# **Renault - Climate Change 2019**

## **C0. Introduction**

## **C0.1**

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

The Group’s activities have been organized into two main types of operating activities, in more than 130 countries:

1. Automotive, with the design, manufacture and distribution of products through its distribution network (including the Renault Retail Group subsidiary):

- New vehicles, with several ranges ( passenger cars, light commercial vehicles and electric vehicles ) marketed under five brands: Renault, Dacia, Renault Samsung Motors, Alpine and Lada. Vehicles manufactured by Dacia and RSM may be sold under the Renault badge in some countries,

- Used vehicles and spare parts,

- The Renault powertrain range, sold business to business;

2. Miscellaneous services: sales financing, leasing, maintenance and service contracts.

In addition, Renault has equity investments in the following two companies:

- Nissan;

-Avtovaz.

The shareholding in Nissan is accounted for under the equity method in the Group’s financial statements and that Avtovaz is fully consolidated (since december 2016).

Renault SA holds 43.4% of Nissan’s share capital and Renault SAS holds 61,09 % of Alliance Rostec Auto B.V wich holds 100% of Avtovaz.

All reported data and informations cover exclusively group Renault's activities and impact. Data from Nissan and Avtovaz are not included.

## **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

Brazil

Chile

Colombia

France

Morocco

Portugal

Republic of Korea

Romania

Russian Federation

Slovenia

Spain

Turkey

## **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.**

Financial 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 Chair | On the board chair, an ethics and CSR Committee has been created to review especially climate-related issues. It replace the Appointments and Governance Committee which had social and environmental responsibility |
| Chief Executive Officer (CEO) | To secure Renault convergence toward upcoming CO2 new regulation steps, and in addition to existing organization, Renault has implemented in 2018 a specific Program team (named CAFE Control Tower), dedicated to CO2 emissions from vehicles (CO2 emissions results and roadmap) , with monthly reporting to CEO for decision |

## **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 – some meetings | Reviewing and guiding strategy  Reviewing and guiding major plans of action  Reviewing and guiding risk management policies  Reviewing and guiding annual budgets  Reviewing and guiding business plans  Setting performance objectives  Monitoring implementation and performance of objectives  Overseeing major capital expenditures, acquisitions and divestitures  Monitoring and overseeing progress against goals and targets for addressing climate-related issues  Other, please specify (CO2 life cycle assessment) | On the board chair, Appointments and Governance Committee(replaced by the ethics and CSR Committee ) held 9 meetings in 2018. Subjects scheduled on a meeting for example: the review of materiality matrix wich includes carbon footprint (life cycle) of vehicles |
| Scheduled – all meetings | Reviewing and guiding strategy  Reviewing and guiding major plans of action  Reviewing and guiding risk management policies  Reviewing and guiding annual budgets  Reviewing and guiding business plans  Setting performance objectives  Monitoring implementation and performance of objectives  Overseeing major capital expenditures, acquisitions and divestitures  Monitoring and overseeing progress against goals and targets for addressing climate-related issues | To secure Renault convergence toward upcoming CO2 new regulation steps, and in addition to existing organization, Renault has implemented in 2018 a specific Program team (named CAFÉ Control Tower), dedicated to CO2 emissions from vehicles (CO2 emissions results and roadmap) , with monthly reporting to CEO of the company for decision on action plans. |

## **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** |
| Chief Executive Officer (CEO) | Both assessing and managing climate-related risks and opportunities | More frequently than quarterly |
| Corporate responsibility committee | Both assessing and managing climate-related risks and opportunities | More frequently than quarterly |
| Sustainability committee | 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).**

(1) On the board chair, an ethic and CSR Committee was created replacing the Appointments and Governance Committee. The Appointments and Governance Committe held 9 meetings in 2018. Regarding social and environmental responsibility its duty is to

a. ensure that the Company and Group are sufficiently committed in terms of ethics, extra-financial compliance and environmental, social and societal responsibility,

b. examine the Group’s policies, reference texts and charters on these matters, including the Group’s code of ethics, and ensure their effectiveness,

c. review and assess procedures for reporting and controlling non-financial indicators (environmental, health and safety indicators and workforce-related reporting),

d. receive, every year, the presentation of the risk-mapping of the Group relating to social responsibility and sustainable development; it shall review the risks and opportunities identified and shall be kept informed of their evolution and the characteristics of the related management systems,

e. review reporting, assessment and control systems to ensure that the Company is able to provide reliable non-financial information and, in particular, issue an opinion on the declaration of extra-financial performance that must be published in accordance with applicable law,

f. work to ensure that the Group takes into account extra-financial issues and long-term outlooks,

g. promote ethics, ensure that ethical rules are harmonized within Group entities and monitor their application,

h. examine Human Resources policies;

i.and receive, every year, the presentation of the risk-mapping of the Group relating to ethics and compliance; it shall review the risks and opportunities identified and shall be kept informed of their evolution and the characteristics of related management systems.

Climate-related issues are specialy integrated in previous listed roles on points c, d and e. For example, Climate-related issue is integrated as the higher risk of the materiality matrix of Groupe Renault by "Vehicle carbon footprint (full life cycle)".

(2) To secure Renault convergence toward upcoming CO2 new regulation steps, and in addition to existing organization, Renault has implemented in 2018 a specific Program team (named CAFE Control Tower), dedicated to CO2 emissions from vehicles (CO2 emissions results and forecast) , with monthly reporting to CEO of the company for decision on action plans. This cross-functional team involves all concerned divisions, including: engineering, manufacturing, sales & marketing, environment.

(3)The CSR departments report to the Chairman and Chief Executive Officer or a member of the Group Executive Committee (GEC) and are coordinated by three operating entities that design and implement policies and associated objectives, identify and manage risks and opportunities, enter into dialog with stakeholders and lastly handle reporting and communication:

- the Corporate Social Responsibility department is responsible for an interdisciplinary and partnership approach to CSR throughout the value chain, societal actions and innovations;

- the Human Resources department is responsible for optimizing allocated resources, skills development, employee involvement and social dialog;

- the Strategy and Environmental Planning department is responsible for environmental issues to be included in the Company’s strategy. It aims to reduce the environmental footprint of activities, products and services over the life-cycle and introduce circular economy business models to boost the Company’s medium- and longterm competitiveness. Individually or jointly, these three operational departments bring issues relating to strategic orientation before the decision-making bodies at CEO or Group Executive Committee member level. These departments then roll them out within the Company through the programs, Regions and functions, using internal networks and by developing external partnerships if necessary. The Human Resources (HR), Environment and CSR functions also contribute to corporate programs to manage ethics. They are among the 10 business-lines represented on the Ethics and Compliance Committee, coordinated by the Ethics department. They also take part in the Appointments and Governance Committee (described on point (1)), one of the specialized committees of the Board of Directors. The three departments analyze and map the major risks identified by the Risk Management departmenon CSR practices in the supply chain, health and working conditions, substance risk... Following its materiality analysis, since April 2016, the CSR department has organized a Positive Impact Committee (PIC) with 20 members, which meets four times a year and represents the main departments and functions of the Group, to promote a common vision and action plans. It coordinates the management of the various departments’ extra-financial issues and helps to identify new opportunities.

## **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?**

Chief Executive Officer (CEO)

### **Types of incentives**

Monetary reward

### **Activity incentivized**

Emissions reduction target

### **Comment**

In 2018 president 's remuneration, included objective that will incentivize achievement of key initiatives under the new long-term Strategic Plan, Drive the Future: electric vehicles Description of the incentive: Electric vehicles: 30% (of salary variable) - Measure: Electric vehicle sales at budget - Rationale: Key lever to take advantage of the energy revolution and keep Renault’s competitive advantage

## **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 | 1 | 2 |  |
| Medium-term | 2 | 6 | In line with Plan Drive the future |
| Long-term | 6 | 15 |  |

## **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 | Risks related to climate change are integrated, among other risks faced by the Renault Group, to the overall risk management processes and instances described on question C.2. 2.b. |

## **C2.2b**

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

------ Definition of risks: Renault considers 3 types of climate-related risks, which can have an impact on the Company’s financial results:

(1) physical risks (exposure of sites to extreme weather events with potential negative consequences on industrial and logistical activities, supply and insurance premiums), (2) risks related to the transition to a low-carbon economy (mismatch between offer of products/services and market expectations, loss of product competitiveness, increase in production costs), (3) impact of the evolution of regulatory and normative requirements related to environmental performance of vehicles and/or industrial processes and, more broadly, greenhouse gas reduction targets defined in the context of the COP 21 agreement and applied to the automotive sector.

------Assessment at company level:

The identification and control of environmental risks are included in the Group’s overall risk management system. Like all CSR issues, environmental issues and associated risks have also undergone a materiality analysis. This identifies and prioritizes them based on their potential impact on the economic performance of the business and their relative importance for its stakeholders.

-------Process used: The Group identified its CSR and climate-related risks when updating its materiality matrix. Groupe Renault has carried out a materiality analysis with the support of a firm of consultants. The aim of this analysis is to generate a materiality matrix depicting the importance of each stake identified from the point of view of stakeholder expectations and, its contribution to the performance of the business in terms of value creation. Headed by the CSR department, an interdepartmental steering committee supervised the methodological approach and the key stages of the project. The results were then validated by members of the Group Executive Committee.

Divided into three categories (Inclusion, Sustainable Mobility and Ethics & Governance), the 30 stakes identified from international standards, an industry benchmark and a literature review, were validated and positioned in the matrix following discussions with Groupe Renault senior executives and representatives of the Group’s stakeholders (employees, customers, investors, suppliers, NGOs, media, environmental and future generations’ representatives, as well as CSR experts). Although all these stakes are important for the Company and its relationship with its ecosystem, the real value, but also the difficulty, of this materiality exercise is to maintain a discriminating approach to the analysis. Indeed, it is about providing prioritized and appropriately weighted answers according to the importance of the stakes mapped.

—————————Assessment at asset level:

At assets level the Renault group is mainly (though not highly) exposed to weather-related risks, which can sometimes turn into opportunities (ex: solar panels for hail protection).

The exposure of every industrial asset to those risks is evaluated yearly by insurers in the frame of risks prevention audits carried out on behalf of Manufacturing and Insurances Divisions.

The Group’s Prevention and Protection, Manufacturing and Real Estate Divisions define and oversee the implementation of action plans.

For example, relating to physical risks at assests level, the Group has been working for several years to increase its resilience capacity in the face of natural disasters through regular updates of risk and stakes assessments, protection programs for people and property, monitoring and crisis management systems and business continuity plans. For example, a specific plan is being rolled out to optimize the treatment plans management for risks of major earthquakes (Chile, Turkey, Romania, Colombia, Slovenia, Morocco, etc.). This program is based on actions to strengthen buildings and facilities, training of staff on the steps to be taken in the event of an earthquake, the establishment of specific means of communication, the organization of crisis management systems, research and preparation of solutions to ensure business continuity and a customized insurance program.

————————— Definition of the level of impact of risks:

Groupe Renault evaluates its substantive impact of climate related risks on 2 vectors (materiality matrix):

- Influence on stakeholders’ opinions or behaviours (moderate, strong, very strong)

- Impact on sustainable business performance (moderate, hight, very high)

