

# Douglas City Council Committee Report

## **REPORT TO**

**Executive Committee** 

## DATE OF MEETING

26<sup>th</sup> September 2024

## **REPORTING OFFICER**

Director of Environment and Regeneration on behalf of the Net Zero Officer Working Group

## SUBJECT

Douglas City Council's Carbon Footprint 2023/24

## **1 REASON FOR REPORT**

To report to Committee and full Council, the Council's progress toward reducing its carbon footprint in line with its Net Zero Strategy and Action Plan One;

To seek approval for the Council's statutory submission to the Isle of Man. Government of its emission data for 2023/24 by 30<sup>th</sup> September 2024;

To note a Carbon Budget tool forecast, updates to Action Plan One and participation in a Carbon Impact Assessment Tool (CIAT) trial; and

To agree Action Plan Two.

## 2 **RECOMMENDATION**

That Committee:

- 2.1 Notes the Council's Carbon Footprint for 2023/24 and the approximate **14%** decrease in the Council's carbon footprint from the baseline year of 2018/19, as per Appendix 1 attached;
- 2.2 Approves the Council's statutory submission to the Isle of Man Government of its carbon emissions for 2023/24 as at Appendix 2;
- 2.3 Notes the forecast provided by a Carbon Budget tool and carbon reduction trajectory as at Appendix 3;
- 2.4 Notes the ISO 14001 'pros' and 'cons' provided by the Net Zero Officer Working Group at Appendix 4;

- 2.5 Agrees to reaffirm its position from February 2022 that it does not wish to have a citizen or tenant panel or citizen/tenant champions on climate change in line with the just transition and climate justice principles;
- 2.6 Approves Action Plan Two for the administration period of 1<sup>st</sup> April 2025 to 31<sup>st</sup> March 2029 as at Appendix 5;
- 2.7 Notes the updates to Action Plan One as at Appendix 6; and
- 2.8 Notes the Council's participation in a trial of use of the Isle of Man Government's Climate Impact Assessment Tool aligned with the <u>Climate</u> <u>Impact Assessment Regulations 2023</u> due to come into effect on 1<sup>st</sup> January 2025 and as reported in Briefing Note 24/07-01.

# **3 FURTHER APPROVAL REQUIRED**

None.

## 4 SUPPORTING RATIONALE

## **Introduction**

- 4.1 In July 2019, the Council embarked upon a journey to formally record, monitor and reduce its carbon footprint and align itself with the Government's Net Zero by 2050 agenda. This was formalised in the adoption of a Net Zero Strategy and Action Plan One at Council in March 2022.
- 4.2 In the same July 2019 report, the Council agreed to engage the services of the Carbon Trust to calculate its carbon footprint for the 2018/19 financial year, which would be the baseline year from which all carbon emissions would be measured.
- 4.3 The report from the Carbon Trust highlighted those areas with the highest emissions for future action. The final presentation from the Carbon Trust was received by the Executive Committee and full Council in February 2021 and April 2021 respectively.
- 4.4 Since that time, Members have received updates on the Council's progress toward reducing its carbon footprint and this report sets out the latest calculated carbon footprint of the Council for the financial year 2023/24, together with other matters of note relating to the Council's Net Zero journey.

## Carbon Footprint 2023/24

4.5 In calculating the emissions data for 2023/24, updated emissions indices for 2023 were applied from the <u>United Kingdom Government's Greenhouse Gas</u> <u>Reporting Conversion Factors (full set</u>), which are used by all United Kingdom based organisations of all sizes and for international organisations reporting on United Kingdom Operations. The 2018 indices were applied by the Carbon Trust in calculating the Council's carbon footprint in 2018/19.

- 4.6 The only exception to this rule is application of a specific Isle of Man index for electricity, which has been provided by the Isle of Man Government's Climate Change Transformation Team.
- 4.7 The Council's Carbon Footprint for 2023/24 is estimated as being 15,049tCO<sub>2</sub>e which is a 14% reduction on the recalculated baseline year. See Appendix 1 attached.
- 4.8 The 2023/24 result represents a **3% decrease** on that reported for 2022/23. There were decreases in most categories except for Oil, Wood Chips and Water consumption, with Staff Commuting and Business Travel unchanged.
- 4.9 More specifically:
  - Oil an increase at Ballaughton Nurseries, offset by a decrease in electricity consumption;
  - Wood Chips an increase at Hazel Court, offset by a consequent decrease in gas consumption;
  - Water Consumption an increase in consumption at Noble's Park Bowling Greens (being investigated).
- 4.10 As exact consumption data is not known for leased buildings, assumptions were applied by the Carbon Trust for the likely energy usage for these buildings based on size, type of energy and typical use, and based on average retail prices for gas and electricity. The same assumptions were applied in 2023/24 and will continue to be applied unless actual consumption data can be obtained.
- 4.11 Use of assumptions and estimates is not ideal, and it is the view of the Net Zero Officer Working Group that over time, the Council should work to make more scientific its calculations of emissions in this area, which is an issue for all sectors unless individual suppliers are calculating their emissions. Until such time as this can be achieved, the Council can only base its assumed emissions on spend rather than actual emissions by suppliers.
- 4.12 Currently, commercial organisations are not legally required to report on their carbon emissions although there are suggestions being made both in the UK and on the Isle of Man that commercial organisations over a certain size may be required to report in the future. Until then, it is the view of the Net Zero Officer Working Group that limitations in the Council's Scope 3 reporting should be acknowledged and accepted, with more accurate reporting pursued in the future when further external agencies are employed to assist the Council in its Net Zero journey.
- 4.13 As previously reported, the figures for procurement, which accounts for 29% of the Council's overall emissions, are based on proprietary indices provided by the Carbon Trust which cannot be obtained from the United Kingdom indices set. Although the same indices have been used since the original 2018/19 baseline year, the overall calculation is based on assumptions that are not tested in terms of actual emissions.

- 4.14 Scope 3 emissions are calculated based on expenditure. The Net Zero Officer Working Group has previously identified a risk of the impact high inflation rises will have on the Council's carbon emission calculations. For example, higher prices will automatically lead to greater 'spend'. The Council is not necessarily procuring any more services than it was previously, but the cost of those services has risen. This will result in a higher carbon emission calculation even though the Council is not procuring more services and therefore producing more carbon.
- 4.15 An inflation adjustment has therefore been applied to the procurement figures to normalise this spend. It would be prudent for this adjustment to be validated by a climate change specialist in due course. The approach taken was to assign an inflation category to each Environmentally-Extended Input-Output (EEIO) Category from the Carbon Footprint spreadsheet, and adjust the kgCO<sub>2</sub>/£ factors by the relevant detailed Manx CPI rate for September, being the mid-point of the year concerned. For example, the Carbon Trust advised that the kgCO<sub>2</sub>/£ for procurement category #28 'Motor vehicle bodies' was 0.5868 in 18/19. The detailed Manx CPI rate for September 2019 for 'purchase of motor vehicles' was 0.7%, for September 2020 was 4.1%, for September 2021 was 9.8%, for September 2022 was 5.6% and for September 2023 was 2.0%. The factor has therefore been reduced by 19.34% to 0.4593 because emissions in respect of that category of expenditure have become more expensive since the Carbon Trust did their calculations.
- 4.16 These inflation adjustments should help ensure future year calculations are not significantly distorted.
- 4.17 Given the above assumptions and estimations, it is essential that the Council receives external validation of its assumptions, estimates and calculations to ensure no calculation errors have occurred which could impact the Council's reporting on its Net Zero journey. Executive Committee had previously agreed (May 2023) that the carbon footprint calculation for 2023/24 would be undertaken externally, and a budget provision was built into the 2023/24 budget accordingly. As the Council is in the process of installing a new e-procurement system which will allow access to the UK Government's Contracts Finder network, the calculation for 2023/24 has yet to be outsourced, however, this will be pursued as soon as possible when the e-procurement system goes live, anticipated to be in the next two months. It is also normal practice for trend analysis to be undertaken every five years to even out annual fluctuations caused by external influences; therefore, a five-year external calculation would be reasonable.
- 4.18 Under the <u>Climate Change (Public Bod</u>ies Reporting Requirements) (Amendment) Regulations 2023, the Council has a legal duty to submit an annual report to the Isle of Man Government using a specific spreadsheet according to the size of the public body. The spreadsheet calculates emissions using consumption data, however, the tool will only consider Scope 1 and Scope 2 emissions.
- 4.19 The Council's intended submission is attached at Appendix 2 and Committee is asked to approve its submission and contents therein. Reassuringly and in

relation to 4.17 above, the emission results produced by the Isle of Man Government's spreadsheet tally with that produced by the Council's owned spreadsheet, originally derived by the Carbon Trust.

4.20 The Isle of Man Government's Climate Change Transformation Team produced a <u>Summary Analysis Report</u> of all public body submissions for 2022/23. A copy of the Report together with covering narrative from the Net Zero Officer Working Group was circulated to all Members by Briefing Note (24/07-01) in early July 2024. Some of the recommendations of the Report are applicable to the Council and will be taken forward as outlined in the Briefing Note.

## <u>Net Zero Roadmap</u>

- 4.21 Committee may recall from the September 2023 Carbon Footprint report that Scope 3 emissions are not legally required to be reported. However, the Isle of Man Government's updated roadmap to achieving Net Zero sets out that Scope 3 emissions will need to be reported going forward. The roadmap was on page 37 of the <u>Summary Analysis Report</u> circulated to Members with Briefing Note 24/07-01.
- 4.22 From 2026/27, it will be a requirement for public bodies to report on their Scope 3 emissions. The Council, on embarking on its Net Zero journey, committed to calculate and reduce its Scope 3 emissions, given that these represent the largest source of Council emissions, and will therefore be in a strong position to report same when required.
- 4.23 Briefing Note 23/02-01 advised Members that the business travel element would only be calculated every five years as experience of calculating this factor since the baseline year has evidenced that there is minimal emissions for the Council in this category, there is little the Council can do to reduce its impact and therefore the time-consuming exercise to calculate these emissions annually will not be undertaken. At most, the carbon emission from this activity represents less than 0.1% of the Council's overall carbon emissions. However, according to the Government's roadmap, public bodies will be expected to report on business travel emissions from 2024/25. Again, the Council will be in a strong position to do so as it has previously calculated these emissions and has the necessary data.

## Climate Impact Assessment Tool (CIAT)

- 4.24 In the last report to Committee, Committee and thereafter Council, agreed a criteria by which the Government's Climate Impact Assessment Tool would be used. The tool is to be used by public bodies when determining the climate impact of major policy or project decisions. The criteria agreed was as follows:
  - Projects of over £½m;
  - Commissioning a new service or ceasing a current service;
  - New builds;
  - Any projects aiming to reduce emissions;

- Any projects or policy decisions that may lead to a significant carbon emissions impact (up or down).
- 4.25 As advised in Briefing Note 24/07-01, the <u>Climate Impact Assessment</u> <u>Regulations 2023</u> were approved in Tynwald and become effective from 1<sup>st</sup> January 2025. Within the Regulations, the criteria by which the Climate Impact Assessment Tool should be used, by statute, were somewhat different to that agreed by Council and the Climate Change Transformation Team sought volunteer public bodies to trial the criteria. The criteria as they appear in the Regulations are as follows:
  - (1) A public body must prepare a climate impact assessment for any proposal that, in respect of its implementation, satisfies one or more of the following specified criteria —
    - (a) the proposal requires approval by
      - *(i) a Minister or political Member of that public body personally; or*
      - (ii) a board, committee or other decision making group that includes a Minister or political Member of that public body;
    - *(b) the proposal requires Treasury approval or concurrence in accordance with Isle of Man Government Financial Regulations as issued by the Treasury from time to time;*
    - (c) the proposal requires, or creates changes to -
      - (i) spending;
      - (ii) allocation of funding;
      - (iii) or annual revenue;

amounting to at least £100,000;

- (d) *the person or body responsible for approving the proposal requests a climate impact assessment.*
- 4.26 Committee should note that (a) above does not apply to the Council and would only apply to Government Departments or other Public Bodies that come under Government.
- 4.27 Initially, the Net Zero Officer Working Group declined to participate in the trial, believing the new criteria to be too onerous, and this was communicated to the Climate Change Transformation Team.
- 4.28 The Working Group identified the extra Climate Impact Assessments that would be necessary under the criteria as set out within the Regulations as compared to the criteria agreed by Council. The Group calculated that twice as many CIATs would need to be completed, thereby doubling officer workload in this regard.
- 4.29 As reported in Briefing Note 24/07-01, to make this point scientifically and without anecdote, the Net Zero Officer Working Group has agreed to participate in the trial and has also participated in workshops and a survey to highlight that the threshold of £100k is too low and that the threshold

needs to be index linked so that it may keep pace with inflation and rising costs.

4.30 Each time the CIAT is used, feedback is provided to the Climate Change Transformation Team with a view to having the criteria amended or a dispensation included within the Regulations that allow for non-completion of a CIAT where it can be shown no value is added from a carbon perspective. The Working Group await the outcome of the trial, workshops and survey, which will be reported to Members accordingly.

## Carbon 'Budget' Tool

- 4.31 A Briefing Note to Members in February 2023 (23/02-01), highlighted that the Net Zero Officer Working Group had been trialling use of a Carbon 'Budget' tool, which forecasts the reduction in carbon needed, year on year, for the Council to reach its aim of being Net Zero in 2050. Attached at Appendix 3 is the latest trajectory forecast by use of the tool for noting.
- 4.32 Committee should note that use of Carbon 'Budget' Tools helps organisations forecast the changes needed to reach Net Zero by 2050. The latest forecast indicates the Council has much work to do to reach its goal and that it needs to front-load several carbon reduction measures in the early years. The longer it takes for Council to act, the more drastic the carbon reduction measures required and the harder it will be for the Council to reach its goal. Furthermore, the longer it takes for the Council to reduce its emissions, the more carbon it will be emitting overall on the journey to Net Zero.
- 4.33 The Net Zero Officer Working Group has discussed the feasibility that the Council may never practically reach Net Zero, that is, attainment of Net Zero may be impossible for the Council to meet due to the nature of its services. However, at this early stage in the Council's Net Zero journey, the Working Group does not feel it prudent to alter the Carbon 'Budget' forecasting tool, which has already been set at 0.1 to recognise sequestration offsetting. The tool will continue to be used, the Council's progress monitored, and the resulting trajectory reported to Committee.
- 4.34 Committee should note that the term 'Carbon Budget' has no reference to finance or financial budgets and is solely concerned with the amount of carbon reduction the Council needs to 'budget' for each year to reach its Net Zero goal.

## <u>ISO 14001</u>

4.35 The Net Zero Officer Working Group has considered whether the Council should pursue ISO 14001. Details on ISO 14001 can be found on this website. ISO 14001 is the internationally recognised standard for environmental management systems (EMS). It provides a framework for organisations to design and implement an EMS, and continually improve their environmental performance. By adhering to this standard, organisations can ensure they are taking proactive measures to minimise their environmental footprint, comply with relevant legal requirements, and

achieve their environmental objectives. The framework encompasses various aspects, from resource usage and waste management to monitoring environmental performance and involving stakeholders in environmental commitments.

- 4.36 Initially, the Working Group considered that accreditation would be useful for the Housing & Property Department, however, submission would need to be by the whole organisation at a cost of approx. £5,000, coupled with uncalculated officer time and resource, and annual subscriptions to retain the accreditation. The Council has recently been quoted £620+VAT per day but without a scope for how many days would be needed.
- 4.37 The Working Group is of the view that the majority of what is required for the ISO submission is already being undertaken by the Council and there would be no tangible benefit toward reducing carbon emissions, albeit the achievement of the accreditation would increase the Council's green credentials with the general public, potential employees and suppliers. Appendix 4 sets out the 'pros' and 'cons' as considered by the Working Group.
- 4.38 The Working Group therefore recommends that the Council does not pursue accreditation currently but keeps pursual under annual review.

