Ahold Delhaize

Climate update

This document contains an overview of statements selected from prior publications of Koninklijke Ahold Delhaize N.V. on points that pertain to Milieudefensie's letter of 13 January 2022. The statements below must be read in the context of the relevant publication.

Introduction

Climate change

There is global consensus that what we do now to slow climate change over the current decade is critical to ensuring a healthy future for all of us. As a company of retail brands, we have a role to play in helping people make healthy and sustainable choices. We need to work together with the other players in our complex value chain to ensure positive changes can be maintained in the long term.

Whilst driving improvements in our own operations, we partner across the value chain to create markets with the right supply and demand to support and grow healthier and more sustainable diets and a robust, more resilient food system.

As mainstream grocery retailers, we need to do this in addition to focusing on pricing, assortment and quality, all of which are of paramount importance to our brands' customers. Nudging is at the heart of our approach to develop and sustain customer demand.

Our Leading Together strategy helps Ahold Delhaize and our brands successfully address evolving market trends. As part of this we identified four growth drivers which are; Drive omnichannel growth, Elevate healthy and sustainable, Cultivate best talent and Strengthen operational excellence. At Ahold Delhaize, our climate plan is part of our Elevate healthy and sustainable growth driver which we briefly explain below.

Our ambition

We talk about health and sustainability as being "Grounded in Goodness" which for us quite simply, is about making healthy and sustainable choices accessible and available to all. To deliver on our strategy we focus on 'healthier people' and 'healthier planet' and the idea that the world's health crisis and climate crisis are intrinsically connected. We believe that if we get it right for ourselves, we usually also get it right for the planet; and acting responsibly today is imperative to securing a better tomorrow for generations to come.

Our approach ensures that the decisions we make are grounded in doing the right thing for people and planet. We collaborate closely with our partners and our brands to empower customers to join this journey with us.

Our Elevate healthy and sustainable growth driver centers around healthier people and a healthier planet:

Healthier people

Our commitment to healthier people begins with empowering customers and associates and working to develop healthier and more sustainable product assortments. But it also has to do with supporting resilient communities, everywhere our brands operate. We have set ourselves a target to have well over 55% of own-brand food sales coming from healthy products by 2025.

Healthier planet

We will achieve our goal of a healthier planet by focusing both on our operations and the overall food supply chain. We are committing to reaching net-zero carbon emissions across our own operations by 2040 and we have set an interim target to reduce absolute carbon emissions with 50% in our own operations (scope 1&2) by 2030 compared to our 2018 baseline.

Ahold Delhaize and its brands have committed to long-term science-based targets to reach a net-zero value chain by 2050 and will advocate towards its value chain to build carbon emission reduction plans consistent with a 1.5°C degrees scenario. We have set an interim target to reduce absolute carbon emissions in our value chain with 15% by 2030 compared to our 2018 baseline.

These targets were set inline with requirements from the Science Based Targets Initiative. Based on our initial assessments of available data and competitive positioning, we have focused our efforts on developing economic pathways to net-zero, within scope 1 and 2 initially. Scope 1 and 2 emissions come mainly from electricity and refrigeration.

Overview of targets and ambitions

Current targets for scope 1 & 2

Our target for reducing absolute scope 1 & 2 carbon emissions is set at 50% by 2030 compared to a 2018 baseline. In November 2021 we committed to be net zero for our own operations (scope 1 & 2) by 2040.

As part of our Sustainable Linked Bond, we also have set an interim target of 29% by 2025 compared to our 2018 baseline.

How we plan to achieve this

In order to reduce CO2 emissions in our own operations, we have identified the following actions:

- Building and remodeling stores in the most energy-efficient way. Our brands could achieve this by installing energy-efficient equipment, such as LED lights, doors on cabinets, heat recuperation, heat pumps, CO2 refrigeration systems (which not only reduce emissions, but are more energy efficient than conventional refrigerators) and improved insulation. While our brands have already started to execute on this action, the net-zero ambition is accelerating our work in this area.
- Replacing or retrofitting refrigerator systems with lower greenhouse gas alternatives, installing natural/hybrid systems (e.g., new CO2 systems) and minimizing leakage from all our systems. This action has the potential of reducing carbon emission from using refrigeration equipment by up to 95%.
- Accelerating the switch to renewable power, with a number of brands using 100% renewable electricity by 2023, reducing up to 100% of carbon emissions relating to energy consumption. Currently 21% of our energy consumption comes from renewables. Our ambition is to build on this with the goal to reach 100% by 2035. In 2021, our brands in the Netherlands and Belgium were powered with 100% renewable energy, either through their own energy generation activities or through sourcing certified renewable energy from suppliers.
- The plans include more onsite energy production through solar panels and wind energy, power purchase agreements (PPAs), renewable energy credits (RECs). Converting both our light and heavy transportation fleet to zero-carbon alternatives, including battery electric vehicles (BEV), leveraging route optimization technology and improving fill mechanism to reduce overall energy use. The costs for this will be impacted by the ratio of how our brands will make use of short-range trucks (electric) vs. long-range (hydrogen fuel cell) trucks.
- Applying an internal carbon price model to investment proposals from the local brands. This was implemented in 2021 and going forward we continue to fine-tune the model and further develop climate criteria for capital expenditure proposals. The current carbon price we use is €150 per ton CO2.

Our ability to achieve net-zero carbon emissions with the actions above is based on the following assumptions:

- The company needs to replace approximately 30–40% of existing refrigeration systems and will be able to improve approximately 60–70% of existing systems by replacing coolants.
- Within the next years, 50% of the brands' heavy duty vehicle fleets will be converted to battery electric vehicles and 50% to hydrogen fuel cells, with fuel cell electric vehicle technology becoming economical by 2032.
- 100% renewable energy (RECs /PPAs) can be acquired at close to parity with grid power.
- Approximately 20% of heating emissions can be reduced through insulation installation, and the remaining approximately 80% by switching to alternative fuel such as heat pumps, district heating, etc.
- Our assessment modeled the incremental costs of achieving net-zero emissions, aiming to show how much more we can expect to spend versus a business-as-usual situation. The business-as-usual emissions forecast was carried out in line with expected business growth and evolution (e.g., in e-commerce), extrapolating from the brands' 2022–2024 strategic plans.
- When determining the costs of abatement and reduction initiatives, we used current costs (i.e., we did not assume cost reduction that may take place when technology scales and matures).

Current targets for scope 3

Our target for reducing scope 3 carbon emissions is set at 15% for 2030 compared to our 2018 baseline and to be net zero by 2050.

Ahold Delhaize and its brands have committed to long-term science-based targets to reach a net-zero value chain by 2050 and will advocate towards its value chain to build carbon emission reduction plans. The biggest opportunity to reduce carbon emissions in scope 3 can be made in agriculture, where Ahold Delhaize brands focus on partnering with suppliers and farmers in this transition, by incentivizing sustainable change through longer term contracts with concrete environmental requirements and co-investments on their farms. A more detailed plan for scope 3 will follow by the end of 2022.

To reduce carbon emissions along the value chain, we focus on four areas:

I. Supplier engagement

As most of the greenhouse gas emissions from our value chain are embedded in the products our brands sell, engaging with suppliers and farmers to reduce their emissions is where we can have the biggest impact. The food industry is already taking action to reduce emissions, and some of the world's largest food manufacturers within our brands value chains have adopted targets in line with the Science Based Targets initiative. With the announcement of targets for 2030, our brands are continuing the journey to engage with their key suppliers and support them in their transition to less carbon-intensive production.

During 2021, we reached out to over 200 suppliers and we will include an additional 100 suppliers in 2022 to this list, asking that they report their emissions either through the Carbon Disclosure Project (CDP) (mainly A-brand suppliers) or via our own survey (mainly own-brand suppliers) we will continue this reporting process annually. Once we have robust data available, we can estimate a more accurate baseline for scope 3. Once the more robust baseline is set, our Procurement teams will set incentives for suppliers to achieve the required yearly scope 3 emission reduction target. A more detailed plan for scope 3 will follow in November 2022.

Our brands have a further opportunity to reduce scope 3 carbon emissions in agriculture, through their focus on partnering with farmers in the transition to low-carbon products. For example, Albert Heijn incentivizes sustainable change through longer term contracts including premium pricing and with concrete environmental requirements and co-investments on farms.

