

Environment, sustainability and biodiversity

Annual report 2022/23



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Accessibility

You can find out more and read this report using assistive technology on our [website](#).

For information on our accessibility principles, please visit: www.audit-scotland.gov.uk/accessibility.

Background

Purpose

1. The purpose of this document is to provide an update on the progress we are making towards our organisational environmental targets. It also provides an update on how we are developing our approach to auditing climate change.

2. Part 1 looks at our environmental performance as an organisation. The headline messages are:

- We currently have already met our carbon emission reduction target for 2030. This is mainly the result of a very significant reduction in business travel following the pandemic.
- This achievement is fragile, however, and could be reversed if our business travel returns to pre-pandemic levels, or if changes to the way our estate is managed leads to greater energy use in our offices.
- We have made significant changes to our climate change governance arrangements to begin to ensure that climate change and environmental sustainability are taken into account at all levels of decision-making.
- We are developing a programme of work, including a review of our targets and the data underpinning them, to make sure that the targets are still fit for purpose. This is with a commitment that the targets will remain at least as ambitious as they are currently. The review includes consideration of the emissions that should be included within scope.

3. Part 2 looks at what we are doing to develop our approach to auditing climate change. The headline messages are:

- In December 2022, we published [Auditing climate change: Our strategy](#), which sets out our approach to auditing climate change.
- Our audit work will play an important role in providing assurance and supporting public bodies to contribute fully to Scotland's climate change goals and wider environmental ambitions.
- We have published three reports on climate change since April 2022, and it will continue to feature in our work programme for the foreseeable future.

Our ambition

- 4.** Audit Scotland has a unique position within the public sector in Scotland, from which we aim to influence and support positive changes in how Scotland is responding to the climate emergency. This includes leading by example with our organisational response.
- 5.** We aim to manage our own operations in a way that minimises our negative environmental impact and enhances our positive impact, wherever possible.
- 6.** Our first [Climate change plan \(2015–2020\)](#) set a target to reduce our emissions from the baseline level of 533 tonnes of carbon dioxide equivalent (tCO₂e) to less than 292 tCO₂e by 2020. We went further than our target and recorded 215 tCO₂e in 2019/20.
- 7.** A review of the initial plan was put on hold in 2020 due to the Covid-19 pandemic and we published our new [Environment, Sustainability and Biodiversity Plan 2021–2025](#) in September 2021. The plan sets out our approach to sustainability issues and continues to reflect our aspirations to reduce our emissions, as well as introducing a focus on reaching net zero by 2030. It includes targets to be achieved on the journey to net zero, against the baseline year 2008/09.

Governance

- 8.** Climate change issues are integrated into what we do and how we work through our corporate publications including our [Annual report and accounts](#), [Public audit in Scotland 2023–28](#), and [Corporate Plan 2023–28](#).
- 9.** We have set in place new governance and risk management arrangements for climate change and wider environmental sustainability to ensure that these issues are taken into account at every level of decision-making.
- 10.** The roles and responsibilities of the groups involved in leading, managing and holding us to account for our environmental and sustainability performance are set out in [Appendix 1 \(page 16\)](#).

1. Our environmental performance

Key messages

1 In 2022/23, we exceeded our overall 2030 emissions reduction target, as set out in our Environment, Sustainability and Biodiversity Plan 2021–2025.

This is due largely to a very considerable drop in business miles travelled and resulting emissions, which are 80 per cent lower than pre-pandemic levels. We recognise that any significant increases to current levels could impact on our ability to meet our targets in future.

2 Gas and electricity usage in Audit Scotland's offices has remained at a fairly consistent level over the last few years, including during the pandemic.

Carbon emissions from electricity continue to decrease significantly as the national grid decarbonises. We expect that gas usage and emissions will increase over the next couple of years as a result of increasing the size of our office space in Glasgow to accommodate increased staff numbers. This could impact on our ability to reach our emissions reduction targets.

3 Audit Scotland's targets do not currently include carbon emissions generated from the energy used by staff when they work from home.

However, we do quantify and report them. Working from home emissions have increased in this reporting year despite more staff working in the office. The increase is due to a new methodology required as part of the Public Bodies Climate Change Duties reporting requirements. We also recognise that, as we do not currently quantify emissions arising from staff commuting to and from work, we do not have a full picture of the positive or negative impact that changes in working patterns may have had on our overall emissions.