## **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 | The Group has a structured approach to analyze the robustness of regulatory compliance over a range of regulated areas defined in collaboration with the Legal department (including “competition”, “fraud and corruption”, “environment”, “health-safety-work environment”, “technical regulations”, etc.). This approach is led by the Regulatory Compliance department, part of the Internal Control department, and is monitored by the Ethics and Compliance Committee. The aim is to ensure compliance with laws and regulations, reduce the exposure of the Company and its executives to risks of criminal, administrative and financial sanctions and protect its image. The system is based on three types of actors: - the functional departments that set specifications (Technical Regulations department, Legal department, HSE department, etc.), provide regulatory oversight in their respective fields, transpose regulatory criteria into internal standards and deploy them within their networks; - the operational entities ensure regulatory compliance via their processes, based on directives and with the support of the relevant functional departments, in accordance with local regulations; - the Regulatory Compliance department defines the methods and evaluates the regulatory compliance systems, with the support of the Legal department. For example the regulation related to EU -ETS is assessed and managed by HSE department for manufacturing plants. |
| Emerging regulation | Relevant, always included | Intelligence report in each department is a key point to anticipate the regulation evolution (new material to develop or to replace and also new technology to implement). For example, the CAFE (Corporate Average Fuel Economy) regulation which will impact all car manufacturers in Europe in 2021 is already assessed. It is evaluated as a priority objective for the Group, which has considerable advantages in this respect, having been in the Top 3 of the most virtuous European manufacturers in terms of CAFE over the last six years and, also for the last five years, having been leader in the market for 100% electric vehicles. |
| Technology | Relevant, always included | In order to continue the reduction in CO2 emissions of its internal combustion engine vehicles to meet its carbon footprint commitments, to comply with the regulatory requirements in each of the Group’s markets (EU with average emissions limited to 95 g CO2/km by 2021, as well as China, Korea, Brazil, India, Turkey, Mexico, Japan, etc.) and to retain a sustainable position among automotive industry leaders in this field, Renault relies on various courses of action, for example: - vehicle weight reduction through the use of lighter materials such as aluminum and the use of technological advances (hot pressed steel, etc.) that lighten the parts while retaining the desired mechanical characteristics; - aerodynamics; - downsizing, i.e ., reducing the cubic capacity (and therefore the consumption) of an engine with the same power output by means of turbochargers and optimized combustion; - the reduction of heat loss and mechanical friction; different levels of hybridization, from Stop and Start, now available on the entire range of affordable, rechargeable, hybrid technology which offers “zero emission” mobility for short day-to-day journeys, and is set to supplement Renault’s electric product line in the next few years. As part of its new Drive the Future 2017-2022 strategic plan, Groupe Renault has announced the launch of 12 electrified models representing half of the range |
| Legal | Relevant, always included | The legal risk is also considered relevant in Renault organization's climate-related risk assessments. For example, China is the other large market in which the Group is subject to stringent regulatory restrictions in matters of CO2 emissions from vehicles. Noncompliance with Chinese CAFC (Corporate Average Fuel Consumption) objectives by the manufacturer would, however, not lead to financial penalties, but to a prohibition on selling the least fuel-efficient models, which would consequently represent a risk for the manufacturer or a commercial and financial opportunity, depending on its positioning in terms of CAFC. Groupe Renault, which, since the first half of 2016, has had an industrial site at Wuhan with its partner Dongfeng, has therefore made the CAFC positioning of its range a key element of its product strategy in China, so that it constitutes a driver and not a brake on its growth in this market. For this, it can rely on its experience in electric vehicles and low-cost cars and, in the medium-term, offer electric vehicles in the Chinese market in addition to a modern and high-performance internal combustion range. Changes to the average CO2 emissions of the vehicles sold by Groupe Renault in Europe and throughout the world, as well as the strategy and product news associated with the internal combustion and electric ranges is a key point. |
| Market | Relevant, always included | The definition of the Group’s future products is based on customer studies and analyses of automotive competitors, so that market expectations and developments and industry trends can be identified. It is also increasingly informed, on a global scale, by anticipatory technology watch by all of the Group’s development stakeholders, of the automotive industry and beyond (consumer electronics for example). To ensure the robustness of the product plan and keep risks under control, the Group: - maximizes the distribution of the same model in different markets, which reduces its exposure to possible fluctuations in one of these markets; - offers a varied, balanced Product portfolio that meets customer expectations in different segments and markets, so as to reduce the risk of dependency on a single market, segment or customer type; - offers a varied engine portfolio (petrol, diesel, electric, etc.) to meet customer expectations in different markets and be resilient to potential changes in the engine mix. The medium-term plan Drive the Future notably strengthens the Group as regards this last point, through the introduction of new gasoline, electric and electrified engines, also contributing to the management of the risk of decline in the markets for diesel-engine vehicles. These new engines form an integral part of the panoply of technologies used to build a competitive response to the increasingly stringent demands of different markets in terms of energy performance and pollutant emissions. For example, in particular Electric vehicles are a major component of Renault’s strategy to answer to the market tendency to buy low carbon vehicles. The Company is targeting a large-scale roll-out of this type of vehicle, which provides a real solution to atmospheric pollution in urban areas given their absence of pollutant emissions during use. They can also significantly reduce the greenhouse gas emissions associated with transportation. |
| Reputation | Relevant, always included | For example, the identification of significant differences between emissions measured in real use of vehicles and in the laboratory or approval had consequences on all car manufacturers' reputation and led the European Commission to define a real-use test protocol, introduced with the Euro 6d standard. Without waiting for these new standards, Groupe Renault had, starting in July 2015, studied the implementation of improvements on all of its Euro 6b and Euro 6c diesel production aiming to further limit emissions in customer use. These improvements were gradually rolled out from August 2016. Environmental issues and associated risks have undergone a materiality analysis. This identifies and prioritizes them based on their potential impact on the economic performance of the business and their relative importance for its stakeholders. In 2015, Groupe Renault conducted a materiality analysis with a specialized firm to identify and prioritize corporate social responsibility stakes that may affect its ability to generate value in the short and medium term. The matrix generated presents the challenges seen by Senior Management and the corresponding key functions compared to their positive or negative impact on the value creation for the Company and the level of importance given to them by all of its stakeholders. The materiality matrix has 2 vectors: - Influence on stakeholders’ opinions or behaviours (moderate, strong, very strong) - Impact on sustainable business performance (moderate, hight, very high) The materiality matrix has identified five critical stakes. One of the critical stake identified is the vehicle carbon footprint (full life cycle). |
| Acute physical | Relevant, sometimes included | One of the Group’s main environmental risks is climatic risks: risk of disruption to industrial and logistics activities and damage to Company assets as a result of extreme weather conditions (storms, floods or hail, etc.); For example hail impacted vehicles on a spain's plant car park in 2018. The Group has been working for several years to increase its resilience capacity in the face of natural disasters through regular updates of risk and stakes assessments, protection programs for people and property, monitoring and crisis management systems and business continuity plans. For example, a specific plan is being rolled out to optimize the treatment plans management for risks of major earthquakes (Chile, Turkey, Romania, Colombia, Slovenia, Morocco, etc.). This program is based on actions to strengthen buildings and facilities, training of staff on the steps to be taken in the event of an earthquake, the establishment of specific means of communication, the organization of crisis management systems, research and preparation of solutions to ensure business continuity and a customized insurance program. |
| Chronic physical | Not relevant, explanation provided | Not impacted. Due mainly to the location of our sites and manufacturing plants the group has not identified risks of chronic physical climate-related risk. |
| Upstream | Relevant, sometimes included | The Group is exposed in a significant way to the risk of a disruption in the supply chain of its production sites, which could lead to interruptions in manufacturing and, ultimately, the delivery of vehicles. The main drivers of these risks are either internal, in particular because of the interdependence underlying the Group’s industrial network, or external (for example: supplier site production that is insufficient or interrupted, failures in supply or transport systems) and can themselves be a result of the occurrence of events (for example acute physical climate-related risk : natural events as storms, floods or hail). The implementation of prevention of risks related to disruptions in the supply chain is the responsibility of specialized teams in the Alliance Supply Chain. These teams rely on the sizing, planning and anticipatory management systems of production capacities (Group factories, logistics platforms, critical supplier sites) and transportation, which constantly integrate the Group’s visibility on commercial demand and projected evolution and prioritize the most strategic parts and vehicles to guarantee the Group’s industrial and commercial performance In addition, regular coordination of supplier reliability, along with audits and security missions, is conducted in partnership with the Supply Chain Quality department. Furthermore, a “Supply Security” unit, together with the Purchasing department and plants, provides security in relation to at-risk suppliers, in particular through the establishment of strategic inventories. Finally, IT processes and tools are being reinforced and deployed in the Group’s various entities. The development of advanced digital tools for Risk Sensing and Risk Mitigation in particular has been planned in the context of the Supply Chain function digital transformation program. The protection system relies on: - business continuity plans and specific action plans in the event that a risk is detected by one of the actors in the supply chain (suppliers, shippers, industrial sites), on the one hand; - the coverage of major risks by specific insurance programs (mentioned elsewhere in this chapter), on the other. |
| Downstream | Relevant, sometimes included | One of the Group’s main environmental risks is climatic risks: risk of disruption to industrial and logistics activities and damage to Company assets. For example extreme weather conditions like hail can impact the downstream activities: the state and the distribution of manufactured vehicles. The prevention politic in relation is to enhance protection for vehicle storage depots exposed to natural hazards such as storms and hail, using appropriate means, such as nets or roofing comprising photovoltaic panels. This specific downstream risk is insured by insurance companies. The nature and scope of cover is determined via a preliminary risk analysis of operating entities. This approach is used for the following types of risk: “transportation and storage of vehicles in depots”: the Alliance buys a capacity of €295 million per claim with a deductible of €100,000 per claim for damage caused to vehicles in depots and €45,000 per claim for land transportation; |

## **C2.2d**

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

I- AT COMPANY LEVEL Renault applies a three-pronged approach to risk and opportunities management :

1. Level 1 - At Group level, the Risk Management Division provides methods and an overall view (mapping) of major risks (materiality analysis for example).

2. Level 2 - The Group’s Prevention and Protection Division is responsible for identifying and handling risks and opportunities linked to the protection of assets;

3. Level 3 - In all entities involved in business-critical processes, experts are appointed to identify and prioritize risk control solutions and related opportunities, and oversee their implementation. They directly contribute to the level 1 risk mapping process.

The following climate change risks & opportunities have been identified within the Renault Group :

(A) physical risks (exposure of sites to extreme weather events with potential negative consequences on industrial and logistical activities, supply and insurance premiums), (B) risks related to the transition to a low-carbon economy (mismatch between offer of products/services and market expectations, loss of product competitiveness, increase in production costs), (C) impact of the evolution of regulatory and normative requirements related to environmental performance of vehicles and/or industrial processes and, more broadly, greenhouse gas reduction targets defined in the context of the COP 21 agreement and applied to the automotive sector.

All risks and opportunities are assessed at levels 1, 2 and 3 as described above and managed at levels 1, 2 and 3 as described below :

- B and C are dealt with by Strategic Environmental Planning Div., with the support of Public Affairs, Vehicle Regulation & Homologation and Manufacturing Divisions. Thoses risks are reported yearly to the GEC (Group Executive Committee), which validates the related management strategy and the means required for its implementation.

For example, in term of transitional risk about climate-related risks and opportunities, the risks and opportunities associated with the tightening of regulations on greenhouse gas emissions, and in particular vehicle CO2 emissions, are identified as a major competitive challenge for the Company. For this reason, they are monitored through a Worldwide Carbon Footprint key performance indicator and specific product competitiveness targets are set in terms of fuel consumption and CO2 emissions (positioning of CAFE valuesin particular). These indicators are reviewed annually by the Group’s Executive Committee, with a view to alignment over the short, medium and long-terms

(A) physical risks: the Renault group is mainly (though not highly) exposed to weather-related risks, which can sometimes turn into opportunities (ex: solar panels for hail protection).

The exposure of every industrial asset to those risks is evaluated yearly by insurers in the frame of risks prevention audits carried out on behalf of Manufacturing and Insurances Divisions.

The Group’s Prevention and Protection, Manufacturing and Real Estate Divisions define and oversee the implementation of action plans.

For example, relating to physical risks at assests level, the Group has been working for several years to increase its resilience capacity in the face of natural disasters through regular updates of risk and stakes assessments, protection programs for people and property, monitoring and crisis management systems and business continuity plans. For example, a specific plan is being rolled out to optimize the treatment plans management for risks of major earthquakes (Chile, Turkey, Romania, Colombia, Slovenia, Morocco, etc.). This program is based on actions to strengthen buildings and facilities, training of staff on the steps to be taken in the event of an earthquake, the establishment of specific means of communication, the organization of crisis management systems, research and preparation of solutions to ensure business continuity and a customized insurance program.

## **C2.3**

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

Yes

## **C2.3a**

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

### **Identifier**

Risk 1

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

Direct operations

### **Risk type**

Transition risk

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

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

### **Type of financial impact**

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

### **Company- specific description**

The agreement signed in 2015 at the end of the Paris Climate Change Conference (COP21) and the national commitments published on that occasion (INDC) have been analyzed in-depth for their implications for the automotive industry. The related opportunities and risks were presented to the Executive Committee to be taken into account in Group strategy and product planning. Opportunities, as well as risks, associated with the tightening of regulations on vehicle CO2 emissions have been identified as a major competitiveness issue for the Company and are monitored as such by the Executive Committee . Thus, the financial penalty of €95 per gram and per vehicle in case of noncompliance with the European objective of a CAFE per manufacturer of 95 g CO2/km in 2021 would represent for Groupe Renault an overall amount of about €145 million per gram of overrun based on current sale volumes in UE for particular vehicles. The achievement of this objective, in order to avoid such penalties, is therefore a priority objective for the Group, which has considerable advantages in this respect, having been in the Top 3 of the most virtuous European manufacturers in terms of CAFE over the last six years and, also for the last five years, having been leader in the market for 100% electric vehicles.

