSA had failed in obtaining vehicles’ approval, the annual risk would have been around €1-2 billion. This anticipation of regulatory thresholds can be seen a financial gain of €1-2 billion on operating costs. No further details on calculation are disclosed due to confidentiality reasons.

### **Strategy to realize opportunity**

To reach and forestall the air pollution thresholds set by regulation, PSA has adopted a core-technology strategy that can be summarized in 3 steps: 1) Developing the most efficient emissions control technologies; 2) Deploying & expanding these technologies in all the products and geographic areas where PSA operates in order to improve financial returns; 3) Reinvesting in R&D programs so as to engage innovative technologies in favor of environment. This core-technology strategy is demonstrated with the Blue HDi label that consists of: - an additive particulate filter which enables the removal of 99.9% of particles in terms of number, - an after-treatment system called Selective Catalytic Reduction (SCR) that eliminates up to 90% of nitrogen oxides (NOx) emitted by the engine. It represents 91% of diesel vehicles fitted with particulate filters in 2018. In preparation to the second stage of Euro 6 that will impose emissions test in “Real Driving Emissions” (RDE), PSA has also taken two main actions: (1) the initiative of measuring fuel economy and pollutants emissions in RDE with the partnership of the NGO Transport& Environment, and (2) the development of a new passive regeneration particulate filter (called GPF) that reduces sharply particulate emissions of petrol vehicles. The GPF, which will be rolled out to all direct-injection gasoline engines, eliminates more than 75% (in number) of all particulate matter, both fine and ultra-fine, whatever the driving conditions.

### **Cost to realize opportunity**

570000000

### **Comment**

More than 7,000 employees are involved in the research and implementation studies for low carbon products (mostly in the powertrain division) for a global cost of 570 million Euros in 2018, which represents 1% of the Automobile Division revenue. More generally, R&D expenditure amounts €3.9 billions in 2018, or around 6% of the total revenue of the automotive division. No further details on calculation are disclosed due to confidentiality reasons.

## **C2.5**

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

|  |  |  |
| --- | --- | --- |
|  | **Impact** | **Description** |
| Products and services | Impacted | (i) Description of the impact: climate risks and opportunities can impact our area of products and services because of market effects. The shift in vehicles technologies due to market changes requires Groupe PSA to develop new models of vehicles that would be aligned with the emerging regulation standards and with the consumer preferences. The Group is for instance developing an electric vehicle programme with DONGFENG MOTOR CORP that aims to extend our range of electric vehicles and to achieve the objective of launching 7 electric models by 2021. Another example of impact on products is the strategic decision of the brand DS Automobiles to offer from 2025 100% of electrified models ( PHEV, 100% electric, or even both). Likewise, with the change of consumer preferences towards mobility services, PSA seeks to develop new services in addition to new products. The Groupe PSA has for instance launched in 2017 its Free2Move mobility services brand which brings together all of its connected mobility services offerings, including B2C and C2C car-sharing; B2B car-sharing; networked fleet management; smart services; rental activity. (ii) Magnitude of the impact: the magnitude of impact is high since risks related to products and services area have the possibility to disrupt the core activity of PSA. Many business units are affected by the change or the reduction of products and services, notably the industrial department, the R&D department and the sales department. |
| Supply chain and/or value chain | Impacted | (i) Description of the impact: failure by suppliers to fulfil their commitments because of climate extreme events could lead to a serious risk of production stoppages. This situation would lead PSA to either find other suppliers with the risk of paying higher prices (which would induce an increase of operating costs) or to delay the commercial launch of new vehicles (which would induce a decrease in sales and consequently in revenue). Those risks on supply chain led to a revision of the management process, with a Supplier Quality Development Department that is now responsible for monitoring all type of risks of suppliers’ production plants and for identifying the “signs of weakness”, including climate change exposure. (ii) Magnitude of the impact: the magnitude of impact is high because the parts and components purchased from suppliers represent more than 75% of a vehicle’s production cost. There is therefore a high exposure of PSA activity towards its suppliers, meaning that the impact could be dramatic if several suppliers from the same region would be facing production issues at the same time due to climate change phenomena. |
| Adaptation and mitigation activities | Impacted | (i) Description of the impact: climate risks, namely physical risks, have an increasing impact on adaptation activities related to water extraction and consumption. If previously, the water resource was inexpensive and available, the prospect of the Group’s establishment in more sensitive regions has changed this perception, and the consumption curve has begun to show a downward trend. To anticipate conflicts of use in water stressed areas, which could have significant repercussions (adverse environmental effects due to reduced water availability, change in ecosystem functioning, change in relations with stakeholders due to economic and social impacts), and to comply with a developing regulatory framework, the Group is continuing its efforts in this direction through more thorough assessments of its energy-consuming activities, by establishing less water-dependent processes, and by considering the recycling of its industrial water to target zero water withdrawals by 2050, with the exception of evaporated water during the manufacturing process. (ii) Magnitude of the impact: the magnitude of impact on adaptation and mitigation activities is low as only one plant is located in an area identified by the World Resources Institute as being at high risk of water stress. In addition, as for energy, each plant has its own water consumption management plan based on the widespread use of metering systems, displaying the least water-intensive operating parameters for each workstation, and using recycling systems. For these two reasons, the size of impact on the business of PSA would remain low. |
| Investment in R&D | Impacted | (i) Description of the impact: more stringent regulations combined with a shift in consumer preferences and the fierce competition for the development of new green technologies led automotive manufacturers to engage massive R&D projects. For instance, in July 2018, Groupe PSA set up its new multi-energy Powertrain Expertise Centre in France (Carrières-sous-Poissy), to support the energy transition by improving powertrains efficiency in reducing CO2 emissions. It was officially inaugurated in early 2019 for a total investment of €32 million and will bring 1,300 employees together in order to develop new competitive powertrains. In addition, bearing in mind the growing scarcity and increasing cost of raw materials over the long-term, the R&D Department is directly concerned with the recyclability and replacement of materials in order to better manage and secure the Group’s supply of materials over the long term. (ii) Magnitude of the impact: the impact on the business of PSA is already high since 38% of the R&D budget is dedicated to the development of low-carbon products and services, from which €1,150 million is specifically spent for the development of innovative powertrains in 2018. In addition, the impact is evaluated as high given the proportion of business units affected. If the R&D department is the first department to be concerned, the Purchasing Department, the Sales Department as well as the Industrial Department are actively involved in the development of innovative solutions, and the absence or the adoption of inadequate solutions could have severe impacts on these various business units. |
| Operations | Impacted | (i) Description of the impact: the regulatory constraint and the stakeholder pressure to reduce direct CO2 emissions and increase the circular economy into PSA activity has and will continue to affect daily operations at PSA facilities. Although emissions and energy consumption used for the industrial production is limited compared to the emissions of sold products, the objective of achieving carbon-neutral plants by 2050 requires profound changes in the operations. For instance, there is an on-going plan to reduce surface areas through more compact workshops, while production lines are also optimized (e.g.: introduction of a single-line assembly). To say it differently, risks related to energy consumption and emissions generate a revision of the industrial organization and operations with eventually the aim of reducing energy consumption. The impact on operations can also be seen in the way PSA is incorporating the circular economy approach in the construction of new assembly plants. For instance, the program Carry Over consists in recycling and adapting machines rather than purchasing new equipment. As a result, Carry Over practices helped to save 30% on capital expenditure costs to launch new projects in assembly plants in 2018. (ii) Magnitude of the impact: the magnitude of impact is medium firstly because it has to do only with the industrial sphere with no interference with other departments. Moreover, changes brought in the industrial organization are gradual, which means that financial expenses or savings are not as significant as for investment in R&D. |
| Other, please specify | Impacted | (i) Description of the impact: With climate transition and the shift from ICEs (Internal Combustion Engines) and BEVs (Battery Electric Vehicles), another risk is a social risk in the sense that European manufacturers are likely to lose 60%-70% of the added values of vehicles given lower needs of materials and payroll and the technologies substitution to the benefit of batteries manufacturers from China. Indeed, the manufacturing process for an electric vehicle differs significantly from an ICE vehicle, with a lower need of components (200 components for an EV as opposed to 1400 components) according to the study of Friedrich Ebert Stiftung (The Future of the German Automotive Industry, 2015). In addition, one third of the value added in the electric vehicle comes from the electric battery, which is currently mainly produced by Chinese industrials. The electric vehicle swift may eventually lead to significant job losses in European countries. (ii) Magnitude of the impact: the magnitude of impact is medium-low for Groupe PSA because Groupe PSA has already implemented actions to address this risk. This is the case with the two joint-ventures (Nidec-PSA and Punch Powertrain-PSA) that aim to invest in EV industrial capacities and maintain production stages in France, in a shared and responsible approach with its social partners. |

## **C2.6**

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

|  |  |  |
| --- | --- | --- |
|  | **Relevance** | **Description** |
| Revenues | Impacted | (i) Description of the impact: The market shows a strong trend towards new forms of mobility such as car-sharing, car-pooling, and connected services. This creates opportunities that are also available to new market entrants, mostly from the digital industry. These players from outside the automotive industry seek a positioning in the automotive value chain that directly competes with the “natural” place of car manufacturers. Insufficient control of the advances of these new players or the absence of Groupe PSA from these new markets and consequently its lack of exposure to these new business models could generate a loss of revenues in the near and medium future for PSA. In addition, a failure to comply with social, societal and ethical standards in the supply chain could have major negative impacts on the Group revenue, since it could damage its reputation and force PSA to reduce the vehicle pricing in order to compensate the potential fall of sales. In discrepancy, if Groupe PSA has the capability to propose new forms of mobility, customers are likely to choose traditional carmakers such a Groupe PSA given their reputation and their visibility in the transportation sector. This capacity of seizing financial opportunities related to new forms of mobility may produce additional revenue for Groupe PSA. (ii) Magnitude of the impact: the impact associated with these risks and opportunities is very high since the capacity of sales could be significantly reduced in case of insufficient progress on these new mobility services. To say it differently, Groupe PSA could lose some economic markets with the direct impact of decreased revenue. So far, the launch of Free2Move appears as a successful and profitable opportunity for the Group given that the Group had generated €124 million in revenue for the Free2Move mobility services by the end of 2018. |
| Operating costs | Impacted | (i) Description of the impact: operating costs are directly impacted by the current and emerging standards and regulations. The regulatory risk leads automotive manufacturers, including PSA, to dedicate specific human resources for ensuring that products and services fully conform to the regulations. At PSA, a special unit is responsible for coordinating the Group’s CO2 program, and a special department monitors the Group’s ELV (end-of-life vehicles) policy and its recycling and recovery performance. These departments increased the operational cost, and it is likely that operating costs would significantly increase in the future given the oncoming stringent regulations. At the opposite, actions to control energy consumption can help to reduce operating costs. For instance, in 2018, actions to control energy consumption led to savings of about €2 million on an overall bill of about €220 million, representing a cost saving of about 1%. Energy savings were also obtained in offices, R&D and dealership facilities that led to a reduction of energy bills by €4.9 million between 2015 and 2018. (ii) Magnitude of the impact: the impact associated with these risks and opportunities is high since the difficulty of reducing energy and resources consumption could rise to an increase of the production cost and pricing, with potential risk in terms of sales. For instance, the production cost per vehicle would have been 0.7€ higher if Groupe PSA did not have implemented energy saving actions in the last years. |
| Capital expenditures / capital allocation | Impacted | (i) Description of the impact: climate risks and opportunities directly impact the capital expenditure of Groupe PSA because of market and technological effects. The shift in vehicles technologies as well as the emerging constraints on vehicle CO2 emissions require Groupe PSA to spend large capital expenditure in order to be able to provide adequate products. Indeed, PSA is designing and engineering more efficient industrial platforms that offer high-performance solutions in terms of modularity, versatility, equipment and reduction of CO2 emissions. This is the case with the Common Modular Platform that has been developed with DONFGENG MOTOR for a total investment of €200 million. Similarly, with the emerging trend of mobility services, Groupe PSA has to expand its portfolio of mobility solutions with the aim of satisfying this new consumer demand. As a result, PSA mobilizes capital investment, such as €100 million in risk capital primarily by investing in start-ups. This rise of capital investment for technology and service development will continue in the future. (ii) Magnitude of the impact: the impact associated with these risks and opportunities is very high since it has to do with the industrial choices of Groupe PSA. Engaging new industrial strategy requires enormous financial capital that has a deeper impact on the financial planning process than other risks and opportunities. For instance, the total investment for the Common Modular Platform, the joint-venture with Nidec and the new mobility services fund reaches more than €400 million. |
| Acquisitions and divestments | Impacted | (i) Description of the impact: The market shows a strong trend towards new forms of mobility such as car-sharing, car-pooling, and connected services. Given that this new mobility market is made up of many start-up and tech companies, traditional actors including Groupe PSA are reducing risks and exploiting opportunities through the acquisitions of promising and emerging companies. In line with this strategy, Groupe PSA created at the end of 2016 the Business Lab, with a program named Venture Development that aims to facilitate the establishment of partnerships with innovative start-ups and/or acquire minority equity stakes directly and through venture capital funds. The Groupe PSA has also set up a €100 million investment fund for start-ups, and has already announced partnerships in fields such as mobility and data. An recent example is the acquisition in February 2019 of TRAVELCAR by Group PSA, a French startup offering a hybrid model somewhere between a traditional rental agency and a platform to connect private car owners. (ii) Magnitude of the impact: the impact associated with these risks and opportunities is medium because PSA is either taking a stake in or forming agile alliances with start-ups, but does not bear the full risk related to the development of disruptive solutions. As a consequence, the financial amount associated with the acquisitions is lower than in other financial areas. |
| Access to capital | Impacted | (i) Description of the impact: Current and emerging regulations related to climate change are deterring investors from investing in carbon-intensive activities, with the result that manufacturers must upgrade their production facilities and product plan to make them less energy-intensive. Risks related to reputation could also have some effects on the capacity to have access to capital. Investors and banks are increasingly taking into account the environmental performance and reputation into their choice of investments and lending. Automotive manufacturers that do not tackle climate change issues or even mislead consumers and stakeholders on the emissions of their sold products could have more difficulties in accessing financial markets due to the reluctance of financial actors, with a direct risk of a higher borrowing cost. (ii) Magnitude of the impact: the impact associated with these risks and opportunities is low since Groupe PSA is pursuing its financial performance targets through a sustainable business management that is recognized by its leadership position on major sustainability ratings. PSA also takes active position on the fight on climate change by being one of the leaders of fuel consumption and CO2 emissions. In addition, Groupe PSA took a unique approach to customer transparency by publishing its vehicles’ real (on the road) fuel consumption. Measurements were taken in accordance with a test protocol outlined by the NGOs Transport & Environment (T&E) and France Nature Environnement (FNE) and audited by Bureau Veritas, an internationally renowned independent organization. The two levers of actions have brought confidence to investors and thereby have helped to reduce the risks of financing. In February 2018, Institutional Shareholder Services Inc (ISS) published Groupe PSA Environmental & Social Quality score of 1-low risk. In December 2018, the rating agency Standard & Poor’s (S&P) awarded Groupe PSA a rating of BBB-/outlook stable. This performance is notably based on: (a) a stable and balanced capital structure supporting the roll-out of strategic projects, (b) a robust strategic plan designed to meet the mobility needs of all of the Group’s customers. |
| Assets | Impacted | (i) Description of the impact: physical risks already have had and will continue to impact our assets worldwide. The increase of frequency and intensity of extreme events could impact the industrial facilities, could deteriorate the industrial equipment and could even disrupt the production process. For instance, Groupe PSA has been recently impacted by the floods in the East of France, where its historical plant in Sochaux was temporarily shut down in January 2018. 900 vehicles could not be produced during this episode and 1,800 employees were forced to stop working. (ii) Magnitude of the impact: the impact associated with these risks and opportunities is medium because not all the industrial assets were and will be affected by the change in climate variables. The most significant impacts are likely to occur in the Mediterranean region and in the South-East Asia region. Additionally, an interruption of activity in one asset would not stop the full production of Groupe PSA, which means that industrial activity could partially continue. As it is already implemented in the Group, when a facility’s capacity is not sufficient to fulfill the production request (due to high commercial demand, technical failure…), production is transferred to another facility. |
| Liabilities | Impacted | (i) Description of the impact: Insurers take into account two criteria for setting their premium rates for insurance and claims compensation: Insurers analyze the impact of natural events on their entire portfolio. This subject is all the more sensitive as the year 2018 was the fourth-costlier disaster year since 1980 with overall losses of 160 billion US dollars according to MunichRe. High claims may lead insurers to raise their rates or at least refuse any premium. By natural events, it is understood the risks such as flood, storm, etc. but also earthquakes which are not climatic events but which are part of the risks taken into account by the insurers. The second criterion is the analysis of the exposure of the group's sites to natural events. This covers the values of direct damage and operating losses insured, the "grading" of exposures to natural risks by geographical area and claims history. For the Group; the most exposed countries are notably, Japan, Brazil, the Netherlands, Chile. Insurers could operate other levers of adjustment than the premium, for example by asking for a reduction of limits, an increase in deductibles or a reduction in their participation in the insurance program. (ii) Magnitude of the impact: the impact associated with this risk is medium because the Group's DDPE insurance program has several lines with a number of co-insurers (roughly a dozen) and therefore each of them has a perception of our risks (its own underwriting policy). |
| Other | Please select |  |

