TESCO

Factsheet

Climate change and energy.

Why it matters.

Climate change is one of the biggest challenges facing the world and as a result, one of our most material issues. The planet is currently on track to warm by almost three degrees by the end of the century[1] with devastating consequences for humanity. The effects of climate change threaten our own business operations, the operations of our suppliers' businesses and the livelihoods of the farmers and workers in our supply chains, in addition to changing the way customers shop and eat. We must all play our part to decarbonise as quickly as possible.

Relevant UN Sustainable Development Goals (SDGs).

Many of the Sustainable Development Goals (SDGs) are impacted by climate change, those listed below are ones most relevant to our climate strategy and net zero ambitions.

SDG 7 Affordable and Clean Energy aims to ensure access to affordable, reliable and sustainable energy for all. Achieving our climate goals depends on becoming more energy efficient and reliant on renewable energy and our actions are well aligned with the targets within SDG 7.

SDG 13 Climate Action calls for urgent action to combat climate change and its impacts. We have a longstanding commitment to tackling climate change and our accelerated net zero ambitions recognise the urgency with which action is required.

SDG 17 Partnerships for the Goals recognises the importance of collaboration. Our net zero climate strategy has been developed with the input, knowledge and expertise of our colleagues, suppliers and NGO partners including WRAP, WWF, the Aldersgate Group and The Climate Group and we will continue to collaborate with these groups as we develop our Scope 3 strategy and its implementation.

Highlights.

55%◊ reduction in Scope 1 and 2 greenhouse gas (GHG) emissions across the Group vs 2015.

We are the first retailer to launch a zero-emission electric lorry in Greater London, and have also launched electric home delivery vans in Hungary.

All suppliers engaged to publicly commit to a net zero ambition.

[1] *UNEP*

◊ Deloitte LLP was engaged to provide independent limited assurance over the selected climate data. Further information on page 10.

Our approach.

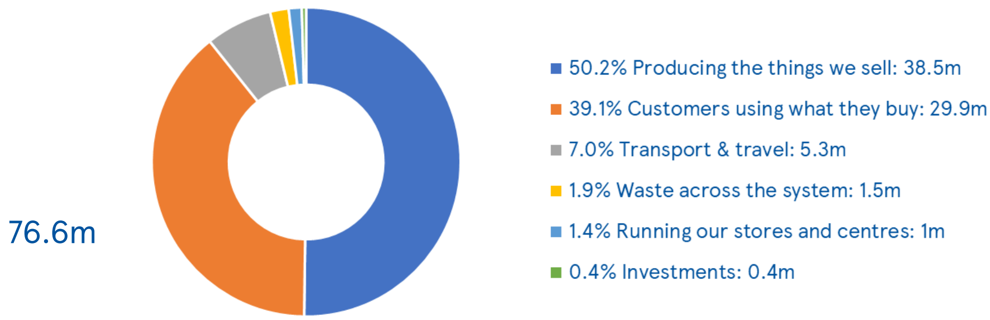
We aim to be carbon neutral in our Group operations by 2035 and net zero across our full value chain (Scope 1, 2 and 3), aligned to a 1.5°C trajectory, by 2050.

Climate change is a global issue that has significant multifaceted implications for our business, suppliers, colleagues and customers. Since 2009, when we became the first business globally to set an ambition of net zero by 2050, we have been taking action to reduce our emissions and mitigate the impacts of a changing climate. We now work closely with most of our top suppliers to gather their footprint data, encourage them to set science-based targets and identify projects where we can collectively drive GHG emission reductions, particularly in our agricultural supply chains through our work with the Tesco sustainable farming groups. For customers, our work to encourage healthy, sustainable diets supports our net zero ambition. This work includes our ongoing reformulation programme and the expansion of our plant-based and healthier ranges.