### **Time horizon**

Medium-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)**

2461539395

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

<Not Applicable>

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

<Not Applicable>

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

The financial penalty of €95 per gram and per vehicle in case of noncompliance with the European objective of a CAFE (Corporate Average Fuel Economy) per manufacturer of 95 g CO2/km in 2021 would represent for Groupe Renault an overall amount of about 2,4 billions euros if calculated on 2018 datas: The average CO2 emissions for light duty vehicle in 2018 in Europe for Renault is 112 g CO2/km so it would result of 112-95=17 g multiplied by the number of sold vehicles particular in Europe (1524173) = 17 X 1524173 X 95 = 2,4 billions euros if the regulation was active in 2018

### **Management method**

The achievement of this objective, in order to avoid such penalties, is therefore a priority objective for the Group, which has considerable advantages in this respect, having been in the Top 3 of the most virtuous European manufacturers in terms of CAFE over the last six years and, also for the last five years, having been leader in the market for 100% electric vehicles. Example: To secure Renault convergence toward upcoming CO2 new regulation steps, and in addition to existing organization, Renault has implemented in 2018 a specific Program team (named CAFÉ Control Tower), dedicated to CO2 emissions from vehicles (CO2 emissions results and roadmap) , with monthly reporting to CEO of the company. This cross-functional team involves all concerned divisions, including: engineering, manufacturing, sales & marketing, environment. Cost of management: this control tower involve a team of about twenty people representing "all" business professions, the best experts in each field, who use their network and their skills in a constant and coordinated effort to achieve compliance. This cost represents around 3 Millions €.

### **Cost of management**

3000000

### **Comment**

### **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: Increased pricing of GHG emissions

### **Type of financial impact**

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

### **Company- specific description**

The financial challenges associated with the European Union Emissions Trading System (EU-ETS), to which 13 Group sites are subject, are managed by a special steering committee. Against a background of the gradual elimination by the European Commission of the free allocation of EU-ETS quotas, the strategy implemented by Groupe Renault aims to minimize the financial costs that these quotas will cause for the Company in the medium and long term, through efforts to reduce the energy consumption of the sites (see the “Manufacturing” section below) and rigorous forward-looking management, throughout the period 2013-2020, of CO2 emissions and allocations of annual quotas and quotas put in reserve by the Group during the years when it had a surplus. In a context of a sharp increase and volatility in the price of the EU-ETS quotas observed in 2018 and the upward trend expected in the coming years, the Group has decided to go to the market (rather than use its quota reserves or surpluses from certain of its sites) to offset the quota deficits at the European sites with negative balances for 2018, for a total cost of around €2 million. The Group plans to maintain the negative impact of CO2 quotas (Europe and Korea) in the Company’s financial statements at a level of around €2 million per year for the end of the 2013-2020 period, while retaining a quota reserve, with the aim of mitigating the expected upward trend in this financial expense over the 2021-2030 period.

### **Time horizon**

Current

### **Likelihood**

Virtually certain

### **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**

In a context of a sharp increase and volatility in the price of the EU-ETS quotas observed in 2018 and the upward trend expected in the coming years, the Group has decided to go to the market (rather than use its quota reserves or surpluses from certain of its sites) to offset the quota deficits at the European sites with negative balances for 2018, for a total cost of around €2 million. The Group plans to maintain the negative impact of CO2 quotas (Europe and Korea) in the Company’s financial statements at a level of around €2 million per year for the end of the 2013-2020 period, while retaining a quota reserve, with the aim of mitigating the expected upward trend in this financial expense over the 2021-2030 period.

### **Management method**

The financial challenges associated with the European Union Emissions Trading System (EU-ETS), to which 13 Group sites are subject, are managed by a special Steering Committee. Against a background of the gradual elimination by the European Commission of the free allocation of EU-ETS quotas, the strategy implemented by Groupe Renault aims to minimize the financial costs that these quotas will cause for the Company in the medium and long term, through efforts to reduce the energy consumption of the sites (see the “C.4.3” section) and rigorous management forward-looking management, throughout the period 2013-2020, of CO2 emissions and allocations of annual quotas and quotas put in reserve by the Group during the years when it had a surplus. A dedicated team has been created at Corporate level to manage the reduction of energy consumption and CO2 emissions on industrial facilities, which represents operating expenses around € 300K/year, not considering the network of employees partly dedicated to this task at sites level. Example: Besides the hundreds of cost-free energy saving actions implemented each year on industrial sites, € 30 milions of investments dedicated to energy efficiency and CO2 emissions reduction are currently at the planning stage or understudy.

### **Cost of management**

300000

### **Comment**

### **Identifier**

Risk 3

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

Direct operations

### **Risk type**

Physical risk

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

Acute: Increased severity of extreme weather events such as cyclones and floods

### **Type of financial impact**

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

### **Company- specific description**

Certain extreme climatic events may disturb or even, in the most serious cases, temporarily stop operations at some of the Group’s production and logistics facilities. The main climatic risks likely to impact Renault sites are flooding (French plants of Choisy-le-Roi and Flins, located close to the Seine River), typhoons (Busan plant in South Korea) and hail storms (the plants in Santa Isabel at Cordoba in Argentina, Valladolid in Spain, Flins in France, Revoz in Slovenia, and Dacia in Romania). The hail risk has, by far, the highest recurring financial impact due to the damage caused to new vehicles when they are stored in unprotected zones. In order to reduce the risk of damage caused by hail, between 2010 and 2013, Groupe Renault implemented a widespread plan to cover vehicle storage zones. This work was partly financed by Renault and partly by investors as part of a project to install photovoltaic panels. As a result of this plan, the majority of the Group’s storage areas for new vehicles are now protected. No other natural risks linked to climate change have so far led to any notable disruptions to activities or material damage to sites or products. Sites subject to risks of flooding or typhoons are suitably protected, and emergency plans are in place to protect people and property and prevent or limit production shutdowns.

### **Time horizon**

Current

### **Likelihood**

About as likely as 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)**

20000000

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

<Not Applicable>

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

<Not Applicable>

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

'- A strong flooding or hurricane may cause an unprepared plant to lose up to 2 weeks of production, which may represent for the concerned plants a prejudice comprised between € 10 and 20 million euros - The main risk linked with hail storms is to damage new cars on unprotected car parks. This risk is estimated to around € 20 million euros yearly for the Renault group worldwide, not considering existing mitigation measures.

### **Management method**

The typhoon risk has been taken into account since the construction of Renault's Busan plant in South Korea, and every new building or facility built in this plant is designed to face such extreme weather conditions without any major damage. Every facility exposed to flooding risk has established a prevention and business recovery plan in order to prevent any major damage and minimize business interruption in case of flooding. An ambitious new car lots protection plan has been implemented from 2010 to 2013 in order to protect new cars from hail storms, especially in the most exposed locations. For example photovoltaic projects implemented in French and Spanish plants in 2012 and in Busan plant (Korea) in 2013 are part of this plan, which included the implementation of more traditional large scale parking lots protection panels - As Korean construction standards are fitted to face typhoon risk, these constructive prevention measures are not associated with quantifiable additional costs. The measures implemented for the prevention and mitigation of the consequences of flooding and typhoon risks are mostly organizational. It is supervised by a dedicated team in the prevention and protection department. Management costs for the coordination team can be estimated to € 100K yearly. Only hail risk is subject to significant investment costs within the Renault Group so far, with a total €15 million investment plan (protection of new car parking lots) carried out since 2010.

### **Cost of management**

100000

### **Comment**

## **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**

Energy source

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

Use of lower-emission sources of energy

### **Type of financial impact**

Reduced exposure to future fossil fuel price increases

### **Company-specific description**

The Group Renault has a considerable advantages in respect to CO2 emission, directly related with client fuel consumption, because it has been in the Top 3 of the most virtuous European manufacturers in terms of CAFE (CO2 emissions) over the last six years.

### **Time horizon**

Current

### **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)**

412000000

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

<Not Applicable>

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

<Not Applicable>

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

From 2010 to 2018 Renault has reduced the average CO2 emissions of its european sales by 22.6 gCO2/km. This represents around 1 l per 100 km of vehicle consumption reduction i.e. around 210 € of savings per year for the client (French fuel prices) (basis 15000 km/yr ). This is as much value added for Renault clients, or a global € 412 000 000 per year on the european 2018 sales of the Group: 210 X 1920742 = 412346130

### **Strategy to realize opportunity**

Fuel consumption is one of the 10 main reasons for buyers to choose a Renault vehicle, according to surveys conducted of customers on Renault’s main markets. Action: Renault continuously improve the fuel efficiency of ICE vehicles through powertrain downsizing, weight reduction and mild hybridization with the result that in 2018 it was able to offer one of the passenger car ranges with the lowest emissions in Europe, which gave it a significant competitive advantage. Example: Renault is developing new tools and services that enable customers to limit their fuel consumption (embedded tools and eco-driving training) Cost to realize opportunity: - More than 1.5 bln euros are spent yearly by Renault on Research and development, of which 60 to 70% (i.e. around 1 bln euros yearly) are linked to air emissions and fuel efficiency (powertrain efficiency, exhausts treatment technologies, car weight reduction, aerodynamics, alternatively-powered vehicles...). Among these, approx. €100 million p.y. are exclusively dedicaded to Research and Advanced Engineering on car emissions reduction (incl. CO2).

### **Cost to realize opportunity**

100000000

### **Comment**

### **Identifier**

Opp2

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

Direct operations

### **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**

As the European leader of full-electric vehicles (world leader with its partner Nissan) Renault is in excellent position to benefit from the political incentives that most countries are implementing for low-emission and zero-emission vehicles, and the restrictions on the use of polluting vehicles that are being enforced in some city centers and/or in case of pollution peaks.

### **Time horizon**

Current

### **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)**

1722000000

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

<Not Applicable>

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

<Not Applicable>

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

Although the share of BEV (i.e. Battery Electric Vehicle or full EV's) on the global car market is still small, it is growing fastly, buoyed by political incentives and restrictions on the use of polluting vehicles. In Europe, the second-largest “all electric” vehicle market in the world in 2018 (behind China), Renault is the leader with market share of 22.2%. Registrations were up by nearly 36% to 48,297 vehicles (excluding TWIZY). In 2018, sales of electric vehicles accounted for roughly 3% of the Group’s revenue. With a revenue of 57419million€ in 2018 Group Renault, EV sales accounted for 1722 million€.

### **Strategy to realize opportunity**

Action: Renault is actively working on the achievement of this goal with the following priorities : - create the conditions for EVs to reach a significant share of vehicle sales in EU and non-EU countries with CAFE-like regulations : (1) market affordable vehicles with over-300 km autonomy and (2) work with authorities for the development of EV charging infrastructure and (3)facilitate the search of charging station Example:To facilitate the use of electric vehicles, Renault continues to develop innovative connected services, For example, the Z.E. Pass application allows drivers to locate available charging stations and offers a roaming service that gives access to most terminals without the need for multiple subscriptions. In addition, a new service helps to plan long journeys by calculating the total travel time (journey + battery recharge) and gives directions to the most relevant charging station. Cost to realize opportunity:The Electric Vehicle program has represented an investment of more than € 4 bln for Renault since 2006, or an average € 400 Mio p.y. Alone, the manufacturing of the new R240 electric motor of Renault ZOE in the Cléon plant (France) has required a € 50 million investment.

### **Cost to realize opportunity**

400000000

### **Comment**

### **Identifier**

Opp3

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

Direct operations

### **Opportunity type**

Energy source

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

Use of supportive policy incentives

### **Type of financial impact**

Other, please specify (reduce financial losses)

### **Company-specific description**

Specific purchasing costs fixed by governments to promote solar energy have made it possible to implement large photovoltaic projects in 6 French plants, 3 Spanish plants and in our Korean plant, in partnership with financial and technical partners. In addition to its environmental benefits in terms of avoided CO2 emissions, this project has made it possible for Renault to protect large areas of newly built car parks from hail risk, thus saving several million euros which should have been spent otherwise for this hail protection purpose only

### **Time horizon**

Current

### **Likelihood**

Virtually certain

### **Magnitude of impact**

Low

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

Yes, a single figure estimate

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

12000000

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

<Not Applicable>

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

<Not Applicable>

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

The large photovoltaic projects implemented in France, Spain and Korea with partner investors avoided € 12 million euros of investments which would have been required otherwise to achieve an equivalent level of protection of new car parks against hail storms. Besides, in 2013 one of these photovoltaic facilities avoided € 12 million worth damage on newly built cars during a single hail storm which occured near our Batilly plant in France.

### **Strategy to realize opportunity**

Action: The hail risk has a significant financial impact due to the damage caused to new vehicles when they are stored in unprotected zones. In order to reduce the risk of damage caused by hail, between 2010 and 2013, Groupe Renault implemented a widespread plan to cover vehicle storage zones. This work was partly financed by Renault and partly by investors as part of a project to install photovoltaic panels. Example: The solar panels installed on Renault sites throughout the world (in France, Spain and Korea) cover a total surface area of 86 ha. In 2018, the 94 MW of fully renewable electricity that they generate enabled the prevention of more than 28,600 metric tons of CO2 emissions. Cost to realize: This opportunity has been managed through a partnership with financial and technical partners, which support the investment and maintenance costs but benefit from the large surfaces let at their disposal by Renault for the purpose of these photovoltaic projects. These projects have been implemented at no investment cost for Renault as they were financed by partner investors. The indirect operational costs related to the involvement of Renault employees on these projects can be roughly estimated to 1 full-time equivalent engineer during 3 years i.e. approx. € 80 000 per year.