## **Action Plans**

- 4.39 In 2022, the Council agreed Action Plan One, in support of the overarching Net Zero Strategy. Action Plans are aligned with political administrative terms and last four years. Action Plan One will therefore come to an end in March 2025. The Net Zero Officer Working Group has derived the next Action Plan in the series, Action Plan Two, which has been approved by the Chief Officer's Management Team. This requires approval by Committee and thereafter Council and is attached at Appendix 5.
- 4.40 When Action Plan One was agreed, Executive Committee determined to not have a citizen or tenant panel or citizen/tenant champions on climate change in line with the just transition and climate justice principles, however Committee resolved (see Section 6, resolution of Committee dated 24<sup>th</sup> February 2022) that this view should be reconsidered during compilation of Action Plan Two. The Working Group has not included this given the previous view expressed and Executive Committee is therefore invited to reaffirm its previous position or agree that such a panel should be included.
- 4.41 Finally, attached at Appendix 6 is an update on progress against the Actions contained within Action Plan One, for noting.

## 5 ALTERNATIVES CONSIDERED BUT NOT RECOMMENDED

That Committee does not approve the Council's emissions submission. This is not recommended as it is a legal requirement under <u>The Climate Change (Public</u> <u>Bodies' Reporting Requirements) (Amendment) Regulations 2023</u> for the Council to make this submission by 30<sup>th</sup> September each year. That Committee does not approve Action Plan Two for the administration period of 1<sup>st</sup> April 2025 to 31<sup>st</sup> March 2029. This is not recommended as it is essential the Council continues to strive to reach Net Zero by 2050 in line with its overarching strategy, and this is achieved through more detailed action plans.

## 6 IF PREVIOUSLY CONSIDERED BY COMMITTEE OR COUNCIL, DATE AND DECISION

## Executive Committee, 28<sup>th</sup> September 2023

## A10. Carbon Footprint 2022 / 2023

The Committee considered a written report by the Director of Environment and Regeneration, on behalf of the Net Zero Officer Working Group, setting out the Council's progress toward reducing its carbon footprint in line with its Net Zero Strategy and Action Plan One.

The Isle of Man Government had pledged that the Isle of Man would be carbon Net Zero by 2050 and, as the largest local government authority on the Island and one of the largest employers in Douglas, the Council would be expected to contribute toward this goal.

In July 2019, the Council had embarked upon a journey to formally record, monitor, and reduce its carbon footprint and to align itself with the Government's 'Net Zero by 2050' agenda; and, in March 2022, this had been formalised in the adoption of a Net Zero Strategy and Action Plan One.

Also in July 2019, the Council had agreed to engage the services of the Carbon Trust to calculate its carbon footprint for the 2018 / 2019 financial year, which was to be the baseline year from which all carbon emissions would be measured.

Updates on the Council's progress toward reducing its carbon footprint had been received since then, and this latest report for the 2022 / 2023 financial year showed an approximate 12% decrease on the recalculated baseline year. While this result represented a 2% increase on that reported for 2021 / 2022, the categories where the increases had occurred - including leased buildings, contracts, and fleet – were noted accordingly. As exact consumption data was not known for leased buildings, assumptions had been applied by the Carbon Trust for the likely energy usage for these buildings, based on size, type of energy, and typical use based on average retail prices for gas and electricity.

It was acknowledged that the use of assumptions and estimates was not ideal, and it was the view of the Net Zero Officer Working Group that, over time, the Council should work to make its calculations in the area of Scope 3 emissions more scientific. Currently Scope 3 emissions were calculated based on expenditure, and a risk had previously been identified of the impact high inflation rises would have on the Council's carbon emission calculations. For example, higher prices would automatically lead to greater 'spend' – so, while the Council was not necessarily procuring any more services than it had been previously, the rise in cost of those services resulted in a higher carbon emission calculation even though the Council was not producing more carbon.

An inflation adjustment had therefore been applied to the procurement figures to normalise this spend, and it was suggested that it would be

prudent for this adjustment to be validated by a climate change specialist in due course. These inflation adjustments should also help ensure that future year calculations were not significantly distorted.

Accurate reporting of Scope 3 emissions was an issue for all sectors and, unless all individual suppliers were calculating their emissions, the Council could only base its assumed emissions on spend, rather than on actual emissions by suppliers.

The Council (as a Category 'A' Public Body) had a legal duty to submit an annual report to Government using an online reporting portal. The portal would calculate emissions using consumption data, but only for Scope 1 and Scope 2 emissions. Presently, as mentioned above, Scope 3 emissions were not legally required to be reported, however, the Council, on embarking on its Net Zero journey, had committed to calculate and reduce its Scope 3 emissions independently of its legal duty, as it was anticipated that the Isle of Man Government would seek Scope 3 data in time, as the Island matured in its Net Zero journey.

In the previous report to Committee, Members had been advised of a climate change impact assessment tool being derived by the Isle of Man Government Climate Change Transformation Team for use by public bodies when determining the climate impact of major policy or project decisions. The Net Zero Officer Working Group believed the tool would benefit Committee decision-making, and had suggested the following criteria be approved for adoption:

- Projects of over £500,000;
- Commissioning of a new service, or ceasing a current service;
- New builds;
- Any projects aimed at reducing emissions; and
- Any projects or policy decisions that may lead to a significant carbon emissions impact (either upward or downward).

Resolved, "(i) That particulars of the report be noted on the minutes;

(ii) That the approximate 12% decrease in the Council's carbon footprint from the baseline year of 2018 / 2019 (as detailed in Appendix 1 to the written report) be noted;

(iii) That the criteria for use of the Climate Impact Assessment Tool for decision-making (as contained in Appendix 2 to the written report) be approved;

(iv) That the updates to Action Plan One (as detailed in Appendix 3 to the written report) be noted; and

(v) That the Governance and Behaviour extract from the Government's reporting tool (as detailed in Appendix 4 to the written report) also be noted."

## Executive Committee, 25<sup>th</sup> May 2023

## A18 Council's Carbon Footprint 2021 / 2022

The Committee considered a written report by the Director of Environment and Regeneration (on behalf of the Net Zero Officer Working Group) in relation to the Council's progress towards reducing its carbon footprint in line with its Net Zero Strategy and Action Plan One.

The Isle of Man Government had pledged that the Island would be carbon Net Zero by 2050 and, as the largest local authority on the Island and one of the largest employers in Douglas, the Council would be expected to contribute towards this goal. In July 2019, the Council had embarked upon a journey to formally record and reduce its carbon footprint and to align itself with the Government's Net Zero by 2050 Agenda. This had been formalised in the adoption of a Net Zero Strategy and Action Plan One at the March 2022 Meeting of the Council.

In July 2019, the Council had agreed to engage the services of the Carbon Trust to calculate the Council's carbon footprint for the financial year 2018 / 2019 – which would be the baseline year from which all of the Council's carbon emissions would be measured. Since that time, updates had been provided to Members on the Council's progress towards reducing its carbon footprint, and details of the latest calculated carbon footprint for the financial year 2021 / 2022 were appended to the written report.

It was noted that the Council's carbon footprint for 2021 / 2022 showed a reduction of approximately 13% on the recalculated baseline year. However, as exact consumption data was not known for leased buildings (Scope 3 emissions), assumptions had been applied by the Carbon Trust for the likely energy usage for these buildings (based on size, type of energy, typical use, and average retail prices for gas and electricity).

The same assumptions would continue to be applied in future years unless actual consumption data could be obtained. As the use of assumptions and estimates was not ideal, it was the view of the Net Zero Officer Working Group that, over time, the Council should work to make its calculations of emissions in this area more scientific. To this end, the Working Group had engaged with an outside agency to determine how these emissions could be based on actuals rather than assumptions and estimates, and that work was ongoing.

It was essential that the Council received external validation of its assumptions, estimates, and calculations, to ensure no calculation errors had occurred which could impact the Council's reporting on its Net Zero journey, and the Net Zero Officer Working Group therefore remained of the view that the Council's carbon footprint should be externally calculated every five years to ensure assumptions continued to be valid and reasonable. The next external calculation, for the financial year 2023 / 2024, was programmed to be calculated by the end of August 2024.

The Climate Change (Public Bodies Reporting Requirements) (Amendment) Regulations 2023 had been approved by Tynwald in March 2023. Under these Regulations, the Council, as a Category A public body, had a legal duty to submit an annual report to the Isle of Man Government, and the first annual report was due in September 2023, covering the period 1st April 2022 to 31st March 2023. It was noted that, presently, Scope 3 emissions were not legally required to be reported. However, given that these represented the largest source of Council emissions, the Council had, on embarking on its Net Zero journey, committed to calculating and reducing its Scope 3 emissions, and there would, therefore, be a need to continue to calculate them independently of the legal duty. It was also anticipated that Government would, in time, seek the submission of Scope 3 emissions data, as the Island matured in its Net Zero journey.

Resolved, "(i) That particulars of the report be noted on the minutes;

(ii) That the approximate 13% reduction in the Councils' carbon footprint from the baseline year of 2018 / 2019 also be noted;

(iii) That approval be given for the Council's carbon footprint to be calculated and validated externally every five years, to ensure assumptions remained current and in-house calculations remained as accurate as possible;

(iv) That approval be given for the appointment of an external agency to calculate and validate the Council's carbon footprint for 2023 / 2024 in 2024; and

(v) That approval be given for  $\pm 10,000$  to be built into the 2024 / 2025 General Revenue Reserve budget for this purpose."

## Executive Committee, 24<sup>th</sup> February 2022

## C19 A Net Zero Carbon Council – Strategy and Action Plan One

The Committee considered a written report by the Chief Officers' Management Team on a draft Net Zero Strategy and the first Action Plan towards the Council achieving Net Zero status.

The Isle of Man Government had pledged that the Isle of Man would be carbon net zero by 2050, and, as the largest local authority on the Island (and one of the largest employers in Douglas), the Council would be expected to contribute towards this goal.

In response to the Climate Change Emergency declared by the Isle of Man Government, the Committee (in July 2019) had received a report on adopting a Climate Change Strategy for Douglas Borough Council. The Committee had agreed to employ the specialist services of the Carbon Trust to calculate the Council's Carbon Footprint, in order that the Council would have a benchmark from which to begin and to then measure its future progress. The Carbon Trust had begun work to harvest the data required and, although an early report had been produced in February 2020, the outbreak of the Covid-19 pandemic had delayed any further work until the summer of 2020.

In February 2021, following receipt of the final report and a virtual presentation from the Carbon Trust, the Committee had agreed that a Strategy for the Council and an Action Plan should be brought forward for agreement and recommendation to the Council. As such, the draft Strategy now proposed (which was in line with the Isle of Man Government's Climate Change Emergency and Action Plan) set out what the Council was aiming to achieve and why; and contained a suggestion for how Action Plans would be brought forward and agreed over the life of the Strategy. 'Action Plan One' was the first in a series of Action Plans, and was intended for the life of the current administration.

The Climate Change Act had received Royal Assent in December 2021 and, within the Act, statutory duties were placed upon local authorities by way of Regulation. Guidance from the Government on what was expected of local authorities was due by 1st April 2022 and, as the largest local authority, it was likely that the Council would be expected to undertake emissions-based reporting.

Members noted that, in the UK, central Government provided financial assistance to local authorities towards their carbon reduction schemes. Although the Isle of Man Government had established an Environmental Protection Fund (set up as part of the Isle of Man Treasury's 2020 budget to help the Island achieve its climate change agenda), local authorities did not currently have access to this fund.

Resolved, "(i) That particulars of the report be noted on the minutes;

(ii) That the draft Strategy (as appended to the report) be approved and recommended to Council; and

(iii) That draft Action Plan One (as appended to the report) be approved and recommended to Council, subject to the following amendments:

- Action Consider and agree how becoming carbon Net Zero is led politically: delete 'or some other elected member arrangement';
- Action Comment on Douglas planning applications where carbon neutrality and biodiversity impacts should be included: Success Indicator to read 'evidence that carbon neutrality and biodiversity is considered where applicable';
- Action Investigate the possibility of focussing the pension scheme's investments on entities which perform well in relation to Environmental, Social, and Governance factors: the Success Indicator to align more closely with the Council's Corporate Plan 2022-2026;
- Action Create a Carbon Net Zero Council area on the Council's website to
  provide good quality education materials about climate change and the action
  the Council is taking: the Success Indicator to read 'establishment of links to
  relevant information portals';
- Action Consider whether the Council should have Member and / or staff champions: deleted, as the owning department would be Executive Committee / Chief Officers' Management Team;

- Action consider whether the Council should have a citizen or tenant panel or citizen or tenant champions on climate change in line with the just transition and climate justice principles: action to be deleted from Action Plan One, and reconsidered at next review;
- Action Investigate the installation of energy efficient lighting in open spaces: amend to read 'continue with the installation of energy efficient lighting in open spaces'."

# Executive Committee, 26<sup>th</sup> February 2021

## A5. Douglas Borough Council Carbon Footprint

Resolved, "(i) That particulars of the written report be noted on the minutes;

(ii) That the Isle of Man Government's Climate Change Action Plan, Phase 1 (version 2), as appended to the written report, also be noted;

(iii) That the Carbon Trust's presentation and report, detailing the Council's current Carbon Footprint, be received and accepted;

(iv) That the Council align itself with the Isle of Man Government's aspirations for Net Zero greenhouse gases by 2050, but that the Council should aim to be Net Zero ready by 2035;

(v) That the Committee's views on which areas should be investigated first for greenhouse gas reduction or off-setting initiatives be noted;

(vi) That a further report on suggested initiatives to reduce the Council's Carbon Footprint – that was, in respect of the Council's housing stock and other initiatives for achieving Net Zero emissions - be submitted to the Committee in due course as part of a draft Net Zero Greenhouse Gas High Level Strategy and Action Plan for the next twenty-five years; and

(vii) That the Director of Finance write to the Climate Change Steering Group (within the Department of Environment, Food and Agriculture) asking the Group to recommend to the Isle of Man Treasury that the Terms of Reference for the Environmental Protection Fund be widened to include local authorities."

## Executive Committee, 28<sup>th</sup> February 2020

## A7 Targeted Engagement on the Isle of Man Climate Change Bill 2020

Resolved, (i) "That particulars of the report be noted on the minutes; and

(ii) That the following suggestions be made to the Department of Environment, Food and Agriculture:-

- That the initial costs of meeting any future climate change legislation requirements by local authorities be met by the Government, after which maintenance and running costs be absorbed by the local authorities;
- That in relation to local authorities, the Government should coordinate action in order to achieve uniformity of approach, and to set minimum standards;
- That the resale of renewable energy to parties other than the Manx Utilities Authority be permitted, in order to allow, for example, car park operators generating energy to sell to electric vehicle owners, and landlords of apartments to be able to sell to tenants;
- That future climate / environmental legislation should include targets for recycling, through central collection and through kerbside collection;
- That future legislation should include a form of reward for local authorities reducing the waste stream by removing recyclable materials; and
- That education on waste disposal, particularly on recycling, should be brought forward in the Government's Action Plan and given some priority."

## Executive Committee minute, 26th July 2019

## A14 Climate Change Strategy

Resolved, "(i) That particulars of the report be noted on the minutes; and

(ii) That it be agreed -

That the Council should keep a watching brief on the work being undertaken by Professor James Curran and the Climate Emergency Consultative Transformation Team for the Isle of Man Government on its Climate Change Action Plan;

- That the Council could align itself to the Isle of Man's Climate Change Action Plan once it was published;
- That the Council should consider what other measures it should implement to reduce its own carbon / energy burden, and that a budget of £15,000 be made available from General Revenue Reserves to employ carbon

	specialists to calculate and produce the Council's carbon impact in delivering its day-to-day services;	
•	That the Council's response to the Climate Change Agenda be included within the next Corporate Plan; and	

• That following the Government's pledge to plant a tree for every Isle of Man resident, an approach be made to them requesting that 28,000 of the 85,000 trees for the whole Island be made available to the Council for planting in the Borough, to equate with the number of residents in Douglas."

# 7 CAPITAL COST AND FUNDING SOURCE

None arising from the recommendations of this report.

Future carbon reduction initiatives will be subject of separate reports seeking funding in the normal manner and alterations to the way the Council delivers its services could have capital implications for the future.