Specific brand actions linked to supplier engagement

- Alfa Beta launched the Smart Farming Initiative. this involves, as of 2021, the involvement of suppliers in reducing their GHG emissions. Via the Cool Farm Tool they are educated on how to calculate as well as reduce their emissions. The project is run in collaboration with the American Farm School and the Bodossaki Institute.
- The GIANT Company's donation to Rodale Institute as well as to Harrisburg University
- In cooperation with the Faculty of Veterinary Medicine and our suppliers, Delhaize Serbia is working on a project to reformulate animal feed with the primary goal of reducing the use of antibiotics. An additional benefit of this project is the reduction of CO2 and ammonia emissions. The first results on chicken meat showed that emissions of CO2 are reduced by 3% and ammonia by 6% compared to farming with conventional food.

2. Low-carbon products

88% of our scope 3 carbon emissions comes from products and services. Next to supplier engagement, shifting to more low-carbon products can have a strong impact on reducing carbon emissions in the value chain. At the same time, customer demand for healthy, low-carbon diets, including plant-based proteins, is on the rise in many of our brands' markets. Building on a history of product innovation, our brands continue to increase the number of low-carbon products in their assortments and, together with suppliers, bring new alternatives to the market. Our brands can help people further understand the impact of their buying decisions and make choices that fit their needs, their tastes and their values.

To achieve this, our brands use technologies, such as blockchain and artificial intelligence, to bring customers more transparency – starting with fresh fruits and vegetables and then moving to the seafood and meat supply chains.

By giving customers access to personalized information – for example, through loyalty apps or online advice – our brands empower and enable customers to make better choices.
Specific brand actions linked to low carbon assortment

- Albert is a part of Veggie challenge launched by ProVeg and in the future Albert will become a partner of ProVeg. Albert also works with ProVeg on the possibilities of the certification "V-label". This year Albert´s marketing department will launch the campaign focuses on the plant-based assortment.
- Hannaford and Giant Food expanded their plant-based assortment
- Albert Heijn doubled its vegetarian assortment in 2020 supported by a promotion campaign including price promotions. In 2022, Albert Heijn launched the ambition to ensure 60% of their protein sales comes from plant-based sources

3. Outsourced transport services

Roughly half of our transportation today is handled by third-party service providers. Our brands work with service providers to reduce their emissions – both those associated with the delivery of goods to stores and with associates' business travel.

4. Waste management

Every year, around one-third of all food produced for human consumption globally is lost or wasted. According to the UN Food and Agriculture Organization (FAO), if food loss and waste were its own country, it would be the world's third-largest greenhouse gas emitter, surpassed only by China and the United States. Our ambition to reduce food waste by 50% by 2030 also contributes to reducing carbon emissions, in addition to the other benefits of improving food security and conserving natural resources.

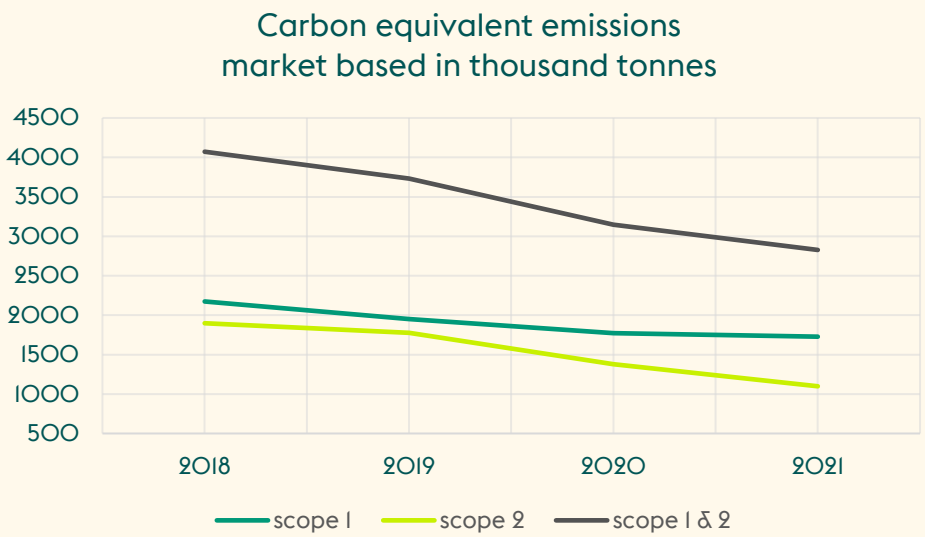
Overview of current and historical performance and how climate impact is measured

As the pace of climate change accelerates, we are committed to reducing carbon emissions in our own operations. Our great local brands continue to invest in energy efficiency, improve their refrigeration systems, further modernize their logistics fleets and opt for eco-friendly fuels.

