



# *Fighting and preparing* **for climate change**

## *Background*

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In 2015, the COP21 Paris climate agreement set goals for limiting global warming, advocating reorientation of the world economy toward a low-carbon model and the phase-out of fossil fuels. This is a major challenge for the retail industry, whose impact on the climate and the environment lies not only at store level, throughout its supply chain - from the place where the goods are produced to the customer's home - but also throughout its value chain - from the production of raw materials to the design and sale of products.

In this context, Carrefour takes part in the Science Based Targets initiative, which encourages companies to set CO<sub>2</sub> reduction targets compatible with keeping global warming below 2°C by 2100. In 2019, the Group assessed its greenhouse gas (GHG) emissions. 98% are located in Scope 3: indirect, they are related to the Group's upstream activities, as opposed to Scopes 1 and 2, which are direct. 72% of the Group's Scope-3 emissions are from products and packaging sold in stores, and 12% from the use of fuel sold, 5% from upstream transport of products and packaging sold, and 5% from the use of non-food products sold.

# Risks related to climate change

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Carrefour is committed to fighting climate change by reducing the Group's GHG emissions and minimizing the climate risks to which its business is subject. The climate change risks for Carrefour are integrated into the company's risk management process. In the countries in which it operates, the Group may be exposed to natural disasters, with direct or indirect on its activities, assets, customers and employees, and resulting in consequences for its financial position. In an environment affected by climate change, uncertain weather conditions may also impact its activities, particularly with regard to customer behaviour. Carrefour's CSR strategy responds to societal challenges related to climate change such as the implementation of a general policy of supplier referencing and responsible purchasing, reducing energy consumption in stores and warehouses, reducing refrigerant gas emissions, improving energy efficiency and reducing transport-related CO<sub>2</sub> emissions. The subject has been identified as a major risk for the Group and is reflected at several levels:

- At store level, the Group is subject to significant regulatory pressures:
  - RE2020 and the Tertiary Decree, which pushes the Group towards high energy efficiency and self-production for its existing stores and during its construction/restructuring;
- Climate change also has a significant physical impact on our store base:
  - Variations in temperature can create challenges in terms of amplitude adjustment or even investments for our cooling and heating installations. However, the major physical risk identified is linked to extreme weather events: floods, hail or snow damaging unsuitable roofs;
- The Group is subject to risk related to new consumption habits, which are to a greater or lesser degree related to climate change: car use, local consumption, low-consumption products, reduction of animal protein consumption, etc. All of these trends have a profound impact on the purchasing behaviour of Carrefour Group customers;
- To ensure the sustainability of its raw materials supplies, the Group has identified materials that are sensitive to the following risks:
  - contribution to climate change (e.g.: Brazilian beef);
  - sensitivity to climate change (e.g. cocoa, coffee).

# Our core values and our goals

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Together with its customers, suppliers and partners, Carrefour is implementing solutions in order to adapt to climate change and ease the transition to a low-carbon economy. In June 2015, Carrefour announced an ambitious emissions reduction target at its Shareholders' Meeting, in line with the 2°C scenario developed by the IPCC.

In 2019, Carrefour has achieved a 36% reduction in its greenhouse gas (GHG) emissions, and a 39% reduction for Scopes 1 and 2. In light of this performance, the Group has updated its climate plan for 2020, has updated its climate plan for 2020, raising its aims for Scope 1 and Scope 2 emissions, and stepping up its commitments for Scope 3 emissions. In fact, 98% of the Group's GHG emissions are indirect, the main sources being products and packaging sold in stores (72%), the use of products sold (12%) and upstream transport of goods (5%).

At its Shareholders' Meeting on May 29, 2020, Carrefour announced a set of new objectives, approved by the Science Based Target initiative (SBTi) led by the CDP, the Global compact, the World Resources Institute (WRI) and the WWF®. Through these initiatives, Carrefour is standing shoulder to shoulder with more than 800 companies and committing to keeping global warming below the 2°C threshold by 2100 (compared with temperatures during the preindustrial period).

The targets set for 2020 are as follows:

## Scope 1 and Scope 2:

Carrefour has set itself the objective of **reducing its GHG emissions by 30% by 2030, and 55% by 2040, compared to 2019**. Gas, electricity and refrigerants used in store are the retailer's main greenhouse gas emitters. To achieve this, Carrefour's priority areas of work are as follows:

- Reduced energy consumption,
- Increasing the proportion of renewable energies in power consumed;
- A 40% reduction in refrigerant-related CO<sub>2</sub> emissions by 2025, compared to 2010, by phasing out hydrofluorocarbon (HFC) refrigerants and limiting coolant fluid leakage;

## Scope 3:

→ the purchase of goods and services: **reduce emissions associated with the purchase of goods and services by 30% by 2030, compared with 2019 levels**; achieving this target would result in **a reduction of 20 megatonnes of CO<sub>2</sub>** in collaboration with its suppliers. To achieve this, Carrefour's priority areas of work are as follows:

- the purchasing of goods and services: reduced emissions related to the purchase of goods and services by 30% by 2030, compared to 2019; this target would produce a reduction of 20 megatonnes of CO<sub>2</sub> in collaboration with its suppliers. To achieve this, Carrefour's priority areas of work are as follows:
  - To prevail upon the retailer's 100 biggest suppliers to make quantified commitments to reducing CO<sub>2</sub> in their direct scope and upstream. In particular, Carrefour wants to ensure that its ten biggest suppliers adopt approaches consistent with the Science Based Targets initiative, and its 30 biggest suppliers take up a climate commitment by 2025.
  - To review the range of products offered by Carrefour in order to reduce the impact on the climate of the average shopping basket,
  - To reduce the impact on the climate of Carrefour branded products, notably by reducing packaging, combating deforestation and developing low-carbon agricultural practices;
- Product use: **by 2030, reduce emissions from product use - fuels and electronic products - by 27.5% compared to 2019**;

- Downstream transport: **cut transport-related CO<sub>2</sub> emissions by 20% between now and 2030, compared to 2019**, by optimising logistics models and developing alternatives to diesel fuel.

**SUMMARY OF OBJECTIVES:**

**Scopes 1 and 2:** reduce CO<sub>2</sub> emissions by **30%** by 2030, and by 55% by 2040, compared to 2019 (well below the 2°C scenario).

**Scope 3:** reduce CO<sub>2</sub> emissions by **29%** by 2030, compared to 2019, including:

- purchase of products and services: reduce emissions associated with purchases of goods and services by **30%** by 2030 compared with 2019 levels (well below the **2°C** scenario);
- Product use: cut emissions resulting from the way in which products are used – fuels and electronic products – by 27.5% between now and 2030, compared with 2019 (2°C scenario);
- transport: reduce transport-related CO<sub>2</sub> emissions by 20% by 2030, compared with 2019 levels (2°C scenario).

# Our performance

Indicators	2019	2020	Change (2019/2020)	Target
Percentage reduction in Scope 1, Scope 2 and Scope 3 (downstream goods transport) GHG emissions goods) compared with 2019 <sup>(1)</sup>	-	7.9%	-	-
<b>SCOPE 1+2</b>				
GHG emissions (scope 1+2) (in tonnes of CO <sub>2</sub> equivalent)	1,830,539	1,663,797	- 9.1%	-
Percentage reduction in Scope 1 and Scope 2 GHG emissions compared with 2019 <sup>(1)</sup>	-	- 9.1%	- 1.3 %	reduce CO <sub>2</sub> emissions by 30% by 2030 and by 55% by 2040, compared with 2019
<b>Energy<sup>(1)</sup></b>				
Energy consumption per m <sup>2</sup> of sales area (kWh/m <sup>2</sup> ) <sup>(2)</sup>	503.1	492.5	-2.1%	-
Percentage reduction in energy consumption per m <sup>2</sup> of surface area sales compared with 2019 <sup>(1)</sup>	-	-2.1%	-	-
<b>Refrigerants</b>				
Refrigerant-related CO <sub>2</sub> emissions (in tonnes of CO <sub>2</sub> equivalent) <sup>(3)</sup>	703,938	563,776	-19.9%	-
Percentage reduction in refrigerant-related GHG emissions compared with 2019 <sup>(1)</sup>	-	-20%	-	reduce CO <sub>2</sub> emissions by 30% by 2030 and by 55% by 2040, compared with 2019
<b>SCOPE 3: transport of goods</b>				
CO <sub>2</sub> emissions per shipping unit (in kg CO <sub>2</sub> /pallet) <sup>(4)</sup>	6.49	6.32	2.6%	-
Percentage reduction in transport-related CO <sub>2</sub> emissions (compared with 2019) <sup>(1)</sup>	-	-2.6%	-	-20% by 2030
<b>Non-financial rating</b>				
CDP climate rating	A			

(1) Scope: comparable BUs (100% of 2020 consolidated sales excl. VAT).

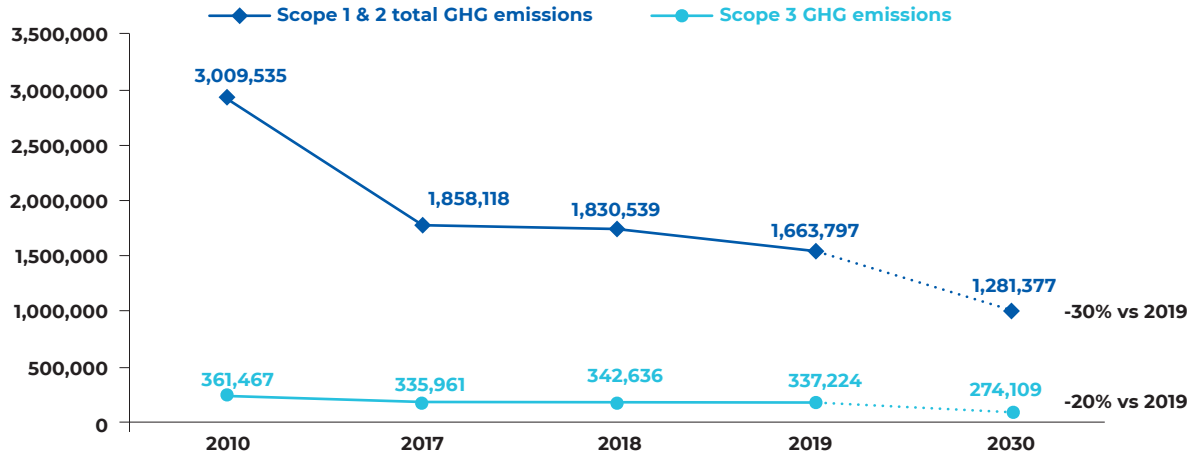
(2) Scope: comparable BUs (100% of 2020 consolidated sales excl. VAT).