Over the last two years we have been refining our end-to-end Group carbon footprint analysis using 2019/20 data to better understand the main sources of emissions, to inform our reduction strategies and in support of the anticipated revalidation of our expanded Science Based Targets (SBTs). This revalidation follows new methodology developments and the inclusion of new data points such as deforestation and land conversion, as well as more ambitious supply chain decarbonisation commitments, aligned with a 1.5°C pathway and in line with the Science Based Target Initiative (SBTi) Forest, Land and Agriculture (FLAG) Guidance.

Through this process, we have been able to identify our material emissions hotspots throughout our full value chain. Having switched to using 100% renewable electricity in 2020, our own operations emissions (Scope 1 and 2) now come primarily from refrigeration, heating and transport. The majority of our total footprint, more than 90%, is in our value chain (Scope 3). Our latest carbon footprint data, covering Scope 1, 2 and 3 emissions, is summarised below:

Our Total Emissions Footprint (tCO^{2}e/year)



Scope 1 and 2 latest data: 2022/23

Scope 3 latest data: 2019/20. Starting with our SBT validation, expected in 2023, our end-to-end footprint including all scopes will be updated yearly to comply with the SBTi guidelines and the GHG Protocol.

To reach our ambitions, our climate strategy focuses on continuing our work to decarbonise our own operations, whilst increasingly rolling out decarbonisation interventions to address key emissions hotspots throughout our value chain (see Scope 3 emissions section below).

We will publish our climate transition plan following the conclusion of the UK Treasury's Transition Plan Taskforce (TPT) consultation and guidance, in line with their disclosure framework. To that end, we are in close coordination with the TPT, participating in their corporate sandboxing and also co-chairing the TPT working group for Food & Agriculture, to support the development of a highly credible, ambitious framework that businesses are able to comply with meaningfully. Our transition plan will follow the Ambition, Action and Accountability guiding principles and will outline the priority hotspots and the steps we are taking in the short- and medium-term to deliver our ambitions, and mitigate climate risk across our estate and supply chains.

Scope 1 emissions

Our Group Scope 1 emissions account for around one million tonnes of CO_2 equivalent (tCO_2e). While a relatively small part of our overall footprint, our Scope 1 emissions relate to the direct emissions that are created from our activities. These include the running of our home delivery vans, the heating, ventilation and air conditioning of our stores and offices and our refrigeration units, and as such are within our control to reduce their impact. Steps we are taking include:

- **Switching to decarbonised transport** as part of our EV100 pledge we are aiming to have a fully electric home delivery fleet by 2030. So far, we have rolled out almost 300 electric vans in the UK. We have also introduced electric home delivery vans in Hungary.
- **Addressing transport emissions associated with our distribution fleet**, trialling fuel alternatives while working directly with manufacturers on even more sustainable long-term solutions. Having launched the UK's first commercially used fully electric articulated large goods vehicles (LGVs) in 2021, in 2022 we became the first retailer to launch a zero-emission electric lorry to trial deliveries across 400 stores in Greater London, served by the Dagenham distribution centre. Each lorry is expected to replace around 30,000 diesel-fuelled road miles every year. We have also introduced LGV trailers with refrigeration units powered by electrical hook-up points at distribution centres and solar panels whilst on the road, each saving around 2,000 litres of diesel per year.
- **Reducing emissions from logistics and home delivery vans** through initiatives that aim to maximise our fuel efficiency launched this year to improve route planning, and telematics used to influence driver behaviour.
- **Addressing emissions from heating, ventilation and air conditioning (HVAC)** by trialling low carbon alternatives to gas boilers, such as heat pumps and heat reclaim systems across our Group estate.
- **Improving refrigeration efficiency and reducing refrigerant emissions** in our stores and distribution centres by installing aerofoil technology, retrofitting existing systems with more environmentally friendly refrigerant gasses and, at the end of the asset's life, switching to natural refrigerant systems that have significantly lower emissions.