## **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 and quantitative

## **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.**

1.Influence on business strategy

Groupe PSA has integrated climate-related issues at the heart of its business strategy and financial planning. Indeed, the “Push to Pass” strategy includes 6 key strategic climate-related commitments: (1) reducing vehicle CO2 emissions and fuel consumption to combat global warming; (2) reducing pollutant emissions to preserve air quality; (3) developing a responsible use of material in the vehicle life cycle from the extraction of raw materials to the recycling of end-of-life vehicles; (4) developing new mobility solutions to meet new customer needs (5) Reducing the industrial carbon footprint of its facilities, (6) Reducing CO2 emissions by ensuring supply chain and logistics environmental performance.

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2. Link between business strategy & emissions reduction target

In line with this strategy, PSA set ambitious targets both for its direct and indirect emissions. In regard to scope 1&2, PSA has defined a CO2 roadmap for manufacturing operations, namely a 60% reduction in CO2 emissions over the 2010-2050 period. PSA is targeting CO2 neutrality for all its plants through the use of renewable energies and the offsetting of residual emissions. The integration of OV is changing the trajectory but the target is remaining the same. The Industrial CO2 Committee, launched in 2018, is in charge of designing a new emissions reduction plan for operations activities. In regard to scope 3, PSA has defined 3 targets: (1) the reduction of CO2 emissions for each vehicle transported by 33% between 2016 & 2035, and (2) the reduction of average CO2 emissions of vehicles sold worldwide by 55% by 2035 compared with 2012 level, (3) the compliance of the CO2 trajectories in compliance with the Paris agreement for strategic and core suppliers. A CO2 Corporate Committee is in charge of designing feasible actions plans (technical enablers, product plan adaptation and strategy) to reach the Group’s targets.

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3. Substantial business decisions made

To best support its strategy of electric vehicles deployment, PSA created in July 2017 a department dedicated to electric vehicle programmes, followed by the creation of a Low Emission Vehicles Business Unit in 2018, which are responsible for defining and deploying the Group’s electric vehicle strategy and rolling out the related products and services. In addition, PSA established a partnership with Nidec Leroy-Somer, with the aim of designing, developing, manufacturing and selling a range of electric traction engines. The partnership was announced in December 2017 and the resulting joint venture: “Nidec PSA e-motors” was launched in May 2018. Production will begin in 2022, with a target of 900,000 units. Another substantial business decision made in 2018 was the launch of a new R&D site named Powertrain Expertise Centre (CEP) in Paris region that will address electrification challenges in the design, development, manufacture and sale of electric traction motors for a total investment of €32 million.

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4. Climate Change (CC) aspects

CC related regulations are a key source of climate risks and opportunities for PSA, and a key factor influencing our business strategy.

Even if these specific risks are mainly regulatory ones, other CC aspects also have an influence. For example, changing consumer behaviors are a great source of opportunities, with growing demands for car models with lower CO2 emissions and fuel consumption.

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5.Short­-term

PSA short-term strategy has been influenced by CC in 2 different ways:

> Product development

Regulatory changes and new customer demands related to CC led PSA to develop a specific strategy related to electric mobility. Indeed, in its Push to Pass strategic plan, the Group has committed to putting 8 plug­in hybrid vehicles (PHEV) and 7 electric vehicles (EVs) on the market between 2019 & 2021.

> Services development

In 2017, PSA launched the deployment of the brand Free2Move, which brings together all of the Group’s mobility and connected services in response to major societal changes and the emergence of new collaborative use. Free2Move is currently being developed worldwide and targets to reach 2,000,000 active B2C customers by 2021.

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6.Long­-term

PSA long-term strategy has been influenced by CC in 2 different ways:

> Developing zero-impact plants

The PSA industrial department is working to achieve by 2050 zero-carbon, zero waste and zero water withdrawals for all manufacturing operations. These ambitious targets will be attained through efficient industrial organization (workshops compacting, roll-out of LED lighting, etc.) the use of renewable energy (e.g.: 100% green electricity contracts), optimization of materials uses in processes and recovery of waste produced.

> Incorporating new technologies

In line with its target of reducing average CO2 emissions of vehicles sold worldwide by 55% in 2035 compared with 2012 levels, PSA has defined long-term orientations that include the development of a plug-in hybrid petrol-electric powertrain; a new range of EVs and a range of high-performance engines and lighter vehicle platforms. In 2025, 100% of models marketed will include an electric version and each new vehicle launched by DS Automobiles will only be available in electrified engines. Additionally, the Group is stepping up its work on fuel cell vehicle innovations with a Center of Competences in Rüsselsheim in order to have a Fuel cell fleet in operation with selected B2B customers by 2021.

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7.Advantages

Our environmental innovations offer strategic advantage over our competitors. Indeed, reducing the fuel consumption and CO2 emissions of our products addresses opportunities generated by the combined effect of consumer preference for flexible and efficient mobility and stricter environment standards.

Advances in clean technology also have a favorable economic impact for our customers, which is a great competitive advantage. For example, the PureTech engine saves a B2B customer in France about €170 a month in the costs of vehicle use compared with the previous model of the same car.

Our core strategy centered on green innovative solutions also helps to attract and retain talents that want to participate in the fight against climate change and contribute to consolidate and bolster industrial property of Groupe PSA.

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8. Paris Agreement (PA)

Groupe PSA climate strategy is designed in respect with the Paris Agreement. On the industrial side, all plants will be carbon-neutral by 2050 by using renewable energies and by offsetting inevitable emissions. On the vehicles side, Groupe PSA commits to reduce average CO2 emissions of vehicles sold worldwide by 55% compared with 2012 levels. On the suppliers side, Groupe PSA is asking key partners and key suppliers to demonstrate a CO2 trend which complies with the Paris Agreement. This set of commitments (including OV) will be submitted to the SBTi in 2019 and will eventually validate the alignment of Groupe PSA with the Paris Agreement.

## **C3.1d**

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

|  |  |
| --- | --- |
| **Climate-related scenarios** | **Details** |
| Other, please specify (Green Constraint Scenario (BIPE)) | --------- Scenarios identification: marketing and products division teams are using various climate-related scenarios developed by the consulting company named BIPE. The main scenario used by PSA is the "Green Constraint" reference scenario, which takes into account moderate economic growth and stringent environmental regulation. In this scenario, green technologies are gradually developed and are transferred by the private sector to developing countries. In addition, in this scenario, global agreements on climate action are found between major countries. Please note that consistency checks were performed with the 2DS scenario of the IEA, and demonstrate that mix projections by energy and technologies from the Green Constraint Model were relatively similar to the results found in the 2DS scenario. Among the range of scenarios considered, PSA is considering a scenario with diesel sales down to 10% and electric vehicles sales limited to 7% for passenger cars in Europe, in order to be ready to ensure both compliance with CO2 levels and preservation of economic performance of the company in that case. --------- Methodology used: the model used to carry out the scenario analysis is based on the WAPO bottom-up model. This model incorporates various inputs that can be summarized in 4 categories: macro-economic variables (e.g.: population, GDP), technological variables (e.g.: weight, specifications of vehicles, cost of technologies), energy variables (e.g.: resources, prices of fuels and regulation variables (e.g.: fuels taxes, air pollutants regulation). --------- Time horizons: the scenario analysis is carried out from today to 2035. PSA has considered this specific time horizon 2018-2035 for two reasons: the changes that are on-going in the automotive market take time, which means that technologies such as the autonomous vehicle will generate significant effects on the Groupe’s business only in the medium term (2025-2035). In addition, forecasting changes in our business leads to the adoption of strategic choices and massive investment plans that need to be considered and thought in the medium future. --------- Perimeters: this scenario analysis was carried out at Group-level. All geographies and entities were considered. --------- Scenario Results: the output of this scenario is the potential market evolution by energy and technologies from today to 2035 and for 14 different geographical zones. As an example, the model predicts the proportion of BEV vehicles in the light-duty vehicles market in Europe for 2030. --------- Impact on the strategy: The technology mix projections resulting from this scenario make it possible to apprehend, for example, at what speed the diesel mix will fall, in Europe and worldwide, and on which markets and at which speed the electrified vehicle mix will increase. These mix projections by energy and technology (potential markets) are shared across the Group. Within the Programs and Strategy Division, they are used to make strategic choices related to the product development plan: decision to invest in an e-CMP electric platform, commitment to offer 100% electrified models in 2025, adaptation of the means of production in coherence with the sales mix projections (creation in May 2018 of a Joint Venture with the Nidec Leroy-Somer holding company to support the transition from diesel to electric, etc...). --------- Case study: The analysis of the different scenarios made it possible to frame the potential sales mix of electrified vehicles (min-max) and to identify accordingly the share of effort to be made to optimize CO2 emissions on conventional thermal vehicles, in order to reach our target relating to the average CO2 emissions of our vehicles. Following this work, PSA is planning to offer 100% electrified vehicles by 2025 and achieve more than 50% of electric, fuel cells and hybrid vehicles in the Group’s sales. |

## **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.**

------- As an environmental pioneer in CO2 emissions from passenger cars, Groupe PSA has defined in 2017 an ambitious roadmap that will help to achieve a full low-carbon business in the long term. This roadmap has three main levers: (1) the attainment of carbon neutrality for its direct operations (scope 1&2) in 2050; (2) the development of a range of increasingly fuel-efficient and low-carbon cars, with the objective of reducing CO2 emissions associated with sold products by 55% from 2012 to 2035; and (3) the reduction of CO2 footprint from purchasing operations and logistics operations (-33% CO2 emissions reduction for logistics between 2012 and 2035).

------- In order to track and monitor progress to these climate-related targets, Groupe PSA has defined some intermediate targets. Regarding its direct operations, the integration of OV changes the emission profile of the Group, especially because OV operates 3 cogeneration plants. Therefore, a new plan for reducing direct operations CO2 emissions will be designed in 2019. Regarding its indirect emissions, Groupe PSA is planning to offer an electrified alternative for 100% of the models marketed by 2025 and to sell more than 50% of electrified vehicles in 2035. PSA also engage with its suppliers to decrease its indirect emissions from the logistic and supply chain. Suppliers are chosen according to an independent third party CSR assessment (Ecovadis) which includes environmental and carbon performance. CO2 emission path in line with Paris agreement are additionally requested annually from our most important suppliers.

------- Groupe PSA identified several challenges that could inhibit the successful implementation of our low-carbon transition plan. Regulation changes are the most prominent challenges, in the sense that the success of the EVs offer would only be met if (1) enough stringent regulations are adopted in terms of CO2 emissions intensity of vehicles; and (2) if Europe and worldwide long-term climate regulatory objectives are linked to future infrastructure. In other words, an insufficient support for electric vehicle charging infrastructure might hamper the uptake of EVs market, which would prevent Groupe PSA to achieve its environmental commitments.

------- In order to implement its target related to its sold products, PSA is investing in 4 type of technologies that will help to reduce emissions from sold products:

(1) the deployment of electric technologies with different-size engines and battery capacity to meet a wide range of types of use and budgets. To support its ambition to offer 100% of electric models by 2025, PSA is developing a range of electric vehicles with Dongfeng Motor. Based on an electric version of the CMP platform (e-CMP), it will spawn a new generation of electric vehicles with ion-lithium battery technology. Seven electric battery versions will be marketed by 2021 (the first of which in 2019), in addition to the launch of eight plug-in hybrid vehicles between 2019 and 2021.

