

**THE
BRITISH STEEL
PENSION SCHEME**

**CLIMATE CHANGE REPORT
FOR THE YEAR TO
31 MARCH 2023**

AUGUST 2023

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INTRODUCTION

Climate change presents one of the biggest economic and political challenges of the 21st century. The Trustee believes that it is incumbent upon asset owners to take the necessary steps to ensure climate-related risks and opportunities are properly considered when investing the assets over which they provide stewardship. Not only will this lead to positive impacts for the planet and wider society, but it will drive better financial outcomes and enhance the ability of the Scheme to deliver the benefits promised to members.

This Climate Change Report provides information about how the Trustee has considered climate-related risks and opportunities and how these have been managed.

This is the Scheme's second Climate Change report covering the period to the Scheme year end date of 31 March 2023 (the first report covered the Scheme year to 31 March 2022). There have been significant changes to the investments of the Scheme since March 2022 culminating in the Scheme fully insuring all benefits with Legal & General Assurance Society (**LGAS**) on 17 May 2023. From that date, the Scheme will no longer be required to produce Climate Change Reports and the Trustee's role as stewards of the Scheme's assets will be limited to the insurance policies with LGAS together with a modest portfolio of cash and gilts to meet the on-going running costs of the Scheme. The Trustee has however taken steps to ensure that the chosen insurance provider has a climate change strategy that is coherent with the Scheme's climate ambitions.

The act of securing benefits with insurance policies has reduced the risks (including climate risks) of the Scheme having insufficient assets to provide members' benefits as far as possible. We have therefore taken a pragmatic approach to producing this report. While the purpose of this report is to inform future strategy, the insurance deals are considered to be irreversible so no change to future strategy is possible.

This report follows the TCFD's framework to provide disclosures in four broad categories:

- **Governance:** the arrangements that have been put in place to maintain oversight of the climate-related risks and opportunities relevant to the Scheme
- **Strategy:** consideration of the potential impact of climate-related risks and opportunities on the Scheme's investment strategy and funding strategy
- **Risk management:** how the processes used to identify, assess and manage climate-related risks are integrated into the Scheme's overall risk management approach
- **Metrics and targets:** the metrics and targets used to assess and manage climate-related risks and opportunities.



1. GOVERNANCE

The Trustee is ultimately responsible for decisions on all investment matters, which includes ensuring climate-related risks and opportunities are properly integrated into the Scheme's risk management framework.

As described in section 3, the Scheme has a detailed Integrated Risk Management (*IRM*) Policy which sets out how the various risks to which the Scheme is exposed are assessed and managed. Climate risk has been explicitly incorporated into this framework as a key risk for the Scheme.

The Trustee receives advice or assistance on governance activities from a range of providers, as discussed further below. The Trustee has considered how those parties consider climate-related risks and opportunities within the support provided to the Scheme.

The Trustee expects its appointed insurance policy provider and its investment managers to have integrated Sustainable Investment considerations (including climate risk) into their investment analysis and decision-making processes and, where relevant, when exercising voting rights.

During the year, the Trustee outsourced the management of all of the Scheme's assets from the in-house manager Pensions Services Limited (*PSL*) to Legal and General Investment Management (*LGIM*). LGIM's Sustainable Investment practices, including climate risk management, as assessed by the Scheme's investment adviser, WTW, were taken into account when appointing LGIM.

During the year, the Trustee also completed two additional insurance transactions with LGAS taking the percentage of Scheme assets invested in annuity insurance policies from 5% to 59%. LGAS's climate risk management practices, as assessed by the Scheme's risk adviser, LCP, were taken into account when appointing LGAS.

The Trustee receives advice or assistance on governance activities from a range of providers including WTW (Scheme Actuary and investment adviser), LCP (risk adviser) and Penfida (covenant adviser). The Trustee, through engagement with these providers, is satisfied that they take account of climate-related risks and opportunities, where relevant to the advice or assistance being provided. The Trustee formally reviews the service it receives from all providers on an annual basis, and the providers' continued ability to take account of climate-related risks and opportunities will form part of these reviews.

The Trustee has also focused on embedding climate considerations within the Scheme's wider integrated risk management framework, which is aligned with the regulatory direction of travel set by the Pensions Regulator.

2. STRATEGY

The Trustee's strategic objective has historically been to secure liabilities in full with an insurance company, and this was achieved on 17 May 2023.