4 Audit Scotland is currently reviewing its targets to make sure that the scope of the emissions included is still appropriate.

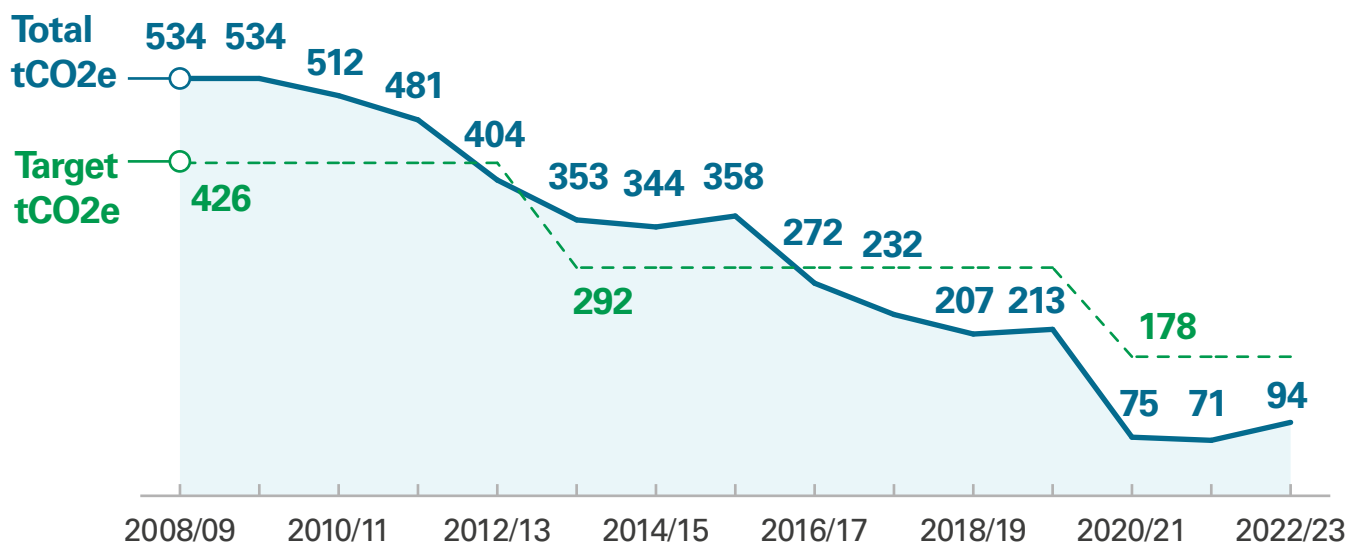
The review will also consider our approach to carbon offsetting and the implications for our net zero ambitions. We expect to report on the outcome of this review in our 2023/24 annual environment, sustainability and biodiversity report.

Overall emissions in 2022/23

Overall carbon emissions against targets

11. Performance against our targets to reduce total carbon emissions to date is shown in [Exhibit 1](#).

Exhibit 1. Carbon reduction since 2008 against targets



Note: Some previously reported figures have been corrected following a review of our emissions data. The updated figures are shown in this graph. The graph does not include working from home emissions, as they are not included in our current targets.

Source: Audit Scotland






12. In 2022/23, the total for the emissions that are included in our carbon reduction target was 94 tCO₂e. This is almost 50 per cent lower than our target to achieve no more than 178 tCO₂e by 2024/25 and more than 30 tCO₂e lower than our current 2030 emissions reduction target, to emit no more than 133 tCO₂e ([Exhibit 2, page 7](#)).

13. This achievement is due largely to:

- significant reductions in business travel which have not returned to pre-pandemic levels
- exceeding emissions reductions from energy use mainly as a result of decarbonisation of the national grid and our energy supply.

Exhibit 2.