### **Cost to realize opportunity**

80000

### **Comment**

## **C2.5**

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

|  |  |  |
| --- | --- | --- |
|  | **Impact** | **Description** |
| Products and services | Impacted | Impact: the low carbon products identified (electric vehicles) are a major component of Renault’s strategy. The Company is targeting a large-scale roll-out of this type of vehicle. In an electric vehicle market with strong potential, the Alliance is the world leader in electric vehicles and Groupe Renault is the leader in Europe. Renault posted 32,7% growth in electric vehicle sales in the world, with a 27% increase in ZOE registrations . Magnitude: High - The objectives for Group Renault in 2022 is to launch 8 electric models and 12 electrified vehicules representing 20% of our portfolio. Moreover, 3% of groupe Renault 2018 revenue comes from electrical vehicles sales |
| Supply chain and/or value chain | Impacted for some suppliers, facilities, or product lines | Impact: The Group is exposed in a significant way to the risk of a disruption in the supply chain of its production sites, which could lead to interruptions in the manufacturing chain and, ultimately, the delivery of vehicles to dealers and customers. The main drivers of these risks are either internal (due in particular to the interdependence underlying the Group’s industrial network) or external. These risks include the natural disasters Magnitude: Low |
| Adaptation and mitigation activities | Impacted | Impact: Natural disasters (earthquakes, storms, floods, etc.) can affect our activities magnitude: low . The Group has been working for several years to increase its resilience capacity in the face of natural disasters through regular updates of risk and stakes assessments, protection programs for people and property, monitoring and crisis management systems and business continuity plans. |
| Investment in R&D | Impacted | Impact: the developement of low carbon products resulted an increase in research an development for electrical vehicles. Magnitude: High - The Electric Vehicle program has represented an investment of more than € 4 bln for Renault since 2006, or an average € 400 Mio p.y. |
| Operations | Impacted | Impact: the developpement of low carbon product (electrical vehicle) led to changes and aptation of manufacturing plant. Magnitude: High- In July 2018, Group Renault annouced more than one billion euros to accelerate investments for the development and production of electric vehicles in France Four leading production sites for electric vehicles: - Douai: introduction of a new Alliance electric platform - Flins: doubling of ZOE production capacity - Cleon: tripling electric motor production capacity and introduction of the new generation electric motor - Maubeuge: investments for the next generation of Kangoo commercial vehicles, including Kangoo Z.E. |
| Other, please specify | Please select |  |

## **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 | (1) Description of the impact: The increase demand on low carbon products creates opportunities for Renault to increase its Electric vehicle sales. How : to secure business and revenue, Renault enlarge its scope : (a) to new segments other than Zoe and Kangoo segment (leader) to large LCV, low cost (b) to new markets other than Europe (leader) like China and India market very oriented to electric mobility to reduce urban pollution (2) Magnitude of the impact: the impact associated with these risks and opportunities is high due to the expected EV market shares in the next years. Renault enlarged the EV offer with an objective of 20% of portfolio vehicules in 2022. In 2018, sales of electric vehicles accounted for 3% of the Group’s revenue. |
| Operating costs | Impacted | (1) Description of the impact: operating costs are directly impacted by the evolution of regulatory and normative requirements related to environmental performance of industrial processes and, more broadly, greenhouse gas reduction targets defined in the context of the COP 21 agreement and applied to the automotive sector. For example the European Union Emissions Trading System (EU-ETS), to which 13 Group sites are subject impacts directly operating costs. In a context of a sharp increase and volatility in the price of the EU-ETS quotas observed in 2018 and the upward trend expected in the coming years, the Group has decided to go to the market (rather than use its quota reserves or surpluses from certain of its sites) to offset the quota deficits at the European sites with negative balances for 2018, for a total cost of around €2 million. The Group plans to maintain the negative impact of CO2 quotas (Europe and Korea) in the Company’s financial statements at a level of around €2 million per year for the end of the 2013-2020 period, while retaining a quota reserve, with the aim of mitigating the expected upward trend in this financial expense over the 2021-2030 period. The strategy implemented by Groupe Renault aims to minimize the financial costs that these quotas will cause for the Company in the medium and long term, through efforts to reduce the energy consumption of the sites and rigorous forward-looking management, throughout the period 2013-2020, of CO2 emission. (2) Magnitude of the impact: High: the total cost was around €2 million to offset the quota deficits at the European sites in 2018. |
| Capital expenditures / capital allocation | Impacted for some suppliers, facilities, or product lines | (1) Description of the impact: Capital allocation is directly impacted by the evolution of regulatory and normative requirements related to environmental performance of vehicles. The shift in vehicles technologies to answer to these requirements requires Groupe Renault to spend large capital expenditure To limit capital expenditures risk to develop new technologies ( Electric Vehicle ; Hybrid technology ; small gasoline engine…), Renault share allocation within Alliance and strategic cooperations (a) on electric with new Alliance electric platform develop in Japan, planned to be produced in Japan and in France ; (b) on hybrid technology from Mitsubishi recently integrated ; The Alliance and Daimler AG are jointly developing a new direct-injection turbocharged small gasoline engine family which will offer a significant improvement in fuel economy, as well as low emissions. (2) Magnitude of the impact associated with theses risks and opportunities: High - 18 billions euros Research and Development investments 2017 2022 giving access to Alliance technologies ~50 billions euros mainly focus on climate related scope |
| Acquisitions and divestments | Impacted for some suppliers, facilities, or product lines | (1) Description of the impact: Acquisitions and divestments are directly impacted by the transition to a low-carbon economy. For example the Energy sector shows interest for new mobility services especially electric mobility services To secure core position on new mobility business, Renault group acquires effective society like 25% in Jedlix, a smart charging specialized start-up and launches a new smartphone "z.e. smart charge ". Renault launched also a new subsidiary called "Renault energy services" positioned on the energy sector and smart grids, a key element of electric mobility. (2) Magnitude of the impact: Medium - $1 billion corporate alliance venture capital fund to focus on investments in “new mobility” including electrification, autonomous systems, network connectivity and artificial intelligence |
| Access to capital | Impacted | (1) Description of the impact: Access to capital rely in particular on investors and banks. They are increasingly taking into account the environmental performance and reputation by Socially Responsible Investment (SRI). These indicators rates the company not only on its financial performance but also on its attitude toward the environment, respect for social values, societal commitment and corporate governance. Each area analyzed produces a rating based on different criteria (transparency, innovation, communication, environment etc.) and is weighted to obtain a final rating. This serves as a reference for fund managers and investors who wish to invest in companies which are successful in terms of social responsibility. Some of these rating agencies have developed, most of the time in partnership with providers of equity indexes, some specific indexes composed of the top-rated companies for environmental, social or governance (ESG) aspects. Groupe Renault is evaluated each year by the main international extra-financial rating agencies on the basis of its public and declarative information. (2) Magnitude of the impact: the impact associated with these risks and opportunities is low since Groupe Renault has good ESG ratings. For example ISS-Oekom is one of the largest sustainability ratings agencies in the world. It has 1,800 employees, a presence in 13 countries and analyzes over 20,000 companies worldwide. Latest results - January 2019: Groupe Renault ESG performances received a Prime rating. The Group received a score of 1/10 for environment, 2/10 for social and 5/10 for governance (on a scale of 1 to 10, 1 being the highest score). |
| Assets | Impacted | (1) Description of the impact : the transition to a low-carbon economy increases the electric vehicles sales. Production plants needed to be adapted. To secure sustainability of historical French leading production assets, Renault invest more than one billion euros to accelerate the development and production of electric vehicles in France - Douai: introduction of a new Alliance electric platform - Flins: doubling of ZOE production capacity - Cléon: diversification from Diesel activities to electric powertrains - Maubeuge: investments for the next generation of Kangoo commercial vehicles, including Kangoo Z.E. (2) Magnitude: High - 1 billion euros investment |
| Liabilities | Impacted for some suppliers, facilities, or product lines | (1) Description of the impact: physical risks like natural disasters could impact our liabilities worldwide. For more than 25 years, the Company has, in consultation with its insurers, put in place an ambitious and rigorous prevention policy that covers personal safety as well as that of property and business continuity. As a result, most existing industrial plants have achieved a high level of prevention and protection, recognized via the “Highly Protected Risk” (HPR) rating, an international standard awarded by insurance companies that verify the application of prevention and protection rules every year across nearly 60 sites. (2) Magnitude: more than 94% of the insured assets in the industrial, engineering and logistics scope covered by Groupe Renault “property damage and business interruption” insurance program have been awarded the HPR label by the Group’s insurance companies, thus attesting to the results obtained. This high degree of control over risks, which is recognized by insurers, has a direct positive impact on the terms at which the Group is able to buy insurance cover. The reasons for keeping deductibles high include the Group’s consistent policy of prevention, and a desire to make each riskbearing entity more accountable. |
| 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.**

Business strategy: Products: launch 8 100% electric vehicles covering all segments, including 5 new models and 3 renewals between 2017 and 2022. Markets: retain position as leader in Europe and penetrate the market in China. 2018: European market leader in electric vehicles since 2013e VP Strategic Environmental Planning reports and proposes a climate change business strategy to the Group Executive Board (GEC) at least once a year. The main subjects reported to the GEC are:

1) The current status, prospects and risks related to the compliance and product competiveness issues related to the EU CAFE and similar regulations in other countries (China, India, South Korea, Japan, Brazil, Mexico, Turkey, Iran, Saudi Arabia...) in the next 10 years → Emissions from products only

2) The current status and prospects regarding the achievement of the Carbon Footprint KPI (-25% per year from 2010 to 2022) → Emissions from the full life cycle of sold vehicles including all corporate activities and supply chain and use phase emissions from non regulated countries.

The technology plan (development and deployment of fuel efficient or alternative energy technologies throughout the vehicle line-up), industrial and business strategy are built on the basis of detailed data collection :

- Present and foreseen regulation on vehicle CO2 emissions, in Europe and in major Renault markets → Information collected by the Public Affairs Dpt and the Vehicle Regulation & Homologation Dpt through a groupwide network of correspondents.

- Analysis of the current and foreseen competitiveness and regulation-compliance of Renault line-up in Europe and other Renault markets → Information provided by Strategic Environment Planning.

- Non-vehicle CO2 emissions (e.g. manufacturing etc.) → Information provided by the operational functions.

The objectives sets (and continued) for the new plan 2016-2022 in relation with climate-related issues are the following:

All sectors: Reduce the carbon footprint of Groupe Renault vehicles sold worldwide by an average of 25% between 2010 and 2022 – achieved : 2018 -17,9% (compared to 2010)

Aspect of climate change:CO2 emissions from use of vehicles

Emissions reductions target or energy reduction target: Worldwide: reduce thetank-to-wheel CO2 Emissions of PC and LCV ranges by 25% between 2010 and 2022 in order to meet the Group’s carbon footprint reduction objectives and to comply with the regulatory requirements for the relevant markets – achieved 2018: 14,9% reduction (compared to 2010)

Business strategy: Products: launch 8 100% electric vehicles covering all segments, including 5 new models and 3 renewals between 2017 and 2022. Markets: retain position as leader in Europe and penetrate the market in China. 2018: European market leader in electric vehicles since 2013

All segments: Build and report the worldwide “well-to-wheel” CO2 emissions reduction trajectory (based on WLTP) by vehicle, in line with the 2030 and 2050 milestones from the +2°C scenario (2DS) for light duty vehicles published by the International Energy Agency \_ achieved 2018: Target (WTW) approved by Science Based Targets Initiative

Manufacturing: Reduce the carbon and energy intensity of Groupe Renault’s sites in the consolidated environmental scope by an average of 3% annually between 2013 and 2022 (i.e., a 24% reduction over the period) – achieved 2018: Carbon intensity reduced by -22,9% since 2013) Energy intensity reduced by -14,6% since 2013)

Manufacturing: Achieve a renewable energy share (both direct & indirect) of 20% in 2020 for sites within the Groupe Renault consolidated environmental scope- achieved 2018: 18,8%

Logistics: Reduce CO2 emissions linked to logistics activities by an average of 6% between 2016 and 2022 (an average of -1% per year). Achieved 2017: -3% (compared to 2016)

## **C3.1d**

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

|  |  |
| --- | --- |
| **Climate-related scenarios** | **Details** |
| IEA B2DS | (1) How the scenario was identified: For scope 1 & 2, to make a commitment on long-term CO2 emissions in line with SBT initiative, Groupe Renault worked on IEA B2DS scenarios In order to set-up the SDA (sectoral decarbonization approach) tool for scope 1 & 2 of OEM manufacturing, Groupe Renault worked with SBTi on the SDA tool. The IEA ETP B2DS trajectories were used to define the trajectories on scope 1emissions & Scope 2 with electricity decarbonization models of IEA ETP B2DS. The International Energy Agency (IEA) Mobility Model 2DS completed the scenarios for the estimations of volumes. For the scope 3 Groupe Renault used 2 scenarios: - the Scenario BIPE WAPO 2016 Green Constraint until 2030 completed by IEA 2DS post 2030. The BIPE WAPO green constraint 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. - The scenario IEA 2DS. (2) Description of the time horizon(s): the Groupe Renault’ scenarios are based on 2050 term with a 2030 step. This timeframe is necessary in order to develop more efficient process in manufacturing plants and develop renewable energy strategy for scope 1 & 2. This timeframe is also essential for scope 3 in order to develop low carbon projects. 2030 is the date of achievement of the SBT targets. (3) A description of the areas: For scope 1 & 2 all assets were included (Manufacturing plants as well as research & engineering buildings). Purchasing department was also involved in order to work on energy & renewable energy purchases. Product planning worked on the volumes projections. For scope 3: Strategy, product planning, Research and development were involved to define the global strategy on products and volumes. (4)the results: the results of the scenario analysis highlighted that the energy savings program on our plants had significant results and needed to be extended to reduce CO2 emissions from manufacturing on Scope 1 & 2. For scope 3 the scenarios highlighted the strategic opportunity of Renault electric vehicles, and the need to continue the development of low carbon products. Renault strategy to develop EV and electrified vehicles answer to the requirements of the scenario. The two CO2 targets for 2030 submitted to SBTi were both validated. (5) Case study: The scenario analysis on scope 3 enhanced the need to develop low carbon products. In this objective, Renault announced the development of 12 electrified vehicles and 8 100% EV for 2022. |

## **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.**

Renault set public objectives approved by SBT initiative in accordance with 2DS trajectory:

“GROUPE RENAULT commits to reduce scope 1+2 GHG emissions by 60% per car produced by 2030 from a 2012 base-year.