Ahold Delhaize has tracked its carbon emissions from own operations for many years. Before the merger both Ahold and Delhaize set targets to reduce their carbon emissions from own operations (scope 1 and 2) which had a target year of 2020. In 2020 we launched an updated climate strategy and committed to an updated target to reduce our carbon emissions by 2030 compared to our 2018 baselines. In November 2021 we added our net-zero ambition for scope 1 and 2 as well as for scope 3 carbon equivalent emissions.

Below is an overview of our performance on reducing our carbon equivalent emissions for the last 4 years.

Scope 1 & 2 carbon emissions

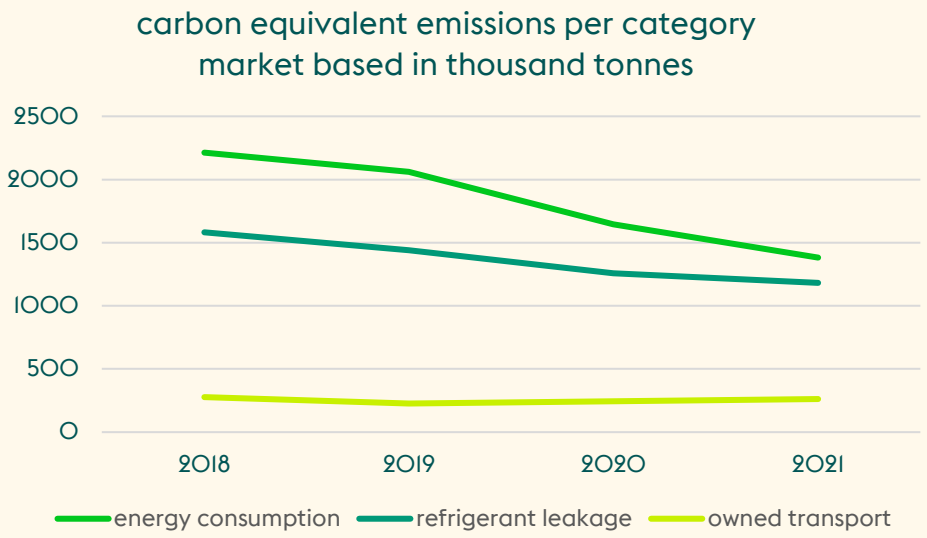


carbon equivalent emissions market based in thousand tonnes	2018	2019	2020	2021
Scope 1	2175	1952	1771	1728
Scope 2	1898	1778	1378	1099
Scope 1 & 2	4073	3730	3149	2827

Our scope 1 and 2 CO2-equivalent emissions are mainly driven by energy consumption, refrigerant leakage and transport. By 2021, CO2-equivalent emissions have decreased by 31% compared to a 2018 baseline. The main drivers for this reduction were related to the increased amount of renewable energy consumed and more efficient and environmentally friendly refrigeration systems. CO2-equivalent emissions from transport increased.

- Carbon emissions from energy consumption were 1,382 thousand tonnes compared to 1,646 thousand tonnes in 2020. During 2021, 315 stores were added to our portfolio, for example, through the acquisition of stores from Southeastern Grocers at Food Lion and DEEN in the Netherlands. We continued to source more green energy through power purchase agreements (PPAs). In 2021, 21% of the energy consumed came from renewable sources compared to 12% in 2020. Initiatives that contributed to the increase included Albert Heijn's switch to sourcing 100% wind energy during 2021 and other brands, including The GIANT Company and Delhaize Serbia, sourcing more green energy.
- Carbon emissions from refrigerant leakage was 1,182 thousand tonnes compared to 1,257 thousand tonnes in 2020. This was driven by our brands using refrigerants with a lower Global Warming Potential (GWP) and having fewer leakages. Our brands continue to install refrigeration systems with a lower GWP, or even natural refrigerants, when they remodel stores. At Albert Heijn, over 50% of stores now run on natural refrigeration systems and our U.S. brands continue to roll out programs for more efficient and climate-friendly refrigeration systems.
- Carbon emissions from fuel consumption of owned trucks increased to 262 thousand tonnes compared to 244 thousand tonnes in 2020.