Carbon footprint in 2022/23 compared to route map emissions reduction targets

Carbon emissions included in our carbon reduction targets		Actual 2022/23 tCO ₂ e	Target 2024/25 tCO ₂ e	Target 2029/30 tCO ₂ e
	Energy	70	79	65
	Business travel	23	92	63
	Waste and recycling ¹	–	6	4
	Water	1	1	1
Total³		94	178	133
	Working from home (not included in carbon reduction targets)²	102	–	–

Notes:

1. Waste and recycling emissions are blank for 2022/23 because this information has not been quantified for the current reporting year. The last recorded waste quantifications were 7 tCO₂e in 2019/20. New systems are being put in place to capture and record this data for future reporting years.

2. Working from home emissions are not currently included in Audit Scotland's emission reduction targets as the targets were established before the significant increase in working from home.

3. A breakdown of the sources of the emissions in this exhibit can be found in [Appendix 2 \(page 18\)](#).

Source: Audit Scotland

14. We recognise that this success is fragile and any significant increases in business travel could mean that we will fail to meet our targets in future years. If our business travel goes back up to pre-pandemic levels, for example, this could add almost 100 tCO₂e to our total and would mean that the 2024/25 target would not be met.

15. We wish to be as transparent as possible and so we are also including our working from home emissions in this report, although they are not included in our current targets as set out within our [Environment, Sustainability and Biodiversity Plan 2021–25](#).

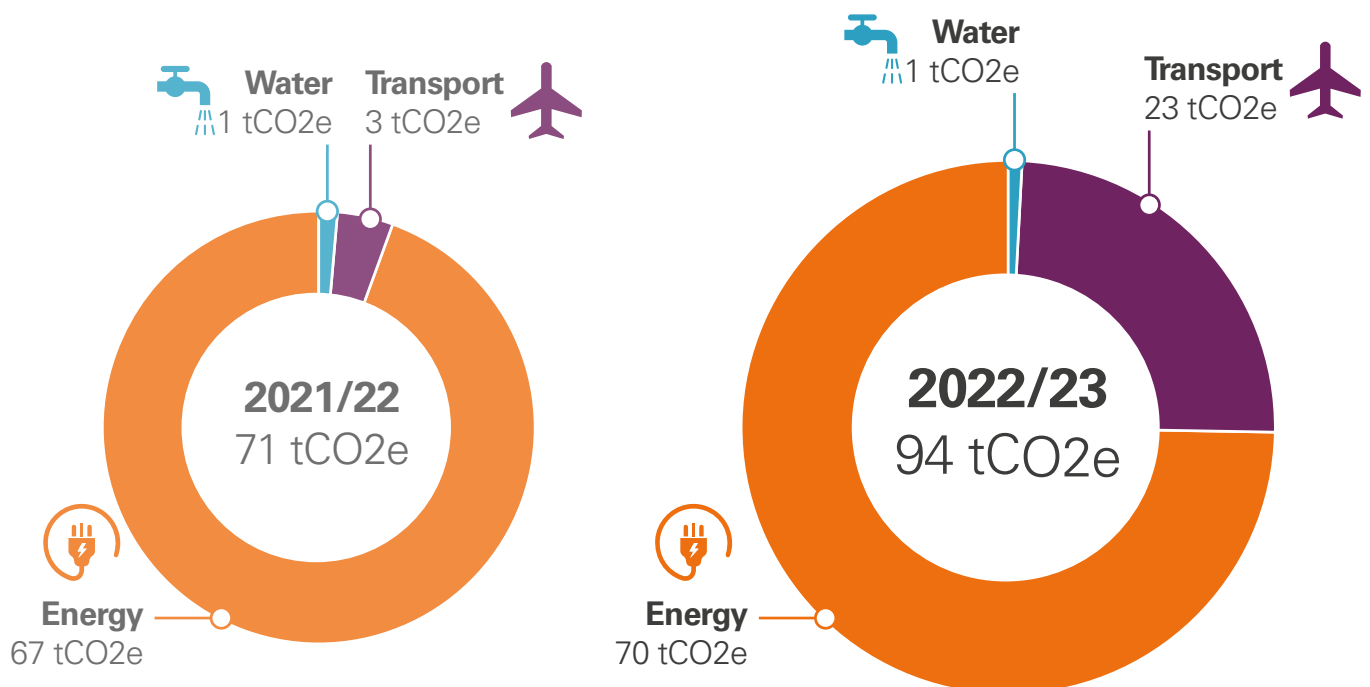
16. Audit Scotland is currently reviewing its targets to make sure that the scope of the emissions included is still appropriate. It will also consider our approach to carbon offsetting and the implications for our net zero ambitions. We expect to report on the outcome of this review in next year's report.