GROUPE RENAULT commits to reduce scope 3 GHG emissions from use of sold products 41% per vehicle kilometer by 2030 from a 2010 base year.”

To achieve these obectives, the main drivers are based on the following intermediate objectives published for the actual plan:

- Reduce the carbon footprint of Groupe Renault vehicles sold worldwide by an average of 25% between 2010 and 2022

- Products: launch 8 100% electric vehicles covering all segments, including 5 new models and 3 renewals between 2017 and 2022. Markets: retain position as leader EV in Europe and penetrate the market in China.

- Worldwide: reduce thet ank-to-wheelCO2 Emissions of PC and LCV rangesby 25% between 2010 and 2022 in order to meet the Group’s carbon footprint reduction objectives and to comply with the regulatory requirements for the relevant markets

- Reduce the carbon and energy intensity of Groupe Renault’s sites in the consolidated environmental scope by an average of 3% annually between 2013 and 2022 (i.e., a 24% reduction over the period)

- Achieve a renewable energy share (both direct & indirect) of 20% for sites within the Groupe Renault consolidated environmental scope in 2020.

- Reduce CO2 emissions linked to logistics activities by an average of 6% between 2016 and 2022 (an average of -1% per year).

## **C4. Targets and performance**

## **C4.1**

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

Intensity target

## **C4.1b**

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

### **Target reference number**

Int 1

### **Scope**

Scope 1+2 (market-based) + 3 (upstream and downstream)

### **% emissions in Scope**

100

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

25

### **Metric**

Metric tons CO2e per vehicle produced\*

### **Base year**

2010

### **Start year**

2011

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

37.48

### **Target year**

2022

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

No, but we are reporting another target that is science-based

### **% of target achieved**

71.46

### **Target status**

Underway

### **Please explain**

In 2011, as part of its Renault 2016 Drive The Change strategic plan, Renault made a unique commitment in the automotive industry to reduce the average carbon footprint of its vehicles sold worldwide by 3% per year between 2010 and 2016, throughout their life-cycle . This objective was exceeded with a total 18,2% reduction at end-2016 (or an average of 3.3% annually for the duration of the plan) thanks to measures implemented to reduce the carbon footprint of vehicles at each stage of their life-cycle. As part of its new Drive the Future 2017-2022 strategic plan, Renault has renewed in 2017 this commitment with the objective of reducing its carbon footprint by 25% over the 2010-2022 period. In 2018, there was a change in life cycle analysis model used to evaluate emissions from materials and 2010 base was revised in order to maintain data comparability from 2010 to 2018. This target doesn't include Avtovaz whose environment performance will be included between 2020-2022 in Renault environment results. SBT submission and validation of scope 1+2 & WTW for scope 3 has happened in 2019 when the SDA tool was published.

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

13

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

24

### **Target reference number**

Int 2

### **Scope**

Scope 3: Use of sold products

### **% emissions in Scope**

100

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

41

### **Metric**

Grams CO2e per kilometer\*

### **Base year**

2010

### **Start year**

2019

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

0.00020655

### **Target year**

2030

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

Yes, this target has been approved as science-based by the Science Based Targets initiative

### **% of target achieved**

39.8

### **Target status**

New

### **Please explain**

On the 28th march 2019, our submitted targets have been approved. The following agreed target wording is: GROUPE RENAULT commits to reduce scope 3 GHG emissions from use of sold products 41% per vehicle kilometer by 2030 from a 2010 base year

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

0

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

-2.8

## **C4.2**

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

## **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 | 10 |  |
| To be implemented\* | 20 | 4227 |
| Implementation commenced\* | 10 | 9190 |
| Implemented\* | 80 | 39528 |
| Not to be implemented | 5 |  |

## **C4.3b**

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

### **Initiative type**

Energy efficiency: Building services

### **Description of initiative**

Lighting

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

4117

### **Scope**

Scope 2 (location-based)

### **Voluntary/Mandatory**

Voluntary

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

4408264

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

0

### **Payback period**

No payback

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

6-10 years

### **Comment**

LED Lighting in leasing

### **Initiative type**

Energy efficiency: Processes

### **Description of initiative**

Combined heat and power

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

16181

### **Scope**

Scope 1

### **Voluntary/Mandatory**

Voluntary

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

3374736

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

100000

### **Payback period**

<1 year

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

6-10 years

### **Comment**

### **Initiative type**

Energy efficiency: Processes

### **Description of initiative**

Heat recovery

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

1642

### **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)**

400000

### **Payback period**

1-3 years

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

11-15 years

### **Comment**

### **Initiative type**

Energy efficiency: Processes

### **Description of initiative**

Other, please specify (insulation pipes, valves, heat exchangers)

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

986

### **Scope**

Scope 1

### **Voluntary/Mandatory**

Voluntary

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

195000

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

260000

### **Payback period**

1-3 years

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

6-10 years

### **Comment**

### **Initiative type**

Energy efficiency: Processes

### **Description of initiative**

Compressed air

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

513

### **Scope**

Scope 2 (location-based)

### **Voluntary/Mandatory**

Voluntary

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

162000

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

210000

### **Payback period**

1-3 years

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

6-10 years

### **Comment**

### **Initiative type**

Energy efficiency: Processes

### **Description of initiative**

Heat recovery

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

452

### **Scope**

Scope 2 (location-based)

### **Voluntary/Mandatory**

Voluntary

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

150000

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

350000

### **Payback period**

1-3 years

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

11-15 years

### **Comment**

### **Initiative type**

Low-carbon energy purchase

### **Description of initiative**

Hydro

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

15636

### **Scope**

Scope 2 (market-based)

### **Voluntary/Mandatory**

Voluntary

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

0

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

0

### **Payback period**

No payback

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

1-2 years

### **Comment**

In 2018, one of our south american plant purchased renewable electricity wich was not the case in 2017

## **C4.3c**

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

|  |  |
| --- | --- |
| **Method** | **Comment** |
| Lower return on investment (ROI) specification | Lower levels of ROI are accepted for emissions reduction activities on a case-by-case basis. |
| Dedicated budget for low-carbon product R&D | Approximately 60% of the Research and advanced engineering budget of the Renault Group is dedicated to low GHG exhaust emissions and low pollutant exhaust emissions of vehicles, as well as alternative types of vehicles such as EV's or PHEV's. |
| Compliance with regulatory requirements/standards | Comply with regulatory requirements and standards is a fundamental prerequisite of the success of Renault. Lots of markets as Europe, China, Korea, Japan, Mexico, India, Saudi Arabia, Iran have introduced CO2 emission thresholds for vehicles. These regulations are becoming more and more stringent and are spreading in other developing markets. These regulations and standards thus drive investments and R and D for vehicle emissions reduction and thereby push innovation. |
| Internal price on carbon | EU-ETS CO2 allowances cost hypotheses are established internally and taken into account in ROI calculations for energy efficiency or emissions reduction investments. They are subject to short- and mid-term projections based on variation models which integrate external factors such as the evolution of energy market and EU-ETS regulations. |
| Financial optimization calculations | Projections of future energy prices are also taken into account in ROI calculations for energy-related investments. These projections are based on models which take into account a series of external factors such as regulatory constraints, the international context (shale gas, geopolitical situation in Russia, Irak, Libya or other oil or gas exporting countries), information and projections from international sources such as Eurostat (expected inflation...) or the International Energy Agency. |
| Internal price on carbon | An internal price has been set for vehicle CO2 emissions reduction (in € per gCO2/km). This price is used as a reference to validate or discard CO2 emissions reduction solutions in future vehicle projects. The amount is based on the 95 €/g CO2 of the 2021 CAFE regulation. |

## **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**

Range of 100% Electric Vehicles in total group Renault sales

### **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 (sales of 100% Electric vehicles)

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

3

### **Comment**

The calculation above is the part of revenue due to electric vehicles sales in total world wide sales. How emissions are avoided by a third party : Electric vehicle don't emit any direct exhaust gaz in use phase. Emissions from scope 1 of electric vehicles owners are equal to zero. Estimated emissions savings from avoided emissions: in comparison with the CAFE (Corporate Average Fuel Economy) of 2018 for all car manufacturers sales in UE VP of 119,4 g CO2/km, the sales of 2018 Renault EV avoided 17,91 T CO2 (use of vehicle for 150 000 km during 10 years)

## **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 2010

### **Base year end**

décembre 31 2010

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

692487

### **Comment**

In 2011, as part of its Renault 2016 Drive The Change strategic plan, Renault made a unique commitment in the automotive industry to reduce the average carbon footprint of its vehicles sold worldwide by 3% per year between 2010 and 2016, throughout their life-cycle. This objective was exceeded with a total 18.2% reduction at end-2016 (or an average of 3.3% annually for the duration of the plan) thanks to measures implemented to reduce the carbon footprint of vehicles at each stage of their life-cycle. As part of its new Drive the Future 2017-2022 strategic plan, Renault has renewed this commitment with the objective of reducing its carbon footprint by 25% over the 2010-2022 period.

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

### **Base year start**

janvier 1 2010

### **Base year end**

décembre 31 2010

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

595130

### **Comment**

In 2011, as part of its Renault 2016 Drive The Change strategic plan, Renault made a unique commitment in the automotive industry to reduce the average carbon footprint of its vehicles sold worldwide by 3% per year between 2010 and 2016, throughout their life-cycle. This objective was exceeded with a total 18.2% reduction at end-2016 (or an average of 3.3% annually for the duration of the plan) thanks to measures implemented to reduce the carbon footprint of vehicles at each stage of their life-cycle. As part of its new Drive the Future 2017-2022 strategic plan, Renault has renewed this commitment with the objective of reducing its carbon footprint by 25% over the 2010-2022 period.

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

### **Base year start**

janvier 1 2010

### **Base year end**

décembre 31 2010

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

595130

### **Comment**

In 2011, as part of its Renault 2016 Drive The Change strategic plan, Renault made a unique commitment in the automotive industry to reduce the average carbon footprint of its vehicles sold worldwide by 3% per year between 2010 and 2016, throughout their life-cycle. This objective was exceeded with a total 18.2% reduction at end-2016 (or an average of 3.3% annually for the duration of the plan) thanks to measures implemented to reduce the carbon footprint of vehicles at each stage of their life-cycle. As part of its new Drive the Future 2017-2022 strategic plan, Renault has renewed this commitment with the objective of reducing its carbon footprint by 25% over the 2010-2022 period.

## **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)**

663344

### **Start date**

janvier 1 2018

### **End date**

décembre 31 2018

### **Comment**

## **C6.2**

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

### **Row 1**

### **​Scope 2, location-based​**

We are reporting a Scope 2, location-based figure

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

We are reporting a Scope 2, market-based figure

### **Comment**

We're reporting both approaches (Market-base and location based). Indeed, 1 of our factories (Tanger) uses and produces renewable energy another uses renewable energy.

## **C6.3**

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

### **Reporting year**

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

663271

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

553366

### **Start date**

janvier 1 2018

### **End date**

décembre 31 2018

### **Comment**

## **C6.4**

### **(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

Yes

## **C6.4a**

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

### **Source**

Refrigerant gas leakage from air conditioning facilities outside the European Union

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

Emissions are not relevant

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

No emissions from this source

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

No emissions from this source

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

Refrigerant gas leakage from air conditioning are reported for facilities within the European Union but not for those outside the European Union due to the difficulty to obtain reliable data in countries where these emissions are not submitted to any legal reporting obligation. However, these emissions are not considered relevant as they represent less than 1% of the group's global GHG emissions.