Scope 1 & 2 carbon equivalent emissions per category

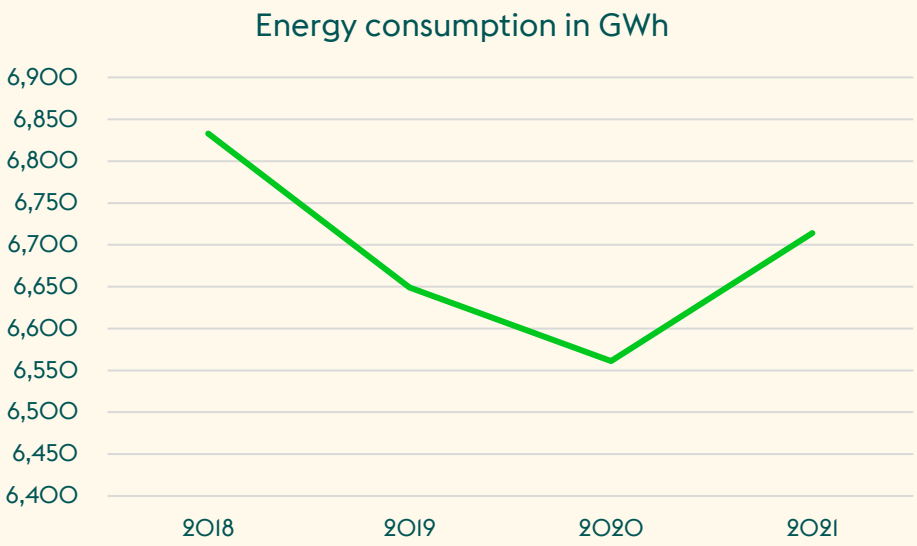


carbon equivalent emissions per category market based in thousand tonnes	2018	2019	2020	2021
energy consumption	2213	2062	1646	1383
refrigerant leakage	1583	1441	1258	1182
owned transport	277	227	244	262
Total	4073	3730	3149	2827

Energy consumption includes electricity, gas for heating and district heating.

More information on the specific categories and drivers can be found in the following sections.