Change in emissions between 2021/22 and 2022/23

17. Although our long-term targets have been surpassed, emissions included in the scope of our targets increased by 23 tCO₂e (33 per cent) between 2021/22 and 2022/23, as shown in [Exhibit 3](#).

18. This is due almost wholly to an increase in business travel emissions, with Audit Scotland staff travelling 324,000 business kilometres compared to 22,000 the previous year. This increase is reflected across all transport modes including car, rail and air and is a result of a return to more typical patterns of working following the pandemic. However, business travel is still considerably less than pre-pandemic levels, when we travelled around one million kilometres a year.

Exhibit 3. Carbon footprint 2022/23 compared to last year



Source: Audit Scotland

Energy carbon emissions

Emissions from electricity and gas used in offices

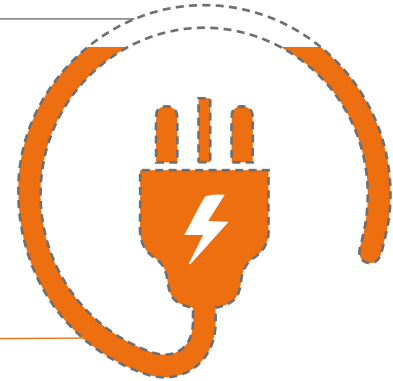
Target: Reduce emissions from electricity and gas used in offices to no more than 79 tCO₂e by 2024/25.

Performance to date: Our emissions from electricity and gas used in offices in 2022/23 were 70 tCO₂e. We are ahead of schedule and have exceeded our target.

Summary: Compared to 2021/22 we increased our carbon emissions from electricity and gas used in offices by 3 tCO₂e (5 per cent).

2024/25 target
79 tCO₂e

2022/23
70 tCO₂e



19. Electricity emissions increased by three tCO₂e compared to 2021/22 which reflects an increase in usage as a result of more staff working in the office. The carbon intensity of this electricity use continues to decrease as the national grid and our energy supply is decarbonised. Gas usage decreased by one tCO₂e, which is likely due to decreased heating demand within the buildings we occupy.

20. Apart from relatively minor fluctuations, the overall trend for the amount of gas and electricity we use in offices has remained fairly stable over recent years. However, we anticipate an increase in both usage and emissions as a result of changes to our office space requirements. This increase could impact on our ability to achieve our targets in future years.

Emissions from electricity and gas used when staff work from home

21. Audit Scotland's targets do not currently include carbon emissions generated as a result of the gas and electricity used by staff when they work from home. However, we do estimate and report them.

22. Working from home (WFH) emissions increased to 102 tCO₂e in 2022/23 compared to 94 tCO₂e in 2021/22. This is despite more staff working in the office and is due largely to the introduction of a new methodology required as part of the Public Bodies Climate Change Duties reporting requirements. A like-for-like comparison would show a decrease.

23. Although we report our WFH emissions we do not currently quantify the emissions generated by staff commuting to and from work. If we did, these emissions would have seen a significant decline with shifts in working patterns. Without this data we cannot know whether there has been an overall reduction in emissions as a result of shifts in working patterns or an overall increase. This makes decision-making around this issue complex.

24. It is also important to note that the WFH emissions are all additional emissions. There can often be concerns that a move to working from home may give a false picture of organisational emissions if they are not properly accounted for. In other words, office energy use may decrease because office spaces are not being used but this is only because the same amount of energy, or more, is being used elsewhere (ie, in staff homes). Because of the way Audit Scotland's energy is quantified, the organisation did not see a significant reduction in its office energy use even when nearly all staff were working from home during the pandemic.

25. It is likely that the move to working from home is also a contributing factor in minimising our business travel. In addition to Audit Scotland staff working more frequently from home, staff at audited bodies have also adopted new working practices, leading to the normalisation of virtual meetings.

26. Audit Scotland is currently reviewing its targets to make sure they best reflect new ways of working since the pandemic and we expect to report on the outcome of this review in next year's sustainability report.