(3) Scope: comparable BUs (83.9% of 2020 consolidated sales excl. VAT). Excluding BRAT. Updated BR 2019 data.)

(4) Scope: comparable BUs (83.9% of 2020 consolidated sales excl. VAT). Excluding BRAT. Updated BR 2019 data.)

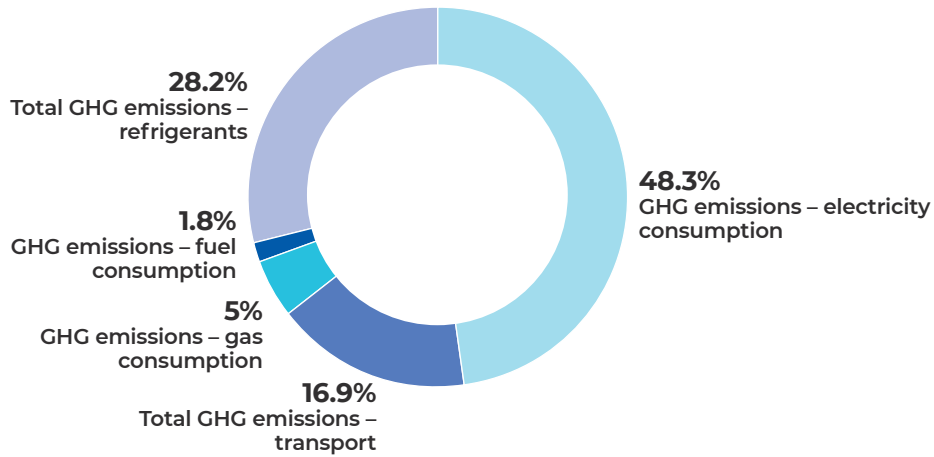


## TOTAL GHG EMISSIONS (T CO<sub>2</sub>)

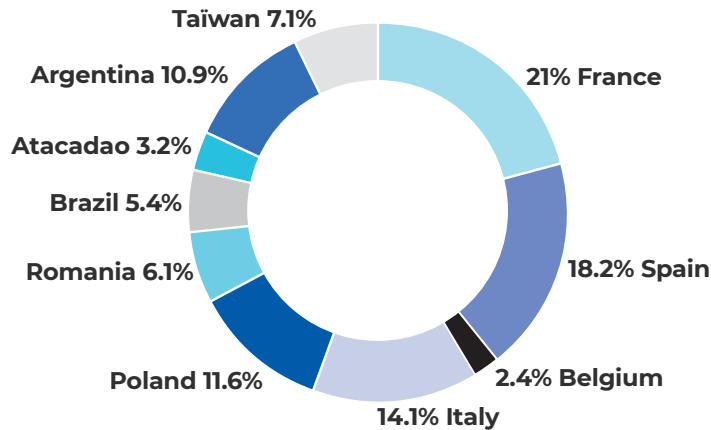


Scope 1 = refrigerant leaks, gas and oil consumption.  
Scope 2 = electricity consumption.  
Scope 3 = downstream transport.