The Trustee undertook scenario analysis during the Scheme year ending 31 March 2022, being the first year in which the Climate Change regulations applied to the Scheme. This analysis, which was described more fully in last year's report, considered 4 separate scenarios for the potential impact of climate change on both the Scheme's assets and liabilities and hence the future progression of its funding level. In conducting the analysis last year, the Trustee has considered the potential effects of climate change over a range of time horizons for the Scheme using 31 March 2021 as the baseline, being the start of the Scheme year during which the Climate Change reporting requirements came into effect. As part of this, the Trustee has also identified the different elements of climate change risk (i.e., transition risk, physical risk). The approach taken last year is consistent with the regulatory requirements and with the statutory guidance for pension schemes published by the Department for Work & Pensions.

The overarching aim of the analysis was to assess the likely impact on the achievement of the Trustee's ultimate objective, which is to fully secure the liabilities through the insurance market. At the time of the analysis, the Scheme's funding level was around 93%, with a central expectation that it would take around 11 years to achieve the ultimate objective.

Under most of the scenarios considered, there would be a negative impact on the expected timeframe to achieving the objective. The most significant impact occurred under the 'Global Coordinated Action' scenario, where the expected timeframe extended to beyond 15 years. In the case where investment markets suddenly price in the impacts of climate change, the Scheme could experience a drop in funding level of up to 8%. In considering this analysis, the Trustee recognised that proceeding to fully insure liabilities as quickly as possible would be the most effective way of mitigating these risks.

As required by the regulations, the Trustee reviewed this initial scenario analysis during this Scheme year and considered whether it would be appropriate for the analysis to be updated. The Trustee took into account changes in the circumstances of the Scheme since the initial analysis was undertaken and considered whether updated analysis would usefully inform Trustee strategy or investment decisions.

When considering whether the scenario analysis should be updated during the first quarter of 2023, the Trustee had already insured 59% of the liabilities and was awaiting a quotation for securing the remaining liabilities, with an expectation that it would have sufficient assets to proceed with the transaction.

The Trustee's view was that completing the transaction would provide the best way for the Scheme to manage the various risks it faces, including the impacts of climate change. Consequently, the Trustee concluded that reassessing the risks and opportunities presented by climate change would not impact the decision to proceed with the transaction, nor would it be feasible to take action to mitigate any risks or exploit any opportunities identified by the analysis, within the relevant timeframes.

As such, the Trustee concluded that updating the scenario analysis would not help inform strategic or investment decisions.

3. RISK MANAGEMENT

Integrated Risk Management (IRM)

The Trustee has operated a robust IRM framework which identifies the key risks to which the Scheme is exposed and for the most important risks, sets out how the risks are defined, measured, mitigated and monitored.

Climate risk has been explicitly added to the framework (having previously been a component of a broader Sustainability and ESG risk) and identified as one of the most significant risks for the Scheme.

Prior to fully insuring the benefits, the processes used to identify and manage these risks included:

- Calculation and reporting of a range of climate risk metrics, and the adoption of a Carbon Journey Plan which seeks to reduce the Scheme's 'Carbon Intensity' metric over time, as described further in section 4.
- Provision of scenario analysis, as described in section 2.
- Consideration of the impact of climate risk on the sponsor.
- Over time, reducing the Scheme's exposure to assets likely to be more affected by climate risk, and increasing exposure to assets which might benefit from the transition to a lower carbon economy. For example, the reduction in the exposure to the Scheme's Global Listed Infrastructure Equities allocation, which is an area of the portfolio which contributes significantly to the Scheme's carbon metrics.
- Engaging with the Scheme's managers on a regular basis to explore their approach to climate risk management and seek to increase the pace of decarbonising, either through their portfolio management decisions or their engagement at the underlying security level.

The Trustee reviews its IRM Policy on an annual basis and will consider whether any changes to how climate-related risks and opportunities are identified, assessed and managed are warranted as part of these annual reviews. Having fully insured all Scheme liabilities, the Trustee presently is undertaking a review of its risk management framework.

Consideration of risks of insurance policies with LGAS

Fully insuring the benefits with LGAS brings significant risk management benefits, which includes the management of climate risks.