(2) the optimization of internal combustion powertrains, with solutions such as downsizing (reducing engine size and number of cylinders) sometimes combined with turbo charging, thereby reducing fuel consumption while maintaining performance; reducing mechanical friction and optimizing combustion technologies.

(3) the improvement of the overall fuel efficiency of its vehicles, in particular by optimizing vehicle architecture and equipment. For instance, the development of lightweight vehicles involves optimizing vehicle architecture, using lower density materials and innovative techniques that help to lighten the car body, whilst improving shock resistance. The new Peugeot 3008 benefits from the EMP2 platform architecture, combined with genuine optimization of the weight/size/performance ratio at every level, making it possible to gain an average of 100kg on the previous generation of vehicles. The group is also investigating fuel cells and alternative fuels in its research center in Russeilsheim.

(4) the launch of 48V motor Hybrid Electric Vehicles (MHEV), notably by cooperating with the company Punch Powertrain. PSA and Punch Powertrain announced in September 2018 their joint-venture named “Punch Powertrain PSA e-transmissions”. The goal of this joint-venture is to produce the future generation of electrified transmission (e-DCT), that allows a lighter and more compact transmission system with fewer components and also delivers outstanding performance (up to 15% fuel consumption savings). This newest generation of e-DCT systems, expected for 2022, will support the Groupe PSA’s electrification plan.

--------- All these measures are incorporated in the Push to Pass Strategic plan defined by PSA in 2016, and completed in late 2017 by the PACE! Plan that aims to accelerate the transition to electrification vehicles for OV through a full access to PSA technologies and expertise (e.g.: launch of joint projects stepped up on the Group's EMP2 and CMP platforms).

## **C4. Targets and performance**

## **C4.1**

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

Both absolute and intensity targets

## **C4.1a**

### **(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.**

### **Target reference number**

Abs 1

### **Scope**

Scope 1+2 (location-based)

### **% emissions in Scope**

90

### **Targeted % reduction from base year**

26

### **Base year**

2012

### **Start year**

2013

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

681409

### **Target year**

2025

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

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

### **% of target achieved**

91

### **Target status**

Underway

### **Please explain**

This target is based on the boundary of our PCA Division worldwide (with foundry activities), which comprised 90% of our total Scope 1+2 emissions in 2012. PCA is Groupe PSA’s Automobile Division. This is not a science-based target because PSA chose not to disclose future output projections beyond 2020 due to the confidentiality of these strategic data. We reported the same target last year, under the same reference Abs1.

### **Target reference number**

Abs 2

### **Scope**

Scope 2 (location-based)

### **% emissions in Scope**

90

### **Targeted % reduction from base year**

100

### **Base year**

2012

### **Start year**

2013

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

681409

### **Target year**

2050

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

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

### **% of target achieved**

16

### **Target status**

Underway

### **Please explain**

Please note that compared to last year, Groupe PSA scope 1&2 targets have changed. It has been decided to significantly increase the level of ambitions by targeting carbon neutrality by 2050 (i.e.: net zero emissions). This target is based on the boundary of our PCA Division worldwide (with foundry activities, OV excluded), which comprises 90% of our 2012 Scope 1+2 emissions. PCA is Groupe PSA’s Automobile Division. This target will be updated to take into account OV activities (cogeneration plants included) and will be submitted to SBTi in 2019. However, Groupe PSA considers this target as science-based since the level of reduction required to stay under 2°C is between 49%-72% by 2050 from 2010 according to the IPCC Fifth Assessment Report. The Group’s ambition to reduce and eventually eliminate GHG emissions relies on (1) reduced energy consumption through controlled production processes, (2) reduced factory land use through more compact workshops, (3) the use of carbon-free energy and eventually (4) the offsetting residual emissions.

## **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 (location-based)

### **% emissions in Scope**

90

### **Targeted % reduction from base year**

26

### **Metric**

Metric tons CO2e per vehicle produced\*

### **Base year**

2012

### **Start year**

2013

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

0.339

### **Target year**

2025

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

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science Based Targets initiative

### **% of target achieved**

91

### **Target status**

Underway

### **Please explain**

Our intensity target is set to 250 kg CO2eq per painted vehicle in 2025 with foundry activities. This target is based on the boundary of our PCA Division worldwide, which comprises 90% of our 2012 Scope 1+2 emissions. Please note that our base year emissions did not include OV carbon footprint. Emissions from commercial activities are not covered by the target. We chose an intensity target with foundry activities because it corresponds to our activity even if other car manufacturers do not have foundry activities. Please note that for the calculation of change in absolute scope 1&2 emissions, it is assumed that the production does not vary between 2012 and 2025 due to confidential data. This target on scope 1&2 has been built in accordance with SBTi requirements and comply with these requirements. The global proposal of SBT objectives was however not approved by the SBTi due to the inadequacy of the scope 3 target. The scope 3 target will be defined and reviewed and once the SBT transport methodology is published. Please note that the same target was reported last year, under the same reference: Int 1. With the integration of OV industrial activity in 2018, the profile of PSA industrial emissions drastically changed, especially because of 3 cogeneration plants owned and operated by OV. Groupe PSA is currently reviewing the science based CO2 path for scope 1&2, by taking the emissions of 2018 as a base year and by targeting carbon neutrality by 2050. This new path under construction will be submitted to the SBTi in 2019 and will be published in the 2019 CSR report.

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

-26

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

0

### **Target reference number**

Int 2

### **Scope**

Scope 3: Use of sold products

### **% emissions in Scope**

77

### **Targeted % reduction from base year**

30

### **Metric**

Grams CO2e per kilometer\*

### **Base year**

2012

### **Start year**

2013

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

153.3

### **Target year**

2025

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

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

### **% of target achieved**

59

### **Target status**

Underway

### **Please explain**

The chosen target covers emissions from the ‘consumption of sold products’ and the related consumed ‘fuel upstream’. Indeed, the ‘Use of sold products’ emissions is actually the addition of three sources from the PSA Life Cycle Analysis: ‘direct consumption of sold vehicles’, ‘related consumed fuel upstream’ and ‘maintenance’. While emissions associated with maintenance are also the consequence of the use of PSA sold products, they are not included in PSA target for two reasons. Firstly, emissions from sold vehicles’ maintenance are significantly low (1.4% of LCA emissions). Secondly, maintenance activities are not strictly correlated to PSA sales, as opposed to ‘related consumed fuel upstream’. Please note that for the calculation of change in absolute scope 3 emissions, it is assumed that vehicles sales do not vary between 2012 and 2025 due to confidential data. The same target was reported last year, under the same reference: Int 2. Please note that this target is now including Opel and Vauxhall. The integration of these two brands induces an increase on PSA European vehicles average emissions (114gCO2/km in 2018 compared to 104gCO2/km in 2017) although Groupe PSA remains one of the market leaders, as the European market average is 119.5 g/km. At worldwide level, PSA worldwide vehicles average emissions almost did not vary between 2017 and 2018.

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

0

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

-30

### **Target reference number**

Int 3

### **Scope**

Scope 3: Use of sold products

### **% emissions in Scope**

77

### **Targeted % reduction from base year**

55

### **Metric**

Grams CO2e per kilometer\*

### **Base year**

2012

### **Start year**

2013

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

153.3

### **Target year**

2035

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

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

### **% of target achieved**

32

### **Target status**

Underway

### **Please explain**

The chosen target covers emissions from the ‘consumption of sold products’ and the related consumed ‘fuel upstream’. Indeed, the ‘Use of sold products’ emissions is actually the addition of three sources from the PSA Life Cycle Analysis: ‘direct consumption of sold vehicles’, ‘related consumed fuel upstream’ and ‘maintenance’. While emissions associated with maintenance are also the consequence of the use of PSA sold products, they are not included in PSA target for two reasons. Firstly, emissions from sold vehicles’ maintenance are significantly low (1.4% of LCA emissions). Secondly, maintenance activities are not strictly correlated to PSA sales, as opposed to ‘related consumed fuel upstream’. Please note that for the calculation of change in absolute scope 3 emissions, it is assumed that vehicles sales do not vary between 2012 and 2035 due to confidential data. The same target was reported last year, under the same reference: Int 3. Please note that this target is now including Opel and Vauxhall. The integration of these two brands induces an increase on PSA European vehicles average emissions (114gCO2/km in 2018 compared to 104gCO2/km in 2017) although Groupe PSA remains one of the market leaders, as the European market average is 119.5 g/km. At worldwide level, PSA worldwide vehicles average emissions almost did not vary between 2017 and 2018.

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

0

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

-55

### **Target reference number**

Int 4

### **Scope**

Scope 3 (upstream & downstream)

### **% emissions in Scope**

100

### **Targeted % reduction from base year**

33

### **Metric**

Other, please specify (kgCO2 / car transported)

*Please note that our target is in kgCO2/car, as mentionned in the metric column, and not in tonsCO2/car, as suggested by the legend in the normalized baseline year emissions covered by metric.*

### **Base year**

2016

### **Start year**

2017

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

0.192

### **Target year**

2035

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

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

### **% of target achieved**

9

### **Target status**

Underway

### **Please explain**

This target, which is initially based on a PCD perimeter, has been adjusted to take into account new activities from Opel-Vauxhall. Although this target has not been validated by the Science-Based Target Initiative (SBTi), this target is equivalent to -2.1% reduction per year, in line with the Paris Agreement. Groupe PSA aims to attain this target by primarily by limiting intercontinental flows through the regionalisation of the Group's activities and by optimising transport patterns (routes, transportation mode, filling rate and packaging).

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

0

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

-33

## **C4.2**

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

### **Target**

Renewable electricity consumption

### **KPI – Metric numerator**

MWh of renewable electricity consumed

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

per MWh of electricity

### **Base year**

2010

### **Start year**

2013

### **Target year**

2025

### **KPI in baseline year**

0.12

### **KPI in target year**

0.24

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

42

### **Target Status**

Underway

### **Please explain**

The Group is involved in reducing its carbon footprint and therefore, to use more renewable energy. This target covers the production units of the group. Our goal is to be carbon neutral by 2050.

### **Part of emissions target**

This target is one of the actions to implement in order reach carbon neutrality target by 2050 for all PSA industrial sites (scope 1&2).

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

No, it's not part of an overarching initiative

### **Target**

Engagement with suppliers

### **KPI – Metric numerator**

Number of key partners & key suppliers setting 2°C target

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

Total number of key partners & key suppliers

### **Base year**

2018

### **Start year**

2018

### **Target year**

2035

### **KPI in baseline year**

0

### **KPI in target year**

1

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

0.61

### **Target Status**

New

### **Please explain**

This new measure has been implemented in the suppliers’ business reviews in 2018. Baseline is valued at zero because this information was not monitored before. In 2018 PSA set an initial target to reach 60%. In 2019, 70% of key partners and key suppliers must demonstrate a CO2 trend which complies with the Paris Agreement and 100% in 2035. In other words, key partners and key suppliers must have CO2 emissions reduction targets (SBT, or 2°C similar targets). Key partners and key suppliers represented almost 58% of Groupe PSA direct material purchase value in 2018.

### **Part of emissions target**

Reduction of its carbon footprint in all its activities is a top priority of Groupe PSA. This target is not an emission reduction target but this will contribute to the overall reduction ambition.

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

No, it's not part of an overarching initiative

## **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 initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

|  |  |  |
| --- | --- | --- |
|  | **Number of initiatives** | **Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked \*)** |
| Under investigation | 3 | 0 |
| To be implemented\* | 6 | 7016 |
| Implementation commenced\* | 4 | 33 |
| Implemented\* | 8 | 12000 |
| Not to be implemented | 0 | 0 |

## **C4.3b**

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

### **Initiative type**

Energy efficiency: Processes

### **Description of initiative**

Heat recovery

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

3145

### **Scope**

Scope 1

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in C0.4)**

427000

### **Investment required (unit currency – as specified in C0.4)**

1108000

### **Payback period**

1-3 years

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

6-10 years

### **Comment**

We are recovering the heat from the painting chimney on our site of Vigo, in Spain. We estimate that this action allows us to save 12 900 MWh of natural gas.

### **Initiative type**

Energy efficiency: Processes

### **Description of initiative**

Process optimization

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

2020

### **Scope**

Scope 1

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in C0.4)**

175000

### **Investment required (unit currency – as specified in C0.4)**

0

### **Payback period**

<1 year

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

3-5 years

### **Comment**

We increased the throughput of our sand recovery furnaces: from 7 tons per hour, we reached 12 tons / hour.

### **Initiative type**

Energy efficiency: Processes

### **Description of initiative**

Process optimization

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

190

### **Scope**

Scope 2 (location-based)

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in C0.4)**

58000

### **Investment required (unit currency – as specified in C0.4)**

200000

### **Payback period**

4 - 10 years

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

6-10 years

### **Comment**

We changed some pumps on a cooling circuit in French Sites. The new pumps, more efficient, allow an electricity saving of 3360 MWh per year.

### **Initiative type**

Energy efficiency: Processes

### **Description of initiative**

Process optimization

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

2165

### **Scope**

Scope 1

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in C0.4)**

310000

### **Investment required (unit currency – as specified in C0.4)**

1500000

### **Payback period**

4 - 10 years

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

>30 years

### **Comment**

We finished the elimination of a 180°C ASC (water heating process) on our site of Vigo, in France. This is saving 8880MWh of gas per year.

### **Initiative type**

Energy efficiency: Building services

### **Description of initiative**

HVAC

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

1250

### **Scope**

Scope 2 (location-based)

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in C0.4)**

324000

### **Investment required (unit currency – as specified in C0.4)**

0

### **Payback period**

<1 year

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

>30 years

### **Comment**

We stopped alimenting in energy the supplier industrial zone.

### **Initiative type**

Process emissions reductions

### **Description of initiative**

Changes in operations

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

2560

### **Scope**

Scope 1

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in C0.4)**

158000

### **Investment required (unit currency – as specified in C0.4)**

0

### **Payback period**

<1 year

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

>30 years

### **Comment**

We stopped producing the DS5 model as well as a the DV3 module. It results in gas and electricity savings, therefore applying to scope 1 but also Scope 2 (location based).