Scope 2 emissions

Scope 2 emissions relate to indirect emissions that come from the production of electricity or heat used from the grid that heat or power the buildings we own or occupy. Since 2015, when grid electricity accounted for 65% of our own operations footprint, we have been reducing our demand and switching to 100% renewable electricity in accordance with our renewable electricity transition roadmap. In 2020, we achieved our goal of 100% renewable electricity across the Group, 10 years earlier than our original 2030 goal. We have achieved this through a combination of renewable energy certificates and investing in our own estate, with the installation of solar panels and wind turbines at our stores and distribution centres to generate renewable electricity on-site; and through Power Purchase Agreements (PPAs).

PPAs are long-term renewable energy contracts that support the green energy transition. We are committed to supporting the greening of the UK National Grid and helping bridge the gap in investment and infrastructure needed to hit the UK's net zero target. In 2019, we signed one of the largest unsubsidised PPA portfolios in the UK, covering five windfarms and four solar farms. As part of this, in 2021 our new windfarm went live in Halsary in the Scottish Highlands, in partnership with ScottishPower Renewables, generating enough clean energy to power the equivalent of almost 20,000 homes per year.

We are continuing to work to increase the proportion of our renewable electricity that comes from direct sourcing to help drive investment into the renewable transition. In total, once all committed contracted sites are operational our new onsite and offsite renewable energy assets will represent 25% of our Group electricity demand. By 2030 our target is to source 60% of our electricity from PPAs and onsite power generation.

Read more about how we are improving our operations to reduce our impact here.

Scope 3 emissions

More than 90% of our overall footprint lies within our upstream and downstream supply chain - our indirect Scope 3 emissions. We will announce new SBTs and FLAG targets in line with a 1.5°C trajectory once the final stages of the validation process by the SBTi is complete. These emissions have been mapped across the full value chain using the GHG Protocol methodology and 2019 data obtained from both our suppliers and farming groups. From this footprint, we have identified our emissions hotspots in order to model the impact over time of different interventions in terms of GHG emissions reduction and cost. A full description of our supply chain decarbonisation strategy will be included in our climate transition plan.

Our climate transition plan will build upon our existing actions, including:

- **Engaging our suppliers to better support our net zero commitment,** by requesting that they disclose carbon data via Manufacture 2030 and set net zero ambitions for their business, as well as by co-designing decarbonisation pathways with key suppliers in hotspot areas. To ensure we prioritise where we can achieve greatest reduction in emissions, our initial focus is on ensuring that 80% of our suppliers, by total cost of goods across the Group, meet this ambition.
- **Developing the Tesco Supplier Network as a knowledge sharing hub**, providing our suppliers with key resources to support their climate transition, and continuing our quarterly drop-in sessions on carbon reporting we started in 2021.
- **Supporting suppliers to pilot interventions** and solutions to address the 'big bets' identified within Scope 3 agricultural emissions.

Areas in which we hope to bring additionality and facilitate fast, efficient, and far-reaching decarbonisation in our supply chain include:

- **Collaborating with our competitors in promoting carbon disclosure and net zero commitments** across our collective supply chains by joining the Manufacture 2030 platform in 2023.
- **Supporting our agricultural suppliers' transition to low-carbon fertilisers,** with our first commercial trial of 5,000 hectares of British field vegetables starting in 2023.
- **Rolling out accreditation mechanisms in our Fresh supply chains** to ensure sustainable soil and water management practises, including rolling out LEAF Marque certification globally by the end of 2025.
- **Building the UK's largest supermarket network of electric vehicle (EV) charging stations** with Volkswagen and Pod Point, to help our customers switch to electric cars. To date we have over 2,500 charging points across 600 stores in the UK.
- **Taking cross-industry action to improve climate outcomes** by working with organisations including WRAP, WWF, the Aldersgate Group, and The Climate Group, among others.
- **Supporting positive public policy on climate goals such as the UK's net zero by 2050** ambition and accelerating the UK's ban on internal combustion engine vehicle sales to 2030**.**

Climate integration

To achieve our net zero climate ambitions and play our part in helping to meet global climate goals, consideration to climate risks and opportunities to our operations and across our value chain needs to be embedded into every decision we make.