In the UK, central Government provides financial assistance to local authorities towards their carbon reduction schemes. The Isle of Man Government has established an Environmental Protection Fund (set up as part of Treasury's 2020 budget to help the Isle of Man achieve its climate change agenda) to which local authorities *do not* have access.

# 8 CHANGES TO REVENUE ESTIMATES AND FUNDING SOURCE

Alterations to the way the Council delivers it services could have resource implications, both positive and negative, in the future. While there are no specific funding requirements contained within this report, it is highly likely that the Council will need to seek professional assistance in determining and achieving actions within the Action Plans, which will have a future cost implication.

# 9 STAFFING/HUMAN RESOURCES IMPLICATIONS

Calculations are conducted annually using existing resources, except for external calculation and validation once every five years.

Currently, the Net Zero work can be undertaken within existing staff resources. However, future action plans may require specialist input, and changes in the way the Council delivers its services could impact on future staffing need.

# **10 LEGAL IMPLICATIONS**

The Climate Change Act 2021 places statutory duties on public bodies. The Climate Change (Public Bodies' Reporting Requirements (Amendment) Regulations 2023 outlines the Council's legal duties to report.

# **11** EQUALITY ACT COMPLIANCE

Nothing within this report contravenes the Equality Act.

The Council's Net Zero Strategy and Action Plans aim to change the way the Council operates and its services in a way that is equal to all.

# 12 COMPLIANCE WITH CORPORATE PLAN

## **Environmental Improvement**

- 4.3 Reduce the Council's carbon footprint and support others to do so
  - 4.3.1 Align with the Isle of Man Government's Net Zero Emission by 2050 strategy and aim to be Net Zero ready by 2035;
  - 4.3.3 Implement a Net Zero Emissions Strategy and Action Plan.

# 13 BUSINESS RISK IMPLICATIONS

The risk of not validating the calculations and updating the assumptions used in calculating the Council's Carbon Footprint is that the results could be skewed and inaccurate.

The Council will be at risk of potential sanction by the Isle of Man Government if the duties imposed upon on it are not fulfilled.

There is a risk that the cost of services, including those procured, will rise as a result of measures introduced to reduce the Council's Carbon Footprint which may not be fully offset by savings achieved.

There is a risk that seeking to incorporate environmental measures in contracts awarded in a constrained market will lead to higher costs and fewer tenders.

# 14 ENVIRONMENTAL IMPACT

The Isle of Man Government has pledged that the Isle of Man will be Carbon Net Zero by 2050. As the largest local government authority on the Island, and one of the largest employers in Douglas, Douglas City Council will be expected to contribute toward this goal. The Council's Net Zero Strategy and Action Plan will lead to positive environmental impacts as well as co-benefits for the Council's communities – better health outcomes (less air pollution), potential job creation, fairer communities, resilience within communities and of the Council to adapt to rapid climate change and the extreme weather events that will bring, and potentially creation of greater green space.

# 15 IMPLICATIONS FOR ECONOMIC DEVELOPMENT (of the City or Island)

Actions taken to deliver the Council's services in a more sustainable way, and to protect and enhance the natural environment could result in investment in the Capital.

## 16 CROSS-DEPARTMENTAL ISSUES

Net Zero work is being progressed in all departments of the Council and the small Net Zero Officer Working Group has representatives from all departments of the Council.

## **17 APPENDICES**

- 1 2023/24 carbon footprint and comparator against the baseline year of 2018/19
- 2 Douglas City Council's intended submission to the Isle of Man Government
- 3 Carbon 'Budget' forecast
- 4 'Pros' and 'Cons' of pursuing ISO 14001
- 5 Proposed Action Plan Two
- 6 Update on Action Plan One

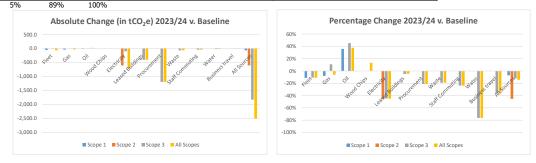
## **18 REASON FOR CONFIDENTIALITY**

None.

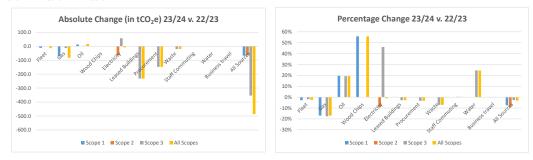
REPORTING OFFICER	Director of Environment and Regeneration
RESPONSIBLE CHIEF OFFICER	Chief Executive
DATE	11 <sup>th</sup> September 2024

Source	2023/24			Absolute Change v. Baseline			Percentage Change v. Baseline					
Source	Scope 1	Scope 2	Scope 3	All Scopes	Scope 1	Scope 2	Scope 3	All Scopes	Scope 1	Scope 2	Scope 3	All Scopes
Fleet	416.4	0.0	98.0	514.4	-52.0	0.0	-11.7	-63.7	-11%		-11%	-11%
Gas	420.6	0.0	70.6	491.2	-37.5	0.0	6.9	-30.6	-8%		11%	-6%
Oil	66.9	0.0	15.1	82.0	17.7	0.0	4.7	22.4	36%		45%	38%
Wood Chips	3.4	0.0	0.0	3.4	3.4	0.0	0.0	3.4			0%	13%
Electricity	0.0	733.9	122.9	856.8	0.0	-607.3	-98.6	-705.9		-45%	-45%	-45%
Leased Buildings	0.0	0.0	8,242.6	8,242.6	0.0	0.0	-407.3	-407.3			-5%	-5%
Procurement	0.0	0.0	4,418.4	4,418.4	0.0	0.0	-1,192.3	-1,192.3			-21%	-21%
Waste	0.0	0.0	284.7	284.7	0.0	0.0	-66.6	-66.6			-19%	-19%
Staff Commuting	0.0	0.0	142.8	142.8	0.0	0.0	-44.4	-44.4			-24%	-24%
Water	0.0	0.0	6.1	6.1	0.0	0.0	-19.6	-19.6			-76%	-76%
Business travel	0.0	0.0	6.2	6.2	0.0	0.0	-3.5	-3.5			-36%	-36%
All Sources	907.3	733.9	13,407.4	15,048.6	-68.4	-607.3	-1,832.4	-2,508.1	-7%	-45%	-12%	-14%
	6%	5%	89%	100%								

## 2023/24 Carbon Footprint Analysis (tCO<sub>2</sub>e)



Source	2023/24			Absolute Change 23/24 v. 22/23			Percentage Change 23/24 v. 22/23					
Source	Scope 1	Scope 2	Scope 3	All Scopes	Scope 1	Scope 2	Scope 3	All Scopes	Scope 1	Scope 2	Scope 3	All Scopes
Fleet	416.4	0.0	98.0	514.4	-11.8	0.0	-1.8	-13.6	-3%		-2%	-3%
Gas	420.6	0.0	70.6	491.2	-70.9	0.0	-12.5	-83.4	-17%		-18%	-17%
Oil	66.9	0.0	15.1	82.0	13.0	0.0	2.9	15.9	19%		19%	19%
Wood Chips	3.4	0.0	0.0	3.4	1.9	0.0	0.0	1.9	56%			56%
Electricity	0.0	733.9	122.9	856.8	0.0	-65.3	56.6	-8.7		-9%	46%	-1%
Leased Buildings	0.0	0.0	8,242.6	8,242.6	0.0	0.0	-231.6	-231.6			-3%	-3%
Procurement	0.0	0.0	4,418.4	4,418.4	0.0	0.0	-148.5	-148.5			-3%	-3%
Waste	0.0	0.0	284.7	284.7	0.0	0.0	-20.1	-20.1			-7%	-7%
Staff Commuting	0.0	0.0	142.8	142.8	0.0	0.0	0.4	0.4			0%	0%
Water	0.0	0.0	6.1	6.1	0.0	0.0	1.5	1.5			25%	25%
Business travel	0.0	0.0	6.2	6.2	0.0	0.0	0.0	0.0			0%	0%
All Sources	907.3	733.9	13,407.4	15,048.6	-67.8	-65.3	-353.1	-486.2	-7%	-9%	-3%	-3%
	6%	5%	89%	100%								



## Climate Change Report 2023-2024 - Category A and B public bodies

Please read this section carefully before completing the report.

This report is for Category A and B public bodies, ie. those with more than 15 staff.

Category C public bodies should NOT use this form. The form for Category C public bodies can be accessed here:

https://www.netzero.im/media/hfsnaoeu/2023-2024-cat-creporting-form-v1.docx

The reporting period is 1 April 2023 to 31 March 2024.

The submission deadline for Category A public bodies is 30 September 2024.

The submission deadline for Category B public bodies is 31 July 2024.

This form is the public body's annual report, required under the Climate Change (Public Bodies' Reporting Requirements) Regulations 2022 (as amended).

This report relates to compliance with the climate change duties set out in Section 21 of the Climate Change Act 2021, which are:

A public body, in performing its duties, must act in the way that it considers best to contribute to -

- (a) the meeting of the net zero emissions target by the net zero emissions target year;
- (b) the meeting of any interim target;
- (c) supporting the just transition principles and the climate justice principle;
- (d) sustainable development, including the achievement of the United Nations sustainable development goals; and
- (e) protecting and enhancing biodiversity, ecosystems and ecosystem services.

Duties (c), (d) and (e) are referred to collectively as the Fair Change principles. To learn more about the climate change duties for public bodies, use these links:

Legal Obligations	Net Zero	Emissions
Targets	Fair Change	Just Transition
Climate Justice	Sustainable Development	Biodiversity and Ecosystems

COMPLETING THE REPORT:

• Please complete the form digitally, in Excel format. The form contains formulas which do not function in any other format.

• In order to provide an update on what you reported last year where requested, please have your previous report to hand.

• Mandatory guestions are marked with an asterisk: \*. However, if you have no emissions in a that section, you may leave it blank.

• Please choose from the multiple choice answers, where they are provided.

• Other than formulas the fields are not locked. If you need more space, feel free to make a row or column larger, or insert additional rows. If you aren't sure how to do this, please get in touch. You may delete unused rows but please leave all questions in the report, even if they are left blank.

• Please take care not to amend or delete the formulas. Cells have been locked where possible to protect against this happening by accident, but sheets are left unprotected to provide additional space if needed.

#### SUPPORTING DOCUMENTS:

• The provision of supporting documents is not mandatory. However, if the public body has produced a document, for example that relates to a reported action, space is provided for the name of the document.

· Ideally, please provide a link to the document or append a copy to this report.

• Please note that supporting documents form a part of the report and must therefore be published with the report; therefore, they should be submitted in a format that is suitable for publication ie. without any sensitive information/redacted.

· Supporting documents should not be used as an alternative to completing the questions in the report.

#### SUBMISSION:

- Please submit the completed report to: publicbodiesclimate@gov.im along with any supporting documents.
- Submission to CCTT fulfils your legal requirement. CCTT administer the reporting process on behalf of the Council of Ministers, you do not need to submit your report directly to the Council of Ministers.
- Following submission, CCTT will review that report and confirm that is has been accepted or, if necessary, may request clarification or additional information.
- Once the report has been accepted, the public body must publish it in accordance with section 23(3) of the Climate Change Act 2021.

### HELP:

If you need help completing this report, please contact publicbodiesclimate@gov.im as early as possible before the submission deadline, to allow sufficient time for us to help you.

**BUILDINGS MANAGED BY DOI SHARED SERVICES:** 

If your public body has buildings that are managed by DOI Estate Shared Services, any requests for energy use (heating and electricity) in relation those buildings (for the 2023-2024 reporting period) must be sent to EnergyReporting@gov.im by the following dates:

• 1 July for Category B public bodies

• 1 September for Category A public bodies

All requests should include:

• An exhaustive list of the buildings that you are asking for information about.

• If those buildings are shared, a head count or similar to enable allocation of the data.

Please note that DOI cannot provide information on buildings that it does not manage. For buildings managed by your public body, you will need to collate the data internally and add both to your report.

## **Q1 PUBLICATION**

Please confirm whether you are content for this report to be published by the Climate Change Transformation Team on their website.

Please note that:

- All supporting documents form part of the report and should be submitted in a format that is suitable for publication ie. without any sensitive information/redacted.
- Publication by CCTT does not affect the public body's statutory requirement to publish its own report (per section 23(3) of the Climate Change Act 2021).

## Q2 PUBLIC BODY INFORMATION\*

Name of public body (choose from drop down)	Douglas (Local Authority)		
Contact email address	krice@douglas.gov.im		
Number of fte employees	239		

\* Please indicate the average full time equivalent (fte) during the reporting period.

For public bodies with staff employed by the Public Service Commission, 'number of fte employees' means stationed employees.

Please proceed to the 'Reporting Data' tab.

## **EMISSIONS DATA**

This section of the report relates to the public body's emissions during the reporting period (1 April 2023-31 March 2024) If you are aware of any missing, incomplete or estimated data, please enter details on the Missing Data tab.

\* Mandatory sections are marked with an asterisk. If the public body has no emissions for a mandatory section, it may be left blank.

### Q3 TRANSPORT\*

Enter the total amount of each vehicle fuel used <u>during the reporting period</u>, in the units listed. If the amount is zero, please leave blank.

	Amount used	Emissions	]
Petrol (litres)	8.406	19.754	kgCO <sub>2</sub> e
Diesel (litres)	143.149	380.776	kgCO2e
Coal (tonnes)		0	kgCO <sub>2</sub> e
Gas oil (litres) (also known as red diesel)	5.762	15.877	kgCO <sub>2</sub> e
Marine fuel oil (litres)		0	kgCO2e
Marine gas oil (litres)		0	kgCO2e
	Total transport emissions:	416.407	kgCO2e

Is there any additional information you would like to provide in relation to the public body's transport data? This might include information about changes in what has been reported this year compared with last year etc.

Marginal decrease in emissions. Likely due to investment in electric vehicles.

### Q4 BUILDINGS (HEATING)\*

Enter the total amount of each heating fuel used <u>during the reporting period</u>, in the units listed. If the amount is zero, please leave blank.

	Amount used	Emissions	
Natural gas (kWh)	2.336.388	420.550	kgCO2e
Heating/burning oil (litres)	2.801	7.115	kgCO <sub>2</sub> e
Gas oil (litres) (also known as red diesel)	21.662	59.688	kgCO <sub>2</sub> e
Coal (tonnes)		0	kgCO <sub>2</sub> e
LPG (litres)		0	kgCO <sub>2</sub> e
Propane (litres)		0	kgCO <sub>2</sub> e
Wood - Logs (tonnes)		0	kgCOze
Wood - Chips (tonnes)	83	3.368	kgCO <sub>2</sub> e
Wood - Pellets (tonnes)		0	kgCO <sub>2</sub> e
	Total buildings emissions:	490.720	kgCO <sub>2</sub> e

Is there any additional information you would like to provide in relation to the public body's buildings data? This might include information about changes in what has been reported this year compared with last year etc.

Significant reduction in gas emissions due to investment in heating control system and increased use of biomass.

### Q5 ELECTRICITY GENERATION\*

Enter the total amount of each fuel used to generate electricity for the public body's own use during the reporting period, in the units listed. If the amount is zero, please leave blank.

	Amount used	Emissions	]
Petrol (litres)		0	kgCOze
Diesel (litres)		0	kgCO <sub>2</sub> e
Gas oil (litres) (also known as red diesel)		0	kgCO <sub>2</sub> e
	Total electricity generation emissions:	0	kgCO₂e

Is there any additional information you would like to provide in relation to the public body's electricity generation data? This might include information about changes in what has been reported this year compared with last year etc.

### Q6 ELECTRICITY USE\*

Enter the total amount of electricity <u>obtained from the national network</u> during the reporting period, in kWh. If the amount is zero, please leave blank.

	Amount	Emissions	1
Electricity used (kWh)	1.813.687	733.872	kgCO <sub>2</sub> e

Is there any additional information you would like to provide in relation to the public body's electricity use data or emissions? This might include information about changes in what has been reported this year compared with last year etc.