### **Initiative type**

Energy efficiency: Building services

### **Description of initiative**

Lighting

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

180

### **Scope**

Scope 2 (location-based)

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in C0.4)**

193000

### **Investment required (unit currency – as specified in C0.4)**

60000

### **Payback period**

<1 year

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

1-2 years

### **Comment**

We changed the lighting system of several buildings for a more efficient LED system.

### **Initiative type**

Energy efficiency: Building services

### **Description of initiative**

Other, please specify (Building compaction)

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

490

### **Scope**

Scope 1

### **Voluntary/Mandatory**

Voluntary

### **Annual monetary savings (unit currency – as specified in C0.4)**

154000

### **Investment required (unit currency – as specified in C0.4)**

0

### **Payback period**

<1 year

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

>30 years

### **Comment**

We compacted our installations, allowing us to stop and demolish some buildings, and resulting in electricity and gas savings.

## **C4.3c**

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

|  |  |
| --- | --- |
| **Method** | **Comment** |
| Compliance with regulatory requirements/standards | Groupe PSA is anticipating and financing compliance with all climate change regulations in all countries where it operates. |
| Dedicated budget for low-carbon product R&D | 38% of Groupe PSA’s total R&D investment, which equals around 1.5 billion euros, is dedicated to projects related to vehicle emissions reduction and disruptive technologies. |
| Partnering with governments on technology development | Groupe PSA is involved in 5 automotive clusters where governments, companies and universities’ research departments work together on specific R&D projects related to low carbon mobility. Additionally, PSA has participated to the launch of VEDECOM (Carbon-free and Communicating Vehicle and its Mobility). VEDECOM is an energy transition institute which represents a unique research ecosystem in France made up of nearly 40 members that forms an unprecedented collaboration between companies from the automotive and aeronautic sectors, infrastructure and service operators from the mobility ecosystem, academic and local government research institutions in the Paris region. This ITE addresses the challenges of the autonomous vehicles and mobility of the future. Its role is to actively drive innovation, research and training applied to transport and responsible mobility. To reach its goal of becoming a European leader, VEDECOM focuses its research on the following three areas: - Electrification of vehicles; - Self-driving cars and connectivity; - Shared mobility and energy. |
| Other | Partnerships with energy suppliers to incite them to provide the with less emitting energy and to use renewable energy. Partnership with our suppliers to promote energy efficiency initiatives. |

## **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**

Group of products

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

Our core business is to produce light cars for passenger and commercial transport. We are now producing low carbon vehicles, with an average of 114 gCO2/km per passenger cars in Europe 22, while the European average is 119.5 gCO2/km. Therefore, we are now below the European average. It means that emissions from the use of our cars are the lowest in the market.

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

Avoided emissions

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

Other, please specify (PSA own methodology)

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

18

### **Comment**

----- Thanks to the use of its low emission vehicles, Groupe PSA estimates that 223 MtCO2e will be avoided over a period covering 13 years (2012-2025). The method for calculating avoided emissions is based on a comparison between the average emissions of vehicles worldwide in 2012 (153 g/km of CO2) and 2018 (126 g/km of CO2), i.e. a reduction of 3.2% per annum. Based on an assumption of a 3% reduction per year, in line with our target of 30% between 2012 and 2025, and with an assumption of 4 million vehicles sold, with an average of 15,000 km travelled per year per vehicle and an average of ten years of use of a car, the quantity of avoided CO2 emissions between 2012 and 2025 is as follows: in 2013: 2.1 Mt; in 2014: 5.1 Mt; etc.; in 2025: 20.4 Mt, for a total of 223 million tonnes of CO2 avoided. ----- In regards to low-carbon products, given that energy transition is still in its early stages for the automotive market, Groupe PSA considered vehicles emitting less than 100gCO2/km as low-carbon products. This accounts for 18% of total sales in 2018.

## **C5. Emissions methodology**

## **C5.1**

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

### **Scope 1**

### **Base year start**

janvier 1 2012

### **Base year end**

décembre 31 2012

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

446214

### **Comment**

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

### **Base year start**

janvier 1 2012

### **Base year end**

décembre 31 2012

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

235196

### **Comment**

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

### **Base year start**

janvier 1 2017

### **Base year end**

décembre 31 2017

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

119512

### **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.**

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?**

### **Reporting year**

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

878013

### **Start date**

janvier 1 2018

### **End date**

décembre 31 2018

### **Comment**

Compared to 2017, Opel and Vauxhall activities are now fully integrated in Groupe PSA climate report. Therefore, emissions are not comparable from 2017 to 2018 since they now integrate Opel and Vauxhall plants. Without Opel Vauxhall, PSA automotive division scope 1&2 emissions would have reached 405 751 tCO2e in 2018 against 403 786 tCO2e in 2017. Opel and Vauxhall operate 3 cogeneration plants to produce electricity and steam from gas combustion. These plants are integrated in the scope 1 emissions measurement. Around one third of the energies produced are sold to external customers (accounting for 112 000 tCO2).

## **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?**

### **Reporting year**

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

435943

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

307458

### **Start date**

janvier 1 2018

### **End date**

décembre 31 2018

### **Comment**

Compared to 2017, Opel and Vauxhall activities are now fully integrated in Groupe PSA climate report. Therefore, emissions are not comparable from 2017 to 2018 since they now integrate Opel and Vauxhall plants. The electricity produced by OV’s cogeneration plants and used by OV plants represented 92 900 tonnes of CO2 in 2018. Compared with a supply from local electricity providers, it shows a reduction of 55 500 tonnes of CO2 because the emission factor of the cogeneration plants is far lower than those of these local suppliers. Emissions from the market-based approach are lower than the location-based approach because our suppliers use a significant proportion of low-carbon energy in the electricity generated. In addition, Groupe PSA signed contracts in Slovakia and Brazil that ensure the supply of 100% renewable electricity to cover all of their electricity requirements.

## **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**

Cars refrigerants (HFC)

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

Emissions are not relevant

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

No emissions excluded

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

No emissions excluded

### **Explain why this source is excluded**

Emission from cars refrigerants are non-significant insofar as they accounted for 0.02% of our total scope 1, 2 and 3 emissions in 2018 (16805 tCO2e). In addition to be non significant, our levers of actions to reduce these emissions are very different from industrial emissions and explain the reasons why Groupe PSA does not include cars refrigerants emissions in its carbon reporting. -----The first source of these leaks are from R&D facilities where large climatic test equipment is used. Groupe PSA has implemented a plan to replace HCFC cooling systems with HFC-type fluids by 2018 at a cost of several million euros. HFC-type fluids are not harmful to the ozone layer according to the Montreal protocol. This plan is now complete and has involved more than 550 pieces of equipment. -----The second source of refrigerant emissions comes from filling mobile air conditioning systems on car assembly lines. Since 2017, R134a has been replaced by HFO 1234yf for most of the cars produced. This has three main consequences. Firstly, HFO 1234yf has much less of an impact on Ozone depletion. Secondly, a new distribution system has had to be built in each plant, which greatly decreases the risk of leaks. On the other side, the third impact is linked with the low use of the R134a installation. Leaks on these equipment could be lately detected because of this low use. In 2017, the Group refined its reporting questionnaire to better identify these leaks. In 2018, the calculation method, based on a mass balance calculation, has been improved and implemented in all the assembly plants, and this method now gives solid results.

## **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**

22069902

### **Emissions calculation methodology**

(i) Types and sources of data: PSA conducted in 2018 a Life Cycle Analysis (LCA), within the framework defined in the ISO 14040/044 standards, on its vehicles and components. This study analyses the multi-criteria environmental footprint of a vehicle and validates its components and materials design. This LCA was carried out in 2018, for all the vehicles produced by the over 2018. --------- (ii) Methodologies, assumptions, allocations: This LCA assessment takes into account, over one year of activity, emissions from: >Production of materials and components for the vehicles manufactured; >The Group’s manufacturing plants and tertiary sites; >Fuel extraction and production necessary to use the vehicles manufactured; >Use phase of the vehicles manufactured; >Vehicle end of life ------- (iii) Specific for the source of ’Purchased Goods and Services’: 2018 European emissions were calculated using mass and material balance provided by suppliers for 100% of supplied parts. Global emissions are calculated with the same ratio as Europe and the multiplication factor of “Use of sold products”. PSA knows, with the LCA analysis, that the source ‘Purchased Goods and Services’ accounts roughly for 25% of emissions from the ‘Use of Sold Products’. Therefore, we multiply this percentage by the 2018 emissions from the ‘Use of Sold Products’ (25%\* 88 626 258 tCO2).

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

### **Explanation**

Our ‘Purchased goods and services’ Scope 3 emissions are significant, since they account for almost 20% of total Scope 3. Although the main source of Scope 3 emissions is by far the ‘Use of Sold Products’ (78% of our Scope 3 emissions), we consider this source of ‘Purchased goods and services’ as “relevant”.

### **Capital goods**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

Groupe PSA considers this source of Scope 3 emissions as ‘not relevant’ for two reasons: (1) The LCA carried out in 2018 evaluated all the potential sources of emissions. This source of ‘Capital Goods’ was not identified as a relevant source of Scope 3 emissions. (2) Additionally, Groupe PSA is considering Scope 3 sources, upon which we can have an influence on its emissions reduction. In this case, PSA’s influence is very limited, and does not enable us to estimate accurate CO2 emissions.

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

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

Groupe PSA considers this source of Scope 3 emissions as ‘not relevant’ for two reasons: (1) The LCA carried out in 2018 evaluated all the potential sources of emissions. This source of ‘Fuel-and-energy-related activities’ was not identified as a relevant source of Scope 3 emissions. (2) Additionally, Groupe PSA is considering Scope 3 sources, upon which we can have an influence on its emissions reduction. In this case, PSA’s influence is very limited, and does not enable us to estimate accurate CO2 emissions.

### **Upstream transportation and distribution**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

935949

### **Emissions calculation methodology**

(i) Types and sources of data: PSA conducted in 2018 a Life Cycle Analysis (LCA), within the framework defined in the ISO 14040/044 standards, on its vehicles and components. This study analyses the multi-criteria environmental footprint of a vehicle and validates its components and materials design. This LCA was carried out in 2018, for all the vehicles produced by the over 2018. -------(ii) Methodologies, assumptions, allocations: This LCA assessment takes into account, over one year of activity, emissions from: >Production of materials and components for the vehicles manufactured; >The Group’s manufacturing plants and tertiary sites; >Fuel extraction and production necessary to use the vehicles manufactured; >Use phase of the vehicles manufactured; >Vehicle end of life ----------(iii) Specific for the source of ’Upstream transportation and distribution’: 2018 European emissions were calculated using mass and material balance provided by suppliers for 100% of supplied parts. Global emissions are calculated with the same ratio as Europe and the multiplication factor of “Use of sold products”. PSA knows, with the LCA analysis, that the source ’Upstream transportation and distribution’ accounts roughly for 1.1% of emissions from the ‘Use of Sold Products’. Therefore, we multiply this percentage by the 2018 emissions from the ‘Use of Sold Products’ (1.1%\* 88 626 258 tCO2).

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

### **Explanation**

Our “Upstream transportation and distribution" Scope 3 emissions are very low when compared to emissions generated by the “Use of our sold products”. They account for less than 1% of total Scope 3, while the source ‘Use of Sold Products’ represents more than 88 million tons of CO2e and 78% of our Scope 3 emissions. Therefore, we reached the conclusion that this source of Scope 3 emissions is considered as “not relevant”.

### **Waste generated in operations**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

Groupe PSA considers this source of Scope 3 emissions as ‘not relevant’ for two reasons: (1) The LCA carried out in 2018 evaluated all the potential sources of emissions. This source of ‘Waste generated in operations’ was not identified as a relevant source of Scope 3 emissions. (2) Additionally, Groupe PSA is considering Scope 3 sources, upon which we can have an influence on its emissions reduction. In this case, PSA’s influence is very limited, and does not enable us to estimate accurate CO2 emissions.

### **Business travel**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

11555

### **Emissions calculation methodology**

(i) Types and sources of data: This category includes emissions from the transportation of employees for business-related activities, for air and train travels. PSA conducted in 2018 a Life Cycle Analysis (LCA), within the framework defined in the ISO 14040/044 standards, on its vehicles and components. This study analyses the multi-criteria environmental footprint of a vehicle and validates its components and materials design. This LCA was carried out in 2018, for all the vehicles produced by the over 2018. -------(ii) Methodologies, assumptions, allocations: This LCA assessment takes into account, over one year of activity, emissions from: >Production of materials and components for the vehicles manufactured; >The Group’s manufacturing plants and tertiary sites; >Fuel extraction and production necessary to use the vehicles manufactured; >Use phase of the vehicles manufactured; >Vehicle end of life ----------(iii) Specific for the source of ‘Business travel’: 2018 European emissions were calculated using mass and material balance provided by suppliers for 100% of supplied parts. Global emissions are calculated with the same ratio as Europe and the multiplication factor of “Use of sold products”. PSA knows, with the LCA analysis, that the source ‘Business travel’ accounts roughly for 0.01% of emissions from the ‘Use of Sold Products’. Therefore, we multiply this percentage by the 2018 emissions from the ‘Use of Sold Products’ (0.01%\* 88 626 258 tCO2).

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

### **Explanation**

Our “Business travel" Scope 3 emissions are very low when compared to emissions generated by the “Use of our sold products”. They account for around 0.01% of total Scope 3, while the source ‘Use of Sold Products’ represents more than 88 million tons of CO2e and 78% of our Scope 3 emissions. Therefore, we reached the conclusion that this source of Scope 3 emissions is considered as “not relevant”.

### **Employee commuting**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

87361

### **Emissions calculation methodology**

(i) Types and sources of data: This category includes emissions from the employee commuting. Two types of data were needed: (1) First, the number of employees. We obtained this data from the Human Resources Department. (2) Second, the distance travelled by employees to go to work. Any real data was available, and we use the last National Survey on Transport and Travel (ENTD in French) carried out in 2008 by the French Ministry for Transport, INSEE and the National Institute for Research on Transport and Transport Safety (NSTT). Because of the lack of data, we assume equivalent distances travelled for employees working in other countries. -------(ii) Methodologies, assumptions, allocations: The calculation methodology is standard: we use travel emission factors in kg CO2 per passenger per km. Then, we multiply them by the commuting distance done by our employees. As said in (i), this distance is not real data but an average from the NSTT survey. Sources of emission factors come from the French Agency ADEME.