Our climate strategy is led from the top by our Group Chief Product Officer, our Executive climate sponsor. Our governance groups maintain oversight of progress made against our interim decarbonisation milestones and hold the business to account for delivery of the operational and supply chain decarbonisation roadmaps.

In 2021, climate was elevated to become a standalone principal business risk, recognising the impact of climate change and the criticality of the natural environment to our business. In addition to our public commitments and strong partnerships, we have continued to strengthen internal governance and metrics and align our climate-related ambitions with our reward policies and external financing. These steps help us to further embed and strengthen our responses and controls.

We have been early adopters of the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations. Most recently, we have been working with Risilience, formerly part of the Centre for Risk Studies at the University of Cambridge Judge Business School. We have created a digital twin of the business to better understand and disclose the economic and environmental impact of climate related transition and physical risks and opportunities that we face. From this modelling we are gaining a better understanding of the different mitigation scenarios for the most emission-intensive areas of our business. Input from this model will help us to better prepare for climate shocks from a financial and logistical standpoint and strengthen the resilience of our supply chains.

At the start of 2022, we introduced ESG metrics into our remuneration policy. The Performance Share Plan (PSP) includes three ESG targets, each with an equal weighting of 8.33% (25% in total), of which carbon reduction forms one of the targets, aligned with our commitment to be carbon neutral in our own operations by 2035. Carbon reduction is recognised as a key deliverable and is now included in our "Big 6" performance measures.

Read more about our TCFD report and Executive remuneration in our latest Annual Report and Financial Statement here.

We launched the first of our sustainability-linked finance products in 2020, and we have continued to strengthen this area over the last two years. Our product suite now includes:

- **A revolving Credit Facility** refinanced in November 2022, with interest linked to the achievement of our ambitious environmental targets on GHG emissions reduction, food waste reduction and increasing the percentage of female and ethnically diverse colleague representation amongst our top global leaders to improve diversity and inclusion.
- **A sustainability-linked bond** (€750m). We were the first retailer to launch a sustainability-linked bond with the coupon linked to our Scope 1 and 2 emissions reduction performance. In October 2021, we issued a Sterling sustainability-linked bond (£400m), again linked to our Scope 1 and 2 emissions reduction targets.

A sustainability-linked supply chain finance programme, which supports suppliers through preferential payment terms to bolster climate best practice across our broader supply base, particularly short and discount suppliers.

Read more about our sustainable financing here.

Memberships and partnerships.

Here are some examples of our key collaborations on climate related issues:

WRAP

WRAP is co-ordinating UK retailers and government behind Scope 3 alignment to drive a consistent approach to reporting, methodologies, research and data collection, which is aimed at accelerating progress on the complex, shared challenge of reducing Scope 3 emissions.

WWF

Through our partnership with WWF, we are working together on developing net zero transition pathways for supply chains across key product and commodity areas, ensuring the strategies are brought together with our nature and biodiversity goals.

British Retail Consortium (BRC)

We are members of the BRC's Climate Action Roadmap, aimed at collectively delivering the industry's net zero ambition by collaborating with other retailers, suppliers, government and customers.

Aldersgate Group

We work with the Aldersgate Group to help shape the policy landscape to address environmental challenges by sharing insight with government at key moments.

The Climate Group

We are signatories to RE100 and EV100, committing us to using 100% renewable electricity and 100% electric vehicles respectively - two of our biggest operational hotspots.

Awards and benchmarks.

CDP Climate

Tesco participates in the annual CDP survey relating to climate change and in the latest 2022 assessment, we achieved an 'A-' score.

Electrifying.com

Tesco is recognised by Electrifying.com as the UK's best supermarket for our EV charging network, with charging points in over 600 stores.