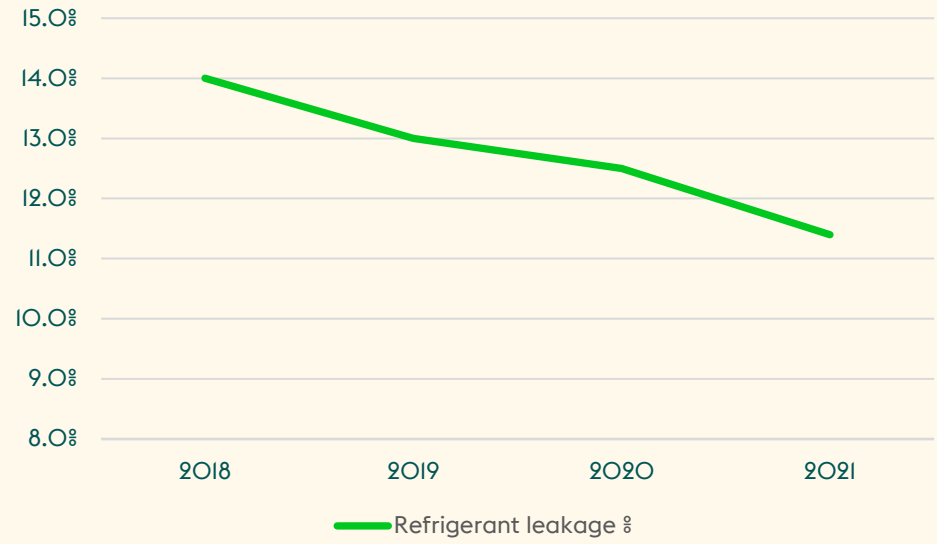
Energy consumption

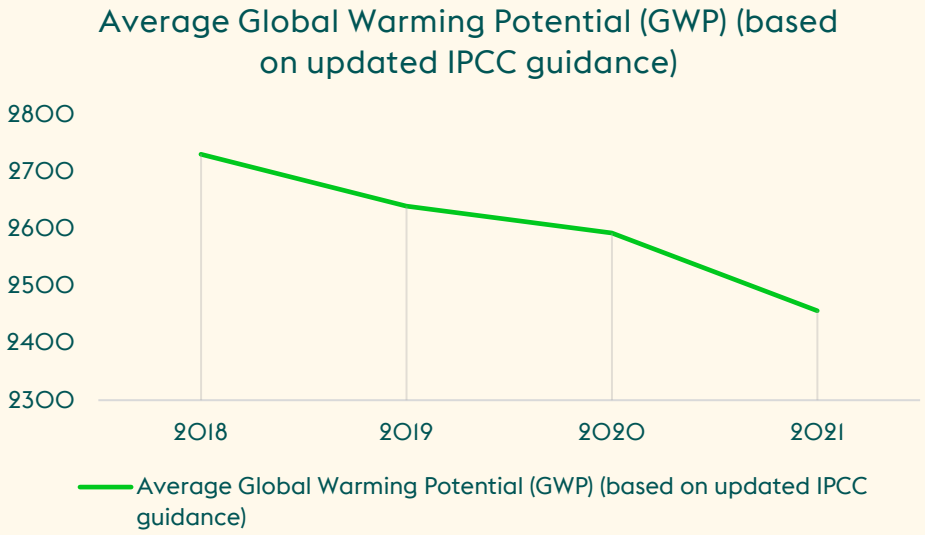


	2018	2019	2020	2021
Energy consumption in GWh	6,833	6,649	6,561	6,714

After years of decreasing energy consumption we saw an increase in absolute energy consumption in 2021. This is mainly caused by the acquisitions of South Eastern Grocers in the US and DEEN in the Netherlands.

Refrigerant leakage

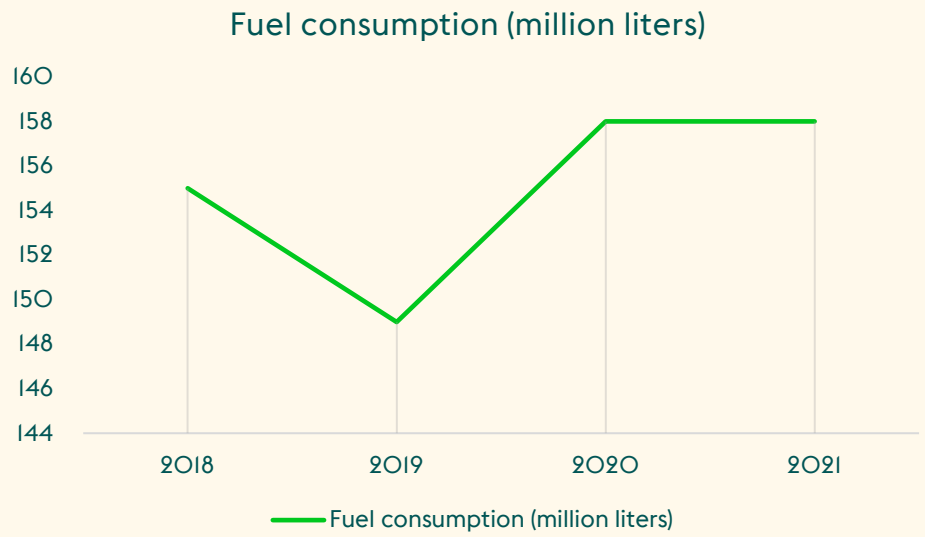




	2018	2019	2020	2021
Refrigerant leakage %	14.0%	13.0%	12.5%	11.4%
Average Global Warming Potential (GWP) (based on updated IPCC guidance)	2731	2640	2593	2457

Both refrigerant leak rates as well as the average Global Warming Potential of our brands refrigeration systems decreased in the last four years. This is mainly caused by installing more sustainable refrigeration systems when remodeling stores including natural refrigeration systems.

Leak rate reduction is achieved in close collaboration with service companies. Frequent maintenance intervals, smart detection systems, and renewed installations, allow us to act in the shortest amount of time reducing the amounts of lost coolants and keeping the products at the right temperature.



	2018	2019	2020	2021
Fuel consumption (million liters)	155	149	158	158

Fuel consumption was stable in the last two years but increased compared to 2018. This is mainly caused by increased sales as a result from the COVID-19. Net sales compared to 2018 increased with 20% where fuel consumption increased with 2% in the same period.

Scope of reported data

From an operational scope perspective, the data includes the following parts of the business, unless specifically noted otherwise:

- All stores (company-owned and franchise/affiliated stores)
- Offices
- Company-owned distribution centers, including all transportation from distribution centers to stores, regardless of whether the transportation companies are owned by Ahold Delhaize.