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

### **Explanation**

Our “Employee commuting" Scope 3 emissions are very low when compared to emissions generated by the “Use of our sold products”. They account for less than 0.1% of total Scope 3, while the source ‘Use of Sold Products’ represents more than 88 million tons of CO2e and 78% of our Scope 3 emissions. Therefore, we reached the conclusion that this source of Scope 3 emissions is considered as “not relevant”.

### **Upstream leased assets**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

Groupe PSA considers this source of Scope 3 emissions as ‘not relevant’ for two reasons: (1) The LCA carried out in 2018 evaluated all the potential sources of emissions. This source of ‘Upstream leased assets’ was not identified as a relevant source of Scope 3 emissions. (2) Additionally, Groupe PSA is considering Scope 3 sources, upon which we can have an influence on its emissions reduction. In this case, PSA’s influence is very limited, and does not enable us to estimate accurate CO2 emissions.

### **Downstream transportation and distribution**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

335093

### **Emissions calculation methodology**

(i) Types and sources of data: PSA conducted in 2018 a Life Cycle Analysis (LCA), within the framework defined in the ISO 14040/044 standards, on its vehicles and components. This study analyses the multi-criteria environmental footprint of a vehicle and validates its components and materials design. This LCA was carried out in 2018, for all the vehicles produced by the over 2018. -------(ii) Methodologies, assumptions, allocations: This LCA assessment takes into account, over one year of activity, emissions from: >Production of materials and components for the vehicles manufactured; >The Group’s manufacturing plants and tertiary sites; >Fuel extraction and production necessary to use the vehicles manufactured; >Use phase of the vehicles manufactured; >Vehicle end of life ----------(iii) Specific for the source of ’Downstream transportation and distribution’: 2018 European emissions were calculated using mass and material balance provided by suppliers for 100% of supplied parts. Global emissions are calculated with the same ratio as Europe and the multiplication factor of “Use of sold products”. PSA knows, with the LCA analysis, that the source ’Downstream transportation and distribution’ accounts roughly for 0.4% of emissions from the ‘Use of Sold Products’. Therefore, we multiply this percentage by the 2018 emissions from the ‘Use of Sold Products’ (0.4%\* 88 626 258 tCO2).

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

### **Explanation**

Our “Downstream transportation and distribution" Scope 3 emissions are very low when compared to emissions generated by the “Use of our sold products”. They account for less than 1% of total Scope 3, while the source ‘Use of Sold Products’ represents more than 88 million tons of CO2e and 78% of our Scope 3 emissions. Therefore, we reached the conclusion that this source of Scope 3 emissions is considered as “not relevant”.

### **Processing of sold products**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

Groupe PSA considers this source of Scope 3 emissions as ‘not relevant’ for two reasons: (1) The LCA carried out in 2018 evaluated all the potential sources of emissions. This source of ‘Processing of sold products’ was not identified as a relevant source of Scope 3 emissions. (2) Additionally, Groupe PSA is considering Scope 3 sources, upon which we can have an influence on its emissions reduction. In this case, PSA’s influence is very limited, and does not enable us to estimate accurate CO2 emissions.

### **Use of sold products**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

88626258

### **Emissions calculation methodology**

(i) Types and sources of data: PSA conducted in 2018 a Life Cycle Analysis (LCA), within the framework defined in the ISO 14040/044 standards, on its vehicles and components. This study analyses the multi-criteria environmental footprint of a vehicle and validates its components and materials design. This LCA was carried out in 2018, for all the vehicles produced by the over 2018. ----------(ii) Methodologies, assumptions, allocations: This LCA assessment takes into account, over one year of activity, emissions from: >Production of materials and components for the vehicles manufactured; >The Group’s manufacturing plants and tertiary sites; >Fuel extraction and production necessary to use the vehicles manufactured; >Use phase of the vehicles manufactured; >Vehicle end of life ----------(iii) Specific for the source of ‘Use of Sold Products’: The methodology to estimate our ‘Use of Sold Products’ emissions is to multiply the amount of vehicles sold in 2018 by the average CO2 intensity per km and by the expected lifetime of the vehicle and by the average distance traveled by the vehicle per year. In 2018, the sold a total of around 3.878 million vehicles. In 2018, the average CO2 emission factor per km was 126 gCO2e / km. The expected lifetime of sold products is 10 years. We account an average distance of 15 000 km traveled per year by the vehicle. The result is 73,489,309 tCO2e for this emissions category in 2018. In addition to that, we add emissions from the ‘related consumed fuel upstream’ and ‘maintenance of vehicles’ (which are calculated as a ratio of emissions from the direct ‘Use of Sold Products’ [20.6%] based upon the 2018 LCA).

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

### **Explanation**

Our ‘Use of sold products’ Scope 3 emissions are significant, since they account for 78% of total Scope 3 emissions.

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

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

1617689

### **Emissions calculation methodology**

(i) Types and sources of data: PSA conducted in 2018 a Life Cycle Analysis (LCA), within the framework defined in the ISO 14040/044 standards, on its vehicles and components. This study analyses the multicriteria environmental footprint of a vehicle and validates its components and materials design. This LCA was carried out in 2018, for all the vehicles produced by the over 2018. ----------(ii) Methodologies, assumptions, allocations: This LCA assessment takes into account, over one year of activity, emissions from: >Production of materials and components for the vehicles manufactured; >The Group’s manufacturing plants and tertiary sites; >Fuel extraction and production necessary to use the vehicles manufactured; >Use phase of the vehicles manufactured; >Vehicle end of life ----------(iii) Specific for the source of ‘End of Life Treatment of Sold Products’: For the source of ‘End of Life Treatment of Sold Products’, European emissions were calculated with a recycling model defined with our ELV suppliers. Global emissions are calculated with the same ratio as Europe and the multiplication factor of “Use of sold products”. Indeed, PSA knows, with the LCA analysis, that the source ‘End of Life Treatment of Sold Products’ accounts roughly for 1.8% of emissions from the ‘Use of Sold Products’. Therefore, we multiply this percentage by the 2018 emissions from the ‘Use of Sold Products’ (1.8%\* 88 626 258 tCO2).

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

### **Explanation**

Our “End of life treatment of sold products" Scope 3 emissions are very low when compared to emissions generated by the “Use of our sold products”. They only account for 1.4% of total Scope 3, while the source ‘Use of Sold Products’ represents more than 88 million tons of CO2e and 78% of our Scope 3 emissions. Therefore, we reached the conclusion that this source of Scope 3 emissions is considered as “not relevant”.

### **Downstream leased assets**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

Groupe PSA considers this source of Scope 3 emissions as ‘not relevant’ for two reasons: (1) The LCA carried out in 2018 evaluated all the potential sources of emissions. This source of ‘Downstream leased assets’ was not identified as a relevant source of Scope 3 emissions. (2) Additionally, Groupe PSA is considering Scope 3 sources, upon which we can have an influence on its emissions reduction. In this case, PSA’s influence is very limited, and does not enable us to estimate accurate CO2 emissions.

### **Franchises**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

We do not have franchises activities.

### **Investments**

### **Evaluation status**

Not relevant, explanation provided

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

We do not have investments activities.

### **Other (upstream)**

### **Evaluation status**

Not evaluated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

### **Other (downstream)**

### **Evaluation status**

Not evaluated

### **Metric tonnes CO2e**

<Not Applicable>

### **Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

### **Explanation**

## **C6.7**

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

Yes

## **C6.7a**

### **(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.**

### **Row 1**

### **Emissions from biologically sequestered carbon (metric tons CO2)**

700000

### **Comment**

## **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**

0.00002326

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

1313956

### **Metric denominator**

unit total revenue

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

56502000000

### **Scope 2 figure used**

Location-based

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

71.9

### **Direction of change**

Increased

### **Reason for change**

An internal study has been managed in 2016 to build the path of CO2 emission reduction of industrial activities and identify the main parameters which influence energy consumption. This study proposes targets for 2025, 2035 and 2050. To reach these objectives, PSA’ strategy takes into account the following elements, which contribute to reduce influence of some parameters on energy use: - Daily control of energy consumption to identify deviation and implement immediate corrective action - Implementation of processes using less energies, for new processes, but also by improving existing processes - Surface reduction of plants. - Use of an increasing part of renewable energies. With the inclusion of OV activities in 2018, the carbon intensity by revenue significantly increased. However, comparisons with results of previous years and with the plan created in 2016 are not possible. Where CO2 emission profiles of production activities are similar between both companies, the existence of cogeneration plants make a big difference to the amount of emissions, in particular direct emissions, and the improvement actions could not be the same as for production plants. The study related to CO2 emissions produced by industrial activities and a new plan will be created in 2019. This new CO2 industrial vision will be designed by the “Industrial CO2 Committee” which is the new instance launched in 2018 to manage this topic, After validation by the Industrial CO2 Committee, the new vision will be proposed to SBTI.

## **C7. Emissions breakdowns**

## **C7.1**

### **(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

## **C7.1a**

### **(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

|  |  |  |
| --- | --- | --- |
| **Greenhouse gas** | **Scope 1 emissions (metric tons of CO2e)** | **GWP Reference** |
| CO2 | 865420 | IPCC Fourth Assessment Report (AR4 - 100 year) |
| CH4 | 1261 | IPCC Second Assessment Report (SAR - 100 year) |
| N2O | 10904 | IPCC Second Assessment Report (SAR - 100 year) |
| HFCs | 428 | IPCC Second Assessment Report (SAR - 100 year) |

## **C7.2**

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

|  |  |
| --- | --- |
| **Country/Region** | **Scope 1 emissions (metric tons CO2e)** |
| France | 318431 |
| Spain | 125851 |
| Portugal | 4401 |
| Slovakia | 20040 |
| Russian Federation | 11587 |
| Argentina | 5814 |
| Brazil | 5638 |
| United Kingdom of Great Britain and Northern Ireland | 42339 |
| Poland | 3522 |
| Germany | 315215 |
| Austria | 1814 |
| Hungary | 3009 |
| Other, please specify (Rest of World) | 20352 |

## **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)** |
| Automotive division | 857661 |
| Automotive trade | 20352 |

## **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 | 878013 | <Not Applicable> |  |
| 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)** |
| France | 76381 | 36911 | 1849029 | 171237 |
| Spain | 131428 | 110390 | 336994 | 53944 |
| Portugal | 7176 | 5116 | 14950 | 4291 |
| Slovakia | 0 | 0 | 101510 | 101510 |
| Russian Federation | 11005 | 8760 | 28659 | 5846 |
| Argentina | 12334 | 12020 | 35442 | 900 |
| Brazil | 0 | 0 | 48334 | 48334 |
| United Kingdom of Great Britain and Northern Ireland | 22800 | 19143 | 98546 | 46317 |
| Poland | 56496 | 35497 | 54632 | 8592 |
| Germany | 41685 | 26783 | 99806 | 16369 |
| Austria | 43151 | 22640 | 115430 | 54310 |
| Hungary | 14371 | 11080 | 43948 | 10064 |
| Other, please specify (Rest of World) | 19116 | 19116 | 77217 | 17196 |

## **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)** |
| Automotive Division | 416827 | 288342 |
| Automotive Trade | 19116 | 19116 |

## **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 | 435943 | 307458 |  |
| 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**

0.000126

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

73489309

### **Metric denominator**

p.km

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

581664750000

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

0

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

3877765

### **Vehicle lifetime in years**

10

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

15000

### **Load factor**

1

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

----------------- Changes: The Group is taking actions to reduce the average CO2 emissions of vehicles sold worldwide by 55% in 2035 compared to 2012. 38% of the R&D budget is devoted to clean tech. The Group maintained its trend for lower average CO2 emissions on all vehicles (passenger and commercial) despite a slight deterioration of the situation for passenger vehicles in Europe due to a fall in the diesel market share, the upscaling of vehicles and the integration of OV. ----------------- Methodology: (i)Types and sources of data: PSA follows the number of cars sold by type and region and the average CO2 emissions per km related to each category of car. (ii) Methodologies, assumptions, allocations: We take the hypothesis that a car will last 10 years and will travel 15000 km per year. We then calculate the emissions related to the entire lifetime of the cars.