## **C6.5**

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

### **Purchased goods and services**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

14173433

### **Emissions calculation methodology**

The CO2 emissions related to the materials and spare parts used to manufacture our vehicules are calculated from “Cradle to gate” emissions. It means, it includes the extraction of materials and fuels, to the transformation of materials into parts, and to the logistics between the extraction and the tier-1 supplier site. The calculation is based on the Life cycle analysis of our vehicules. The calculations are made thanks to Thinkstep GaBi LCA database (Emissions from the production of materials, spare parts and required processing).

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

1

### **Explanation**

The calculation includes real data from suppliers when we obtain the information.

### **Capital goods**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

1567598

### **Emissions calculation methodology**

Emissions related to the purchase of capital goods are estimated by multiplying annual tangible investments with Defra UK emission factors per sales volume. As mentioned in our 2018 Registration Document, tangible investments represented € 2,557 millions and were mainly focused on the development, adaptation and modernization of industrial facilities i.e. the purchase of machinery and Equipment. So this amount of investments was converted in GBP based on an average conversion rate of 1,14 EUR/GBP in 2017, and multiplied by the latest available UK-39 Machinery & Equipment emission factor from 2012 Guidelines to Defra, i.e. the 2009 value (0.7 kg CO2e / GBP) which can be considered as conservative given the downward trend observed during the previous years. Spend-based method If the supplier-specific method, hybrid method, and average-data method are not feasible (e.g., due to data limitations), companies should apply the average spend-based method by collecting data on the economic value of purchased goods and services and multiplying them by the relevant EEIO emission factors. Refer to the “Secondary data sources” in the Introduction for further guidance on EEIO data. Companies may use a combination of the material-based method and spend-based method by using both processbased and EEIO data for various purchased goods and services. Activity data needed • Amount spent on purchased goods or services, by product type, using market values (e.g., dollars) • Where applicable, inflation data to convert market values between the year of the EEIO emissions factors and the year of the activity data.

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

0

### **Explanation**

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

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

159351

### **Emissions calculation methodology**

(1) The extraction, production, and transportation of fuels consumed by Renault (2) Energy losses during the Transport and distribution (TandD) of the electricity consumed by Renault. The calculation is based on the energy consumptions collected from Renault plants and facilities. (1) For each fuel (natural gas, gasoline, gasoil and LPG), GHG emissions from production are calculated by multiplying the total quantity consumed over the year in Renault facilities by the corresponding emission factor. The emission factors are from JEC V5(JEC (JRC-Eucar-Concawe) and Bilan Carbone® ADEME (ADEME is the French government Agency for the Environment and the Management of Energy). (2) TandD loses of electricity are calculated by multiplying the total electricity consumption of each Renault sites in kWh with % TandD loses of electricity for the representative country and most up-to-date emission factors in gCO2eq per kWh of electricity for the same country coming from IEA database.

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

0

### **Explanation**

These emissions are not considered relevant since they represent only 0.2% of the Renault Group's Scope 3 emissions but have nevertheless been calculated

### **Upstream transportation and distribution**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

526718

### **Emissions calculation methodology**

(Production Parts - Upstream logistics) Scope of emissions: - Inbound transportation between Renault’s Tier 1 suppliers and Renault facilities, starting when the products and materials leave the gate of the Renault suppliers or Renault sites and ends at manufacturing plants entry. - Upstream logistics CO2 emissions are quantified for all plants. - All transportation mode (air, water, train and road transportation) - Geographical perimeter : Worldwide. The CO2 emissions are calculated on a monthly basis using a Volume x Distance-based method : By matching the volumes transported (m3) and the distance traveled (km) we estimate m3.km transported by truck/train/ship/Air transport including packaging returns (volume of goods transported X distance traveled). We calculate the CO2eq emissions by multiplying the m3.km transported by the appropriate emissions factor for each mode. For road transport the transported volume is converted into a number of km.trucks by applying the load factor, and multiplied by an average fuel consumption in L/100 km per truck. For other modes French ADEME CO2 emission factors are used.

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

0

### **Explanation**

### **Waste generated in operations**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

1121258

### **Emissions calculation methodology**

Scope of emissions : Emissions from the treatment (disposal, incineration, recycling) of waste generated in all Renault operated facilities worldwide (same geographical and operational perimeter as scope 1 emissions). Following the recommendation of the GHG Protocol Technical Guidance for Calculating Scope 3 Emissions, avoided emissions linked to energy recovery during incineration and recycling of materials (avoidance of virgin material production) are NOT deducted. into the calculation. Calculation method : Wastetype specific method Step 1 - Annual collection of data about waste production and waste treatment method. The waste data collection is part of the standard Renault environmental data reporting process. Step 2 - Available emissions factors for different waste treatment processes are collected from the ADEME Base Carbone (www.basecarbone.fr). Emissions factors include the emissions from waste transportation. Emission factors are not country specific. Step 3 - Wastes are classified according to their characteristics (hazardous / non hazardous ; material composition) and their treatment (disposal, incineration, recycling) to fit the emission factors categories. Step 4 - For each waste/treatment category, the total amount of waste produced worldwide is multiplied by the corresponding emission factor.

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

0

### **Explanation**

### **Business travel**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

78821

### **Emissions calculation methodology**

Business Travel : A travel company (Carlson Wagon Lit since Nov. 2012) manages the business travels of Renault’s employees and reports travel distances. Scope of emissions : The reporting perimeter covers the Air and train travels of all Renault employees worldwide (except travels of employees from Turkish, Algeria, and South Korean subsidiaries as they have a dedicated travel agency). The reported data is calculated as follows: The CO2 emission is estimated basing on km travelled, cabin class, uplift factor (constant =109%) :CO2 Emission = MILES \* 1.609 \* UPLIFT \* FACTOR CO2e Calculations should be based on the current, 2011 (July), guidelines produced by DEFRA/DECC’s GHG Conversion Factors, including factoring of actual distance flown. The method uses the airport locations; the emissions are based upon the actual distance flown. The following factors are taken into account: 1. The total distance is calculated using the 2 specified airport locations (based on the ‘Great Circle’ method of calculating distances, where the distance is the shortest between any two points on the surface of a sphere). 2. The distance is multiplied by 1.09 to allow for takeoff, circling and non-direct routes. This is known as the uplift factor. 3. The class of flight chosen which determines the emission factor to use for that distance; economy/premium economy / business / first. For shorter flights class is not applicable. The above choices, determine the emission factor to use in our calculation. 4. The total emissions of carbon dioxide equivalent (C02e), (which includes carbon dioxide, methane (CH4) and nitrous oxide (N2O), converted to carbon dioxide equivalents and summed) per passenger kilometre (these are the Air Passenger Transport Conversion Factors, provided by DEFRA) · Domestic flights are inferior to 785km (based on the midpoint that DEFRA have used for calculating ‘domestic’ and ‘short international’ factors, i.e. 463km and 1108km). · Short international between 785 km and 3,700 km. · Long international are more than 3,700 km. Exclusion of travel by cars: Fuel consumption of vehicles belonging to the company or those for which it is responsible (management vehicles, service or taxi pool vehicles, on-site transportation) because it is included in scope 1, not scope 3.

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

100

### **Explanation**

Although they represent only 0.1% of the Renault Group's global scope 3 emissions and are therefore deemed not relevant from the quantitative point of view, emissions from business travel are accounted for and included in our Carbon Footprint for their management value as they are directly impacted by the company's travel Policy and the employee's attitude towards business travel. The information comes from our travel supplier

### **Employee commuting**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

51964

### **Emissions calculation methodology**

The employee commuting includes travel for employees between their home and primary workplace. Scope of emissions : Renault SAS (France) employees only. Calculation method : - Step 1: We collect the information about the distance between home and workplace and commuting mode (vehicle or public transportation) from all employees of French sites - Step 2: We define the emission factor for each commuting mode. For public transportation the EF is provided by French ADEME (Guide sur les facteurs d’émission). Although local trains and underground accounts for a significant share of public transportation use, we use the emission factors for bus transportation (The split between bus and train is not available. This is a conservative estimate). For personal cars, we consider that most Renault employee drive 6-years old Renault cars in average. Consequently the EF is the average CO2 emissions of Renault cars (CAFE) 6 years ahead of the considered accounting year. -Step 3: We multiply activity data (person-kilometers by mode of emissions we multiply the number of employees for each site by related workdays. - Step 4: To include the effects of teleworking, we deduce the avoided km from the total. On the opposite, carsharing and car-poling effects are not accounted for.

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

0

### **Explanation**

Like the emissions from business travel, those related to employee commuting are accounted for and included in our Carbon Footprint for their management value as they are directly impacted by the company's Policy and the employee's attitude towards commuting.

### **Upstream leased assets**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

619

### **Emissions calculation methodology**

The upstream leased assets which are not already included into the Scope 1 and Scope 2 emissions of the Renault Group consist only of a few office activities as well as IT server locations. The emissions of the main of these locations have been calculated and represented 619 tons CO2 in 2016 i.e. less than 0,002% only of the Group's global scope 3 emissions. These emissions can therefore be considered as not relevant.

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

0

### **Explanation**

### **Downstream transportation and distribution**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

554838

### **Emissions calculation methodology**

Transportation and Distribution of sold products (Vehicles logistics only - Excluding the logistics of parts and accessories) Scope of emissions : - All activities starting when the vehicles leave the gate of the Renault facility and ending when the dealers receive the vehicles. - Geographical perimeter: Worldwide. -Vehicle logistics only. Calculation method : Distance-based method. Step 1: Extraction of data from the logistics IT systems. For each logistic leg (departure and arrival point): extraction of the transported vehicle models, load factors, transport modes and distances in km and extraction of the total quantity of vehicles transported on each logistic leg. Step 2: Conversion of physical data into vehicle kilometers transported by truck/train/ship (number of vehicles transported X distance traveled). Step 3: Calculation of emissions - For road the km.vehicles are converted into a number of km.trucks by applying the load factor (number of cars on a truck) which vary according to the model, and the traveled countries. CO2 emissions are calculated by using consumption factors (in L/100 km per truck), empty returning capacities and the corresponding fuel CO2eq emission factor. - For train, barge and ships, km.vehicles are converted into km.tonnes by considering the weight of cars. CO2eq emissions are calculated by multiplying these km.tonnes by CO2 conversion rates (which includes empty returning capacities corresponding to transported modes).

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

0

### **Explanation**

### **Processing of sold products**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

1328

### **Emissions calculation methodology**

Renault products which are processed further or re-processed are for 2 types: - Vehicles dedicated to the transport of people with reduced mobility -Second life parts The two activities are already integrated in scope 1 and 2 as other Renault plants. Through Renault Tech, Renault is the only European manufacturer engaged in the design, manufacture and marketing of vehicles dedicated to the transport of people with reduced mobility. Through Choisy le Roi plant, Renault sells remanufactured motors and parts. These emission figures are already integrated in scope 1 and 2.

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

100

### **Explanation**

Emissions are already integrated in scope 1 and 2 as the process of modifying vehicles is integrated in Renault plants.

### **Use of sold products**

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

84001034

### **Emissions calculation methodology**

The reported value is calculated as follows: Well to Tank: - 1: We collect the fuel consumption of each vehicle (homologated data or estimated data when not regulated) and the worldwide sales of each vehicle. - 2: For each fuel (diesel, gasoline or electricity), we collect emission factors from JEC (Joint Research Center of the European Commission / Eucar / Concawe) - 3: For each vehicle, we multiply its consumption by its annual worldwide sales and the emission factor of its fuel. - 4: We multiply the annual emissions by 150 000 km (estimated life time of vehicles) to obtain the total well to tank emissions over the use phase. Remark: The emissions factors for biofuel E100 (100% ethanol) is negative (carbon sink). B7 (biodiesel in Europe) and E26 (bio-gasoline) have lower emission factors than regular diesel and gasoline. The E85 emission factor is the same as for regular gasoline. For electricity (electric vehicles fuel), the emission factor depends on the production mix of the country where the vehicle was sold. Tank to Wheel: - 1: We collect the CO2 emissions of each vehicle (g CO2 / km homologated data or estimated data when not regulated) and the worldwide sales of each vehicle. - 2: For each vehicle, we multiply its emissions by its annual worldwide sales. (result = annual emissions of sold vehicles) - 3: We multiply the annual emissions by 150 000 km (estimated life time of vehicles) to obtain the total use phase emissions. Note: Use emissions in the current fiscal year could be calculated from the total quantity of fuel/electricity consumed by Renault products sold in previous years. However, given the difficulty of determining how many Renault products sold in previous years are still in use, Renault uses the total quantity of fuel/electricity consumed while in use over the lifetime (10 years, 150 000 km) of Renault products sold in the current fiscal year as an indicator for CO2 emissions during use.