If you have any additional emissions information, you can report it here - if you do not have any additional information, please leave this section blank. You can obtain a conversion factor from here: https://assets.publible.uk/media/649c5340bb13dc0012be2b6/ghg-conversion-factors-2023-condensed-set-update.aks\_ If you need help identifying a conversion factor, please contact\_publicbodiesclimate@gov.im

Emission source eg. aviation, refrigeration, biofuels for heating		Unit eg. litres, kWh, tonnes	in the units specified - enter number only	in kgCO2e per unit	Emissions Calculates automatically if other fields are completed.	
					0	
					0	
					0	
					0	
					0	
					0	
					0	
Total:						

### Q8 TOTAL (GROSS) EMISSIONS FOR REPORTING PERIOD

This section will automatically show the public body's total emissions, for the reporting period, based on the data entered. NOTE: This report is limited to a small number of high level indicators and therefore does not cover all GHGs or GHG emitting activities.

Total (gross) reported emissions: 1.641.000 kgCO2e

### Q9 LAND AND HABITATS

If the public body has no land, please proceed to the Governance & Behaviour tab.

When completing this section please:

- Enter details of any parcels of land of over 1 hectare owned by the public body during the reporting period.

- Try to maintain consistency in parcel description with your previous report, adding granularity where possible.

Report parcels in separate locations individually.
 Complete the table to be best of your current knowledge, choosing 'Unknown' where necessary.

HABITAT TYPE

The form now allows for a habitat subtype/soil type to be selected, if known.

If you do not know the subtype or soil type please choose the 'Unknown' option for the main habitat type eg. 'Grassland - Other/Unknown' or 'Forest - Other/Unknown'

For more information on the conversion factors use for the different habitat types, please contact publicbodiesclimate@gov.im

Parcel name/reference	Address or description	Area (ha)	Habitat type & sub-type	Gas exchange	]
Noble's Park		14	Grassland - Semi-natural	-19.740	kgCO₂e
Summerhill Glen		4	Forest - Semi-natural broadleaved woodland	-5.240	kgCO <sub>2</sub> e
Lawn Cemetery		2	Grassland - Amenity	-1.240	kgCO2e
Field below Lawn Cemetery		2	Grassland - Scrub	-2.820	kgCO <sub>2</sub> e

				_
Allotments	2	Cropland - Arable, unknown soil	580	kį
Groves Road Field	3	Grassland - Amenity	-1.860	kį
Springvalley Road (football area)	3	Grassland - Amenity	-1.860	kį
Anagh Coar Field	1	Grassland - Amenity	-620	kį
Ballaughton Park	2	Forest - Mixed plantation	-5.180	kį
Harcroft	1	Grassland - Amenity	-620	k
Douglas Head	2	Grassland - Scrub	-2.820	k
Derby Square	1	Grassland - Semi-natural	-1.410	k
Power Station Plot	2	Grassland - Semi-natural	-2.115	k
Willaston Field	2	Grassland - Amenity	-930	k
Ballanard Field	1	Grassland - Amenity	-620	k
Douglas Golf Course	45	Grassland - Semi-natural	-62.745	,
Lheannag Park	1	Forest - Broadleaved plantation	-1.720	
Bayr Cam	2	Grassland - Amenity	-1.240	k
Governor Hill	1	Grassland - Amenity	-620	k
Douglas Beach	40	Other land (bare ground, beach etc.)	0	
Blackberry Lane/Bemahague Fields	3	Grassland - Other/Unknown	-2.160	
Fort North , Cooil Road	3	Grassland - Other/Unknown	-2.160	
Kewaigue Tip (Formerly Kewagiue Mill)	3	Grassland - Scrub	-4.230	
Shaw's Brow Car Park	2	Settlement	0	,
Ballaughton Nursery glasshouses, yard, office and car park	1	Settlement	0	k
Balaughton Nursery periphery	1	Forest - Semi-natural broadleaved woodland	-1.310	k
Borough Cemetery	5	Grassland - Amenity	-3.100	
		Total gas exchange:	-125.780	k

IMPORTANT

Some habitat types are EMITTERS (ie. they release CO<sub>2</sub> into the atmosphere).

Habitat types that remove CO2 will return a minus value in the end column, habitats that release CO2 will return a positive value.

Additionally, some habitat types, due to their average condition on the Island, return a nil value i.e. they are neither an emitter nor a sink.

This section is designed to give only a rough indication of the carbon removed by the land owned by the public body and, in future reports, to track land use change.

Is there any additional information you would like to provide in relation to the public body's land? This might include information about changes in what has been reported this year compared with last year etc.

During the reporting year the Council trialled "No Mow May" in two areas, which is not reflected in the above figures.

### NET REPORTED EMISSIONS FOR REPORTING PERIOD

This section will automatically show the public body's net emissions i.e. gross emissions from transport, buildings and electricity minus net land use (if completed).

The public body's net emissions (ie. emissions minus carbon stored) for the reporting period are:

1.515.220 kgCO2e

Baseline data remains

the same

### Q10 BASELINE

Only Category A public bodies need to complete this question. Has the public body's baseline year data changed?

A public body's baseline data may change if, for example, missing or estimated data for that year has since been obtained.

## **GOVERNANCE & BEHAVIOUR**

## \*Mandatory questions are marked with an asterisk.

The questions in this section relate to how the public body has incorporated the climate change duties into its functions and the actions it has taken to support them. Please complete all of the mandatory sections, using the drop-down options where provided.

## Q11 DECISION MAKING\*

Please tell us about any processes or mechanisms by which the public body incorporates the climate change duties in its decision making processes.

### NOTE: The Summary Analysis Report 2022-2023 recommends that all public bodies embed the climate change duties in their decision making processes.

<b>Type of measure</b> Please choose from drop down.	Description Please describe the measure and how it fits into the public body's governance processes. Please do not name individuals - refer only to roles. If a measure was reported last year but has been changed, please explain the change.	Update Is this a new measure or something that was reported last year? Please choose from drop down.	Status Please choose from the drop down.
Required content for decision papers	Standard reporting template used which includes a section for Environmental Considerations.	Measure reported last year	Underway/on-going
Use of Climate Impact Assessment Tool	Use of the IOM Government-developed Climate Impact Assessment Tool for: Projects of over £½m; Commissioning a new service/ceasing a current one; New builds; Any projects aiming to reduce emissions; Any projects that may lead to a significant carbon emissions impact (up or down).	Measure reported last year	Underway/on-going
Other relevant impact assessment	Use of industry standards on construction projects for example Association of Energy Conscious Buildings (AECB) and others.	New measure	Underway/on-going
Required content for decision papers	Ethical and Sustainable Procurement Policy.	New measure	Completed
Required content for decision papers	Environmental Policy.	New measure	Completed
Required content for decision papers	Street Lighting Policy.	New measure	Completed

Is there any additional information you would like to provide in relation to how the climate change duties are incorporated into the public body's decision making processes?

A number of sessions were provided to all councillors and staff on the importance of considering cliamte duties within report-writing and decision-making.

## Q12 AWARENESS\*

What measures has the public body taken during the reporting period to raise awareness of the climate change duties (or climate change more generally) within the public body or with external service users/stakeholders.

<b>Type of measure</b> <i>Please choose from drop down.</i>	Please describe the measure. If a measure was reported last year but has been changed,	Internal or external? Was this measures aimed at staff or external service users/stakeholders? Please choose from drop down.	Update Is this a new measure or something that was reported last year? Please choose from drop down.	Status Please choose from the drop down.
Talks, briefings, presentations, meetings etc.	Quarterly monitoring of progress against Action Plan.	Internal (staff)	Measure reported last year	Underway/on-going
Digital media (eg. website or social media content)	Net Zero Action Plan on website.	Both	Measure reported last year	Completed
Emails/newsletters	Information included in Human Resources newsletter to staff.	Internal (staff)	Measure reported last year	Underway/on-going
Other	Annual staff commuting survey.	Internal (staff)	Measure reported last year	Completed
Training	Further training of 10 more staff and 8 members. In addition Waste crews have attended recycling champions training.	Internal (staff)	New measure	Completed
Other	Design team meetings.	Both	New measure	Underway/on-going
Staff meetings	Monthly management meetings.	Internal (staff)	New measure	Underway/on-going

Is there any other information you would like to provide in relation to the public body's awareness raising measures?

The Council will be celebrating its first City Day in March 2025 and the theme for the Business Breakfast will be Climate Change.

Launched the Dragonflies' Den initiative in liaison with Manx Wildife Trust to encourage and support community groups to improve the biodiversity and sequestration potential of green spaces.

Promoted International Bee Friendly Day in Regent Street in liaison with Manx Wildlife Trust and Beekeepers' Association to promote the importance of pollinsers.

Worked with the community at Ballanard Court and a commercial entity to install a community garden.

Installed bike parks in cemeteries and Douglas Head.

Raised awareness of beach ecology at the Beach Day.

## Q13 EMISSIONS REDUCTION PLANS\*

limate action/emissions reduction plan in place.
III

If you answered 'No', please explain how the public body is ensuring that it is contributing towards the Island's net zero	
and interim emissions reduction targets.	

Is there any additional information you would like to provide in relation to the public body's climate action/emission reduction plan?

Action Plan One covers April 2021 to March 2025.

Quarterly monitoring and update reports provided to Chief Officers Management Team and annually to all councillors as part of the annual carbon footprint reporting.

Action Plan Two to cover April 2025 to March 2029 is currently awaiting approval.

## Q14 OTHER RELEVANT DOCUMENTS\*

Has the public body prepared any other documents, in relation to the climate change duties, during the reporting period	Yes - see below		
Please enter details of any documents (eg. plans, strategies or other similar documents) relating to the climate change du	ties.		
Name/description of document Please include a link where possible or include a copy as a supporting document. If a document was reported last year but has been updated during the reporting period, please explain.	Relevant climate change duty/duties Please choose from drop down	Update Is this a new measure or something that was reported last year? Please choose from drop down	Status Please choose from the drop down
Ethical and Sustainable Procurement policy. Relates to Fair Change, Emissions Reduction, Just Transition/Climate Justice, Sustainable Development, Biodiversity and Ecosystems.	Multiple (please specify in description)	New measure	Completed
Environmental policy reviewed and updated following councillor input. Relates to Fair Change, Emissions Reduction, Just Transition/Climate Justice, Sustainable Development, Biodiversity and Ecosystems.	Multiple (please specify in description)	New measure	Completed

## Q15 CLIMATE ACTION\*

Has the public body taken any action to reduce its emissions, or in relation to any other aspect of the climate change duties, during the reporting period?	Yes - see below	]	
Please complete the table below with details of actions taken.		2	
Description of action/s	Relevant climate change duty Please choose from drop down	Update Is this a new measure or something that was reported last year? Please choose from drop down	Status Please choose from the drop down
Promotion of improved online availability of magazines, etc. leading to a reduction in printed material.	Emissions reduction	New measure	Underway/on-going
Introduced summary rate demands for owners of multiple properties.	Emissions reduction	New measure	Completed
Emailing of sales invoices to those customers who provide their email address.	Emissions reduction	New measure	Completed
Encouraged more paperless working and easier access to information for Members and officers.	Emissions reduction	New measure	Underway/on-going
Adopted and used the Climate Impact Assessment Tool.	All	New measure	Underway/on-going
Replaced a gas-powered teletruck with an electric-powered one.	Emissions reduction	New measure	Completed
Introduced a revised policy on memorial plaques meaning the Council won't need to build further walls in future.	Emissions reduction	New measure	Completed
Raised awareness of beach ecology at the Beach Day.	Biodiversity and Ecosystems	New measure	Completed
Bee Day raised awareness of the importance of biodiversity and of pollinators.	Biodiversity and Ecosystems	New measure	Completed
Introduction of "No Mow May" into two areas, which hopefully will encourage others to follow (private households) Emissions reduction and biodiverity & ecosystems.	Multiple (please specify in description)	New measure	Underway/on-going
Updated allotment rules including introduction of hoses to assist with food growth and encourage greater use of allotments.	Biodiversity and Ecosystems	New measure	Completed
Motorhome aire introduced in Nobles Park, encouraging visitors to stay on one location and not move around each day, thereby saving carbon.	Emissions reduction	New measure	Completed
Composting toilet on the golf course. – First on the island.	Biodiversity and Ecosystems	New measure	Completed
Seeded the Cemetery Cottage area thereby returning what was previously a hard surface to urban grassland.	Biodiversity and Ecosystems	New measure	Completed
New civic amenity site – reducing carbon in terms of transporting material to the EfW plant - built right next door.	Emissions reduction	New measure	Completed
Recycling rate increased to 23%.	Emissions reduction	New measure	Completed
Upgrade of the Fleet Management System so less reliance on paper and quicker response to defects meaning lower emissions.	Emissions reduction	New measure	Completed
Beach Buddies event supported in April 2023 – raising awareness of reducing the blight of litter, etc. and recognising biodiversity.	Biodiversity and Ecosystems	New measure	Completed
Raising awareness of recycling during Recycling Week 2023.	Emissions reduction	New measure	Completed
Introduction of Flexitime policy resulting in less concentration of traffic in rush hours so reducing emissions caused by idling engines.	Emissions reduction	New measure	Completed
Prepared a Housing strategy and ten year road map with emphasis on design and construction of new energy-efficient housing.	Emissions reduction	New measure	Underway/on-going
Working on the Solar Power framework for Council properties.	Emissions reduction	New measure	Underway/on-going
Working on the Light Emitting Diode (LED) framework on Council properties.	Emissions reduction	New measure	Underway/on-going
Changing lights on Council apartments buildings to LED.	Emissions reduction	New measure	Underway/on-going
Construction of high energy-efficient apartments in Willaston. The apartments have solar panels and use air source heat pumps to heat the internal spaces.	Emissions reduction	New measure	Underway/on-going
Procurement of new operational computer systems and applications has been moved from on premise by default to Software as a Service (cloud-based services supplied on shared infrastructure and data centres). It is envisaged that over time the Council will be in position to reduce the requirement for on premise infrastructure and power consumption.	Emissions reduction	New measure	Underway/on-going
Use of remote support software TeamViewer to reduce the number of in person support visits required and reduce vehicle journeys.	Emissions reduction	New measure	Completed
Implementation of virtual meeting software Microsoft Teams across the whole Council enabling a reduction in travel for internal and supplier face to face meetings.	Emissions reduction	New measure	Completed
Provision of Work from Home capability for approximately 90 staff for business continuity. This also provides options for days when staff may work from home and do not drive to the office.	Emissions reduction	New measure	Completed
Implementation of electronic invoicing for Waste Services commercial customers reducing paper usage.	Emissions reduction	New measure	Underway/on-going
Expansion for electronic meetings software First Agenda and reduction of paper usage.	Emissions reduction	New measure	Completed

Introduced Remote Access for Members for Committee Meetings into Standing Orders.	Emissions reduction	New measure	Completed
Investigating alternative options to gas cremators.	Emissions reduction	New measure	In planning/development stage
Changed the allotments tenancy period to coincide with the growing season which makes them more productive.	Increasing removals (natural carbon storage)	New measure	Completed
Engage with allotment tenants electronically.	Emissions reduction	New measure	Completed
Engaged with Department of Infrastructure to seek synergies with highway developments by installing electrical lighting infrastructure in tandem to reduce cost, energy consumption and waste.	Emissions reduction	New measure	Underway/on-going

HIGHLIGHTS	
Are there any actions or initiatives taken by the public body over the reporting period, in relation to the climate change duties, that you would like to highlight? If so, please describe the action, project or initiative:	
To which aspect/s of the climate change duties does the action, project or initiative relate?	Emmision reduction and sustainable development
Please briefly explain why you have chosen to highlight this action, project or initiative. For example, this may be because it was particularly successful, innovative or a good example of collaboration.	These are new initiatives by the public body.
	If you have any photographs of your highlighted actions, please feel free to append them as supporting documents.

## **MISSING AND ESTIMATED DATA**

Did you report any missing, incomplete or estimated data in last year's report?

This section of the report is for you to list where you know that information is missing or has been estimated for this reporting period.