## **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?**

Increased

## **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 | 1651 | Decreased | 0.3 | In 2018, because the share of renewable energies slightly increased in 2018 compared to 2017, at 17.2% (16.2% for PCD and 19.1% for OV), GHG emissions also slightly decreased between 2018 and 2018 (- 1 714 tCO2e). Since scope 1&2 emissions (i.e. perimeter considered: automotive division and trade without OV) in 2017 amounted for 609285 tCO2, we estimate that PSA renewable energy consumption have contributed to decrease Scope1&2 emissions by 0.3% Calculation: ([-1714] / 2017 scope 1&2). This calculation is valid, because we use constant emission factors from 2014 up to 2018. |
| Other emissions reduction activities | 12000 | Decreased | 2 | In 2018, the Group engaged in strong actions to optimize its processes and decrease its energy consumption. 12000 tCO2 were saved due to improvements made in the energy performance of PCDOV plants. Since scope 1&2 emissions (i.e. perimeter considered: automotive division and trade without OV) in 2017 amounted for 609285 tCO2, we estimate that PSA emissions reduction activities have contributed to reduce Scope1&2 emissions by 2% Calculation: ([-12000] / 2017 scope 1&2). This calculation is valid, because we use constant emission factors from 2014 up to 2018. |
| Divestment | 0 | No change | 0 |  |
| Acquisitions | 699963 | Increased | 115 | Groupe PSA acquired Opel and Vauxhall in 2017 and this is the first year for which the Group is reporting OV activities. This implies a very significant increase in scope 1 and 2 emissions of the Group, especially since OV have cogeneration plants, accounted for in the calculation. This acquisition drastically changes the profile of Groupe PSA on this topic, and it will lead the Group to completely review its CO2 plan. This new plan is under construction and will be submitted to SBTI in 2019 and published in the next CSR report. Since scope 1&2 emissions (i.e. perimeter considered: automotive division and trade without OV) in 2017 amounted for 609285 tCO2, we estimate that the acquisition of OV contributed to increase Scope1&2 emissions by 115% Calculation: (699963/ 2017 scope 1&2). This calculation is valid, because we use constant emission factors from 2014 up to 2018. |
| Mergers | 0 | Please select | 0 |  |
| Change in output | 11219 | Increased | 1.8 | PCD production increased by 2% from 2017 to 2018. If the production had remained constant compared to 2017, 11219 tCO2 would have been avoided. Since scope 1&2 emissions (i.e. perimeter considered: automotive division and trade without OV) in 2017 amounted for 609285 tCO2, we estimate that the change in output have contributed to increase Scope1&2 emissions by 1.8 %. Calculation: (11219 / 2017 scope 1&2). |
| Change in methodology | 0 | No change | 0 |  |
| Change in boundary | 0 | No change | 0 |  |
| Change in physical operating conditions | 0 | No change | 0 |  |
| Unidentified | 0 | No change | 0 |  |
| Other | 0 | No change | 0 |  |

## **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?**

Location-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 | No |
| Consumption of purchased or acquired steam | Yes |
| Consumption of purchased or acquired cooling | No |
| 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) | 17190 | 2456840 | 2474030 |
| Consumption of purchased or acquired electricity | <Not Applicable> | 550382 | 2627074 | 3177456 |
| Consumption of purchased or acquired heat | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of purchased or acquired steam | <Not Applicable> | 0 | 765723 | 765723 |
| Consumption of purchased or acquired cooling | <Not Applicable> | <Not Applicable> | <Not Applicable> | <Not Applicable> |
| Consumption of self-generated non-fuel renewable energy | <Not Applicable> | 0 | <Not Applicable> | 0 |
| Total energy consumption | <Not Applicable> | 567572 | 5849637 | 6417209 |

## **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 heat | Yes |
| Consumption of fuel for the generation of steam | No |
| 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**

2363534

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

<Not Applicable>

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

1868266

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

<Not Applicable>

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

<Not Applicable>

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

495268

### **Comment**

42% of our natural gas consumption results from OV cogeneration plants, which produces electricity and steam. Only the natural gas used for PSA self-consumption is accounted for. The natural gas used to produce electricity for external clients is excluded.

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

Fuel Oil Number 1

### **Heating value**

LHV (lower heating value)

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

5941

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

<Not Applicable>

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

5941

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

<Not Applicable>

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

<Not Applicable>

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

0

### **Comment**

This is the consumption of Home Heating Oil, mainly for heating our buildings and also for the maintenance of our power generators.

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

Fuel Oil Number 2

### **Heating value**

LHV (lower heating value)

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

419

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

<Not Applicable>

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

419

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

<Not Applicable>

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

<Not Applicable>

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

0

### **Comment**

These are heavy fuels used for PSA’s automotive trade activities.

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

Coke

### **Heating value**

LHV (lower heating value)

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

86946

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

<Not Applicable>

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

86946

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

<Not Applicable>

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

<Not Applicable>

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

0

### **Comment**

The coke is used for PSA’s foundries, on Sept Fons site. The use of coke allows the plant to recycle a large amount of ferrous scraps, partly coming from other PSA’s plants, in short circular loops.

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

Wood Waste

### **Heating value**

LHV (lower heating value)

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

17190

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

<Not Applicable>

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

17190

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

<Not Applicable>

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

<Not Applicable>

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

0

### **Comment**

The wood furnace in the Vesoul plant (Groupe PSA central warehouse) produced 17,190 MWh in 2018 (5,693 tonnes of CO2) by burning wood packaging waste directly “produced” on site. This action reduces waste transportation and avoids fossil fuel emissions.

## **C8.2d**

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

### **Coke**

### **Emission factor**

2.55

### **Unit**

metric tons CO2 per metric ton

### **Emission factor source**

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### **Comment**

### **Fuel Oil Number 1**

### **Emission factor**

3.12

### **Unit**

metric tons CO2 per metric ton

### **Emission factor source**

PSA GUIDE TO THE CALCULATION OF ATMOSPHERIC EMISSIONS

### **Comment**

### **Fuel Oil Number 2**

### **Emission factor**

3.12

### **Unit**

metric tons CO2 per metric ton

### **Emission factor source**

PSA GUIDE TO THE CALCULATION OF ATMOSPHERIC EMISSIONS

### **Comment**

### **Natural Gas**

### **Emission factor**

185

### **Unit**

kg CO2 per MWh

### **Emission factor source**

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### **Comment**

The exact unit is: kg CO2 per MWh SCP.

### **Wood Waste**

### **Emission factor**

0.092

### **Unit**

metric tons CO2 per GJ

### **Emission factor source**

PSA GUIDE TO THE CALCULATION OF ATMOSPHERIC EMISSIONS

### **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 | 639139 | 313209 | 0 | 0 |
| Heat | 0 | 0 | 0 | 0 |
| Steam | 555855 | 484402 | 0 | 0 |
| Cooling | 0 | 0 | 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**

Grid mix of renewable electricity

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

Wind

Hydropower

Nuclear

### **Region of consumption of low-carbon electricity, heat, steam or cooling**

Other, please specify (France, Argentina, Spain, Portugal, Russia, Germany, Austria, Hungary, Poland & United Kingdom)

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

389065

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

0

### **Comment**

PSA energy suppliers provide low carbon energy, whether renewable or nuclear. For instance, nuclear energy accounts for 72% of total electricity generated by our French supplier in 2018.

### **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**

Wind

Hydropower

Biomass (including biogas)

### **Region of consumption of low-carbon electricity, heat, steam or cooling**

Other, please specify (Slovakia and Brazil)

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

149845

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

0

### **Comment**

Groupe PSA signed contracts in Slovakia and Brazil that ensure the supply of 100% renewable electricity to cover all of their electricity requirements.

## **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**

0.37

### **Metric numerator**

tCO2e

### **Metric denominator**

Production: Vehicle

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

1162488

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

3124968

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

43.6

### **Please explain**

PSA follows very carefully the quantity of CO2e emitted per vehicle painted. This ratio is not comparable to last year because of OV integration. Cogeneration emission (112 000 tCO2e) were not accounted for in the calculation. If we consider only PCD’s perimeter, the 2018 ratio is equal to 258kgCO2/vehicle. It decreased by -0.4% compared to 2017 (259 kgCO2e/vehicle). This is due to the group’s efforts to manage its energy consumption and use renewable energy.

## **C9. Additional metrics**

## **C9.1**

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

### **Description**

Waste

### **Metric value**

107

### **Metric numerator**

kg

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

Painted vehicle

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

12.3

### **Direction of change**

Decreased

### **Please explain**

Waste from foundries activities are integrated here. Due to the integration of OV facilities, comparison between 2017 and 2018 is difficult. The amount of waste per car, excluding foundry waste is similar for both companies (around 53.5 kg). The improvement compared to 2017 is only due to integration of OV facilities, which do not operate foundries. The analysis of evolution can only be conducted for PCD wastes. Foundry waste increased of 3%, in line with production increase, non-hazardous waste of 9% and hazardous waste of 17.5% and the global result is an increase of 6.7%, or around 4.6 kg per car produced. The reasons of these evolutions are different according to waste families. In line with the situation of 2017, increase of non hazardous waste is directly linked with the use of non returnable packaging due to the success of new launches and the delay to implement enough returnable packaging in logistics loops. Most of these single use packaging are made of wood and cardboard, and then easily recoverable. For hazardous waste, the main causes are footprint reduction of some mechanical plants (Tremery, Metz, Française de Mécanique, Caen) where a lot of old equipment were dismantled. Those which were not reused in carry over operations have been treated as hazardous waste.

### **Description**

Energy usage

### **Metric value**

1.99

### **Metric numerator**

MWh

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

Painted vehicle

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

2.4

### **Direction of change**

Increased

### **Please explain**

The energy intensity of vehicle manufacturing is not comparable to 2017 because of OV integration. PCD decreased its energy consumption to 1.93MWh per car (vs. 1.96 in 2017, or a decrease of 1.5%) but OV’s consumption is around 2.17 MWh per car.

## **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**

Conventional hybrid

### **Metric figure**

73

### **Metric unit**

Units

### **Explanation**

The number of conventional hybrid vehicles includes all the conventional hybrid vehicles sold worldwide in 2018.

### **Activity**

Light Duty Vehicles (LDV)

### **Metric**

Sales

### **Technology**

Battery electric vehicle (BEV)

### **Metric figure**

10387

### **Metric unit**

Units

### **Explanation**

The number of BEV vehicles includes all the BEV vehicles sold worldwide in 2018.

## **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**

janvier 1 2018

### **Investment end date**

décembre 31 2018

### **Investment area**

R&D

### **Technology area**

Other, please specify (All products and services included)

### **Investment maturity**

Large scale commercial deployment

### **Investment figure**

1500000000

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

21-40%

### **Please explain**

Mindful of sustainable development, the Group devotes more than 38% of its research & development budget to clean technologies. There are a number of R&D focuses: powertrain efficiency (IC, hybrid or electric) and depollution systems; making vehicles lighter and more ecological in every respect (consumption and reduced need for raw materials); vehicle energy efficiency etc. This high portion of low-carbon investments has a concrete impact on the deployment of new vehicles models. For example, eight plug-in petrol hybrid vehicles will be launched in Europe and China between 2019 and 2021. These will enable emission thresholds of under 50 g/km of CO2, i.e. 2 l/100 km in all areas and will run 50 km in fully electric mode in city and suburban environments (WLTP procedure). In addition, seven electric vehicles will be launched in Europe and China from 2019. Ultimately, with this low-carbon investment plan, between now and 2025, 100% of the models marketed by the Group worldwide will be offered in electric or plug-in hybrid versions.

## **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**

Reasonable assurance

### **Attach the statement**

[FY2018\_PSA\_GT\_signed\_letter\_at\_the\_request\_of\_CDP.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/FM6DLslng0KvGDcdNokDog/FY2018PSAGTsignedletterattherequestofCDP.pdf)

### **Page/ section reference**

P.2 / Social, environmental and societal information covered by the reasonable assurance

### **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**

Reasonable assurance

### **Attach the statement**

[FY2018\_PSA\_GT\_signed\_letter\_at\_the\_request\_of\_CDP.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/FM6DLslng0KvGDcdNokDog/FY2018PSAGTsignedletterattherequestofCDP.pdf)

### **Page/ section reference**

P.2 / Social, environmental and societal information covered by the reasonable assurance

### **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**

[FY2018\_PSA\_GT\_signed\_letter\_at\_the\_request\_of\_CDP.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/FM6DLslng0KvGDcdNokDog/FY2018PSAGTsignedletterattherequestofCDP.pdf)

### **Page/section reference**

P.2 / Social, environmental and societal information covered by the reasonable assurance

### **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?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Disclosure module verification relates to** | **Data verified** | **Verification standard** | **Please explain** |
| C8. Energy | Other, please specify (Overall energy consumption) | ISAE3000 | > The global energy consumption is verified annually by a third-party, which provides an opinion on the data published. > The data relative to energy consumption is verified since it is a key metric to measure our industrial efficiency. > This data is mentioned in the question C8.2a.  [FY2018\_PSA\_GT\_signed\_letter\_at\_the\_request\_of\_CDP.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/FM6DLslng0KvGDcdNokDog/FY2018PSAGTsignedletterattherequestofCDP.pdf) |
| C4. Targets and performance | Product footprint verification | The Group conducts life cycle analyses on its vehicles and components, within the framework defined in the ISO 14040/044 standards. These studies analyze the multi-criteria environmental footprint of a vehicle and validate its component and materials design. The entire product life cycle is taken into account from raw material extraction, to manufacture, use and end of life. | > The methodology used to conduct the vehicle LCAs was certified by a critical review by THINKSTEP – a firm with expertise in life cycle analyses – in 2018. > The Group has set a goal to analyse the life cycle of each new family of vehicles. Since 2014, all new vehicles, except for those designed with joint venture partners, have been subject to life cycle analyses. In addition, for each core technological change or strategic innovation, a study is carried out to assess any developments in the environmental impacts from these technologies. > This data is used in the questions C4.1b and C6.5.  [FY2018\_PSA\_GT\_signed\_letter\_at\_the\_request\_of\_CDP.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/FM6DLslng0KvGDcdNokDog/FY2018PSAGTsignedletterattherequestofCDP.pdf) |

## **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

## **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**

76

### **Period start date**

janvier 1 2018

### **Period end date**

décembre 31 2018

### **Allowances allocated**

553543

### **Allowances purchased**

0

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

668653

### **Details of ownership**

Facilities we own and operate

### **Comment**

Compared to 2017, OV activities are now integrated in the allowances. In total, 14 plants are involved: 5 for OV and 9 for PCD. Following energy performance improvement conducted for many years, the Velizy facility disinvests one of its boilers in 2017, and do not met anymore the ETS conditions, and do not appear in the list of plants. On OV side, 5 OV facilities are involved in ETS system and receive also free allowances for the part of their activity covered by ETS regulation. Cogeneration activity is out of the scope of ETS, and for this activity, which represents the greatest part of the emission, the 3 concerned plants do not receive any free allowance. This fact explains the deficit of quotas.

## **C11.1d**

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

---- The Group is part of the CO2 allowance trading scheme implemented by European Directive No. 2003/87/EC, also called ETS regulation amended for combustion operations (heating and processes) of its largest plants and for one of its castings. As part of the third phase of the CO2 emission allowance scheme scheduled from 2013 to 2020, 14 plants are involved, 5 for OV and 9 for PCD (PCD : Sochaux, Mulhouse, Rennes, Poissy, Vesoul, Sevel Nord and Sept-Fons in France and Vigo in Spain & OV: 2 plants in Germany, 2 plants in the UK, 1 plant in Spain).

---- At the moment, the automotive sector is assessed by European regulations as “at risk of carbon leakage” since 2015. As a result, free quota allocations for PSA and other automakers will remain constant at 80% of a benchmark value (based on a European benchmark) until 2020. Within the revision of ETS scheme (phase 4 – 2021-2030), the system of free allocation will be prolonged only for sectors considered as the highest risk of relocating their production outside of the EU. This excludes the automotive sector, which will no longer be considered as “at risk of carbon leakage”. It will imply a phase out of free allocations after 2026 from a maximum of 30% to 0% at the end of phase 4 (2030). This financial risk is addressed either through the definition of an internal CO2 price, and also in the strategy to reduce CO2 emission of industrial activities, based on control and management of energy use in production processes, workshop surface reduction, for buildings and also for production processes, like compact painting processes.