## CONTRIBUTION TOTAL GHG EMISSIONS

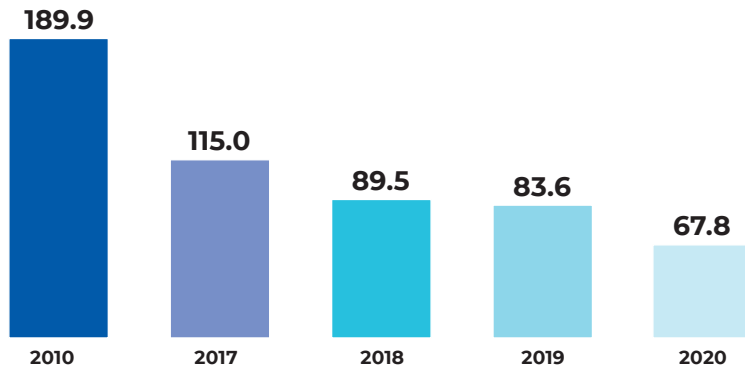


## TOTAL GHG EMISSIONS BY COUNTRY, SCOPES 1, 2 AND 3

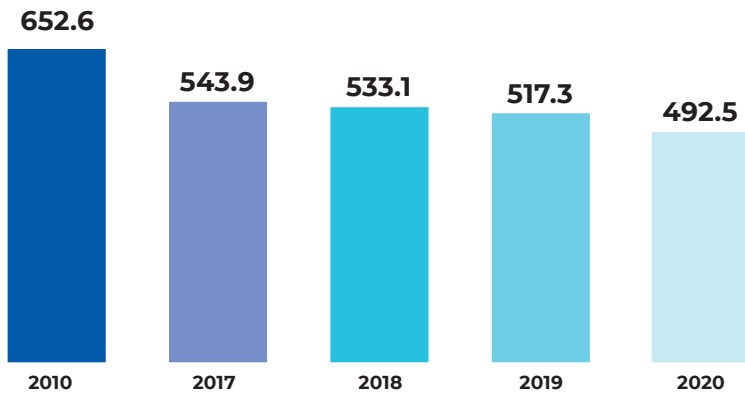




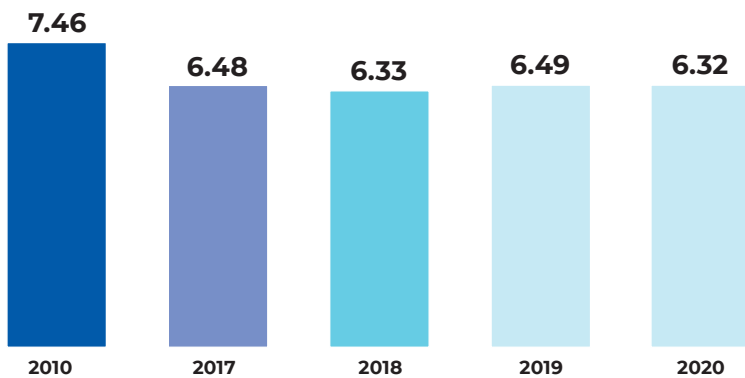
### INTENSITY OF REFRIGERANT-RELATED GHG EMISSIONS IN STORES (KG CO<sub>2</sub>/M<sup>2</sup>)



### ENERGY CONSUMPTION PER M<sup>2</sup> OF SALES AREA (KWH/M<sup>2</sup>)



### INTENSITY OF TRANSPORT-RELATED GHG EMISSIONS (KG CO<sub>2</sub>/PALLET)



# Our action plans

The action plans to help us deliver on our aims and achieve our objectives are as follows:

1. **REDUCTION OF SCOPE 1 AND 2 EMISSIONS: SITES**
  - 1.1. Improving energy efficiency and developing renewable energies
  - 1.2. Reducing refrigerant leaks and emissivity
2. **SCOPE 3 EMISSIONS REDUCTION: TRANSPORT**
  - 2.1. Optimizing logistics chains
  - 2.2. Developing alternatives to conventional fuels
3. **SCOPE 3 EMISSIONS REDUCTION: PRODUCTS AND SERVICES**
  - 3.1. Encouraging supplier commitment to climate change.
  - 3.2. Reducing the impact on the climate of own-brand products sold in stores.
  - 3.3. Developing product ranges with a low impact on the climate.
4. **ADAPTION TO CLIMATE CHANGE**

## 1. REDUCTION OF SCOPE 1 AND 2 EMISSIONS: SITES

In order to implement its long-term strategy in its day-to-day activities, Carrefour has been deploying a global strategic plan since 2013, which aims to encourage all Group departments and entities to be more efficient and create more value by providing both optimized operational services and low-carbon technologies.


### 1.1. Improving energy efficiency and developing renewable energies

France, Italy and Belgium are ISO 50 001 certified (for Integrated Stores) to ensure optimum energy management.


- **In-store energy efficiency:** electronic speed dimmers, divisional counters, low-power lighting, night curtains, doors on refrigerated units, heat recovery for domestic hot water, wall and roof insulation, etc. As such, some energy saving contracts (ESCs) have been in place since 2016 in France (service contracts with energy efficiency companies that are paid on the basis of the savings that they generate). These contracts, for example, enable heat to be recovered from cold systems, saving 5-10% of requirements (e.g. Greenflex). In France, between 2018 and 2019, 155 stores applied for a LED lighting energy saving contract with a total amount of 33,679,389 kWhcumac and 167 stores applied for an energy saving contract for refrigeration units with a total amount of 81,444,373 kWhcumac. At the same time, sensors (Advizeo) have been fitted to identify and analyse consumption shifts in order to optimise operation and reduce operating costs (energy, HVAC, lighting).
- **Renewable energies:** the Carrefour Group is also increasing its on-site production of renewable energies. In France, the Carsol project is equipping 36 hypermarkets with photovoltaic power plants from January 2020. This initiative will cover 10% of these stores' consumption (24 GWh), which accounts for 1.5% of Carrefour France's electricity consumption overall. Some sites in France and around the world have green electricity contracts, but this is not a priority for the Group, which is focusing on local production with local producers/distributors and the Power Purchase Agreement (PPA) system.
- **Communicate:** the Group considers that its stakeholders are key to the success of its goals and informs customers and personnel in-store about good energy saving practices.