Section	Description (eg. fuel type)	Is the data missing, incomplete or estimated?	Reason the data was missing, incomplete or estimated.	If estimated, how was the estimate calculated?	Action planned to improve data?	Do you expect the data to be available for the next reporting period? (1 April 2023 - 31 March 2024)	Was this data reported missing for the previous reporting period? (1 April 2022-31 March 2023)
Chose from the dropdow list.	n Enter a brief description of the data that is missing. Eg. 'petrol'	Choose from the drop down list.	Enter a brief description of why measured data could not be obtained. Eg. Data not collected/retained	Enter a brief description of how the estimate was arrived at.	Enter a brief description of action planned to obtain/improve the data. Eg. data collection processes to be updated.	Choose from the drop down list.	Choose from the drop down list.

Please proceed to the 'Supporting Docs' tab

# **SUPPORTING DOCUMENTS**

Please provide a list of all the supporting documents you have provided and whether they are provided by link or attached copy.

Please note that all supporting documents form part of your report and therefore must be published. Therefore, please ensure that they are suitable for publication and do not contain any sensitive information.

Please do not include documents that cannot be published.

Name of document	Please enter the link below or indicate if a copy has been provided.
Barriers and Challenges	

Please proceed to the 'Supporting Docs' tab

## **Conversion Factors - Fuels**

## SOURCES:

2018	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2018
2019	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2019
2020	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020
2021	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021

2022 https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022

2023 https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023

SUMMARY:			2018	2019	2020	2021	2022	2023	
	Fuel	Units	kg CO₂e	kg CO₂e	kg CO₂e	kg CO2e	kg CO₂e	kg CO₂e	Description
	Petrol	Litres	2,30531	2,31495	2,31467	2,33969	2,33970	2,35000	Petrol (100% mineral)
	Diesel	Litres	2,68779	2,68697	2,68787	2,70553	2,69880	2,66000	Diesel (100% mineral)
<b>T</b>	Coal	Tonnes	2.452,29	2.464,95	2.380,01	2.403,84	2.411,43	2.396,48	Coal (industrial)
Transport	Gas oil (aka red diesel)	Litres						2,76	Gas Oil
	Marine Fuel Oil	Litres						3,10000	Marine Fuel Oil
	Marine Gas Oil	Litres						2,73782	Marine Gas Oil
	Natural gas	kWh	0,18396	0,18385	0,18387	0,18316	0,18254	0,18000	Natural gas (Net CV)
	Heating oil	Litres	2,53627	2,54042	2,54039	2,54014	2,54013	2,54000	Burning oil
	Gas oil (aka red diesel)							2,76	Gas Oil
	Coal	Tonnes	2.881,65	2.744,72	2.883,26	2.883,26	2.883,26	2.904,95	Coal (domestic)
Buildings	LPG	Litres	1,51906	1,52260	1,55537	1,55709	1,55709	1,56000	LPG
	Propane	Litres						1,54	Propane
	Wood - Logs	Tonnes	61,52297	63,84683	63,11534	61,81736	43,03576	43,89327	Wood logs
	Wood - Chips	Tonnes	56,88051	59,02902	58,35272	57,15269	39,78833	40,58114	Wood chips
	Wood - Pellets	Tonnes	70,47328	73,13523	72,29731	72,61754	50,55459	51,56192	Wood pellets
	Petrol	Litres	2,30531	2,31495	2,31467	2,33969	2,33970	2,35000	Petrol (100% mineral)
Electricity Gen	Diesel	Litres	2,68779	2,68697	2,68787	2,70553	2,69880	2,66000	Diesel (100% mineral)
	Gas oil (aka red diesel)	Litres						2,76	Gas Oil

DETAILED & ADDITIONAL FACTORS:		2018	2019	2020	2021	2022	2023		
Гуре	Fuel	Unit	kg CO₂e						
	Butane	tonnes						3033,38	
		litres						1,75	
		kWh (Net CV)						0,24	
		kWh (Gross CV)						0,22	
		tonnes	2746,63	2542,04	2533,00	2538,48	2539,25	2562,57	
	CNG	litres	0,48066	0,44486	0,44327	0,44423	0,44	0,45000	
	CNG	kWh (Net CV)	0,20437	0,20428	0,20374	0,20297	0,20	0,20000	
		kWh (Gross CV)	0,18396	0,18385	0,18387	0,18316	0,18	0,18000	
	LNG	tonnes	2746,63	2550,04	2542,41	2555,28	2559,17	2581,98	
		litres	1,24282	1,15387	1,15041	1,15623	1,16	1,17000	
		kWh (Net CV)	0,20437	0,20492	0,20449	0,20431	0,20	0,20000	
		kWh (Gross CV)	0,18396	0,18443	0,18455	0,18438	0,18	0,18000	
		tonnes	2937,32	2936,86	2938,81	2939,29	2939,29	2939,36	
	LPG	litres	1,51906	1,52260	1,55537	1,55709	1,56	1,56000	< buildings, LPG aka propane (litres)
	LPG	kWh (Net CV)	0,23030	0,23029	0,23030	0,23031	0,23	0,23000	
		kWh (Gross CV)	0,21448	0,21447	0,21448	0,21449	0,21	0,21000	
Gaseous fuels	Natural coc	tonnes	2746,63	2542,04	2533,00	2538,48	2539,25	2562,57	
		cubic metres	2,04652	2,03053	2,02266	2,02135	2,02	2,04000	
	Natural gas	kWh (Net CV)	0,20437	0,20428	0,20374	0,20297	0,20	0,20000	
		kWh (Gross CV)	0,18396	0,18385	0,18387	0,18316	0,18	0,18000	< buildings, natural gas (KwH)
		tonnes		2550,04	2542,41	2555,28	2559,17	2581,98	
	Natural gas (100% mineral blend)	cubic metres		2,03693	2,03017	2,03473	2,03	2,05000	

				~					
	Natural gas (100% mineral biend)	kWh (Net CV)		0,20492	0,20449	0,20431	0,20	0,20000	
		kWh (Gross CV)		0,18443	0,18455	0,18438	0,18	0,18000	
		tonnes	2589,60	2610,26	2601,11	2578,25	2578,25	2578,25	
	Other petroleum gas	litres	0,94857	0,95614	0,95279	0,94441	0,94	0,94000	4
		kWh (Net CV)	0,20005	0,20164	0,20094	0,19917	0,20	0,20000	
		kWh (Gross CV)	0,18404	0,18551	0,18486	0,18324	0,18	0,18000	
		tonnes						2997,63000	
		litres						1,54000	
	Propane								-
		kWh (Net CV)						0,23000	
		kWh (Gross CV)						0,21000	
									1
			2018	2019	2020	2021	2022	2023	
ctivity	Fuel	Unit	kg CO₂e	kg CO₂e	kg CO₂e	kg CO₂e	kg CO₂e	kg CO₂e	
		tonnes	3.213,91	3.218,92	3.218,60	3.192,76	3192,76	3.193,69	
		litres	2,28586	2,29105	2,29082	2,33048	2,33	2,33000	
	Aviation spirit	kWh (Net CV)	0,25698	0,25742	0,25805	0,25658	0,26	0,26000	
		kWh (Gross CV)	0,24413	0,24455	0,24514	0,24375	0,24	0,24000	
		tonnes	3.181,15	3.181,37	3.181,41	3.181,43	3181,43	3.178,37	
		litres	2,53883	2,54306	2,54310	2,54514	2,55	2,54000	
	Aviation turbine fuel	kWh (Net CV)	0,26072	0,26080	0,26086	0,26086	0,26	0,26000	
		kWh (Gross CV)	0,24768	0,24776	0,24782	0,24782	0,25	0,25000	
		tonnes	3.165,26	3.165,36	3.165,32	3.165,01	3165,01	3.165,04	
	D	litres	2,53627	2,54042	2,54039	2,54014	2,54	2,54000	< buildings, heating oil (litres)
	Burning oil	kWh (Net CV)	0,25963	0,25974	0,25964	0,25975	0,26	0,26000	
		kWh (Gross CV)	0,24665	0,24675	0,24666	0,24677	0,25	0,25000	
		tonnes	3.132,15	3.088,23	3.028,61	2.969,07	3032,89	3.015,65	
		litres	2,62694	2,59411	2,54603	2,51233	2,56	2,51000	
	Diesel (average biofuel blend)	kWh (Net CV)	0,26349	0,26023	0,25568	0,25165	0,26	0,25000	
		kWh (Gross CV)	0,24768	0,24462	0,24057	0,23686	0,24	0,24000	
		tonnes	3.209,22	3.205,55	3.206,62	3.208,76	3208,76	3.203,91	
		litres	2,68779	2,68697	2,68787	2,70553	2,70	2,66000	< transport, diesel (litres) / electricity gen (litres)
	Diesel (100% mineral diesel)	kWh (Net CV)	0,26910	0,26880	0,26891	0,26955	0,27	0,27000	
		kWh (Gross CV)	0,25296	0,25267	0,25278	0,25338	0,25	0,25000	
		tonnes	3.228,84	3.217,82	3.221,37	3.229,20	3229,20	3.228,89	
		litres	3,17799	3,17966	3,18317	3,17522	3,18	3,17000	
	Fuel oil	kWh (Net CV)	0,28544	0,28492	0,28484	0,28527	0,29	0,29000	
		kWh (Gross CV)	0,26831	0,26782	0,26775	0,26815	0,27	0,27000	
		tonnes	3.478,44	3.229,86	3.229,34	3.230,28	3230,28	3.226,58	
		litres	2,97049	2,75821	2,75776	2,75857	2,76	2,76000	
	Gas oil	kWh (Net CV)	0,29417	0,27315	0,27310	0,27318	0,27	0,27000	
		kWh (Gross CV)	0,27652	0,25676	0,25672	0,25679	0,26	0,26000	
		tonnes	3.182,00	3.181,89	3.181,42	3.181,43	3181,44	3.181,00	
	L. L. Surger	litres				2,75	2,75	2,75	
	Lubricants	kWh (Net CV)	0,28130	0,26909	0,28131	0,28105	0,28	0,28000	
		kWh (Gross CV)	0,26442	0,25294	0,26443	0,26418	0,26	0,26000	
		tonnes	3.142,87	3.142,87	3.142,87	3.142,87	3142,87	3.142,38	
		litres				2,12	2,12	2,12	
Liquid fuels	Naphtha	kWh (Net CV)	0,24881	0,24894	0,24898	0,24895	0,25	0,25000	
		kWh (Gross CV)	0,23637	0,23650	0,23653	0,23651	0,24	0,24000	
		tonnes	3.002,28	2.997,50	2.942,05	2.947,62	2903,08	2.806,66	
		litres	2,20307	2,20904	2,16802	2,19352	2,16	2,1000	
	Petrol (average biofuel blend)	kWh (Net CV)	0,24607	0,24603	0,24164	0,24227	0,24	0,23000	
		kWh (Gross CV)	0,23377	0,23373	0,22920	0,22980	0,24	0,22000	
		tonnes	3.153,66	3.152,96	3.152,58	3.153,90	3153,90	3.154,08	
		connes							
		litres	2,30531	2,31495	2,31467	2,33969	2,34	2,35000	< transport, petrol (litres) / electricity gen (litres)