This strategy of reducing industrial CO2 emissions produced positive outcome in 2018 since the Vélizy facility stopped using one of its boilers in 2017 due to energy performance improvements made over many years. Consequently, this plant does not longer meet the ET conditions and does not appear in the list of plants covered by the EU-ETS scheme.

## **C11.2**

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

Yes

## **C11.2a**

### **(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.**

### **Credit origination or credit purchase**

Credit origination

### **Project type**

Forests

### **Project identification**

The Peugeot carbon sink project in the Amazon

### **Verified to which standard**

VCS (Verified Carbon Standard)

### **Number of credits (metric tonnes CO2e)**

700000

### **Number of credits (metric tonnes CO2e): Risk adjusted volume**

638470

### **Credits cancelled**

Yes

### **Purpose, e.g. compliance**

Voluntary Offsetting

## **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**

Navigate GHG regulations

### **GHG Scope**

Scope 1

Scope 2

### **Application**

The internal carbon price is applied at industrial level, led by the Group Industrial division and followed by industrial managers. The financial business unit is also involved since 2018 due to the major financial implications associated with the new European GHG regulations.

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

21

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

Given the recent reform of the ETS market (new EU directive 2021-2030 that reduces the quantity of allowances) and the ambition of the European Commission to increase the carbon price to 100€/tCO2 in the next few years, the Groupe PSA foresees to regularly increase the price of carbon in the future. 2019-2020: 20€/tCO2 2021-2023: 25€/tCO2 2024-2025: 30€/tCO2

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

Shadow price

### **Impact & implication**

The head of industrial division is using a shadow price of carbon in order to reveal the future risks associated with GHG regulations. This price and its evolution in the future is shared with all industrial facilities, which uses it to draw up their master plan (3-5 years projections) and make decisions related to performance actions and investment plans. In 2018, the financial business unit was also involved due to the major financial implications associated with the new European GHG regulations.

## **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**

Compliance & onboarding

### **Details of engagement**

Included climate change in supplier selection / management mechanism

Climate change is integrated into supplier evaluation processes

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

90

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

93

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

19

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

Groupe PSA has decided to prioritize on direct material suppliers where 93% of our total procurement spend is covered by the strategy. It represents 975 supplier groups in total, or more than 90% of suppliers by number.

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

---- Engagement: Groupe PSA aims to assess its entire supplier base on the basis of environmental, social, ethical and sustainable procurement. To achieve this target, Groupe PSA has chosen to entrust this evaluation to an external provider, EcoVadis. In 2018, 90% of PSA direct materials suppliers were selected on the basis of CSR criteria. Suppliers not assessed must commit to be assessed by EcoVadis. All suppliers are aware that an Ecovadis assessment and signature of the Group PSA Charter is a mandatory prerequisite to remain in the supplier panel and also to be awarded for any future business. --- Measures of success: With an average score of 48.12, Groupe PSA suppliers outperformed all suppliers assessed by EcoVadis, who have an average score of 42.2.

### **Comment**

### **Type of engagement**

Compliance & onboarding

### **Details of engagement**

Other, please specify (Alignment with Paris Agreement)

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

6.1

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

58

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

19

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

Groupe PSA requires its key suppliers and key partners to align with the Paris Agreement because they share close or essential relationship with Groupe PSA and they provide technical expertise in several products groups identified as strategy by Groupe PSA. Those suppliers represented 58% of the total procurement spend in 2018.

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

---- Engagement: For key suppliers and key partners, the Group has decided to monitor the environmental roadmap, the action plans follow-up regarding the alignment with the Paris Agreement. ---- Measures of success: 61% of our key suppliers and partners have demonstrated a CO2 trend that comply with Paris agreement in 2018. Our goal is to reach 70% next year.

### **Comment**

### **Type of engagement**

Engagement & incentivization (changing supplier behavior)

### **Details of engagement**

Run an engagement campaign to educate suppliers about climate change

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

6.1

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

58

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

19

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

This engagement is an on-going engagement that aims to cover 90% of total suppliers by 2025. So far, the engagement is made with key partners and key suppliers that represented 58% of the total procurement spend in 2018.

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

Groupe PSA is offering trainings on CSR risks and on the Group’s requirements for its suppliers. The Group’s ambition is to have trained 90% of its suppliers by 2025. To achieve this goal, PSA provides its suppliers with various learning, training and development tools. • Monthly supplier briefings • Access to an e-learning on CSR principles to evaluate & improve their CSR performance and how to build up robust internal processes supporting CSR via the dedicated platform. These trainings include all topics of CSR, including ethics, human rights, environment, climate change, etc.). Additionally, Groupe PSA organizes, on an annual basis, supplier awards event, which is an opportunity to praise the performance and industrial excellence of supplier plants that meet the Group’s quality requirements, from producing the vehicle to handing over the keys to the end customer. In 2018, 16 suppliers were rewarded for their commitment and the quality of their response to the Group’s expectations.

### **Comment**

### **Type of engagement**

Engagement & incentivization (changing supplier behavior)

### **Details of engagement**

Other, please specify (Exclusive partnership with GEFCO (transport supplier))

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

0.1

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

6

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

1.1

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

Groupe PSA and its logistic provider GEFCO have an exclusivity agreement under which the Group entrusts GEFCO with the management and optimisation of its entire global manufacturing supply chain, from supplying components to production and assembly plants to distributing finished vehicles, in compliance with the social and environmental requirements set out by Groupe PSA. As a key partner and the exclusive logistics provider, Groupe PSA is implementing a specific and dedicated supplier engagement policy. For confidentiality reasons, the % of purchasing value (6%) has been estimated on the basis of public press releases and not on the basis the exact 2018 figures.

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

---- Engagement: Within the frame of this collaboration, and in order to reduce the environmental footprint of logistics operations and in particular its carbon footprint, Groupe PSA is undertaking a large set of actions including: 1/ Monitoring of the environmental performance on a monthly basis with respect to the transport of components and vehicle distribution; 2/ Improving the trucks and sea containers loading rate through the implementation of a tool for 3D visualisation of the truck loading and the massification of flows between several suppliers; 3/ Optimising intercontinental flows thanks to redesign of procurement flows. ---- Measures of success: Improving the environmental and carbon performance of logistics takes time and is tracking with the metric of kg CO2e / vehicle transported. However, we have already observed some successes. 1/ The filling rate of Sea Container shipped to intercontinental plants (Latin America, Russia, China) has been challenged and has improved, reaching more than 80% of air volume. 2/ In 2018, direct flows between European powertrain plants (Trémery and Hordain) and the Kaluga plant in Russia have been implemented, reducing the necessity to operate via a platform and reducing the number of kilometres by 23,000 km.

### **Comment**

### **Type of engagement**

Innovation & collaboration (changing markets)

### **Details of engagement**

Run a campaign to encourage innovation to reduce climate impacts on products and services

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

3

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

29.2

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

19

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

Groupe PSA involves key suppliers in projects to develop future green technologies. This concerns around 300 suppliers that have a strong financial structure and capacity for innovation.

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

Groupe PSA and this set of suppliers work together to meet new environmental and automotive safety regulations and anticipate customers’ future expectations. Main areas of innovation are: autonomous vehicle, driver assistance technologies and energy transfer (for electric vehicles of the future). There is no direct measure of success insofar as this joint innovation with suppliers is long-term partnership that will eventually lead to the release of new products and services.

### **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**

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

### **% of customers by number**

100

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

77

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

100% of our customers are likely to take part in this engagement since our web-based application enables all customers to get access to the real consumption of Groupe PSA’s vehicles. The application is now available on the brands’ websites in 12 European countries. This application is addressed to all of our existing and potential customers (100%) because our stakeholders, including customers, challenge and expect from us at least transparency and even a positive contribution to the environment. This engagement of transparency on the real consumption of our vehicles aims to provide some answers to our customers.

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

----- Impact of engagement: Groupe PSA takes two major climate-related engagement with its customers: 1- Transparency related to the real-world fuel consumption of its vehicles, and tools that permit for each customer to evaluate its own fuel consumption 2- Propose on its vehicles onboard functions aimed at reducing fuel consumption This form of engagement can produce significant impacts towards customers since the web application helps them to: - view the fuel consumption data for their model by entering its characteristics (body type, trim level, engine, gearbox and type of tires); - estimate their own consumption based on the actual use of their vehicle (number of passengers, load, driving style, etc.) using an online configurator. ----- Measures of success: This engagement in favor of information and education achieved positive outcomes. 1/ The first success is the number of vehicles covered by this web-based application. It is now possible to estimate the consumption in real-world driving conditions of more than 1,000 versions of PEUGEOT, CITROËN and DS AUTOMOBILES vehicles, and additional measurements have been made on Light Commercial Vehicles (LCV) in 2018-2019. Moreover, Groupe PSA is studying the possibility of extending the protocol to OPEL vehicles and to adapt the test Protocol for hybrid vehicles. This will allow customers to get clear information on next generation of plug-in Hybrid vehicles that will be launched by Groupe PSA in 2019. 2/ The second success is the award “Ecobest 2017” given to this real-world fuel consumption test protocol. ECOBEST 2017 is the key award in the green technologies, actions and programs in preserving the environment. It is given by AUTOBEST jury members representing 31 European countries, making it the largest Independent Motoring Jury in the world by the number of represented countries. 3/ The third measure of success is the frequency to which customers are using the web-based application. For instance, customers in France visit the website approximately 25,000 times per year.

### **Type of engagement**

Education/information sharing

### **Details of engagement**

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

### **% of customers by number**

100

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

77

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

Groupe PSA released a series of 7 YouTube videos in the end of April 2019 called “MOVE To ELECTRIC by Peugeot (“Electric Life , Charge at Home, Hit the Road, Map your Route, Plan your Trip”) in order to prepare the launch of e-208 electric passenger vehicle. 100% of our customers are likely to take part in this form of engagement since our YouTube videos are on open access and aim to inform and educate customers on the use of electric vehicles.

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

----- Impact of engagement: YouTube videos are aimed to describe all characteristics of an electric vehicle and emphasize its easiness of use, its time of charging, its autonomy, its capacity of locating charging stations, etc. In other words, videos aim to reduce the psychological obstacles that might have customers when using an electric vehicle and show the possibility to use electric vehicles in the daily life. At the end, the intended impact is an increase of electric vehicles purchases by PSA customers. ----- Measures of success: Given the recent launch of the videos (end of April 2019), the measure of success is the number of views in YouTube. The number of views already reached more than 20k mid-June and is expected to increase in the next few months with the launch of the campaigns for new electrified vehicles.

### **Type of engagement**

Collaboration & innovation

### **Details of engagement**

Run a campaign to encourage innovation to reduce climate change impacts

### **% of customers by number**

100

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

77

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

100% of our customers are likely to take part in this engagement given that our new models will be equipped with these onboard functions. This engagement aims to give the capacity to every customer to act itself on its vehicle consumption and thereby on the environment. By encouraging the change in driving behaviors, CO2 emissions from vehicles could be dramatically reduced.

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

----- Impact of engagement: In 2018, Groupe PSA launches two new onboard functions aimed at reducing fuel consumption: 1- “Eco-coaching” function which, in real time and with a consumption report at the end of the trip, informs and advises customers via the vehicle’s dashboard about gear changes, optimal braking, the use of the Stop&Start function and managing acceleration to help them improve their eco-driving. It will be launched in 2019 on plug-in hybrid vehicles; 2- “ECO mode” function, which allows the driver to select a fuel efficient operating mode (activating the freewheeling function, for example). ----- Measures of success: These new onboard functions, which offer potential fuel savings of around 5%, will be gradually rolled out to all future lines and thereby will provide significant benefits to customers and to the environment.

## **C12.1c**

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

Beyond suppliers and customers, Groupe PSA is deploying its climate-related strategy with other partners in its value chain, including employees, technological partners, mobility experts, investors and dealership networks.

-------- Engagement with employees within the company:

In accordance with the commitments made under its Global Framework Agreement, the Group presents a review of its application of said agreement with respect to the Groupe PSA's social responsibility every year at the plenary meeting of the Group’s Works Council. The Group’s Works Council is a body for dialogue and discussion between management and employee representatives including the IndustriALL Global Union and IndustriALL European Union trade union federations. For example, during the 2018 annual meeting, discussions were held on the initiatives undertaken under commitment No. 9 of the agreement, namely Protection of the environment, and commitment No. 15, namely Environmental Protection. Furthermore, worldwide indicators (water and energy use, greenhouse gas emissions, volatile organic compound emissions, waste production and recovery rates) are presented to the employee representatives and compared with the Group’s commitments in the field. Corrective action plans and good practices are presented and debated. The Group’s Works Council is a body for dialogue and discussion between management and employee representatives including the IndustriALL Global Union and IndustriALL European Union trade union federations.

To support its employees in understanding the changes related to energy transformation, Groupe PSA is also engaging a training plan called “Electric Quest”. Launched in 2018, the training programme offers a 10-minute e-learning session every month for a year to all employees with the objective to raise the level of knowledge about electric car technologies and marketing. It is a powerful catalyst for mobilising employees.

-------- Engagement with technological partners:

PSA is developing several joint-venture with technological partners, allowing the group to develop new technologies, which are involved in the success of the electrification and the hybridation of PSA’s models as well as the development of Euro 6-compliant engines. This is exemplified with the Nidec Leroy-Somer partnership whose purpose is to develop e-motors or with the future joint-venture agreement with Punch Powertrain that aims to product the future generation of the electrified transmission (e-DCT) starting in 2022.

-------- Engagement with mobility experts:

In 2018, the Group’s CEO also started a series of one-to-one dialogues with high-level experts on the seven megatrends that will shape the future of mobility. This initiative was launched in September 2018 during the Paris Motorshow. The aim of these dialogues is to help to build the future strategic plan of the Company. All dialogues are filmed so that they can be shown to the public in a transparent way. The dialogue related to climate change was made public in December 2018.