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

0

### **Explanation**

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

### **Evaluation status**

Relevant, calculated

### **Metric tonnes CO2e**

1901458

### **Emissions calculation methodology**

Scope of emissions: We consider disposal/treatment of Renault cars sold by Renault at the end of their life in this scope. Calculation method: Renault uses a LCA database integrated in GaBi to calculate the emissions coming from vehicles end-of-life treatments. Emissions are calculated for 32 pivot vehicles representative of Renault range and sales on the basis of their materials composition (see Purchased Goods and Services section). Note : the emissions avoided by the recycled materials generated through the ELV recycling process are not accounted here, otherwise the overall emissions would be negative for this source since they are superior to the emissions related to the end-of-life treatment/recycling of vehicles.

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

1

### **Explanation**

datas on End of life for some parts comes from our suppliers

### **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**

Emissions from downstream leased assets (vehicles leased to clients) are accounted for in the "use of sold products" category since these vehicles are accounted for in the yearly vehicle sales figures (as well as production figures). These emissions are reported in the scope 3 " use of sold products"

### **Franchises**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

313429

### **Emissions calculation methodology**

Renault dealers network, especially outside Europe, includes franchised companies or individuals. The number and dispersion (thousands) of retailers make it very difficult to collect accurate data on their GHG emissions, so these emissions are estimated through the rule of three on the basis of the CO2 emissions of the Renault-owned RRG network per new vehicle sold.

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

10

### **Explanation**

Direct emission obtained from Renault owned network account for 10% of sold vehicles.

### **Investments**

### **Evaluation status**

Not relevant, calculated

### **Metric tonnes CO2e**

1485153

### **Emissions calculation methodology**

Companies in which Renault owns a majority equity share are included in scope 1 and 2 emissions and therefore not reported in the "investments" category. The emissions of the companies in which Renault owns a minority equity share are accounted for by the equity method, based on the scope 1 and 2 emissions published in their statutory or sustainability report. This concerns Nissan Motor (43,4% equity share) and Daimler AG (1,55%). Avtovaz (Russia), in which Renault held a 61,09% equity share by End-2018, did not disclose any certified CO2 emissions figure, and was therefore not accounted for in the investment emissions category in 2018. So Renault "investment emissions" = Nissan scope1+2 emissions x 43,4 % + Daimler AG scope 1+2 emissions x 1.55%.

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

100

### **Explanation**

Data comes from certified emission figures from companies in which Renault own a minority equity share

### **Other (upstream)**

### **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**

No other upstream co2 emissions

### **Other (downstream)**

### **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**

No other downstream co2 emissions

## **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)**

36233

### **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**

0.00002119

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

1216711

### **Metric denominator**

unit total revenue

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

57419000000

### **Scope 2 figure used**

Market-based

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

3.08

### **Direction of change**

Decreased

### **Reason for change**

Decrease of Scope 1+ 2 emissions due to investment in energy efficiency and new low carbon electricity supply contracts,

## **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** |
| HFCs | 42532 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| CO2 | 620292 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| CH4 | 267 | IPCC Fifth Assessment Report (AR5 – 100 year) |
| N2O | 253 | IPCC Fifth Assessment Report (AR5 – 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 | 300545 |
| Spain | 100854 |
| Portugal | 2371 |
| Other, please specify (rest of the world) | 259574 |

## **C7.3**

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

By activity

## **C7.3c**

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

|  |  |
| --- | --- |
| **Activity** | **Scope 1 emissions (metric tons CO2e)** |
| Mixed manufacturing plants | 172300 |
| Powertrain plants | 72005 |
| Logistics, Engineering and tertiary activities | 63569 |
| Other activities | 355470 |

## **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 | 599775 | <Not Applicable> | Logistics, Engineering and tertiary sites sites excluded |
| 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 | 69156 | 69156 | 1286166 | 0 |
| Spain | 119400 | 119400 | 479986 | 0 |
| Other, please specify (rest of the world) | 455923 | 346018 | 1285805 | 272101 |
| Portugal | 18791 | 18791 | 65543 | 0 |

## **C7.6**

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

By activity

## **C7.6c**

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

|  |  |  |
| --- | --- | --- |
| **Activity** | **Scope 2, location-based emissions (metric tons CO2e)** | **Scope 2, market-based emissions (metric tons CO2e)** |
| Powertrain plants | 96804 | 96804 |
| Mixed manufacturing plants | 175422 | 159297 |
| Logistics, Engineering and tertiary sites sites | 33106 | 33106 |
| Other activities | 357938 | 264159 |

## **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 | 630164 | 520260 | logistic, engineering and tertiary excluded |
| Transport services activities | <Not Applicable> | <Not Applicable> | <Not Applicable> |

## **C-TO7.8**

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

### **Activity**

Light Duty Vehicles (LDV)

### **Emissions intensity figure**

0.000104

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

84001034

### **Metric denominator**

p.km

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

802067062500

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

-3

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

3240675

### **Vehicle lifetime in years**

10

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

15000

### **Load factor**

1,65 Origin: represents the average number of passengers per vehicle in Europe (Adra, Michaux and André, 2005 quoted in SECTORAL DECARBONIZATION APPROACH (SDA): A method for setting corporate emission reduction targets in line with climate science. Version 1 | MAY 2015

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

Between 2017 and 2018 CDP report on this question, changes occurred on methodology: Well To Wheel result replaced Tank To Wheel result to be consistent with data on 6.5 question. Results in 2018 : decrease of CO2 emissions of Renault vehicles sold in 2018 Methodology used: official CO2 homologation of vehicles

## **C7.9**

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

Decreased

## **C7.9a**

### **(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Change in emissions (metric tons CO2e)** | **Direction of change** | **Emissions value (percentage)** | **Please explain calculation** |
| Change in renewable energy consumption | 15636 | Decreased | 1.22 | In 2018, one of our south american plant purchased renewable electricity from hydropower. So the decrease of emissions between the two years due to the augmentation of renewable energy is calculated as follow: emissions reduction due to renewable electricity purchased in 2018 minus emissions reduction due to renewable electricity purchased in 2017 (109 904 - 94 268): 15636 Teq. The emissions value (percentage) is the change in emission (col 2: 15536) divided by sum scope 1 + 2 previous year (1284968,96) X 100=1.22 |
| Other emissions reduction activities | 23892 | Decreased | 1.96 | The projects of 2018 energy saving campaign (listed in C.4.3.b without changes in renewable energy consumption) are estimated to have obtained an annual CO2e savings (metric tonnes CO2e) of 23892 (col2) The emission value calculation is the change in emission 23892 (col2) divided by (scope 1+2 previous year (1284968,96)) \*100 = 1,86 |
| Divestment | 0 | No change | 0 | No change |
| Acquisitions | 0 | No change | 0 | No change |
| Mergers | 0 | No change | 0 | No change |
| Change in output | 17896 | Decreased | 1.4 | The production volume of vehicles decreased by 2,09% from 2017 to 2018. However we consider that the "volume effect" on energy consumption represents only 2/3 of the output change, since approximately 1/3 of the energy consumption of a car assembly plant (heating, lighting...) are not directly proportional to production output. Hence, 2/3 \* 2,09% = 1,9% decrease of energy consumption and CO2 emissions due to the change in output. The change of emission is equal to 1,9% of scope 1 & 2 previous year : 0,019 \* 1284968 = 17896 Teq. The percentage calculation is the change in emission (17896 col 2) divided by scope 1&2 previous year : (17896/1284968 )\* 100 = 1,4 |
| Change in methodology | 0 | Please select | 0 | No change |
| Change in boundary | 7539 | Increased | 0.59 | 2 new foundries started activities in 2018. These new foundries are hosted on existing facilities. The change in emissions is calculated by the difference of energy consumption of the 2 plants between 2017 and 2018 (36115,8 ) multiplied by the energy intensity of Renault in 2018 (0,2087)= 7539 The emissions value (percentage) is the result (7539 ) divided by total 2017 scope 1 +2 (1284968,96)\*100 = 0,59 |
| Change in physical operating conditions | 0 | No change | 0 | No change |
| Unidentified | 0 | No change | 0 | No change |
| Other | 1780 | Increased | 0.14 | The vehicles production decreased in low carbon electricity countries. The Change in emissions is calculated as follow: (% of electricity consumption in 2017 in France- % of electricity consumption in 2018 in France) \* (total electricity consumed in 2018)\* (electricity intensity of Renault manufacturing plants-electricity intensity in France). The emissions value (percentage) is the result (1780) divided by total 2017 scope 1 +2 (1284968)=0,14 |

## **C7.9b**

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

Market-based

## **C8. Energy**

## **C8.1**

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

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

## **C8.2**

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

|  |  |
| --- | --- |
|  | **Indicate whether your organization undertakes this energy-related activity** |
| Consumption of fuel (excluding feedstocks) | Yes |
| Consumption of purchased or acquired electricity | Yes |
| Consumption of purchased or acquired heat | Yes |
| Consumption of purchased or acquired steam | Yes |
| Consumption of purchased or acquired cooling | 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) | 8736 | 2711248 | 2719983 |
| Consumption of purchased or acquired electricity | <Not Applicable> | 1000362 | 1950090 | 2950452 |
| Consumption of purchased or acquired heat | <Not Applicable> | 85725 | 40204 | 125929 |
| Consumption of purchased or acquired steam | <Not Applicable> | 0 | 32383 | 32383 |
| 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> | 1094823 | 4733925 | 5828748 |

## **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 | Yes |
| 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 | No |

## **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**

2651716

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

0

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

2651716

### **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**

<Not Applicable>

### **Comment**

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

Liquefied Petroleum Gas (LPG)

### **Heating value**

LHV (lower heating value)

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

56843

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

0

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

56843

### **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**

<Not Applicable>

### **Comment**

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

Fuel Oil Number 2

### **Heating value**

LHV (lower heating value)

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

2689

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

2689

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

0

### **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**

<Not Applicable>

### **Comment**

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

Wood Waste

### **Heating value**

LHV (lower heating value)

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

8736

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

0

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

8736

### **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**

<Not Applicable>

### **Comment**

## **C8.2d**

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

### **Fuel Oil Number 2**

### **Emission factor**

78.243

### **Unit**

kg CO2e per GJ

### **Emission factor source**

French law : Decree oct. 31, 2012

### **Comment**

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

### **Emission factor**

64.0545

### **Unit**

kg CO2e per GJ

### **Emission factor source**

French law : Decree oct. 31, 2012

### **Comment**

### **Natural Gas**

### **Emission factor**

57.0545

### **Unit**

kg CO2e per GJ

### **Emission factor source**

French law : Decree oct. 31, 2012

### **Comment**

### **Wood Waste**

### **Emission factor**

0.297

### **Unit**

kg CO2e per MWh

### **Emission factor source**

Emission factors of the Carbon Base ® ADEME - consultation July 2019

### **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 | 97108 | 2689 | 94420 | 0 |
| Heat | 2717295 | 2717295 | 8736 | 8736 |
| Steam | 0 | 0 | 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**

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

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

Wind

Hydropower

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

Other, please specify (North africa and south america)

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

272101

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

0

### **Comment**

green electricity supply for some Renault plants

## **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**

1216711

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

3249209

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

-3

### **Please explain**

This figure is published in Renault registration document. It is included in the main environmental objective of Renault on CO2. In 2018 this metric decrease of 3% due to all projects on energy consumption achieved in 2018 & increase of renewable share

## **C9. Additional metrics**

## **C9.1**

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

## **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**

Battery electric vehicle (BEV)

### **Metric figure**

50872

### **Metric unit**

Units

### **Explanation**

Electric vehicles are a major component of Renault’s strategy. The Company is targeting a large-scale roll-out of this type of vehicle, which provides a real solution to atmospheric pollution in urban areas given their absence of pollutant emissions at tail pipe during use . They can also significantly reduce the greenhouse gas emissions associated with transportation. In 2018, the Group recorded a 33% increase of EV sales in comparison with 2017 in its worldwide sales of electric vehicles, to 50872 units.