Last updated: May 2023

Performance.

For both energy and emissions data, we have included all major subsidiaries within the Group measures and have included all UK-based subsidiary operations within our consolidated UK disclosures.

Group data						
Commitment	**KPIs**	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**
Climate neutral across our operations by 2035, aligned to a 1.5°C pathway	Percentage reduction of Scope 1 and 2 market-based GHG emissions across the Group (baseline 2015/16)	41%	49%	54%	52%	55% ◊ (a)
Source 100% of our electricity from renewable sources by 2030	Proportion of generated volume from grid PPAs (that are additional[b], not operational) and on-site generation, as a percentage of energy consumption at a Group level	81%	84%	100% (21% contracted additional)	100% (26% contracted additional)	100% (25% contracted additional[b] 13% generated) ◊

◊ Deloitte LLP was engaged to provide independent limited assurance over the selected climate data. Further information on page 10.

(a) This year we reduced our Scope 1 and 2 GHG emissions vs 2015/16 by 55%.

(b) We define 'additional' renewable sources in our methodologies on page 9.

Group GHG emissions data (tCO_2e)						
	2015/16 baseline	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**
Scope 1	1,240,871◊	1,117,480	1,105,183	1,053,131	1,110,098	1,039,346◊
Scope 2 (Market-based method)	1,095,671◊	256,446	81,531	13,631	16,107	7,796◊ (a)
Scope 2 (Location-based method)	1,657,316◊	995,543	859,583	718,222	642,337	575,462◊
Total Scope 1 and 2 (Market-based)	2,336,542◊	1,373,926	1,186,714	1,066,762	1,126,205	1,047,142◊
Scope 1 and 2 carbon intensity (kg CO_2e/sq. ft. of stores and DCs)	26.29	15.85	13.24	11.63	12.16	11.91◊
Selected Scope 3[b]	684,079	624,752	557,111	471,195	593,405	567,191◊

◊ Deloitte LLP was engaged to provide independent limited assurance over the selected climate data. Further information on page 10.

(a) All core operations and UK-based subsidiaries run on 100% renewable electricity (grid and onsite generation). Our Scope 2 emissions in 2022/23 came from international sourcing and subsidiary offices and some district heating in Central Europe.

(b) Scope 3 disclosure include: Third-party logistics that Tesco would otherwise fulfil, transmission and distribution losses and well-to-tank, business travel and water consumption. We are currently developing our end-to-end roadmap to net zero that will inform our reporting of Scope 3 emissions going forwards.

UK GHG emissions data (tCO_2e)						
	2015/16 baseline	2018/19	2019/20	2020/21	2021/22	2022/23
Scope 1	974,764	913,331	905,053	880,039	936,257	888,676
Scope 2 (Market-based method)	776,807	25,205	–	–	–	–
Total Scope 1 and 2 (Market-based)	**1,751,572**	**938,536**	**905,053**	**880,039**	**936,257**	**888,676**
Selected Scope 3	501,344	449,718	400,462	332,719	432,180	414,267
Total	**2,252,915**	**1,388,254**	**1,305,515**	**1,212,758**	**1,368,437**	**1,302,943**

Group energy consumption (GWh)						
	2015/16 baseline	2018/19	2019/20	2020/21	2021/22	2022/23
Total renewable consumption	–	2,676	3,021	2,836	2,773	2,742
Total non-renewable consumption	6,823	3,905	3,422	3,253	3,491	3,259
Total energy consumption (excluding f—gas and biofuels)	**6,823**	**6,580**	**6,443**	**6,089**	**6,263**	**6,000**

UK energy consumption (GWh)						
	2015/16 baseline	2018/19	2019/20	2020/21	2021/22	2022/23
Total energy consumption (excluding f-gas and biofuels)	**5,502**	**5,366**	**5,306**	**5,037**	**5,203**	**5,037**

Looking ahead.