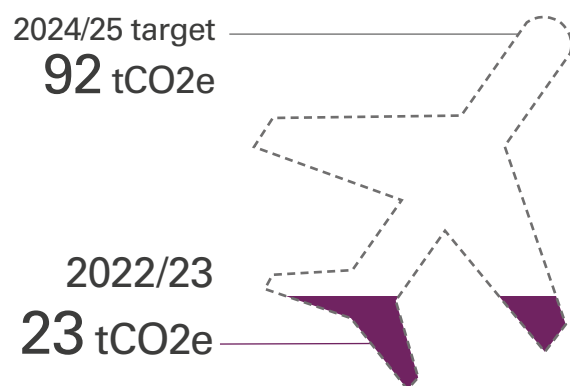
Business travel carbon emissions

Business travel

Target: Reduce annual business travel carbon emissions to no more than 92 tCO₂e by 2024/25.

Performance to date: Our transport-related carbon emissions in 2022/23 were 23 tCO₂e. Therefore our 2024/25 target has been met and exceeded.

Summary: Compared to 2021/22 we increased our carbon emissions by 20 tCO₂e. However, we are 80 per cent below our 2019/20 pre-pandemic levels.



27. While our business travel emissions have increased from three to 23 tCO₂e compared to the previous year, we are still 80 per cent below our pre-pandemic levels of 118 tCO₂e. The biggest reductions since 2019 have been in car travel and flights.

28. The reduction in business travel is due, to a large extent, to the shift to online meetings which has reduced the need to travel. Audit Scotland has invested in technology to support this, including enhanced

hybrid meeting facilities. We thank colleagues for thinking about whether business travel is necessary and for choosing the least carbon intensive option when it is.

29. Based on travel over the last three years we have demonstrated that we are able to meet our 2030 target of less than 63 tCO₂e per annum. Business travel is likely to fluctuate depending on need. We will monitor trends in business travel closely, recognising that any significant increase would have implications for our ability to meet our targets in future.

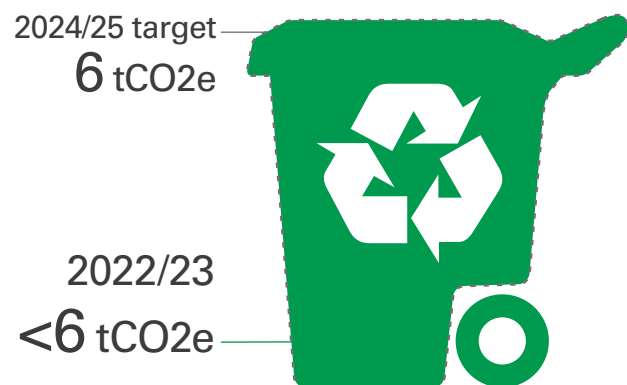
Waste, recycling and water carbon emissions

Waste

Target: Reduce waste and recycling carbon emissions to no more than 6 tCO₂e by 2024/25. (There is no carbon reduction target for water which has remained consistent at 1 tCO₂e for several years.)

Performance to date: Our waste and recycling carbon emissions in 2022/23 were not quantified but are likely to be less than 6 tCO₂e.

Summary: We do not have sufficient data to record our waste emissions at present. However, we have a range of recycling facilities at all our offices, including for paper and cardboard, plastic and glass.



30. Since the pandemic we have a limited amount of data for emissions relating to waste and recycling. As a result of hybrid working, we are confident we have not returned to pre-pandemic levels for office waste and recycling emissions. We are looking to re-establish data collection for this area.

31. Based on pre-pandemic levels we are confident we can meet our published target of 4 tCO₂e by 2030. Several initiatives have been implemented to minimise waste as much as possible, including reducing our stationery supplies and using glass milk bottles that are collected and re-used.

Procurement carbon emissions

32. To date we have not included supply chain emissions in our calculations. Audit Scotland is currently conducting a review of its

targets and the data supporting them. This will include consideration of procurement emissions.

33. We focus on embedding sustainability into our procurement activity and we include sustainability clauses in our standard procurement terms and conditions.