Methodology

We report our scope 1 and 2 carbon emissions data according to the Greenhouse Gas (GHG) Protocol Corporate Standard. CO2 emissions data consists of a calculated CO2 equivalent: actual CO2 emitted plus equivalent emission from other greenhouse gases.

The carbon footprint methodology follows the guidelines of the World Business Council for Sustainable Development (WBCSD)/World Resources Institute (WRI) Greenhouse Gas (GHG) Protocol regarding corporate greenhouse gas accounting and reporting.

We use the latest available emission factors in our reporting. We source location-based electricity emission factors from the International Energy Agency (IEA, 2021 edition; 2019 data) for European countries and from the Environmental Protection Agency (EPA) (based on eGrid 2019 values, issued in February 2021) for the United States. The source we use for the market-based (residual mix) emission factors for our U.S. brands is Green-e, and for our European brands is the European residual mix.

We source fuel emission factors from GHG Protocol 2014 wherever available, and otherwise from other appropriate sources. For refrigerant leakages, GWP values of all refrigerant blends used in Ahold Delhaize facilities were calculated based on GWP values of refrigerants from the Intergovernmental Panel for Climate Change Assessment Report 6, AR6 Chapter 7 (2021).

Data collection and considerations

Data on energy consumption, leakage for refrigerant substances and liters of diesel used for owned transport is collected on a quarterly basis on site level at each brand.

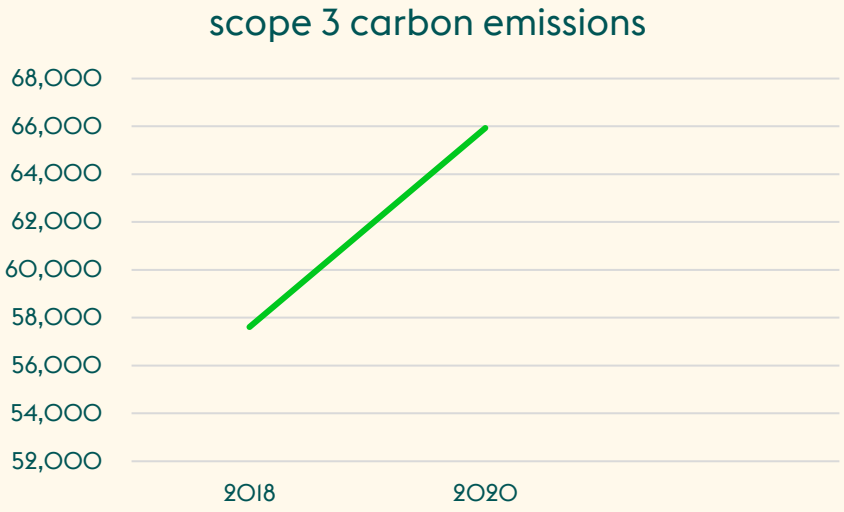
The sources of this data include invoices, remote meter records, third-party service provider reports and internal reports. Source data is reviewed internally and reported to the group through an internal reporting tool that stores the conversion factors to calculate the carbon emissions. Absolute carbon emissions are calculated by multiplying the source data with the relevant conversion factors.

Data is not always available in real time or immediately after quarter close. In these cases, we use data extrapolated from previously known consumption. If data is not available at all, e.g., for a portion of the franchise stores, we use estimates calculated using locations that are comparable in size and format.

During 2021, several events took place that impacted Ahold Delhaize's scope 1 and 2 absolute carbon emissions: Food Lion acquired Southeastern Grocers, Albert Heijn acquired DEEN supermarkets, IPCC updated the conversion factors for refrigeration substances, and last-mile delivery was included for the Ahold Delhaize USA brands. This resulted in a restatement of the 2018 baseline to 4,073 thousand tonnes (+11.3%). The 2021 performance reflects these changes as well, while the 2020 data only includes the change from the updated conversion factors following the IPCC report.

Scope 3 carbon emissions

To reduce carbon emissions along our value chain, our brands are partnering with suppliers to focus on four areas: reducing waste, increasing the number of low-carbon products in their assortments, reducing emissions from outsourced transportation, and engaging with suppliers to reduce their emissions. For mor information see above.