The Trustee has taken advice from Penfida on the financial strength of LGAS as a counterparty for the Scheme's annuity insurance transactions. They advised LGAS were a suitable counterparty for the following reasons:

- LGAS's Solvency II ratio as at 31.12.22 was 207% of the minimum required (the minimum is designed to cover a 1-in-200 year stress)
- They have strong credit ratings and a strong approach to risk management
- Transferring to an insurance company provides additional regulatory protections including the Financial Services Compensation Scheme should LGAS fail, protection against any acquisition/transfer of business and protection against excessive shareholder pay-outs.

The insurer bears any climate related losses out of solvency capital and shareholder funds so the above factors all mitigate the risk that members' benefits will be adversely impacted by climate related losses on the insurer's underlying investments.

The Trustee has also taken advice from LCP on the responsible investment and climate risk management capabilities of LGAS for the investments backing their annuities business. LGAS is LCP's highest rated annuity provider for responsible investment and LGAS's investment process involves considering climate risks and opportunities at both an asset class level and within individual securities.

Covenant Risks

The Scheme's sponsor operates in an energy-intensive sector meaning that climate risks are skewed to the downside. The insurer is effectively providing a second covenant to the Scheme which is arguably stronger than that of the sponsoring company especially with regards to climate risks.

4. METRICS AND TARGETS

Carbon emissions are classified per the Greenhouse Gas Protocol (the GHG Protocol) and include:

1. Carbon Dioxide (CO₂)
2. Methane (CH₄)
3. Nitrous Oxide (N₂O)
4. Hydrofluorocarbons (HFCs)
5. Perfluorocarbons (PFCs)
6. Sulphur Hexafluoride (SF₆)
7. Nitrogen Trifluoride (NF₃)

A carbon dioxide equivalent or CO₂ equivalent, abbreviated as CO₂e, is a metric used to compare the emissions from various greenhouse gases based on their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

As per the GHG Protocol, emissions of these gases are grouped in three categories known as Scope 1, Scope 2 and Scope 3:

- Scope 1 carbon emissions are those directly occurring from sources that are owned or controlled by the institution.
- Scope 2 carbon emissions are "indirect emissions generated in the production of electricity consumed by the institution".
- Scope 3 carbon emissions encompass all other indirect emissions that are "a consequence of the activities of the institution but occur from sources not owned or controlled by the institution" such as commuting; waste disposal; embodied emissions from extraction, production, and transportation of purchased goods; outsourced activities; contractor-owned vehicles; and line loss from electricity transmission and distribution".

As per the GHG Protocol, Scope 3 carbon emissions can be classified into two broad categories:

- Upstream Scope 3 emissions: defined as indirect carbon emissions related to purchased or acquired goods and services; and
- Downstream Scope 3 emissions: defined as indirect carbon emissions related to sold goods and services.

The Trustee has elected to calculate the various emissions metrics, as far as it is able, allowing for scope 1, 2 and 3 emissions.

Trustees must select and report on a minimum of the following metrics:

- one absolute emissions metric,
- one emissions intensity metric,
- one portfolio alignment metric and
- one additional climate change metric

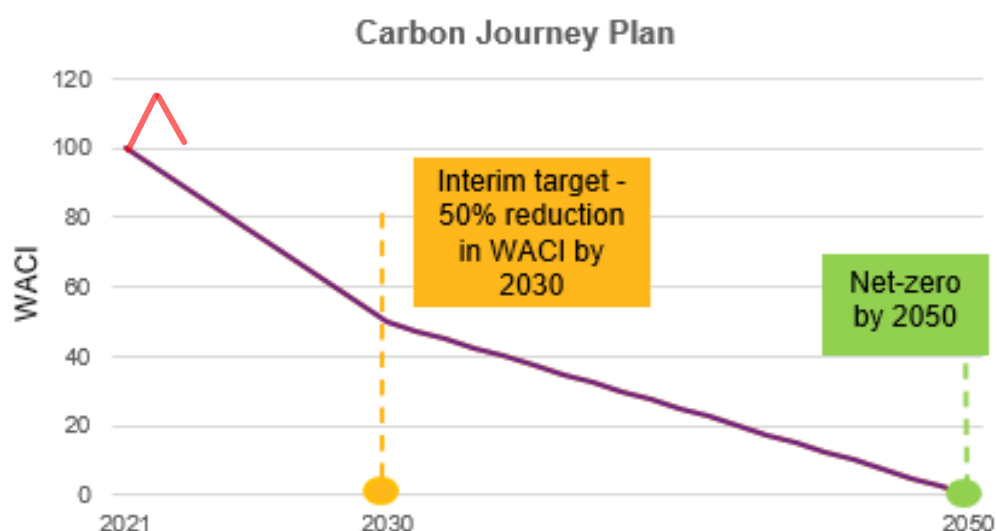
Trustees must review their metric selections from time to time as appropriate to the Scheme. In order to comply with the recommendations, the Trustee is committed to monitoring and reporting on the following metrics:

- **Absolute GHG emissions** (including Scope 1, Scope 2 and Scope 3) of the Scheme's assets: The absolute metric is the total carbon emissions associated with the portfolio expressed in tonnes of CO₂e. For this metric, an investor with 5% ownership of a company's enterprise value will also be attributed 5% of the company's carbon emissions. The enterprise value is defined as enterprise value including cash (**EVIC**).
- **Weighted Average Carbon Intensity (WACI):** The weighted average carbon intensity metric normalises the total carbon emissions per million of sales at the portfolio level.
- **Climate Value-at-Risk (CVaR):** The Climate VaR metric helps investors to better assess potential future costs and/or profits relating to their portfolio's exposure to future climate change. Expressed in percentage change of market valuation, this metric is the aggregate of projections to 2100 of transition cost, physical cost and profit.
- **Warming Potential:** Alongside the CVaR, this metric translates the carbon intensity into an implied temperature increase. The Warming Potential metric establishes a forward-looking contribution to global warming.
- **Exposure to Green Bonds/Revenues:** A green bond is a bond specifically earmarked to be used for climate and environmental projects. These bonds are typically asset-linked and backed by the issuer's balance sheet and are also referred to as climate bonds.

For last year's report the Trustee and PSL's chosen data provider for calculating these metrics was MSCI. For this year's report since the assets were outsourced to LGIM the Trustee is using metrics based on data from LGIM's chosen provider, ISS. Given the Scheme has now achieved its objective of fully insuring the Scheme's liabilities, the Trustee has not restated the previous year's climate metrics.

As part of integrating climate risk into the Scheme's IRM framework, the Trustee established a Carbon Journey Plan (**CJP**) as a means of monitoring and managing the carbon exposure of the Scheme's assets over time. The CJP, which is illustrated in the chart below, is constructed as follows:

- It uses the Weighted Average Carbon Intensity (**WACI**) as the metric against which a target has been set
- It starts the measurement from a baseline date of 31 March 2021 (being the start of the Scheme year in which the TCFD requirements first applied)
- It has a longer-term target of reducing the WACI to zero by 2050.
- It has a medium-term, interim target of reducing the WACI by 50% by 2030.



■ Actual observed WACI for the two years from March 2021 to March 2023

Summary of calculated metrics

Metric	31-Mar-23	31-Mar-22
Total carbon emissions (tonnes of CO ₂ e)	1.2 million	50.7 million
WACI (tonnes/million \$ of sales)	850	979
Warming potential	2.6 degrees _c	3.24 degrees _c
Exposure to green bonds/revenues (% of corporate bond portfolio)	4.8%	5.3%

We have not been able to provide a CVaR as at 31 March 2023 since LGIM do not provide this metric for the assets that they manage. However, from 17 March 2023 the benefits of the Scheme are fully insured, and therefore the insurer bears climate related investment losses (rather than the Scheme). The climate risk exposure of the Scheme is therefore effectively zero as long as the insurer remains solvent (compared with a CVaR of 8.9% as at 31 March 2022).

The carbon emissions as at 31 March 2022 and 31 March 2023 have been calculated on a best endeavours basis using the data available to the Trustee at the time and the most up to date methodologies available. It is not unusual for methodological changes or data provider updates over time to lead to material and sometimes unexpected fluctuations in the trends observed for carbon emissions. In calculating the metrics above, the following asset classes have been considered:

1. Corporate bonds
2. Global Listed Infrastructure Equities (sold during year)

Whilst the analysis undertaken is intended to cover the level of emissions associated with the Scheme's asset portfolio as accurately as possible, this is a developing area, which currently gives rise to several limitations:

- For the corporate bonds the total carbon emissions data from LGIM only covers 62.5% of the portfolio so we have scaled up the emissions proportionately to assume 100% coverage for the corporate bond allocation.
- The industry is yet to formalise an approach for calculating the carbon emissions associated with gilts and insurance policies. For this analysis, we have disregarded the proportion of the portfolio that is invested in gilts and the LGAS buy-in insurance policies – this approach is aligned with the industry practice.
- The quality and breadth of data is lower for private companies and the coverage across different asset classes varies significantly, particularly within less liquid mandates. As such, we have excluded the property exposure from the calculation of these metrics.