Biodiversity and responding to the nature emergency

34. The Nature Conservation (Scotland) Act 2004 places a statutory duty on all public sector bodies in Scotland to further the conservation of biodiversity. The Wildlife and Natural Environment (Scotland) Act 2011 introduced a requirement for all public bodies to make a report publicly available on their compliance with the biodiversity duty. Biodiversity duty reports are required every three years.

35. Audit Scotland does not own or manage land and we therefore have limited opportunity to carry out activities which encourage biodiversity. However, we can support biodiversity through:

- reducing our carbon footprint
- reducing what we buy and the resources we use
- reducing the amount of pollution we put into the environment
- minimising waste and following the waste hierarchy
- where relevant, highlighting biodiversity through our audit work.

36. Examples of specific biodiversity activity include:

- raising staff awareness of biodiversity by highlighting steps staff can take in gardens and outdoor spaces to support pollinators during the autumn
- organising an internal webinar with the sustainable development team at the Scottish Parliament, to learn about their biodiversity activities and their beehives.

Becoming a climate-resilient auditing organisation

37. We recognise that as an organisation we need to give more focus to becoming a climate-resilient organisation and contribute to Scotland's national climate change outcomes. This means taking into account the likely impact of extreme weather events on our operations, auditing and staff wellbeing, for example, and the increasing pressures on the cost and availability of resources that we need to do our work.

Validation of figures

38. Audit Scotland has introduced a new internal peer review process, which means that all emissions data is peer reviewed and quantified by

at least two separate people. This approach will continue to be developed over the next 12 months as our new governance structures bed in. We will also explore options for external peer review.

Looking ahead: journey to net zero and climate resilience

39. Our focus remains on reducing our greenhouse gas emissions, with the ambition of reaching net zero by 2030. We are continually reviewing how we are responding as an organisation to the climate emergency and identifying opportunities for further improvement. During 2023/24, we will be reviewing our emissions targets, and the data underpinning them, to ensure they are still appropriate.

40. The majority of colleagues now work in a hybrid environment – splitting their time between the office and home. The impact of this on our emissions over the longer term is not yet clear. Hybrid working has led to an increase in our energy-related emissions as we continue to operate our offices and include the emissions created by home working. However, reductions in emissions from staff commuting are currently not quantified and we have no way of knowing at present whether there has been a positive or negative impact on our overall emissions.

41. Consideration also needs to be given to the contribution hybrid working makes to our climate resilience, providing flexibility in terms of where, how and when work is undertaken. Further investigation needs to be done in this area so that we have greater clarity to inform decision-making.

42. Our focus is on reducing emissions and we are not currently using carbon offsets, such as tree planting, to offset our residual emissions. This has implications for the achievement of our target to be net zero by 2030, which is based on utilising specifically designed projects to offset the carbon emissions that remain after all possible reduction activities have been implemented. Our target review will include a review of our offsetting policies now and in the future to consider our approach to this issue.

43. We are committed to increasing staff awareness of environmental issues and building climate considerations into decision-making across the organisation. In 2022/23, we introduced new climate change training for all new starts and this has now been rolled out to all colleagues.

44. New thematic working groups have been developed as part of the new climate change governance structure ([Appendix 1, page 16](#)). The groups cover energy use, travel, procurement and waste, biodiversity, climate resilience and our audit approach. Each thematic working group will develop an action plan and we expect to be able to report on progress in next year's sustainability report.

2. Auditing climate change

Our audit role

45. In December 2022, we published [Auditing climate change: Our strategy](#), which sets out our approach to auditing climate change. It outlines the role of public audit in this area and our aim to hold public bodies to account and help drive change and improvement in how public bodies respond to the twin challenges of achieving net zero emissions and adapting our environment to build resilience against climate change.

46. We will focus our attention on the areas where we can uniquely add the greatest value. Our approach focuses on:

- raising public sector awareness of the importance and relevance of climate change
- holding audited bodies to account for their actions and spend on climate change
- identifying and sharing learning, including good practice and areas for improvement.

47. Our audit work will play an important role in providing assurance and supporting public bodies to contribute fully to Scotland's climate change goals and wider environmental ambitions.