## CASE STUDIES:


 **Carrefour France - Energy plan:** Carrefour has launched an energy plan for the period 2013-2020 to offset energy inflation. This plan has a positive impact on the Group's energy costs, which have been falling every year since 2015. It comprises:

- 1 Implementation of an ISO 5000 certified energy management system;
- 2 Coordination of energy efficiency;
- 3 Smart grids and dynamic energy purchases;
- 4 Research and development;
- 5 Another energy saving project based on five main technologies such as:
  - a. The implementation of speed controllers on compressors in refrigeration systems (6 to 10% energy savings),
  - b. The implementation of refrigeration systems operating on CO<sub>2</sub> (7 to 25% energy savings),
  - c. The implementation of LED lighting (40 to 80% energy savings),
  - d. The implementation of refrigeration units with closed doors (12 to 20% energy savings),
  - e. The implementation of sub-metering (5% energy savings).

 **Carrefour France - The energy transition through photovoltaics:** In 2019, Carrefour took another step forward with its climate plan. To speed up its energy transition, the Group entered into an innovative partnership with France's leading independent photovoltaics company, Urbasolar. This industrial player, specialised in photovoltaics, is supporting

Carrefour in the installation of photovoltaic shades on several hundred parking spaces located in the car parks of some thirty hypermarkets in France. This system will eventually enable the production and own-consumption of 21,000 MWh of clean, green electricity each year, equivalent to the annual consumption (excluding heating) of some 4400 households – i.e., 44 tonnes of CO<sub>2</sub> avoided every year. The energy produced thanks to the installation of these photovoltaic shades will be used to produce part of the electricity for the Carrefour hypermarkets concerned. Through this initiative, Carrefour will become the leading producer of electricity for its own use in France and one of the biggest in Europe. An advancement that is also beneficial for consumers: the photovoltaic shades installed will make Carrefour's customers more comfortable by providing them and their parked vehicles with welcome protection from the natural elements (rain, wind and sun).

 **In Poland** where conventional energy is heavily reliant on coal, Carrefour has set up solar panels at two sites.

 **in Brazil,** Carrefour is studying the possibility of using solar power for 100% of its express stores.

## 1.2. Reducing refrigerant leaks and emissivity

**Use of natural and low-emission refrigerants:** the use of the F Gas regulation in Europe aims to phase out **hydrofluorocarbon (HFC) refrigerant** gases and replace them with CO<sub>2</sub> (commitment to have completely renewed systems throughout the European network by 2030). Each country has drawn up its own roadmap in this regard. For France, this constitutes an investment of around €80 million over 15 years dedicated to refrigeration. When a CO<sub>2</sub> power plant is replaced, an additional energy gain is expected, thanks to the new, more modern power plants, with an estimated 8% reduction in electricity consumption for food refrigeration (i.e. an annual electricity consumption saving of **€3 million for hypermarkets and €1.5 million for integrated supermarkets with a comparable scope**). For the number of CO<sub>2</sub> conversions between 2018 and 2033, the French roadmap foresees a total of 1,005 sites affected, which is 93% of the sites switching to CO<sub>2</sub>.

Limiting refrigerant leaks: Efforts to improve efficiency are focused on strengthening the maintenance and tightness of installations in all countries.