		kWh (Gross CV)	0,24082	0,24099	0,24120	0,24158	0,24	0,24000	
		tonnes	3.228,84	3.217,82	3.221,37	3.229,20	3229,20	3.228,89	
	Processed fuel oils - residual oil	litres	3,17799	3,17966	3,18317	3,17522	3,18	3,17000	
		kWh (Net CV)	0,28544	0,28492	0,28484	0,28527	0,29	0,29000	
		kWh (Gross CV)	0,26831	0,26782	0,26775	0,26815	0,27	0,27000	
		tonnes	3.478,44	3.229,86	3.229,34	3.230,28	3230,28	3.226,58	1
		litres	2,97049	2,75821	2,75776	2,75857	2,76	2,76000	1
	Processed fuel oils - distillate oil	kWh (Net CV)	0,29417	0,27315	0,27310	0,27318	0,27	0,27000	
		kWh (Gross CV)	0,27652	0,25676	0,25672	0,25679	0,26	0,26000	
		tonnes	2.944,82	2.944,82	2.944,82	2.944,82	2944,81	2.944,32	
		litres							
	Refinery miscellaneous	kWh (Net CV)	0,25911	0,25966	0,25966	0,25966	0,26	0,26000	
		kWh (Gross CV)	0,24615	0,24667	0,24667	0,24667	0,25	0,25000	
		tonnes	3.225,59	3.225,02	3.224,58	3.224,56	3224,57	3.219,38	
		litres				2,75	2,75	2,75	
	Waste oils	kWh (Net CV)	0,28515	0,28556	0,27494	0,27503	0,28	0,27000	
		kWh (Gross CV)	0,26804	0,26842	0,25674	0,25682	0,26	0,26000	
		tonnes	3.249,28	3.250,08	3.249,99	3.249,99	3249,99	3.245,30	
		litres	2,77479	2,77547	2,77540	2,77539	2,78	2,77000	
	Marine gas oil	kWh (Net CV)	0,27479	0,27486	0,27485	0,27485	0,27	0,27000	
		kWh (Gross CV)	0,25830	0,27486	0,25836	0,27485	0,27	0,26000	
		tonnes	3.159,49	3.159,55	3.159,50	3.159,51	3159,50	3.154,75	
		litres	3,159,49	3,159,55	3,159,50	3,159,51	3159,50	3.154,75	< transport marino fuel oil (litros)
	Marine fuel oil			,					< transport, marine fuel oil (litres)
		kWh (Net CV)	0,27931	0,27976	0,27937	0,27911	0,28	0,28000	-
		kWh (Gross CV)	0,26255	0,26298	0,26261	0,26236	0,26	0,26000	J
					1				1
			2018	2019	2020	2021	2022	2023	
ctivity	Fuel	Unit	kg CO₂e	kg CO₂e	kg CO₂e	kg CO₂e	kg CO₂e	kg CO₂e	
		tonnes	2.452,29	2.464,95	2.380,01	2.403,84	2411,43	2396,48	< transport, coal (tonnes)
	Coal (industrial)	kWh (Net CV)	0,34191		,	· · · · · · · · · · · · · · · · · · ·	0,34	0,34	
	Coal (industrial)	kWh (Net CV)	0,34191	0,34930	0,33726	0,34064	0,34	0,34	
	Coal (industrial)		0,34191 0,32482	0,34930 0,33183	0,33726 0,32040	0,34064 0,32361	0,34 0,32	0,32	
		kWh (Net CV) kWh (Gross CV) tonnes	0,34191 0,32482 2.261,32	0,34930	0,33726 0,32040 2.222,94	0,34064 0,32361 2.252,34	0,34 0,32 2270,45	0,32 2199,33	
	Coal (industrial) Coal (electricity generation)	kWh (Net CV) kWh (Gross CV)	0,34191 0,32482	0,34930 0,33183 2.264,93	0,33726 0,32040	0,34064 0,32361	0,34 0,32	0,32 2199,33 0,33	
		kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV)	0,34191 0,32482 2.261,32 0,32750	0,34930 0,33183 2.264,93 0,32170 0,30561	0,33726 0,32040 2.222,94 0,33333	0,34064 0,32361 2.252,34 0,33706	0,34 0,32 2270,45 0,34	0,32 2199,33	< buildings, coal (tonnes)
	Coal (electricity generation)	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72	0,33726 0,32040 2.222,94 0,33333 0,31666 2.883,26	0,34064 0,32361 2.252,34 0,33706 0,32020 2.883,26	0,34 0,32 2270,45 0,34 0,32 2883,26	0,32 2199,33 0,33 0,32 2904,95	< buildings, coal (tonnes)
		kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288	0,34930 0,33183 2.264,93 0,32170 0,30561	0,33726 0,32040 2.222,94 0,33333 0,31666	0,34064 0,32361 2.252,34 0,33706 0,32020	0,34 0,32 2270,45 0,34 0,32 2883,26 0,36	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation)	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473	0,33726 0,32040 2.222,94 0,33333 0,31666 2.883,26 0,36276 0,34462	0,34064 0,32361 2.252,34 0,33706 0,32020 2.883,26 0,36276 0,34462	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation) Coal (domestic)	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes	0,34191 0,32482 2.261,32 0,32750 0,31112 <b>2.881,65</b> 0,36288 0,34473 3.064,56	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04	0,34064 0,32361 2.252,34 0,33706 0,32020 2.883,26 0,36276 0,34462 3.165,24	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation)	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841	0,33726 0,32040 2.222,94 0,33333 0,31666 2.883,26 0,36276 0,34462	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation) Coal (domestic)	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation) Coal (domestic) Coking coal	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation) Coal (domestic)	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes	0,34191 0,32482 2.261,32 0,32750 0,31112 <b>2.881,65</b> 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006	0,34064 0,32361 2.252,34 0,33706 0,32020 2.883,26 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 <b>2.881,65</b> 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193	0,34930 0,33183 2.264,93 0,32170 0,30561 <b>2.744,72</b> 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,34165	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890 0,34096	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,36	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,36	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes	0,34191 0,32482 2.261,32 0,32750 0,31112 <b>2.881,65</b> 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,35964 0,34165 2.264,93	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 2.219,47	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890 0,34096 2.248,82	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,35964 0,34165 2.264,93 0,33853	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36462 0,34462 0,34358 0,36440 3.397,79 0,36006 0,34206 2.219,47 0,33333	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890 0,34096 2.248,82 0,33706	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes	0,34191 0,32482 2.261,32 0,32750 0,31112 <b>2.881,65</b> 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,35964 0,34165 2.264,93	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 2.219,47	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890 0,34096 2.248,82	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90	< buildings, coal (tonnes)
Solid fuels	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,35964 0,34165 2.264,93 0,33853	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36462 0,34462 0,34358 0,36440 3.397,79 0,36006 0,34206 2.219,47 0,33333	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890 0,34096 2.248,82 0,33706	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33	< buildings, coal (tonnes)
	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028 0,32326	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,34165 2.264,93 0,33853 0,32161	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 2.219,47 0,33333 0,31666	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890 0,34096 2.248,82 0,33706 0,32020	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34 0,32	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33 0,32	< buildings, coal (tonnes)
	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home produced coal only) Fuel	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028 0,32326	0,34930 0,33183 2.264,93 0,32170 0,30561 <b>2.744,72</b> 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,34165 2.264,93 0,33853 0,32161 <b>2019</b>	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 2.219,47 0,33333 0,31666 <b>2020</b>	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35797 3.386,86 0,35797 0,34096 2.248,82 0,33706 0,32020	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34 0,32 <b>2022</b>	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33 0,32 <b>2023</b>	< buildings, coal (tonnes)
	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home produced coal only)	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34459 3.396,50 0,35993 0,34193 2.261,32 0,34028 0,32326 <b>2018</b> kg CO <sub>2</sub> e	0,34930 0,33183 2.264,93 0,32170 0,30561 <b>2.744,72</b> 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,34165 2.264,93 0,33853 0,32161 <b>2019</b> kg CO <sub>2</sub> e	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 2.219,47 0,33333 0,31666 <b>2020</b> kg CO <sub>2</sub> e	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890 0,34096 2.248,82 0,33706 0,33706 0,32020 <b>2021</b> kg CO <sub>2</sub> e	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34 0,32 <b>2022</b> kg CO <sub>2</sub> e	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33 0,32 <b>2023</b> kg CO <sub>2</sub> e	
	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home produced coal only) Fuel Wood logs	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028 0,32326 <b>2018</b> kg CO <sub>2</sub> e 61,52297	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,34165 2.264,93 0,32161 2.264,93 0,32161 2019 kg CO <sub>2</sub> e 63,84683	0,33726 0,32040 2.222,94 0,33333 0,31666 <b>2.883,26</b> 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 2.219,47 0,33333 0,31666 <b>2020</b> kg CO <sub>2</sub> e <b>63,11534</b>	0,34064 0,32361 2.252,34 0,33706 0,32020 2.883,26 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,32020 0,34022 0,35797 3.386,86 0,32020 0,34022 0,35797 3.386,86 0,32020 0,32020 0,34022 0,35797 3.386,86 0,32020 0,32020 0,34022 0,32020 0,34022 0,32020 0,34022 0,32020 0,34022 0,32020 0,34026 0,32020 0,34026 0,32020 0,320000000000	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34 2266,90 0,34 0,32 <b>2022</b> kg CO <sub>2</sub> e <b>43,03576</b>	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33 0,32 <b>2023</b> kg CO <sub>2</sub> e <b>43,89327</b>	
ctivity	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home produced coal only) Fuel	kWh (Net CV) kWh (Gross CV) tonnes kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 <b>2.881,65</b> 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028 0,32226 <b>2018</b> kg CO <sub>2</sub> e <b>61,52297</b> 0,01506	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,34165 2.264,93 0,33853 0,32161 2.264,93 0,32161 2.2019 kg CO <sub>2</sub> e 63,84683 0,01563	0,33726 0,32040 2.222,94 0,33333 0,31666 2.883,26 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 2.219,47 0,33333 0,31666 <b>2020</b> kg CO <sub>2</sub> e 63,11534 0,01545	0,34064 0,32361 2.252,34 0,33706 0,32020 2.883,26 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890 0,34096 2.248,82 0,33706 0,32020 2.248,82 0,33706 0,32020 2.248,82 0,33706 0,32020 2.248,82 0,33706 0,32020 2.248,82 0,33706 0,32020 0,33706 0,32020 0,3200 0,32020 0,32020 0,32020 0,32020 0,32020 0,32020 0,32020 0,32020 0,32020 0,3200 0,3200 0,3200 0,3200 0,3200 0,3200 0,3200 0,3200 0,3200 0,3200 0,3200 0,32000 0,32000 0,32000 0,32000 0,32000 0,320000000000	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34 0,32 <b>2022</b> kg CO <sub>2</sub> e <b>43,03576</b> 0,01053	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33 0,32 <b>2023</b> kg CO <sub>2</sub> e <b>43,89327</b> 0,01074	< buildings, wood - logs (tonnes)
	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home produced coal only) Fuel Wood logs Wood chips	kWh (Net CV) kWh (Gross CV) tonnes kWh (Gross CV) tonnes kWh (Set CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028 0,32326 <b>2018</b> kg CO <sub>2</sub> e 61,52297 0,01506 56,88051	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 0,34473 0,36841 0,36841 0,36841 0,35964 0,35964 0,35964 0,34165 2.264,93 0,33853 0,32161 <b>2019</b> kg CO <sub>2</sub> e <b>63,84683</b> 0,01563 <b>59,02902</b>	0,33726 0,32040 2.222,94 0,33333 0,31666 2.883,26 0,36462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 2.219,47 0,33333 0,31666 <b>2020</b> kg CO <sub>2</sub> e 63,11534 0,01545 58,35272	0,34064 0,32361 2.252,34 0,33706 0,32020 <b>2.883,26</b> 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35890 0,34096 2.248,82 0,33706 0,32020 <b>2021</b> kg CO <sub>2</sub> e <b>61,81736</b> 0,01513 <b>57,15269</b>	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34 0,32 <b>2022</b> kg CO <sub>2</sub> e <b>43</b> ,03576 0,01053 <b>39,78833</b> 0,01053	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33 0,32 <b>2023</b> kg CO <sub>2</sub> e <b>43,89327</b> 0,01074 <b>40,58114</b>	< buildings, wood - logs (tonnes)
ctivity	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home produced coal only) Fuel Wood logs	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV)	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028 0,32326 <b>2018</b> kg CO <sub>2</sub> e <b>61</b> ,52297 0,01506 <b>556,88051</b> 0,01506	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,34998 3.393,76 0,35964 0,34165 2.264,93 0,33853 0,32161 <b>2019</b> kg CO <sub>2</sub> e <b>63,84683</b> 0,01563 <b>55,02902</b> 0,01563	0,33726 0,32040 2.222,94 0,33333 0,31666 2.883,26 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 2.219,47 0,33333 0,31666 <b>2020</b> kg CO <sub>2</sub> e 63,11534 0,01545 <b>5</b> 8,35272 0,01545	0,34064 0,32361 2.252,34 0,33706 0,32020 2.883,26 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35797 3.386,86 0,35797 0,34096 2.248,82 0,33706 0,32020 <b>2021</b> kg CO <sub>2</sub> e <b>61,81736</b> 0,01513 <b>57,15269</b> 0,01513 <b>72,61754</b>	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34 2266,90 0,34 0,32 <b>2022</b> kg CO <sub>2</sub> e 43,03576 0,01053 39,78833	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33 0,32 <b>2023</b> kg CO <sub>2</sub> e <b>43,89327</b> 0,01074 <b>40,58114</b> 0,01074	< buildings, wood - logs (tonnes) < buildings, wood - chips (tonnes)
ctivity	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home produced coal only) Fuel Wood logs Wood chips Wood pellets	kWh (Net CV) kWh (Gross CV) tonnes kWh (Gross CV) tonnes kWh (Gross CV) tonnes kWh	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028 0,32326 <b>2018</b> kg CO <sub>2</sub> e <b>61</b> ,52297 0,01506 <b>56</b> ,88051 0,01506 <b>70</b> ,47328	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,346841 0,34998 3.393,76 0,35964 0,34165 2.264,93 0,33853 0,32161 <b>2019</b> kg CO <sub>2</sub> e <b>63,84683</b> 0,01563 <b>59,02902</b> 0,01563 <b>73,13523</b>	0,33726 0,32040 2.222,94 0,33333 0,31666 2.883,26 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36006 0,34206 0,34206 0,34206 0,34206 2.219,47 0,33333 0,31666 <b>2020</b> kg CO <sub>2</sub> e 63,11534 0,01545 58,35272 0,01545 72,29731	0,34064 0,32361 2.252,34 0,33706 0,32020 2.883,26 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35797 3.386,86 0,35797 0,34096 2.248,82 0,33706 0,32020 2021 kg CO <sub>2</sub> e 61,81736 0,01513 57,15269 0,01513	0,34 0,32 2270,45 0,34 0,32 2883,26 0,36 0,34 3165,24 0,38 0,36 0,36 0,34 2266,90 0,34 0,32 2266,90 0,34 0,32 <b>2022</b> kg CO <sub>2</sub> e 43,03576 0,01053 39,78833 0,01053	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33 0,32 <b>2023</b> kg CO <sub>2</sub> e <b>43,89327</b> 0,01074 <b>40,58114</b> 0,01074 <b>51,56192</b>	< buildings, wood - logs (tonnes) < buildings, wood - chips (tonnes)
tivity	Coal (electricity generation) Coal (domestic) Coking coal Petroleum coke Coal (electricity generation - home produced coal only) Fuel Wood logs Wood chips	kWh (Net CV) kWh (Gross CV) tonnes kWh (Net CV) kWh (Gross CV) tonnes kWh tonnes kWh tonnes	0,34191 0,32482 2.261,32 0,32750 0,31112 2.881,65 0,36288 0,34473 3.064,56 0,36483 0,34659 3.396,50 0,35993 0,34193 2.261,32 0,34028 0,32326 <b>2018</b> kg CO <sub>2</sub> e <b>61,52297</b> 0,01506 <b>56,88051</b> 0,01506 <b>70,47328</b> 0,01506	0,34930 0,33183 2.264,93 0,32170 0,30561 2.744,72 0,36288 0,34473 3.094,60 0,36841 0,34998 3.393,76 0,35964 0,34165 2.264,93 0,32161 <b>2019</b> kg CO <sub>2</sub> e <b>63,84683</b> 0,01563 <b>59,02902</b> 0,01563	0,33726 0,32040 2.222,94 0,33333 0,31666 2.883,26 0,36276 0,34462 3.222,04 0,38358 0,36440 3.397,79 0,36040 0,34206 2.219,47 0,33333 0,31666 2020 kg CO <sub>2</sub> e 63,11534 0,01545 58,35272 0,01545	0,34064 0,32361 2.252,34 0,33706 0,32020 2.883,26 0,36276 0,34462 3.165,24 0,37681 0,35797 3.386,86 0,35797 3.386,86 0,35797 0,34096 2.248,82 0,33706 0,34096 2.248,82 0,33706 0,32020 <b>2021</b> kg CO <sub>2</sub> e <b>61,81736</b> 0,01513 <b>57,15269</b> 0,01513	0,34 0,32 2270,45 0,34 0,32 <b>2883,26</b> 0,36 0,34 3165,24 0,38 0,36 3386,87 0,36 0,34 2266,90 0,34 2266,90 0,34 0,32 <b>2022</b> kg CO <sub>2</sub> e <b>43,03576</b> 0,01053 <b>39,78833</b> 0,01053	0,32 2199,33 0,33 0,32 <b>2904,95</b> 0,37 0,35 3164,65 0,38 0,36 3386,57 0,36 0,34 2195,90 0,33 0,32 <b>2023</b> kg CO <sub>2</sub> e <b>43,89327</b> 0,01074 <b>40,58114</b> 0,01074 <b>51,56192</b> 0,01074	< buildings, wood - logs (tonnes) < buildings, wood - chips (tonnes)

# Douglas City Council Carbon Budget Calculator

#### Scope 1

baseline year target emission target year

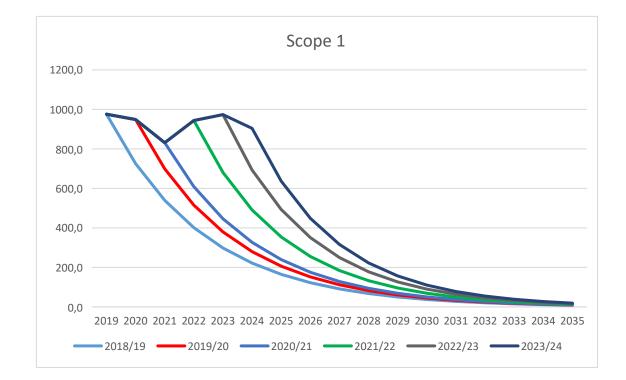
Calculated Footprint

No. of years until target year Annual percentage reduction

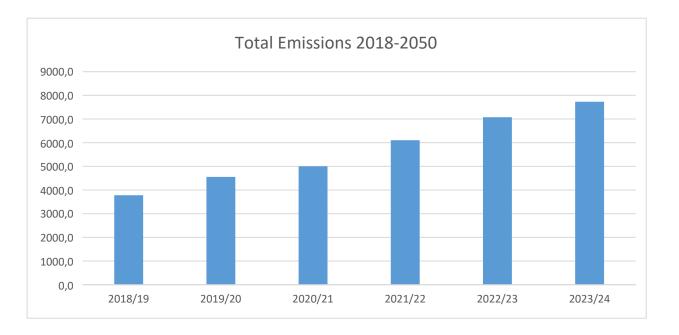
Year

2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
975,62	948,61	831,21	943,7	973,54	903,86
2019	2020	2021	2022	2023	2024
0,1	0,1	0,1	0,1	0,1	0,1
2050	2050	2050	2050	2050	2050
31	30	29	28	27	26
25,64%	26,31%	26,74%	27,88%	28,83%	29,56%

Year 2018/19		2019/20	2020/21	2021/22	2022/23	2023/24
2019	975,6	975,62	975 <i>,</i> 6	975,62	975,62	975,62
2020	725,4	948,6	948,6	948,6	948,6	948,61
2021	539,4	699,1	831,2	831,2	831,2	831,21
2022	401,1	515,2	608,9	943,7	943,7	943,7
2023	298,2	379,6	446,1	680,6	973,54	973,54
2024	221,7	279,8	326,8	490,8	692,8	903,86
2025	164,9	206,2	239,4	354,0	493,1	636,7
2026	122,6	151,9	175,3	255,3	350,9	448,5
2027	91,2	112,0	128,5	184,1	249,7	316,0
2028	67,8	82,5	94,1	132,8	177,7	222,6
2029	50,4	60,8	68,9	95,7	126,5	156,8
2030	37,5	44,8	50,5	69,1	90,0	110,4
2031	27,9	33,0	37,0	49,8	64,1	77,8
2032	20,7	24,3	27,1	35,9	45,6	54,8
2033	15,4	17,9	19,9	25,9	32,4	38,6
2034	11,5	13,2	14,5	18,7	23,1	27,2
2035	8,5	9,7	10,7	13,5	16,4	19,2
2036	6,3	7,2	7,8	9,7	11,7	13,5
2037	4,7	5,3	5,7	7,0	8,3	9,5
2038	3,5	3,9	4,2	5,1	5,9	6,7
2039	2,6	2,9	3,1	3,6	4,2	4,7