## **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 2017

### **Investment end date**

décembre 31 2022

### **Investment area**

R&D

### **Technology area**

Electrification

### **Investment maturity**

Large scale commercial deployment

### **Investment figure**

18000000000

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

41-60%

### **Please explain**

18 billions euros Rand D investments 2017 2022 giving access to Alliance technologies mainly focus on climate related scope: • Additional synergies expected from electrification, connectivity and autonomous technologies • 12 pure electric models to be launched, utilizing common EV platforms and components • 40 vehicles to be launched with autonomous drive (AD) technology • To become an operator of robo-vehicle ride-hailing services

## **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**

[assurance reasonable.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/mYXCYR8Ky0uiMXu294i3Ng/assurancereasonable.pdf)

### **Page/ section reference**

extracts from Renault groupe registration document 2018: - First graph on P1: GREENHOUSE GAS EMISSIONS (√) with the note below (1) Indicators audited by the independent third party at a reasonable level of assurance: total (scope 1 & 2) greenhouse gas emissions for financial year (√) 2018. - end of P2: Conclusion and signature of the assurance

### **Relevant standard**

ISAE3000

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

100

### **Scope**

Scope 2 market-based

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

Annual process

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

Complete

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

Reasonable assurance

### **Attach the statement**

[assurance reasonable.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/mYXCYR8Ky0uiMXu294i3Ng/assurancereasonable.pdf)

### **Page/ section reference**

extracts from Renault groupe registration document 2018: - First graph on P1: GREENHOUSE GAS EMISSIONS (√) with the note below (1) Indicators audited by the independent third party at a reasonable level of assurance: total (scope 1 & 2) greenhouse gas emissions for financial year (√) 2018. - end of P2: Conclusion and signature of the 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**

[Assurance Scope 3.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/TpxJRVNWj0K-vBNQURDUZw/AssuranceScope3.pdf)

### **Page/section reference**

End of p1: (3) Qualitative information; Vehicle carbon footprint

### **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 | Year on year emissions intensity figure | ISAE3000 | Energy intensity is verified as other industrial indicators during verification of registration document. P1 energy consumption for Renault manufacturing plant  [other verifications.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/xx3roa1aL0yWgGsSHBhi5g/otherverifications.pdf) |
| C6. Emissions data | Other, please specify (Fuel-and-energy-related activities: all fuels consumed on Renault plants are verified) | ISAE3000 | P2 of Renault registratio 2018 document explains all Indicators audited by the independent third party KPMG at a reasonable level of assurance for 2018 (excluding VOC in g/m2 and foundry waste)  [other verifications.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/xx3roa1aL0yWgGsSHBhi5g/otherverifications.pdf) |
| C6. Emissions data | Other, please specify (Industrial wastes) | ISAE3000 | P2 of Renault registratio 2018 document explains all Indicators audited by the independent third party KPMG at a reasonable level of assurance for 2018 (excluding VOC in g/m2 and foundry waste)  [other verifications.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/xx3roa1aL0yWgGsSHBhi5g/otherverifications.pdf) |
| C6. Emissions data | Renewable energy products | ISAE3000 | The energy consumption and renewable energy from contracts are verified. p1 attached table: DISTRIBUTION OF ENERGY CONSUMPTION BY TYPE OF ENERGY  [assurance renewable energy.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/XtILsFBTsU-u9YPpY6MVTQ/assurancerenewableenergy.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**

54

### **Period start date**

janvier 1 2018

### **Period end date**

décembre 31 2018

### **Allowances allocated**

658781

### **Allowances purchased**

43998

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

393202

### **Details of ownership**

Facilities we own and operate

### **Comment**

Groupe Renault own plants

## **C11.1d**

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

Renault's strategy for complying with the EU-ETS scheme includes :

1) The implementation of energy savings and GHG emissions reduction activities

Example: implementation of painting process energy recovery in Pitesti plant: the project was approved thanks in particular to the incorporation of EU-ETS quota price in the return of Investment calculation.

2) Forecasting future emissions of sites under ETS and anticipate the cost of allowances purchase in ETS phase 3 (2013-2020). The emissions and costs forecasts allow for an arbitration at Renault group level between short term cash optimization and the risk of allowances shortage in the mid-term.

3) The generation of additional carbon credits, through the Clean Development Mechanism project from Tangier plant (CDM project 9139), as soon as the price of carbon credits will justify its activation (see explanation below).

Complementary explanation on point 3) : Renault initiated a Clean Development Mechanism project for its Tangiers plant (reduction of direct emissions through energy efficiency improvement and switching from natural gas to biomass for heat production). The project was validated and officially registered by the UNFCCC in 2012 under the following reference "Project 9139 : Heat recovery and fuel switch from natural gas to biomass residues implemented at Renault Tanger Méditerranée (RTM) plant – Melloussa, Morocco". The carbon credits were to be originated between 2015 and 2023, however at the current rate of EU-ETS carbon credits the cost of the process required to generate them (certification of the avoided CO2 emissions...) is equivalent or even higher than their estimated global value, hence the activation of this process remains suspended so far to the evolution of the rate of EU-ETS carbon credits. All data regarding this project are available on the UNFCCC website

## **C11.2**

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

No

## **C11.3**

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

Yes

## **C11.3a**

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

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

Drive energy efficiency

Drive low-carbon investment

### **GHG Scope**

Scope 1

Scope 2

Scope 3

### **Application**

Renault group uses an internal price for 3 distinct application 1) EU-ETS CO2 allowances cost hypotheses are established internally and taken into account in ROI (Return On Investment) calculations for energy efficiency or emissions reduction investments in manufacturing plants. They are subject to short- and mid-term projections based on variation models which integrate external factors such as the evolution of energy market and EU-ETS regulations. For example, this internal carbon price was integrated in the decision making of the Pitesti paintshop renovation described in C.4.3.b for which investment required was 310000€. 2) An internal price has been set for vehicle CO2 emissions reduction (95 € per gCO2). This price is used as a reference to validate or discard CO2 emissions reduction solutions in future vehicle projects. 3 )Client value has also integrated internal carbon price taking into account carbon tax (actual consumption x fuel cost + fuel carbon taxes + bonus / penalty

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

450

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

The approache to pricing used is the differentiated pricing: the price varies for scope 1 and 2 (application 1 and 2) and for vehicle use (application 3). All of them have an evolutionary pricing: a price which is in accordance with short- and mid-term projections based on variation models which integrate external factors such as the evolution of energy market and regulation ( EU-ETS/CAFE (Corporate Average Fuel Economy)/ UE carbon tax) regulations. The 450€/T used on scope 3 emission for vehicle Development, based on CAFE regulation Tax.

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

Internal fee

Implicit price

Offsets

### **Impact & implication**

The internal carbon price shifted mainly investments toward energy efficiency measures and product offering: - The carbon price based on EU-ETS CO2 allowances is used to promote investment in energy efficiency of our manufacturing plants. For example, this internal carbon price was integrated in the decision making of the Pitesti paintshop renovation described in C.4.3.b for which investment required was 310000€. - The internal price set for vehicle CO2 emissions reduction has an impact on product offerings because is used as a reference to validate or discard CO2 emissions reduction solutions in future vehicle projects. It is one of the main drivers of vehicle choice and definition.

## **C12. Engagement**

## **C12.1**

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

Yes, our suppliers

Yes, our customers

## **C12.1a**

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

### **Type of engagement**

Information collection (understanding supplier behavior)

### **Details of engagement**

Collect climate change and carbon information at least annually from suppliers

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

50

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

82

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

13

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

Under the law on the duty of vigilance , Groupe Renault uses in particular a mapping of the risks of suppliers with whom an established commercial relationship exists. In terms of risks relating to human rights and fundamental freedoms, health and safety of persons, the environment, ethics and compliance, two areas have been singled out for analysis: (1)risks relating to families of purchases:(1.a) parts. The families of purchases have been classified according to risks, (1.b)services. The families of purchases have been included in a nomenclature produced by an external service provider based on the criteria of the law on the duty of vigilance; (2.)country risks. The mapping used was produced by an external service provider based on the criteria of the law on the duty of vigilance. The combination of these two risk factors has enabled supplier and subcontractor sites to be ordered according to four levels of criticality: “low”, “medium”, “high” and “very high”. For those parts production facilities or service provision entities representing the highest potential risks and which have never undergone a CSR assessment, or for which the CSR assessment is not at the required level, external companies carry out audits on the ground. Based on the mapping of supplier risks, the most at-risk production sites were identified. In order to reduce the risks, these sites are audited based on a triennial plan (2018/2019/2020). In the context of monitoring the measures implemented, in 2018, Renault carried out 43 audits of sites performed by three external companies in six countries in which the Group is present: Algeria, China, India, Romania, Russia and Turkey. The main anomalies were identified in the area of health and safety.

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

Groupe Renault traditionally measures the CSR performance of its suppliers through two main criteria: (1)the percentage of the volume of parts, services & Equipment purchased that are the subject of CSR evaluation;(2) the percentage of the volume of “CSR evaluated” parts, services and equipment purchased for which the CSR score reflects a high or very high performance. Examples of positive outcomes achieved: We are currently working on CO2 emissions with our battery supplier and renewable energy for the battery plant production in order to reduce battery CO2 footprint. The sourcing of a part of the plant is already with renewable energy. The all plant will soon be covered.

### **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**

79.3

### **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 because the eco-driving aids are now available on all passenger car and light commercial vehicle models sold under the Renault, Dacia and Renault Samsung Motors (in South Korea) brands, except where local vehicle adaptations change this. Renault offers eco-driving assistance solutions in order to assist them in reducing their fuel consumption through eco-driving. Changing driver behaviors through eco-driving is one way to reduce energy consumption (gasoline, diesel or electricity). Depending on driving style, savings of up to 25% could be achieved. In addition to embedded eco-driving aids, Renault offers its fleet customers Driving ECO2 training programs on internal combustion and electric vehicles, in partnership with the French driving school ECF (École de Conduite Française) and the International Federation of Safety Education Network (IFSEN). Course participants are trained on their own work vehicles, to which a Driving ECO2 Training System by Renault device is connected. This facilitates an analysis of the overall driving data so as to measure in real time the progress made through the implementation of the skills learned. Renault also offers its corporate customers an embedded telematics system (Fleet Asset Management), which provides corporate fleet managers with remote access vehicle driving data (distance, consumption, average speed and Eco-score). This objective assessment of the driver’s behavior encourages employees to adopt eco-driving measures during their travel and they can be trained if necessary.

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

Changing driver behaviors through eco-driving is one way to reduce energy consumption (gasoline, diesel or electricity). Depending on driving style, savings of up to 25% could be achieved. These embedded aids have fully achieved their goal, which was to raise driver awareness of how their driving affects their vehicle’s consumption and emissions, and initiate a form of collaboration or even dialog between drivers and their vehicles in terms of eco-driving. Since then, Renault has been developing second-generation embedded eco-driving aids, which will integrate predictive functions and a higher degree of personalization, connectivity and interactivity with the driver, to improve the gains. Surveys, conducted both internally and externally to better understand customers’ expectations of embedded eco-driving aids, led to the identification of four driver profiles :(1) “participative” drivers who wish to take an active role by changing their behavior, and would like information and targeted advice on how to do this; (2)“delegating” drivers, who are ready to give full responsibility for reducing their consumption to the vehicle;(3) drivers who are both participative and delegating;(4) finally, a minority of drivers who state that they have no interest in any form of eco-driving assistance. In order to meet the specific expectations of each of its customers, Renault has developed a full range of Driving ECO2 embedded driving tools adapted for each driver profile

## **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

## **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** |
| Carbon tax | Support | EU - Directive on Energy Taxation (Revision project) We engaged with the States representatives and European Commission services to communicate the risks and benefits of energy taxation changes for the automotive industry. France - Carbon tax projects We engaged in the Environmental Taxation Committee to communicate the risks and benefits of energy taxation changes for the automotive industry. | We support Energy Taxation and Carbon taxes provided : - It induces CO2 emissions reductions - It does not result into an increase of the overall rate of government levies |
| Other, please specify (Electric Vehicles (EV) incentives) | Support | Renault is engaged with policy makers at international (EU...), national and local (states, regions, cities...) levels to promote financial and non-financial EV incentives in order to support the development of the emerging EV market. | Renault advocates financial/fiscal incentives, which are still essential to the development of the EV market in the short- and mid-term, but also non-financial incentives such as : - the development of the EV charging network - access to low-emission zones - the development of renewable energy production and offers. |

## **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?**

Renault applies a coordination process between the Public Affairs Dpt (in charge of policy dialog and proposals with local, national and European public authorities and administration) and the Strategic Environmental Planning Dpt (in charge of climate change strategy).

- Once every 2 weeks, a member of the Public Affairs Dpt holds a meeting with the Strategic Environmental Planning Dpt members to review the current and upcoming subjects and actions, and ensure that Public Affairs' engagements with policy makers are consistent with the Group's climate change strategy.

- On specific policy issues (mainly on EV incentives action plan), a member of the Strategic Environmental Planning Dpt or the expert from the Strategic Environmental Planning Dpt network is appointed to ensure the follow up and coordination of activities with the Public Affairs Dpt.

## **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**

[registration-document-2018 EN.pdf](https://www.cdp.net/fr/formatted_responses/files?file_path=k9me76vz7u2sozvqoi2gbw-cdp-credit360-com/yWfffQFHkEO0VFU6CxdjTw/registrationdocument2018EN.pdf)

### **Page/Section reference**

The reference pages from the registration document are the following pages (of the pdf) Governance: P 286-291 Strategy depending on topics Risks and opportunities: P109 Emissions figures: P 159 Emission targets: p158 other metrics: P164 and 136 to 138

### **Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Other, please specify (figures and text)

### **Comment**

## **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 | VP Strategic Environmental Planning | Environment/Sustainability manager |