To support delivery of our forthcoming net zero SBT and FLAG targets, we will roll out a new Group Scope 3 strategy consisting of decarbonisation roadmaps and supply chain initiatives for emission hotspots, as well as supplier engagement plans to drive delivery, catalyse new sources of sustainable finance, and align reporting standards across our supplier base. Our decarbonisation pathways will be published in conjunction with the reglementary disclosure of our climate transition plan, following the conclusion of the Transition Plan Taskforce consultation and guidance.

Commitments and targets

- Scope 1 and 2 emissions reduction of 60% by 2025 and 85% by 2030 (vs 2015/16 baseline).
- Carbon neutral across Group operations by 2035 and net zero across the supply chain by 2050, aligned to 1.5°C trajectory.
- Procure Group electricity demand increasingly via PPAs and onsite generation, at 45% by 2025 and 60% by 2030.
- Fully electric Tesco home delivery fleet by 2030.

Methodologies.

How we measure our progress

To track our progress against our climate strategy and science-based targets, we align our methodologies with climate science and the internationally recognised standard for carbon reporting Greenhouse Gas (GHG) Protocol.

We follow an operational control approach in order to identify our reporting boundary. We may choose to recalculate our baseline figure at our discretion to reflect any major structural changes such as mergers, acquisitions or divestments, or methodological changes such as boundary changes.

Percentage reduction of Scope 1 and 2 (market-based) GHG emissions (baseline 2015/16) across the Group

Our Scope 1 and 2 emissions cover the following sources across our international operations:

- Scope 1 – These are the direct GHG emissions that originate from Tesco owned or controlled assets. For example, emissions from gas and other fuel consumption in our stores, distribution centres and offices globally. We also include emissions from fuel consumption in Tesco owned and leased vehicles transporting the products that we sell. As well as energy, we also include emissions from refrigerant gas leakage from systems in our stores or our vehicles.
- Scope 2 – This includes the indirect GHG emissions from the generation of electricity and district heating which Tesco uses, in accordance with the GHG Protocol.

Scope 3

These are emissions not produced by Tesco itself, and not the result of activities from assets owned or controlled by us, but by those that Tesco is indirectly responsible for, up and down its value chain.
We currently report against categories 1, 3, 4 and 6 within the GHG Protocol definition of Scope 3, covering:

- Category 1 - Purchased Good and Services (Water is the only aspect of Category 1 that is reported on within this scope).
- Category 3 - Transmission and distribution impacts of electricity and heat supply and well-to-tank embodied impacts of fuel.
- Category 4 - Distribution arranged by Tesco but provided by third parties that Tesco would otherwise need to fulfil.
- Category 6 - Business travel by air, rail, taxi, and short-term hire car.

Percentage electricity from 'additional' renewable sources

We define 'additional' renewable sources as procuring energy in a way that creates new renewable generation rather than buying what is already accounted for via Renewable Energy Certificates (RECs). We consider this procurement approach to be highly credible as it contributes to the wider transition to a low carbon energy market.

We calculate this as the proportion of our total Group electricity demand that is attributed to either new Power Purchase Agreements (PPAs) or owned on-site renewable generation. This is expressed as a percentage.

This is the first year we are reporting on 'generated additional' as well as 'contracted additional'. This is to provide both an accurate view of actual generation within the timeframe, as well as to give sight of what we have contractually committed to towards achieving our roadmap milestones.

Results for these KPI's are rounded, using standard calculation practices.

Assurance.

Deloitte LLP was engaged to provide independent limited assurance over the selected climate data highlighted in this report with a ◊ using the assurance standard ISAE 3000. Deloitte has issued an unqualified opinion over the selected data. Deloitte's full assurance statement is available at: Reporting hub (tescoplc.com)

Read more about our approach

More information

Our approach to climate change

Methodologies and assurance

Our carbon footprint methodology

Deloitte assurance statement