	2040	1,9	2,1	2,2	2,6	3,0	3,3
	2041	1,4	1,6	1,6	1,9	2,1	2,3
	2042	1,1	1,1	1,2	1,4	1,5	1,6
	2043	0,8	0,8	0,9	1,0	1,1	1,2
	2044	0,6	0,6	0,6	0,7	0,8	0,8
	2045	0,4	0,5	0,5	0,5	0,5	0,6
	2046	0,3	0,3	0,3	0,4	0,4	0,4
	2047	0,2	0,2	0,3	0,3	0,3	0,3
	2048	0,2	0,2	0,2	0,2	0,2	0,2
	2049	0,1	0,1	0,1	0,1	0,1	0,1
	2050	0,1	0,1	0,1	0,1	0,1	0,1
Total Emi	ssions						
2018-205	0	3779,7	4554,4	5002,9	6105,2	7075,5	7730,5

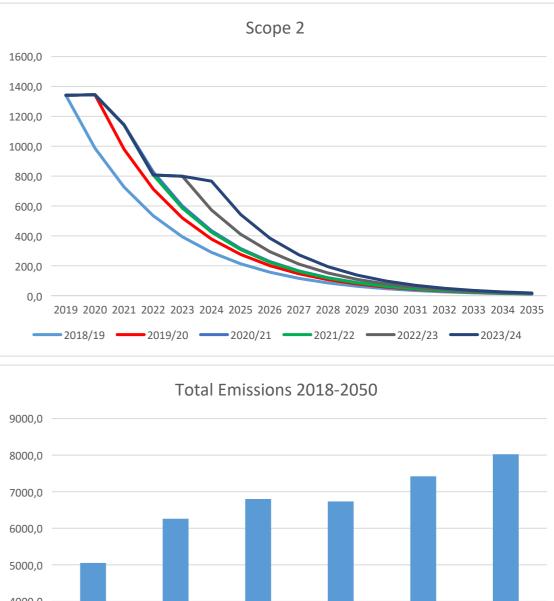


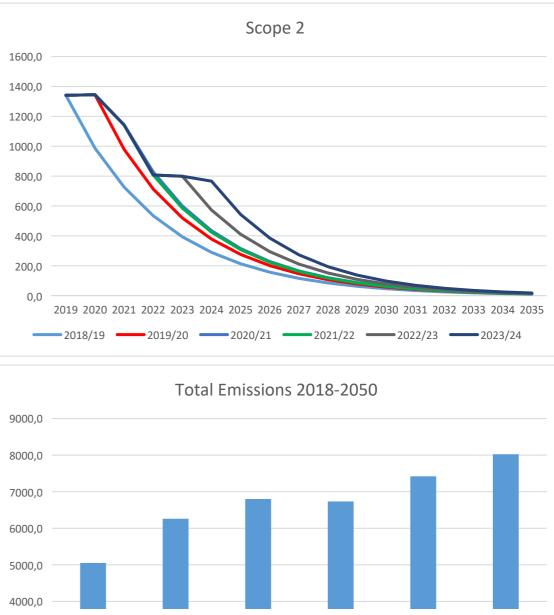
# **Douglas City Council Carbon Budget Calculator**

### Scope 2

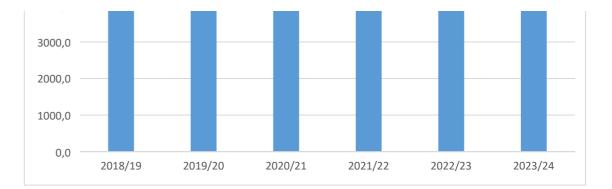
Year	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Calculated Footprint	1341,15	1344,52	1142,5	807,37	799,16	766,26
baseline year	2019	2020	2021	2022	2023	2024
target emission	0,1	0,1	0,1	0,1	0,1	0,1
target year	2050	2050	2050	2050	2050	2050
No. of years until target year	31	30	29	28	27	26
Annual percentage reduction	26,40%	27,16%	27,54%	27,48%	28,31%	29,11%

Year	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
2019	1341,2	1341,15	1341,15	1341,15	1341,15	1341,15
2020	987,0	1344,5	1344,5	1344,5	1344,5	1344,5
2021	726,4	979,4	1142,5	1142,5	1142,5	1142,5
2022	534,6	713,4	827,8	807,4	807,4	807,4
2023	393,5	519,6	599,8	585,5	799,16	799,16
2024	289,6	378,5	434,6	424,6	572,9	766,26
2025	213,1	275,7	314,9	307,9	410,7	543,2
2026	156,8	200,8	228,2	223,3	294,4	385,1
2027	115,4	146,3	165,3	162,0	211,1	273,0
2028	85,0	106,6	119,8	117,4	151,3	193,5
2029	62,5	77,6	86,8	85,2	108,5	137,2
2030	46,0	56,5	62,9	61,8	77,8	97,3
2031	33,9	41,2	45,6	44,8	55,8	69,0
2032	24,9	30,0	33,0	32,5	40,0	48,9
2033	18,3	21,9	23,9	23,6	28,7	34,7
2034	13,5	15,9	17,3	17,1	20,5	24,6
2035	9,9	11,6	12,6	12,4	14,7	17,4
2036	7,3	8,4	9,1	9,0	10,6	12,3
2037	5,4	6,2	6,6	6,5	7,6	8,8
2038	4,0	4,5	4,8	4,7	5,4	6,2
2039	2,9	3,3	3,5	3,4	3,9	4,4





2040	2,1	2,4	2,5	2,5	2,8	3,1
2041	1,6	1,7	1,8	1,8	2,0	2,2
2042	1,2	1,3	1,3	1,3	1,4	1,6
2043	0,9	0,9	1,0	0,9	1,0	1,1
2044	0,6	0,7	0,7	0,7	0,7	0,8
2045	0,5	0,5	0,5	0,5	0,5	0,6
2046	0,3	0,4	0,4	0,4	0,4	0,4
2047	0,3	0,3	0,3	0,3	0,3	0,3
2048	0,2	0,2	0,2	0,2	0,2	0,2
2049	0,1	0,1	0,1	0,1	0,1	0,1
2050	0,1	0,1	0,1	0,1	0,1	0,1
Total Emissions						
2018-2050	5051,7	6260,8	6800,5	6733,6	7421,1	8024,8

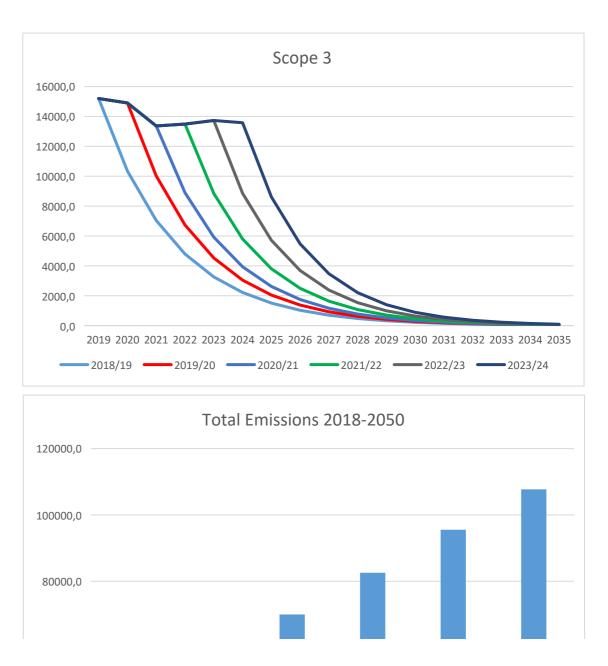


# **Douglas City Council Carbon Budget Calculator**

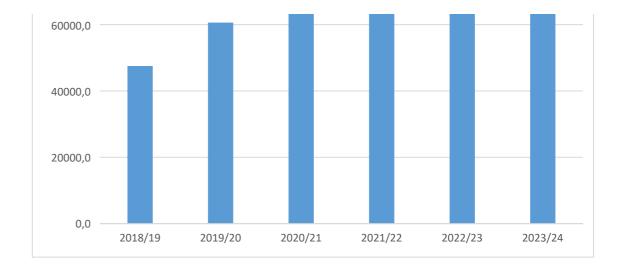
## Scope 3

Year	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Calculated Footprint	15201,35	14905,17	13365,58	13491,21	13730,6	13581,46
baseline year	2019	2020	2021	2022	2023	2024
target emission	0,1	0,1	0,1	0,1	0,1	0,1
target year	2050	2050	2050	2050	2050	2050
No. of years until target year	31	30	29	28	27	26
Annual percentage reduction	31,95%	32,77%	33,44%	34,42%	35,48%	36,53%

Year	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
2019	15201,4	15201,35	15201,35	15201,35	15201,35	15201,35
2020	10344,9	14905,2	14905,2	14905,2	14905,2	14905,2
2021	7039,9	10020,6	13365,6	13365,6	13365,6	13365,6
2022	4790,8	6736,7	8896,7	13491,2	13491,2	13491,2
2023	3260,3	4529,0	5922,0	8847,8	13730,6	13730,6
2024	2218,7	3044,8	3942,0	5802,5	8859,4	13581,46
2025	1509,9	2047,0	2623,9	3805,4	5716,4	8620,4
2026	1027,5	1376,2	1746,6	2495,7	3688,4	5471,5
2027	699,2	925,2	1162,6	1636,7	2379,9	3472,8
2028	475,8	622,0	773,9	1073,4	1535,6	2204,3
2029	323,8	418,2	515,1	703,9	990,8	1399,1
2030	220,4	281,1	342,9	461,7	639,3	888,0
2031	150,0	189,0	228,2	302,8	412,5	563,6
2032	102,1	127,1	151,9	198,6	266,1	357,7
2033	69,5	85,4	101,1	130,2	171,7	227,1
2034	47,3	57,4	67,3	85,4	110,8	144,1
2035	32,2	38,6	44,8	56,0	71,5	91,5
2036	21,9	26,0	29,8	36,7	46,1	58,1
2037	14,9	17,4	19,9	24,1	29,8	36,9
2038	10,1	11,7	13,2	15,8	19,2	23,4
2039	6,9	7,9	8,8	10,4	12,4	14,8



2040	4,7	5,3	5,9	6,8	8,0	9,4
2041	3,2	3,6	3,9	4,5	5,2	6,0
2042	2,2	2,4	2,6	2,9	3,3	3,8
2043	1,5	1,6	1,7	1,9	2,1	2,4
2044	1,0	1,1	1,1	1,3	1,4	1,5
2045	0,7	0,7	0,8	0,8	0,9	1,0
2046	0,5	0,5	0,5	0,5	0,6	0,6
2047	0,3	0,3	0,3	0,4	0,4	0,4
2048	0,2	0,2	0,2	0,2	0,2	0,2
2049	0,1	0,1	0,2	0,2	0,2	0,2
2050	0,1	0,1	0,1	0,1	0,1	0,1
Total Emissions						
2018-2050	47513,4	60604,7	69991,4	82563,4	95536,2	107715,4



#### ISO 14001

Quotations from the ISO Key Benefits document.

	Pro	Limitations
1	Demonstrate compliance with current and future statutory and regulatory	As a public body we will comply with the law, don't need to demonstrate it
	requirements	
2	Increase leadership involvement and engagement of employees	
3	Improve [Council] reputation and the <b>confidence of stakeholders</b> through	
	strategic communication	
4	Achieve strategic business aims by incorporating environmental issues into	We already do this anyway
	business management	
5	Provide a competitive and financial advantage through improved	We're not in competition
	efficiencies and reduced costs	
6	Encourage better <b>environmental performance of suppliers</b> by integrating	Could make more difficult to get tenders
	them into the organisation's business systems	
7	The Council would be seen to be leading by example	
8	Would provide a framework for staff	

	Con	Mitigations
1	Will cost money to subscribe and implement	May be paid back if the cost reductions claimed actually materialise
2	Will sap officer time to study and implement. "Implementing ISO 14001 can	May be paid back if the efficiency improvements claimed actually
	be a time-consuming and resource-intensive process. Organisations may	materialise
	need to invest significant effort in developing documentation, conducting	
	audits, and training employees. This can strain the resources of small or	
	resource-limited organisations, leading to delays and increased costs." -	
	The Knowledge Academy	

#### Net Zero Carbon Council Action Plan Two

#### DRAFT

Action category	Action	Success Indicator	Owning Dept	Timeframe	Communication
Emissions Reduction	Calculate the Council's carbon footprint for each financial year to provide evidence-based progress reporting against the baseline of 2018/2019.	Annual carbon footprint data which allows progress against the carbon net zero strategy to be monitored, evaluated, reported and published	ExCOMT	mar-29	Executive Committee report. Members briefing note. Employee Newsletter.
Emissions Reduction	Ensure the Corporate Plan and all Services Plans refer to the Council's overall aim of being carbon net zero by 2050 and carbon zero ready by 2035.	All Service Plans refer to the Carbon Net Zero Strategy.	All	apr-28	Departmental Plans on intranet.
Emissions Reduction	Review progress against Action Plan Two annually and make suggestions for inclusion in Action Plan Three in 2029.		All COMT	mar-28	Annual report to Executive Committee. Annual briefing note to Members. Quarterly update to COMT.
Funding	Lobby government for appropriate funding and incentives to progress carbon reduction schemes that will help central government achieve its aspirations.	Evidence of alternative funding streams or otherwise.	Finance	okt-26	Within reporting on progress against Action Plan Two above.