Our audit work

48. Since April 2022, Audit Scotland has published three reports focused on climate change:

- [Scotland's councils' approach to addressing climate change](#) (September 2022): This briefing on behalf of the Accounts Commission highlights the critical role of councils in helping Scotland achieve its national climate change goals and includes recommendations for councils to consider to help improve their response to the climate emergency.
- [How the Scottish Government is set up to deliver climate change goals](#) (April 2023): This report on behalf of the Auditor General focuses on how effective the Scottish Government's climate change governance and risk management arrangements are in supporting it to drive the delivery of Scotland's national net zero targets and climate change adaptation outcomes.

- **[Approaches to achieving net zero across the UK](#)**

(September 2023): This report is a joint piece of work between the public audit offices of the four UK nations – Audit Scotland, Audit Wales, National Audit Office and Northern Ireland Audit Office. It sets out the UK and devolved governments’ legislation, policy, strategy, governance and monitoring arrangements, relevant to achieving net zero.

49. We plan to publish a performance audit report on behalf of the Auditor General in early 2024, looking at the work the Scottish Government is doing to [decarbonise heat in homes](#). We are also planning performance audit work on sustainable transport, and the progress that is being made to ensure that Scotland adapts to climate change and is more resilient.

50. As part of the 2022/23 annual audit, all appointed auditors were asked to gather information on the arrangements for responding to climate change in public bodies. This included considering what targets, strategies and monitoring arrangements were in place, and the extent to which bodies were considering the impact of climate change on their financial statements. We will review the information gathered by auditors to help inform the development of future audit work.

Looking ahead: developing our audit approach

51. We will continue to refine our audit methodology in response to our learning and external developments, such as new legislation or standards. Learning from our organisational activity to reduce our environmental impact will support development of our audit approach. In turn, the key findings and recommendations from our audit work will help to shape our organisational activities.

Appendix 1

Environmental and sustainability governance arrangements

Audit Scotland Board

Membership: The Auditor General for Scotland, the Chair of the Accounts Commission and three members appointed by the Scottish Commission for Public Audit.

Role: The board is responsible for the exercise of all functions of Audit Scotland. It exercises its powers and authorities through a Scheme of Delegation, which it determines and approves. Under the Scheme of Delegation, the board formally approves Audit Scotland's Environment, Sustainability and Biodiversity Plan. It receives annual updates on performance against the plan's targets and objectives, thereby holding Audit Scotland to account for their performance.

Leadership Group

Membership: The Auditor General for Scotland; Audit Scotland's Chief Operating Officer; the Controller of Audit; Executive Directors and Audit Directors of Audit Services, Performance Audit and Best Value, and Innovation and Quality.

Role: Leadership Group is responsible for embedding environmental considerations into decision-making, approving policies that include environmental dimensions, and scrutinising performance against environmental targets.

Green Future Strategic Group

Membership: Representatives from across all business groups.

Role: The Green Future Strategic Group has an important leadership role and is empowered to make strategic decisions that will influence our response to climate change and wider environmental issues. It coordinates and oversees relevant activity across the organisation and scrutinises Audit Scotland's performance. It leads delivery of our Green Future Strategy.

Green Future Thematic Groups

Membership: Representatives from across all business groups.

Role: Sitting beneath the Green Future Strategic Group are six thematic working groups, each focusing on a key area of activity to help reduce Audit Scotland's environmental impact and develop our auditing approach (energy use, travel, procurement and waste, biodiversity, climate resilience and our audit approach). These groups report into the Green Future Strategic Group and provide information to help support decision-making and identify risks.

Business groups (Audit Services, Performance Audit and Best Value, Innovation and Quality, and Corporate Services)

Role: Audit Scotland's business groups are pivotal in ensuring that Audit Scotland meets its climate change obligations and continuously improves its environmental performance. It is through the actions of all staff that we can make the greatest difference.

Appendix 2

Sources of Audit Scotland's carbon emissions 2022/23

Category	Carbon emissions (tCO ₂ e)
Energy use	
Natural gas	39
Grid electricity	31
Working from home	102 (not included in targets)
Travel	
Rail	8
Car travel	6
Flights – domestic	6
Flights – short haul	2
Taxi	1
Water	
Water – treatment	0.57
Water – supply	0.27
Total	94 (196 including working from home emissions)

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