	2018	2020
scope 3 carbon emissions	57,605	65,930

In 2020, our scope 3 carbon equivalent emissions increased with 14% compared to the 2018 baseline.
Relative to net sales, our scope 3 carbon emissions decreased by 3.8% in 2020 compared to 2018.

Scope 3 – Purchased goods and services	88%
Scope 3 – Use of sold products	5%
Scope 3 – Other categories	7%
Total scope 3 footprint	100%

Methodology

Our carbon footprint methodology follows the guidelines of the World Business Council for Sustainable Development (WBCSD)/World Resources Institute (WRI) and Greenhouse Gas (GHG) Protocol regarding corporate greenhouse gas accounting and reporting.

Calculating scope 3 emissions is complex. Our brands have hundreds of thousands of products on their shelves supplied by more than 10,000 direct suppliers. All of these direct suppliers source materials and ingredients from their own suppliers, resulting in complex supply chains covering all areas of the world.

As a result of this complexity, actual data on our scope 3 carbon emissions is currently not consistently available, and we continue to work to improve this. As our brands continue to reach out to their suppliers, we expect increasing access to actual data, which will make our numbers more accurate.

At the moment, we fully rely on assumptions and estimations when calculating our scope 3 carbon emissions. Our scope 3 footprint consists of 10 relevant scope 3 emission categories (out of 15 defined by the GHG protocol). We used two main calculation methods defined by the GHG Protocol: : the average data and spend-based methods. We applied the method that was most suitable, based on the category.

Data collection and considerations

Scope 3 carbon emissions data is collected on an annual basis. We report on scope 3 emissions with a one-year delay, as information to calculate the data is in some cases received from third parties and therefore not yet available at year end.

CALCULATING CATEGORY I: PURCHASED GOODS AND SERVICES

Purchased goods, the most material category, accounts for 88% of our total scope 3 footprint. The main assumptions and estimates used in our calculation of the category Purchased goods are as follows:

We use different input data sets to calculate the emissions from products and services, depending on the information available in our brands' data systems. No validated supplier data was available, so we used weight of products purchased (6%), value of products purchased (2%), weight from products sold corrected for waste (26%) and value from products sold corrected for margin and waste to come to value of products purchased (66%). The correction for margin and waste is done at brand level but assumed to be the same for all product categories and is not diversified to product category.

These average data method calculations are based on the publicly available emission intensity of different foods. For products with weight (32%), we mainly used the Big Climate Database (all brands except for Delhaize Belgium) and Agribalyse (solely for Delhaize Belgium). With these databases, all retail-specific product categories were assigned special emission factors that enabled us to apply corresponding emission intensities for each category.

For the spend-based method (68%), we used the emission intensities of different food and non-food industries (source: UK Department for Environment, Food & Rural Affairs (Defra) for food (emission factor 1.06) and Base Carbone for different non-food categories) and multiplied this by products sold corrected for margin and waste.

As a consequence, due to our plans to implement further due diligence procedures in connection with scope 3 carbon emissions, reducing the use of assumptions and estimates, our numbers might materially change over time.

For services, the footprint is calculated using the spend-based method and activity data are the annual brand-level purchased value of products and services multiplied by the emission intensity for relevant services (source: Defra (emission factor 0.2275)).

CALCULATING CATEGORY II: USE OF SOLD PRODUCTS

The second biggest emission category is category II: Use of sold products, which accounts for 5% of our total estimated scope 3 emissions. This category is impacted by the gasoline stations some of our brands operate. Emissions are calculated using an average data method, by multiplying the total volume of petrol sold to customers by the relevant emission factor from EPA.

CALCULATING OTHER SCOPE 3 CATEGORIES:

We have combined several smaller emission categories together as "other categories" that account for 7% of our estimated scope 3 emissions. These include fuel- and energy-related activities, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, end-of-life treatment of sold products, franchises, and investments. The emission calculations are done using an average data method and are based on publicly available emission factors for each category (source: Defra, SimaPro, CO2emissiefactoren.nl, EPA, and different input activity data).

Non-abatable emissions and use of offsets

A certain amount of carbon emissions will be very hard to abate. This is applicable for the following areas:

- A part of scope 1 emissions from refrigerant leakages
- A part of scope 3 emissions coming from products and services

For our scope 1 & 2 emissions we do not plan to use offsets to achieve the 50% reduction by 2030 compared to our 2018 baseline.