## 2. SCOPE 3 EMISSIONS REDUCTION: TRANSPORT

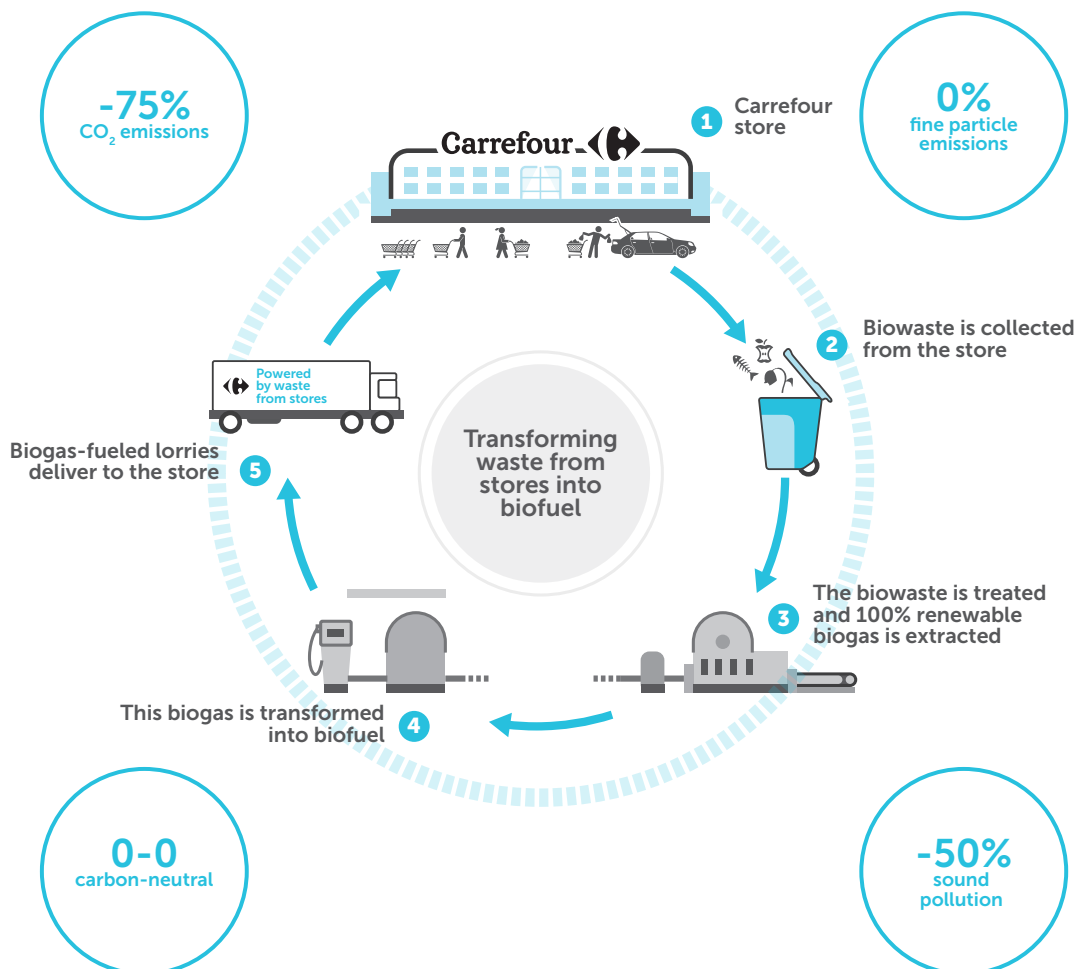
### 2.1. Optimising logistics chains

To reduce its energy consumption, CO<sub>2</sub> emissions and transport costs, supply chain teams are working closely with carriers to improve truck loading, optimise travel distances and phase in alternative modes of transport. Implementation of this Group policy is adapted to local contexts in each country.

### 2.2. Developing alternatives to conventional fuels

Under its commitment to phase out diesel-fuelled delivery transport from 2030, Carrefour is expanding its fleet of vehicles running on biomethane, a fuel produced from non-consumable organic waste at its stores. The aim is to extend this clean, quiet transport mode to cover all delivery rounds in the Paris region by 2021 and nationwide by 2022. Biomethane-powered vehicles eradicate fine particle emissions and cut CO<sub>2</sub> emissions by 75%, as well as reducing noise pollution by 50%. By the end of 2020, there were 500 biomethane vehicles in service in the Carrefour France fleet, 13% of the total, delivering goods in four major cities: Paris, Lyon, Bordeaux and Lille. In one year, these trucks covered a total of 37 million kilometres – equivalent to 48 trips to the moon – and saved a total of 18,000 tonnes of CO<sub>2</sub>. Carrefour is stepping up the development of this fleet: there will be 600 biomethane vehicles by the end of the first quarter of 2021 and 800 by the end of the year. In 2020, fourteen Carrefour bio-NGV service stations were opened for Carrefour vehicles, as well as for all carriers which have made the switch over to biomethane. New stations are scheduled to be opened across all of France in 2021. Carrefour is actively encouraging the use of this biofuel in the other countries where the Group operates: Italy, Spain, etc.

### BIOMETHANE, A CIRCULAR ECONOMY INITIATIVE



### 3. SCOPE 3 EMISSIONS REDUCTION: PRODUCTS AND SERVICES

Carrefour is committed to reducing greenhouse gas emissions by 30% by 2030 compared with 2019. This commitment, whose objective corresponds to a reduction of 20 megatons of CO<sub>2</sub> in collaboration with its suppliers. To implement its objectives, the Group has identified several levers.

#### 3.1. Promoting suppliers' commitment to the climate:

The Carrefour Group wishes to convince 100 of its largest suppliers to commit to an ambitious climate trajectory and is setting up an annual reporting of their GHG emissions reductions. For this purpose, a number of initiatives have been launched such as bilateral exchanges with 30 of the most important suppliers, in order to promote commitments compatible with a 2°C trajectory, in line with the Science based targets initiative. In 2019, the «Food Transition Pact» initiative was launched, bringing together some twenty suppliers of national brands around co-constructed projects focusing on five sustainable development themes: packaging, transparency, responsible products, climate and biodiversity.

In 2019, Carrefour launched the Food Transition Pact, a network of Carrefour suppliers committed to the food transition for all, transforming food systems by offering customers nutritious, sustainable products at a reasonable price. The Pact offers a platform for discussion, sharing best practice, discovering new opportunities for collaboration with Carrefour and sharing progress with consumers. Open to all Carrefour suppliers on a voluntary basis, the Food Transition Pact is an opportunity for them to take concrete steps to distinguish themselves as leaders in the food transition for all.

The Pact is structured around 5 pillars: packaging, biodiversity, climate, transparency and responsible products. As far as climate is concerned, the 20 megatonnes project, launched in 2020, sets out to encourage suppliers to make commitments, measure CO<sub>2</sub>, involve consumers and suggest patterns of consumption that generate lower CO<sub>2</sub> emissions. A platform for calculating greenhouse gas emissions is being developed.