The significant reduction in the total carbon emissions (tonnes of CO₂e) versus last year is due to the following factors:

- The sale of the Global Listed Infrastructure equities
- The significant reduction in the size of the corporate bond portfolio (and corresponding increase in buy-in insurance policies)
- The change from calculations being provided by PSL based on MSCI data to LGIM calculating based on ISS data which appears to assign lower total emissions to equivalent portfolios.

The Weighted Average Carbon Intensity (**WACI**) numbers are more comparable year on year and show a 13% reduction versus last year, the primary reason being the sale of the Global Listed Infrastructure equities (partially offset by a small increase for the corporate bonds). More details are set out in the table below:

WACI (tonnes/million \$ of sales)	31 March 2023		31 March 2022	
	WACI	Allocation %	WACI	Allocation %
LGAS Insurance Policies		58.6%		5.0%
Corporate Bonds	850	20.2%	802	58.3%
Gilts		10.1%		16.5%
Property		6.3%		12.1%
Global Listed Infrastructure equities		0.0%	3,274	4.5%
Private equity		0.5%		0.5%
Cash and other		4.2%		3.1%
Total fund value / Assets covered	850	20.2%	979	62.8%

Achieving the CJP objectives

Now that the Scheme is fully insured, climate risks have been reduced as far as possible since climate related losses will be borne by the insurer before the Scheme. Furthermore, the Trustee has selected the highest rated insurer for climate risk management of their underlying investments according to analysis from LCP.

APPENDIX - ASSET ALLOCATION

As of March 2023, the fund was valued at £7.35 billion and the split between different asset categories is set out in the table below:

Asset allocation	31 March 2023		31 March 2022	
Asset category	£'m	Allocation %	£'m	Allocation %
LGAS Insurance Policies	4,308	58.6%	498	5.0%
Corporate Bonds	1,482	20.2%	5,785	58.3%
Gilts	742	10.1%	1,637	16.5%
Property	463	6.3%	1,202	12.1%
Global Listed Infrastructure equities	2	0.0%	448	4.5%
Private equity	39	0.5%	52	0.5%
Cash and other	311	4.2%	307	3.1%
Total fund value	7,347	100.0%	9,929	100.0%

For the purposes of the analysis in this report, the various metrics have been calculated for the Corporate Bonds (plus for last year the Global Listed Infrastructure equities).

Property and private equity have been excluded from the analysis as it is not yet possible to obtain the relevant data on the Scheme's actual holdings.

Gilts have been excluded from the analysis, in accordance with the guidance from the IIGCC NZIF for sovereign bonds held for liability hedging purposes. The LGAS buy-in insurance policy has also been excluded, using a similar rationale. The Trustee recognises that different schemes are adopting different approaches with regards to calculating metrics on liability hedging assets.

APPENDIX - GLOSSARY

Net Zero target

Firm's targets to make Net Zero carbon emissions by a specific date, at which point having sought to reduce the emissions as much as possible, any carbon dioxide which continues to be released into the atmosphere is balanced by an equivalent amount being removed by offsetting through carbon removals.

Scope 1, 2 and 3 emissions

Greenhouse gas emissions are categorised into three groups or 'Scopes'.

Scope 1 covers direct emissions e.g. use of natural gas, company car vehicle emissions.

Scope 2 covers indirect emissions from the generation of purchased electricity, steam and heating.

Scope 3 includes 15 other categories of indirect emissions in a company's value chain e.g. business travel and investments.

Carbon Emissions - Scope 1+2+3 Intensity (t/USD million sales)

This figure represents the company's most recently reported or estimated Scope 1 + Scope 2 + Scope 3 greenhouse gas emissions normalised by sales in USD, which allows for comparison between companies of different sizes. The carbon intensity figures for each holding in the portfolio are averaged using the portfolio weights.

Green Bonds

A green bond is a bond specifically earmarked to be used for climate and environmental projects. These bonds are typically asset-linked and backed by the issuer's balance sheet, and are also referred to as climate bonds.