-------- Engagement with investors:

The Group manages its relations with its by maintaining continuous dialogue aimed at mutual understanding and the promotion of concrete actions. Investors and shareholders are informed of CSR performance through a letter and through the CSR report and the Registration document published every year. Moreover, Groupe PSA published in April 2019 its first Climate Report, which complies with the recommendations of the FSB Task-Force on Climate-related Financial Disclosures (TCFD) and provide investors with information on the 4 main themes of the TCFD: governance, strategy, risk management, and metrics & targets. The Group also organizes consultation Committee and shareholders/investors meeting where environmental aspects can be discussed, mainly through their implication for the Group’s strategy and its risks and opportunities.

-------- Engagement with dealership networks:

Environmental performance of vehicles and manufacturing facilities as well as sustainable mobility subjects are discussed with dealership networks. Sales and marketing employees are trained on these subjects to better understand climate-related issues that the group is facing and the solutions that are being developed. This is done for instance through e-learning training. This helps them to better reply to customers questions but also to better understand the current and future dynamics around automotive technologies and markets (e.g.: share of electrified vehicle market and future perspective, etc.). Furthermore, distribution and/or repair service contract include clauses related to sustainable development.

## **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

Funding research organizations

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 (CO2 fleet regulation) | Support with minor exceptions | (1) Name of legislation: post 2020 CO2 emissions target regulation in Europe which will amend EC 443/2009 (CO2 emissions target based on NEDC procedure) (2) Geographies of legislation: Europe (3) Type of engagement: Groupe PSA engaged discussions, meetings, influence strategies activities towards MEEM (Ministère de l’Environnement, de l’Energie et de la Mer) and European Commission for proposing solutions to define a CO2 emissions target based on WLTP procedure derived of CO2 emissions target based on NEDC. (2) Geographies of legislation: Europe (3) Type of engagement: Groupe PSA engaged discussions, meetings, influence strategies activities towards MEEM (Ministère de l’Environnement, de l’Energie et de la Mer) and European Commission for proposing solutions to define a CO2 emissions target based on WLTP procedure derived of CO2 emissions target based on NEDC. | The Worldwide Harmonized Light Vehicles Test Procedure (WLTP) is a new procedure and replaced the NEDC procedure in Europe on September 2017. The WLTP procedure is more representative of real-life conditions: measured CO2 emissions will be increased. Groupe PSA supports WLTP introduction to restore its customers’ trust and has proposed a formula to calculate CO2 emissions target on WLTP based on CO2 emissions target on NEDC (95 g/km in 2020). For Groupe PSA, key factors are iso-stringency between NEDC and WLTP, and additive corrections (instead of multiplicative corrections). 100% of PSA passenger cars were certified under the new WLTP standard upon its entry into force on 1 September 2018. |
| Other, please specify (Circular economy) | Support with minor exceptions | (1) Name of legislation: EU end-of-life vehicles (ELVs) Directive (2) Geographies of legislation: Europe (3) Type of engagement: Groupe PSA, together with the other members of ACEA, are currently focusing on defining country-specific best processes for the treatment of ELV to ensure the best environmental results as part of a self-sustainable ELV business. Groupe PSA also supports the development of a harmonised methodology for measuring the rate of incorporation of recycled and natural materials. | Groupe PSA promotes the adoption of best practices by EU Member States to implement the European Directive on the treatment of end-of-life Vehicles (ELV). It advocates for the professionalisation of the recycling industry and higher output (ELV decontamination centres, shredding, sorting after shredding, etc.). It participates in the Environmental ELV steering committees of the European Automobile Manufacturers Association (ACEA) to facilitate the elaboration of the Energy Transition and Circular Economy package in Europe. |
| Other, please specify (Battery recycling) | Support with minor exceptions | (1) Name of legislation: standards for batteries recycling (2) Geographies of legislation: Europe and China (3) Type of engagement: PSA is closely involved in the development of a standard, via the European Automobile Manufacturer’s association (ACEA), and local joint ventures outside of Europe (China mainly). | Groupe PSA promotes the repair and recycling of batteries. For instance, PCD has a contract for the entire European market with a single, efficient partner, whose recycling rates in 2017 were 77.4% for Li-ion batteries of electric vehicles and 84.0% for the Ni-MH batteries of hybrid vehicles. These rates are significantly higher than the 50% regulatory thresholds for recycling efficiency. The agreement covers all of the PCD’s dealership networks and industrial sites for all traction battery technology across all European marketing regions. Other manufacturers could reach the same level of recycling rate with appropriate recycling partners. |

## **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**

ACEA – European Automobile Manufacturers’ Association

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

Consistent

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

The main topics are the vehicles’ fuel consumption efficiency and carbon emissions reduction of vehicles and processes. ACEA calls as well for greater balance between climate objectives and global competitiveness. For example, in 2018 ACEA worked on the best processes to establish for a better end-of-life vehicles dismantling and recycling treatment.

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

Three specialized Departments (Public Affairs, Sustainability, Industrial Direction) are tasked with representing Groupe PSA in trade associations as ACEA. This way, Groupe PSA is actively participating in working groups to influence common positions. In addition, Carlos Tavares took over the Presidency of ACEA in 2018. As ACEA President, Mr Tavares had meetings with Commissioners Mr Canete, Mr Moedas, Mrs Malmstöm and Mr Katainen. Furthermore, Mr Tavares hosted the ACEA annual reception in January and took the opportunity to outline the industry challenges on CO2, safety and Brexit.

### **Trade association**

CCFA – Comité des Constructeurs Français d’Automobiles

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

Consistent

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

CCFA supports the implementation of CSR policies in the automotive industry, by identifying the CSR best practices at each member company and standardizing them across working group members. Regarding environmental issues, the main topics tackled are regulations on the vehicles’ fuel consumption efficiency and carbon emissions reduction of vehicles and processes. For example, the French car manufacturers’ committee (CCFA), with the French government’s automotive industry platform (PFA) renewed the CSR Charter for the automotive sector on 6 October 2016. The purpose of the Charter is to formally set out the industry’s responsibilities and to foster a CSR approach throughout the supply chain so that it effectively boosts performance and competitiveness. In 2016, this charter was based around six main CSR components, which are: human rights; labour rights; social responsibility; the environment; ethical conduct and anti-corruption. The purpose of the charter is to formally set out the industry’s responsibilities and to foster a CSR approach throughout the supply chain so that it effectively boosts performance and competitiveness.

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

Three specialized Departments (Public Affairs, Sustainability, Industrial Direction) are tasked with representing Groupe PSA in trade associations as CCFA. This way, Groupe PSA is actively participating in working groups to influence common positions on regulations related to fuel consumption and CO2 emissions of vehicles. In addition, the Groupe PSA has signed the second joint CSR Charter of the CCFA and PFA in October 2016.

## **C12.3d**

### **(C12.3d) Do you publicly disclose a list of all research organizations that you fund?**

Yes

## **C12.3e**

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

Regarding the engagement with universities:

1) Method of engagement: Groupe PSA has a scientific partnership with many universities, engineering schools and business schools, in France and abroad. For example, PSA has a long-term scientific partnership with the Bourgogne­Franche­Comté region, the French National Scientific Research Centre (CNRS), the Université de Franche Comté, the Université de Technologie de Belfort Montbéliard and the École Nationale Supérieure de Mécanique et Microtechnique de Besançon. PSA is also working on biofuels with several Brazilian universities and created an OpenLab with Moroccan universities.

2) Topic of engagement: the long­term collaboration with regional university research laboratories will explore clean technologies, the autonomous vehicle, vehicle appeal and the plant of the future. The OpenLab launched with Moroccan universities is focused on “Sustainable Mobility for Africa”.

3) Nature of the engagement: the partnership will take the form of collaborative projects, funding for doctoral students and assistance with creating start­ups. In addition, as part of the agreement, Groupe PSA employees will speak at the partner universities and scientific study will be promoted.

4) Actions advocated: PSA supports academic and research projects in order to identify the breakthrough technologies of the vehicle of the future. The group also helps to accentuate innovation in the Bourgogne Franche Comté region and in Morocco, and therefore enhance both region’s economic and social appeal. PSA plants are engaging with universities about the biodiversity around the plants. In 2018, France Nature Environment (FNE) and PSA Foundation have been working together on shaping the future of sustainable mobility. They published a practical document for teachers and educators, which was the result of two years’ work, in order to promote sustainable mobility with educational and awareness- raising actions aimed at young people. This educational guide to sustainable mobility approved by the French Ministry of Education aims at supporting education institutions to raise awareness of sustainability issues.

Regarding the engagement with stakeholders:

1) Method of engagement: PSA organized several stakeholder dialogues in 2018, that brought together actors from civil society such as NGO representatives, researchers, economists, sociologists, etc.

2) Topic of engagement: the stakeholders dialogue tackled in particular 3 topics: sustainable mobility, economic development of host regions and harnessing talent and paving the way for success

3) Nature of engagement: from the various dialogues about the future mobility, the Groupe PSA is developing a range of connected and mobility services in response to changes in customer behavior and expectations and, through dialogue with civil society, PSA is inventing the transport of the future by incorporating digital into vehicle DNA and installing driver assistance systems to improve safety and traffic flow, with the aim of bringing the autonomous car within reach of as many people as possible.

Regarding the engagement with VEDECOM:

1) Method of engagement: PSA is a member of the VEDECOM (Carbon­free and Communicating Vehicle and its Mobility) Institute. This energy transition institute (ITE) represents a unique research ecosystem in France made up of some 40 members that forms an unprecedented collaboration between companies from the automotive and aeronautic sectors, infrastructure and service operators from the mobility ecosystem, academic and local government research institutions in the Paris region.

2) Topic of engagement: autonomous vehicles and mobility of the future by actively driving innovation, research and training applied to transport and responsible mobility.

3) Nature of engagement: in the VEDECOM Institute, Groupe PSA works with aeronautic and IT companies on: ­ future hybrid and electric engines (optimisation of the “powertrain”, engine + gearbox + steering) and developments around fuel hydrogen (in particular as a complement to battery­ operated electric engines whose autonomy will increase); ­ the autonomous vehicle connected to its environment; ­ inter modal transport, infrastructure, Smart Grids. For example, in developing autonomous vehicles, VEDECOM manufacturers and equipment suppliers have teamed up to reduce the duration of processes (authorisations to conduct road experiments were granted in 5 months instead of 12), their complexity and their cost (a single application was filed to register the patents rather than one application for each patent).

4) Actions advocated: support of research covering engines and connectivity of post 2020 vehicle to promote individual, low­carbon and sustainable mobility.

## **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?**

All CSR issues are mapped and validated by the Executive Committee. The Executive Committee allocates resources according to the weight of each issue in the materiality matrix (which is public). CO2 emissions, i.e. climate change, rank first in the strategic issues. Influence strategies are conducted by the Public Affairs Department. The Public Affairs Department manages relations with governments, ministries, parliaments, public agencies and enterprises, local authorities, European Union institutions, foreign governments and, by extension, the business and professional communities and non­governmental organizations. This Department also represents the Group’s positions on climate change related issues.

The Public Affairs Department is under the responsibility of the Corporate Secretary, who is member of the Executive Committee and reports directly on these issues to the Chairman of the Managing Board. Finally, the Public Affairs Department may be audited by the Group Audit and Risk Management Department, which acts completely independently. As mentioned earlier, this Risk Management Department is also in charge of climate change risks assessment.

In Latin America, China and Russia, dedicated external relations officers report directly to the Regional Chief Executive, who is a member of the Managing Board or reports to it.

Besides, for any regions where Groupe PSA operates, consistency on climate change is also ensured at the Managing Board level, since Executive Vice President, Programs & Strategy, who is a member of the Managing Board and Executive Committee, holds direct and specific responsibility on climate change related issues.

## **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**

[Groupe PSA\_Registration Document\_2018.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/6sTcFJof6EKGVWLxJ1vtQQ/GroupePSARegistrationDocument2018.pdf)

### **Page/Section reference**

1.1.4 Risk Management and Internal Control Procedures – P.20-P.23 1.1.5 Risk factors – P.23-P.33 2.2.2 Embracing Environmental Issues – P.41-P.56 2.2.5 Groupe PSA CSR Performance – P.78

### **Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

### **Comment**

The registration document has been filed with the French Autorité des Marchés Financiers (AMF) and registered under D.19-0201, on March 26, 2019. The 2018 Registration Document is available on the Group's web site www.groupe-psa.com/en, in its “Regulated Information” section.

### **Publication**

In mainstream reports

### **Status**

Complete

### **Attach the document**

[Groupe PSA\_CSR Report\_2018.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/VVi2rgl-dEKvW-HRigtbYA/GroupePSACSRReport2018.pdf)

### **Page/Section reference**

1. Creating Shared and Lasting Value – P.7-44 2. A Trendsetter in Sustainable Mobility – P.45-P.119 4. Responsible Supply Chain Management – P.165-P.188 5. Reducing the Environmental Impact of Manufacturing and Logistics Operations – P.191-P.232

### **Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

### **Comment**

The annual CSR Report presents all the work carried out by the Group on its societal issues, including climate issues. Audited by an independent third party, it connects financial and non-financial performance, in accordance with the recommendations of the International Integrated Reporting Council (IIRC). Groupe PSA CSR Report has been awarded "Advanced" for four consecutive years by the United Nations Global Compact. This label rewards both transparency and best practices in sustainable development. The CSR Report is available on the Group’s web site, https://www.groupe-psa.com/en/automotive-group/responsibility/#csrreport

### **Publication**

In mainstream reports, incorporating the TCFD recommendations

### **Status**

Complete

### **Attach the document**

[Groupe\_PSA\_Climate Report\_2018.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/UjxlHxVink6yCe7sHAQgqg/GroupePSAClimateReport2018.pdf)

### **Page/Section reference**

The whole document relates to climate change and GHG emissions.

### **Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

### **Comment**

In its Climate Report, Groupe PSA gives its stakeholders a global vision of its measures to fight climate change and mitigate its effects. It also describes how the Push to Pass strategic plan integrates climate-related economic opportunities and risks. The achievement of the Group's climate objectives is monitored with full transparent indicators This Climate Report complies with the recommendations of the FSB Task-Force on Climate-related Financial Disclosures (TCFD).

## **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.**

## **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 | Senior Vice President, Programmes | Board/Executive board |