Suppliers can join the Food Transition Pact by making a commitment to a plan of action based on a minimum of three of the Pact's priority areas of focus. They must then report their progress to the Food Transition Pact. Working groups have been created with the manufacturers involved in the Pact, in order to advance the projects structured around the five pillars. Each candidate must present an ambitious action programme to Carrefour, which must then be validated by a panel of internal experts.

In order to report on the members' collective performance, indicators have been defined for the five pillars of the Pact. In particular they include the reduction of packaging placed on the market (in tonnes of packaging avoided), the reduction of GHG emissions (in tonnes of CO<sub>2</sub> avoided), the percentage of products displaying the Nutri Score, etc.

### **3.2. Reducing the impact on the climate of own-brand products sold in stores**

Carrefour is implementing a series of action plans to develop responsible sourcing and reduce the impact on the climate of its own-brand products. In particular, the Group is committed to combating deforestation, developing agro-ecological practices within its Carrefour Quality Lines and reducing the use of packaging. The objectives are as follows:

- Combating deforestation: Carrefour is committed to moving towards zero deforestation by 2020. The action plans focus on palm oil, wood and paper, beef in Brazil, soy and cocoa (see Carrefour.com and CSR Report : “Protecting forests and biodiversity.”);
- Carrefour Quality Lines: all Carrefour Quality Line products will carry an agroecology-specific message by 2022. (e.g. “fed GMO-free”, “fed without antibiotics”, “grown without chemicals” etc.). 10% penetration of Carrefour Quality Lines products in fresh produce by 2022 (see Carrefour.com and CSR Report: “Promoting and developing sustainable agriculture.”);
- packaging reduction: reduce the amount of packaging placed on the market by 10,000 tonnes by 2025 (from 2017); 100% reusable, recyclable or compostable packaging by 2025 for Carrefour brands (see Carrefour.com and CSR Report : “Committing to ecodesign and a circular economy for packaging.”)

### **3.3. Developing product selection with a low impact on the climate:**

In order to achieve the above objectives, Carrefour wishes to work on product selection in order to reduce the emissivity of the average consumer shopping basket. In this way, Carrefour wishes to offer low-carbon alternatives for the most emissive product categories.

The vegetalisation of food is a key issue for Carrefour, responding both to a strong social trend in terms of major climate issues, the preservation of biodiversity, the sharing of resources at a global level and major public health issues, and to a commercial trend driven by strong growth in demand and the structuring of markets. Carrefour is committed to developing vegetarian ranges with a view to offering an alternative to the consumption of animal proteins. These products are suitable both for consumers concerned about animal welfare (detailed in Section 2.2.4) and for flexitarians wishing to reduce the proportion of meat in their diet. Carrefour pays great attention to the quality and nutritional profile of these products. The first French retailer to launch a vegetarian range in its own brand, Carrefour now has more than 70 products – the widest vegetarian offer in any supermarket in France. Throughout 2020, Carrefour continued to speed up its growth on the imitation-meat segment by launching more than 25 innovations, thus meeting consumers' growing desire to “Eat better” and “Consume more effectively”.

## **4. ADAPTION TO CLIMATE CHANGE**

Since 2008, the Group has engaged in numerous activities to improve the way in which it manages the natural risks inherent in its activities. An in-depth study conducted in 2016 identified the most exposed sites. Environmental risks and problems are regularly mapped to more effectively assess them, preventive measures are updated and insurance coverage is adjusted, in all countries where the Group operates, directly or through franchised intermediaries.

**FOCUS:**

**CARREFOUR BANQUE ACTIVITY**

Carrefour is also active with its savings products. The Carrefour Banque range includes a savings scheme with funds totalling €348.4 million at the end of 2019, and a life insurance scheme holding savings deposits of €1,794 million at the end of 2019. The Parvest Smart Food fund, made up of international food-themed shares, is managed by BNPP (IMPAX). It invests 85% of its assets in food supply chain companies selected for their sustainable development practices.

Carrefour Banque's range of savings products includes a savings account and a life insurance policy.

- The funds in the savings account are used to finance the Carrefour Banque credit business and amounted to €420 million at 31/12/2018.
- Carrefour Banque's life insurance policy was developed in partnership with trusted players, AXA and BNP Paribas Asset Management, and the savings deposits managed amounted to €1,846 million at 31/12/2018. Each client can choose his or her investment profile.

In terms of responsible investment policy, Carrefour Banque relies on the expertise of each of its partners.

- Axa's investment policy is available on the website <https://www.axa.com/fr/page/investissement-responsable>
- BNP's investment policy is available on the website: <https://www.bnpparibas-am.com/fr/responsabilite-sociale-et-environnementale/notre-responsabilite-economique/notre-politique-%20dinvestissement-responsable-et-esg/>

# Our organization



## SCOPE

Carrefour Group's climate plan concerns the nine countries that make up the group's integrated countries, namely, France, Spain, Italy, Belgium, Poland, Romania, Argentina, Brazil and Taiwan. The GHG emissions measured by Carrefour since 2010 through annual reporting include the following items:

- Direct sources of GHG emissions (Scope 1) such as gas and fuel consumption and use of refrigerants in cooling production plants and air conditioning;
- Indirect sources of GHG emissions (Scope 2), mainly electricity consumption;
- Indirect external sources of GHG emissions (Scope 3), namely downstream goods transport. Carrefour's quantified targets apply to all integrated stores and all formats depending on their significance.