Sustainability

All activities can be considered as taking account of profit, people and the planet (also known as the 'triple bottom line'). A more formal definition is "meeting the needs of the present without compromising the ability of future generations to meet their needs".

Task Force on Climate-related Financial Disclosures

The Financial Stability Board created the TCFD to improve and increase reporting of climate-related financial decision useful information.

Governments are encouraging firms to make disclosures aligned to the TCFD framework to enable investors to compare them and allocate capital accordingly. The UK Government made TCFD reporting mandatory for all listed companies and large asset owners in 2022.

The **Climate VaR** metric provides investors with an estimation of how the value of their investment portfolios could be impacted (up or down) by climate policy risk, technology transition opportunities and extreme weather (physical climate risks). A company's Climate VaR, expressed as a percentage change from its current market valuation, is derived from financial modelling of potential future costs and profits associated with climate-related risks and opportunities.

TCFD requires that asset owners run climate scenario analyses in accordance with Paris Agreement.

Base case: holding the increase in the global average temperature to 2°C above pre-industrial levels by 2100.

Worst case: using a greater than 2°C scenario to account for physical effects due to extreme weather change.

Best case: pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, with net zero by 2050.

The **Warming Potential** metric provides investors with an indication of how the projected business activities undertaken by companies in their investment portfolios align to pathways corresponding to global temperature targets. Given the same business activities, the Warming Potential of two companies, expressed in degrees Celsius (°C), should be similar regardless of other factors that may affect their exposure to climate-related risks such as differences in their policy environment, exposure to weather hazards or market valuations.

APPENDIX - DISCLAIMERS

LGIM (2023 data)

Third party ESG data providers: Source: ISS

Where the Information includes scope 3 green house gas emissions data (as defined in the Final Report on the Recommendations of the Task Force on Climate-related Financial Disclosures (June 2017) (**Scope3Data**)), please note that: Legal & General relies on third party sourced model-based estimates for Scope 3 Data, as most within scope companies do not publish Scope 3 Data; and Legal & General makes no representation and/or warranty that Scope 3 Data provided to you may be utilised to satisfy any requirements you may have under the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021.

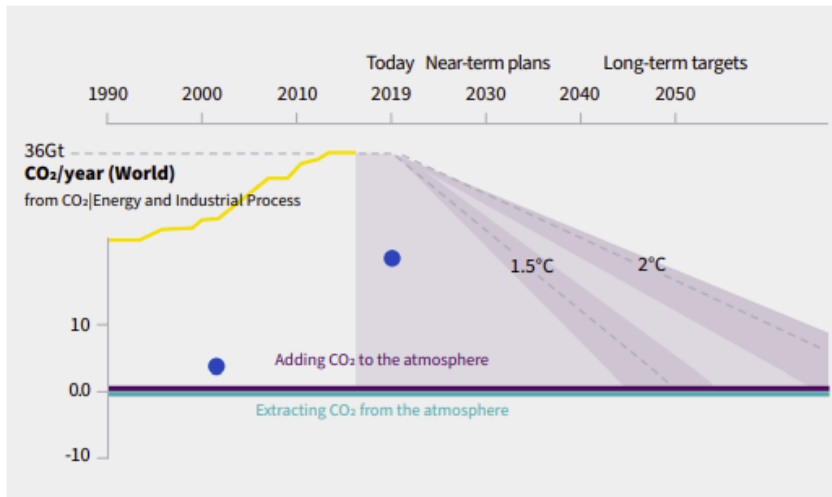
MSCI (2022 data)

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APPENDIX - STRATEGY

The Intergovernmental Panel on Climate Change's (*IPCC*) 1.5°C report highlights that, if the Paris 1.5°C target is to be met, then “global net anthropogenic CO₂ emissions must decline by about 45% from 2010 levels by 2030, reaching Net Zero by around 2050”.

This report also indicates that the 2°C target implies that CO₂ emissions will need to reduce to Net Zero by around 2075.



The Paris Agreement set the long-term target of keeping a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C.

From climate physics, we know that reaching these targets implies limiting the cumulative CO₂ emissions to a very tight carbon budget. The latest IPCC report has shown that therefore the 2°C target implies that CO₂ emissions have to be reduced to zero around 2075. For limiting warming to 1.5°C, CO₂ emissions have to be reduced to zero around 2050.

Source: Aviva Report: Global net anthropogenic CO₂ emissions Source: Based on IPCC.