## GOVERNANCE AND PERFORMANCE ASSESSMENT

Within the Carrefour Group, climate-related issues are monitored by the CSR Committee, whose chairwoman (who is an independent director) is responsible for the subject of climate change, as a major risk identified by the Group. In this capacity, she brings to the Board of Directors the benefit of her operational experience in retail and her experience in a private foundation. The combination of the two experiences corresponds to the Group's expectations for addressing climate-related issues.

Emissions are calculated annually on the basis of the guidelines of the international GHG Protocol, and then undergo reasonable assurance checks by an independent third party. Performance relating to the reduction of GHG emissions is included in the CSR and Food Transition Index. This index is given a 25% weighting as a criterion in a long-term executive compensation plan and a 20% weighting in compensation for the Chairman and Chief Executive Officer.

### Scopes 1 and 2 emissions reductions: sites and logistics

- In order to assess the Group's performance, Carrefour evaluates its GHG emissions every year using a detailed accounting system based on Scopes 1 and 2, and the updating of the calculation of its Scope 3 macro emissions.
- Anti-waste committee (Group Investment Committee, Financial Consolidation, Strategy, Risk & Compliance, and CSR departments).
- Store managers are encouraged to reduce their store's energy consumption.
- In 2016, an internal carbon price was defined which, applied to investment projects, will drive investments towards low-carbon solutions.

### Reducing Scope 3 product-related emissions:

- A project is currently being rolled out to set up climate accounting and reporting to enable a complete assessment of the impact on the climate of the Carrefour Group's product portfolio;
- Food Transition Pact: the integration of national brand suppliers into Carrefour's approach is facilitated through the Food Transition Pact. This pact makes it possible to set up joint projects and to report on performance collectively. It focuses on five priority areas, including the development of a low-carbon power supply, including:
  - The setting of a reduction target for direct and indirect CO<sub>2</sub> emissions in line with the «Science based targets»,
  - The definition of clear targets for reducing energy consumption and increasing the use of renewable energy sources.



## JOINT INITIATIVES AND PARTNERSHIPS

- **As a signatory of the French business climate pledge**, the Group is committed, along with 88 other French companies, to investing in the low-carbon transition and the fight against climate change.
- Carrefour takes part in the **Science based targets initiative**, led by the CDP, the Global Compact, the World Resources Institute (WRI) and the WWF®. Through these initiatives, Carrefour is committed with over 190 companies to establishing CO<sub>2</sub> reduction targets, based on a scientific approach, to keep global warming below 2°C in 2100, compared to pre-industrial temperatures.
- As a member of the **Consumer Goods Forum (CGF)**, which comprises more than 400 stakeholders from the consumer goods industry, Carrefour is committed to reducing the carbon footprint caused by deforestation, refrigerants and food waste;
- Carrefour adheres to the **Caring for Climate (C4C)** initiative underpinned by the UN Global Compact. Alongside 450 other companies, Carrefour has promised to reduce its greenhouse gas emissions (GHG) by setting targets, outlining strategies, putting them into practice, and reporting the results.
- Carrefour is a member of the voluntary European initiative REAP (Retailers' Environmental Action Programme). This European initiative brings together volunteers working to reduce the environmental impact of their businesses and supply chains by promoting more sustainable products and by raising customer awareness. Along with the other members, Carrefour is a signatory to the initiative's Circular Economy Plan. Under this plan, Carrefour has published details on the progress made towards meeting its commitments, on matters including waste prevention and management.
- **Urbasolar**: Carrefour is joining forces with Urbasolar, France's leading independent photovoltaic panel specialists, to speed up the energy transition of its hypermarkets with an initial deployment of photovoltaic shading devices in the car parks of 36 of them. All of the electricity generated in this way will be for the hypermarkets own use.
- The **Cercle des Transporteurs** is an innovative project incubator comprising 22 major Carrefour partners. Since 2011, the Group has been running regular workshops to discuss and instigate actions addressing the medium- and long-term challenges of shipping goods by road: flow optimisation, vehicle and equipment technologies, personnel training, rolling out best practices, sustainability, road safety and IT solutions. The 2018, the workshops covered: the shortage of drivers and poor image for the profession, technical solutions (truck engine, refrigeration unit motor, choice of refrigerant) and e-transport challenges: traceability, connected transport, digital delivery slips, etc.



## FOR FURTHER INFORMATION

- Carrefour.com and CSR Report: Protecting forests and biodiversity.
- Carrefour.com and CSR Report: Promoting and developing sustainable agriculture.
- Carrefour.com and CSR Report: Committing to ecodesign and a circular economy for packaging.
- CDP Climate.