Action category	Action	Success Indicator	Owning Dept	Timeframe	Communication
Education and Awareness	Monitor and review communications for the overarching strategy and this plan including raising awareness, informing, consulting, and collaboration with citizens, Members, staff and others. Communication should consider how behaviour change at an individual level can be encouraged and enabled, and should engage with citizens across all demographics.	Establishment of communications for the life of this plan and potentially the next four- year action plan.	СХ	mar-29	Management Meetings / Business Breakfast / Chamber of Commerce
Emissions Reduction	Decarbonise the Crematorium.	Reduced carbon emissions from cremations.	E&R	mar-29	Quarterly reporting in Parks Service Plan Monitoring
Waste	Investigate means by which more recyclables can be captured and increase the range of materials collected at the kerbside.	A decision on materials collected at the kerbside.	E&R	mar-29	Enabling Committee reports; specific communication plan & engagement roadshows
Waste	Investigate methods of reducing waste on building sites in consultation with developers and contractors, for example, use of schemes such as considerate constructors and use of smart waste technology.	Evidence of reduced waste.	H&P E&R	mar-29	Within project specifications and project team meetings; in business case for capital schemes

Action category	Action	Success Indicator	Owning Dept	Timeframe	Communication
Emissions Reduction	Ensure when Council policies are reviewed that there is no conflict between them and the Council's climate change duties under the Climate Change Act 2021. May be superceded by the CIAT.	All policies are reviewed and any conflict is removed.	All	mar-29	Reports to Executive committee, emails to relevant staff, intranet
Emissions Reduction	Implement a carbon budget approach. Carbon budgets are an estimate of the total quantity of CO <sub>2</sub> equivalent emissions that can be allowed to achieve a net zero status within a certain timeframe.	Carbon budget reporting is monitored by Executive Committee.	ExCOMT	maj-25	Annual Action Plan report to Executive Committee; briefing notes; intranet; internet
Funding	Implement the Council's first large scale green energy generation through renewables on Council land and property.	Number of renewable energy generation schemes implemented.	H&P	dec-25	Committee report, press releases, social media, community newsletter
Travel/Transport	Deliver 3 new Active Travel initiatives which may include re-imagining car parks operated by the Council, car share schemes for staff, further home working to reduce the need for travel, secure bike storage, provision of electric bikes, designated active travel routes.		All	sep-27	Committee reports, HR Newsletter, press release as appropriate, social media, website
Waste	Reduce consumption and waste, buy less, waste less, use pre-used. Re-engage communities in the Waste Minimisation message. Reduce total waste arising by 33% by 2037.		E&R	mar-29	Social media; Community Newsletter

Action category	Action	Success Indicator	Owning Dept	Timeframe	Communication
Energy Efficiency	Make the Council's existing and new Housing Stock (including sheltered housing complexes), and other Council assets, more energy efficient, where feasible.	Continued implementation of energy efficient programme.	H&P	jul-25	Members' Bulletin, Housing Newsletter
Energy Efficiency	Complete energy audits of the housing stock and corporate buildings owned by the Council for reduced natural gas/oil consumption and for energy efficiency and commence implementation of recommendations.	Audits completed, recommendations implemented where possible.	H&P	mar-29	Members' Bulletin, Housing Newsletter, Committee report
Energy Efficiency	Construction of energy efficient new housing, e.g. AECB, passive house construction for new builds.	Number of new energy- efficient housing units.	H&P	mar-29	Committee reports and briefing notes, Community Newsletter, Housing Newsletter, press release, social media
Travel/Transport	Decarbonise the Council's fleet by pursuing a carbon net zero vehicle and plant renewal policy where possible.	Lower emissions from the fleet thereby reducing the Council's carbon footprint.	ereby ne Council's		Committee reports, press release, social media
Emissions Reduction	Implement electronic processes to replace paper forms requiring signatures, where legally possible.	Internal forms dealt with electronically where possible.	CX Finance	sep-26	Management meetings; intranet

Action category	Action	Success Indicator	Owning Dept	Timeframe	Communication
Emissions Reduction	Review all existing services using the Climate Impact Assessment Tool as if they were new proposals - business as usual will result in harmful levels of emissions as usual. Note: Section 4(2) of the CLIMATE IMPACT ASSESSMENT REGULATIONS 2023 states that "a decision taken actively or <i>passively to continue an existing action or activity</i> of a public body shall be deemed to be a proposal of that public body if it has not been reviewed as to mode and mechanisms of delivery by 31 March		All	mar-27	Management meetings, Committee reports as appropriate
Emissions Reduction	Lobby government to amend legislation to allow service of rate demands by email in order to reduce paper usage.	Emailing of rate demands commenced to those whose email addresses the Council holds.	Finance	apr-28	Press release, initial mailing direct to ratepayers in year before
Emissions Reduction	Investigate the introduction of AUDDIS for direct debits to remove the need for paper mandates.	Report on suggestion completed.	Finance	dec-26	Committee report
Emissions Reduction	Roll out online staff expenses claims procedure.	All staff submitting claims in this way.	Finance	jun-25	Staff newsletter

Action category	Action	Success Indicator	Owning Dept	Timeframe	Communication
Emissions Reduction	Sell a building to reduce the Council's embodied carbon.	Sold.	СХ	dec-26	Press release
Energy Efficiency	Explore carbon value of council owned open spaces.	Inclusion in Masterplans and overarching Parks Strategy.	E&R	mar-29	Consultation
Energy Efficiency	Review operation of the nursery to reduce energy use.	Change implementation.	E&R	mar-26	Committee report

#### Net Zero Carbon Council Action Plan One Update 13. september 2023

#### Progress at a glance key: Complete 17

In progress 16 To do 4

Action category	Action	Success Indicator	Owning Dept	Timeframe	Progress at a Glance	Update - June 2023
Emissions Reduction	Calculate the Council's carbon footprint for 2019/2020 and each successive financial year to provide evidence based progress reporting against the baseline of 2018/2019.	Annual carbon footprint data which allows progress against the carbon net zero strategy to be monitored, evaluated, reported and published.	ExCOMT	feb-22	In progress	Project plan agreed. Every year completed. 2022/23 data to be reported to ExCo in September 2023 and submitted to the IoM Government by 30th September 2023.
Emissions Reduction	Ensure the Corporate Plan and all Services Plans refer to the Council's overall aim of being carbon net zero by 2050 and carbon zero ready by 2035.	All Service Plans refer to the Carbon Net Zero Strategy	All	apr-22	Complete	Complete.
Emissions Reduction	Comment on Douglas planning applications where carbon neutrality and biodiversity impacts should be included.	Evidence that carbon neutrality and biodiversity is considered, where applicable.	E&R	apr-22	Complete	Completed. The planning application appraisal document template includes two new sections on "Biodiversity/Ecology impact/Trees" and "Energy Efficiency/Carbon Neutrality".
Emissions Reduction	Review progress against Action Plan One annually and make suggestions for inclusion in Action Plan Two in 2025.	Progress toward the overarching carbon reduction strategy and evidence of maturing actions to reach carbon net zero by 2050, including compilation and review of a Net Zero Risk Register.	AII COMT	apr-22	In progress	Project plan includes provision of an update to COMT on a quarterly basis. Reminders set up in project team Outlook diaries to provide updates quarterly. Project Initiation Document includes its risk register. Suggestions for Action Plan Two to be developed in 2024/25.
Education and Awareness	Establish and maintain links with the Isle of Man Government's Climate Change Transformation Team and the Chamber of Commerce Climate Change Working Group to ensure the Council does not work in isolation of the wider public and private sector.	Evidence of multi-agency working.	DoER COMT	apr-22	Complete	Action complete and contact ongoing.
Emissions Reduction	Consider and agree how becoming carbon net zero is led politically.	Decision on whether this is championed by Executive Committee, established process.	сх	apr-23	Complete	At presentation of Action Plan One, it was agreed that the political lead should be through the Executive Committee.

Action category	Action	Success Indicator	Owning Dept	Timeframe	Progress at a Glance	Update - June 2023
Emissions Reduction	Investigate how the Council's climate change duties under the Climate Change Act 2021 can be embedded in all decision making.	Climate change duties are fully embedded in decision making processes.	сх	apr-23	Complete	A Climate Impact Assessment Tool has been developed by the IoM Gov. Agreement for the criteria for its use included within the September 2023 ExCo report. The Committee Report format has been altered to include the Climate Impact Assessment, yet to be approved by Executive Committee. The tool is now available for use, therefore complete
Emissions Reduction	Derive a procurement strategy which aligns with the Council's climate change duties.	Procurement strategy agreed by Council and adopted as council policy.	Finance All depts	apr-23	In progress	Ethical Procurment Policy drafted and will be presented to ExCo in September 2023.
Emissions Reduction	In discussion with the Climate Change Transformation Team, agree how the Council's progress against its duties in the Climate Change Act 2021 will be monitored, evaluated, reported and published. It will be a legal requirement for the Council to report and publish in accordance with the Act.	An agreed methodology for monitoring, evaluating, reporting and publishing the Council's progress against its statutory duties under the Climate Change	DoER COMT	apr-23	Complete	Action complete. IoM Gov has derived an online reporting tool based on consumption data which will automatically calculate emissions for Scope 1 and Scope 2. Will also provide sequestration data.
Funding	Investigate whether alternative funding sources are available to the Council including partnerships with private and public sector organisations, eg, Manx Utilities Authority.	Evidence of alternative funding streams or otherwise.	Finance	apr-23	Complete	No alternative funding sources found.
Funding	Lobby Government for access to Climate Change Transformation Funds including ad hoc grant programmes, eg, Green Living Grant.	Financial support from Government toward the climate change agenda.	Finance	apr-23	Complete	Two letters written seeking local authority access to the Climate Change Transformation Fund. Both responses were negative. They are considering making funding availble for feasibilty studies (but not the schemes themselves).
Funding	Investigate the possibility of focussing the pension's scheme investments on entities which perform well in relation to Environmental, Social and Governance factors.	A decision on where pension scheme investments are focussed.	Finance	apr-23	Complete	The scheme's UK and global equity investments have been switched in this manner in September 2022. Corporate bonds were switched in 2021. Absolute Return and Property were reported on in May 2023 concluding that both current managers demonstrated an acceptable level of integration of ESG issues into their investment process.
Education and Awareness	Provide carbon literacy training for all members and key staff.	Increased awareness and literacy of Members and staff on climate change.	сх	apr-23	In progress	Councillors Byron, Washington, Watson and Horning have attended ASPSE Carbon Literacy Training for Elected Members. Further training to be offered to both Members and staff.

Action category	Action	Success Indicator	Owning Dept	Timeframe	Progress at a Glance	Update - June 2023
Education and Awareness	Derive a communication strategy for the overarching strategy and this plan including raising awareness, informing, consulting, and collaboration with citizens, Members, staff and others. The Communication Strategy should consider how behaviour change at an individual level can be encouraged and enabled, and should engage with citizens across all demographics.	Establishment of a communication strategy for the life of this plan and potentially the next four-year action plan.	СХ	apr-23	In progress	Communication Strategy currently being drafted.
Education and Awareness	Create a Carbon Net Zero Council area on the Council's website to provide good quality education materials about climate change and provide information on the action the Council is taking.	Establishment of links to relevant information portals.	сх	apr-23	Complete	Area completed inlcuding updates on Council progress. A link is provided to external resources.
Education and Awareness	Support Government's role in educating and enabling citizens to reduce their own carbon emissions. Consider how the Council can support government.	Evidence of multi-agency working.	COMT	apr-23	Complete	COMT agreed to share Net Zero.im messages on the Council website and this is ongoing. Action complete.
Education and Awareness	Consider whether the Council should have Member and/or staff champions/working group on climate change.	A decision on whether Member and/or staff champions/working group should be appointed.	COMT	apr-23	Complete	Completed. ExCo agreed in February 2022 that ExCo should lead on this initiative
Waste	Investigate completely paperless processes and meetings.	A decision on paperless meetings, evidence of paper removed from processes.	CX - member meetings	apr-23	Complete	As part of the budget savings plan December 2022 a reduction in budget was proposed to reduce paper copies of Council papers for Members. Members have requested to continue to receive paper copies. Democratic Services has reduced the amount of prints for Council which is the only meeting left that receives printed copies.
Energy Efficiency	Incorporate energy efficiency initiatives in all Council projects and events to ensure that projects and events are as energy efficient as possible.	Consideration of reduced energy consumption.	CX E&R H&P	apr-23	In progress	Single use plastic ban at all events already introduced. Reducing energy consumption considered at every event but it has become apparent that it cannot be easily measured and therefore evidenced. Action to be updated accordingly.
Energy Efficiency	Continue with the installation of energy efficient lighting in open spaces.	Approval of an energy efficient programme.	E&R	apr-23	To do	Not started but any new lighting will be energy efficient. The most likely projects are feature lighting elements in the Marine Gardens and Queen's Promenade Gardens
Emissions Reduction	Investigate pursual of ISO 14001 environmental management certification and other certifications.	Decision on whether to pursue ISO 14001, BES or others.	ExCOMT	apr-24	To do	On the Net Zero Officer Working Group agenda for September.

Action category	Action	Success Indicator	Owning Dept	Timeframe	Progress at a Glance	Update - June 2023
Emissions Reduction	Investigate means by which the Crematorium can become carbon neutral.	Reduced carbon emissions from cremations.	E&R	apr-24	In progress	Early indications suggest the main options are conversion to electricity or the introduction of alternative methods such as water cremations alongside the potential for off-setting. Research suggests that electric cremators would reduce carbon emissions substantially, particularly if using a green tariff (not currently available on the IoM) or sustainably generated. Conversion would be dependent on whether a sufficient supply is available. This should be considered when the cremators are next replaced. Abatement of Nitrogen Oxide (NOx) emissions should also be considered.
Funding	Investigate whether a carbon net zero fund should be established to enable the necessary investment to achieve carbon net zero. The fund would also need to capture any benefits made from changes in service delivery to obtain carbon net zero.	A decision on the establishment of a carbon net zero fund.	Finance	apr-24	Complete	Complete. Cons outweighed the pros so decision reached not to create such a fund. Cons included: 1. Would require Department of Infrastructure (DoI) approval to create (or rename) a new reserve; 2. Could be misinterpreted as spelling out the limit of the Council's commitment to climate change action; 3. Could be misinterpreted as moneys available to ratepayers or others to take climate change action; 4. Finance required can already be obtained from the Invest to Save Fund, the General Revenue Reserve or from borrowing; 5. Would contribute to a proliferation of reserves.
Education and Awareness	Consider whether the Council should have a citizen or tenant panel or citizen or tenants champions on climate change in line with the just transition and climate justice principles.	A decision on whether panels or champions should be pursued.	сх	apr-24	Complete	ExCo agreed in February 2022 that citizen panels should be led by government.
Waste	Investigate methods of composting green waste to reduce emissions.	A decision on a green waste disposal method, reduced emissions.	E&R	apr-24	Complete	The Garden Waste Collection service commenced in August 2022 and to-date more than 3.7k bins have been delivered to households with gardens The service did not run beltween November and January, recommencing in February 2023 with tonnages reaching a year high in May at over 104 tonnes. The material is currently tipped at a local composting facility, where the material is tested in accordance

Action category	Action	Success Indicator	Owning Dept	Timeframe	Progress at a Glance	Update - June 2023
Waste	Investigate means by which more recyclables can be captured and increase the range of materials collected at the kerbside.	A decision on materials collected at the kerbside.	E&R	apr-24	In progress	Fortnightly refuse collections commenced at the end of October 2022. Historically the recycling rate avaeraged at just over 5%. Since the change in service dry recyclables (excluding grass) comprising plastic containers, glass bottles, cans, paper and cardboard has increased to >9% per month with a year high to-date of 10.3% for June 2023. The R.R. is recylables captured by weight as a proportion of overall waste. The Council's future actions require an updated Waste Strategy from Government.
Waste	Investigate methods of reducing waste on building sites in consultation with developers and contractors, for example, use of schemes such considerate constructors and use of smart waste technology.	Evidence of reduced waste.	H&P E&R	apr-24	In progress	In progress, this will be explored on new projects.
Emissions Reduction	Review all Council policies to ensure there is no conflict between them and the Council's climate change duties under the Climate Change Act 2021.	All policies are reviewed and any conflict is removed.	сх	apr-25	To do	All Policy drafters to consdier when policies are written or next due for review. The key question to be asked is whether the policy in anyway works against the Council's aspirations within its Net Zero Strategy.
Emissions Reduction	Investigate whether the Council should adopt a carbon budget approach. Carbon budgets are an estimate of the total quantity of $CO_2$ equivalent emissions that can be allowed to achieve a net zero status within a certain timeframe.	A decision as to whether a carbon budget approach is feasible for the Council.	ExCOMT	apr-25	In progress	Simple model being trialled by the Net Zero Officer Working Group.
Emissions Reduction	Investigate how current green spaces contribute toward carbon offsetting and how to maximise their ability to store carbon.	Inclusion of green spaces in the Council's carbon footprint calculations.	E&R	apr-25	In progress	The Government's online portal estimates sequestration. For 2022/23, it is estimated that just over 200,000kg of C20e is offset through the Council's green spaces.
Funding	Investigate the feasibility of green income generation through renewables on Council land and property, for example, solar farms.	A decision on whether investing in renewables is feasible for the Council.	H&P	apr-25	In progress	In progress and to be expored at the beginning of Capital schemes.
Travel/Transport	Continue to promote Active Travel which may include re-imagining car parks operated by the Council, car share schemes for staff, or further home working to reduce the need for travel.	Reduced emissions from staff, greater participation in active travel by staff, greater use of active travel facilities by residents.	CX E&R H&P	apr-25	To do	No update other than the active travel policy is to be reviewed. Home working is much more prevalent than previously.

Action category	Action	Success Indicator	Owning Dept	Timeframe	Progress at a Glance	Update - June 2023
Waste	Reduce consumption and waste, buy less, waste less, use pre-used. Re-engage communities in the Waste Minimisation message. Reduce total waste arising by 33% by 2037.	Increased recycling rate, reduced municipal waste arisings.	E&R	apr-25	Complete	Following the introduction of the garden waste collection service and the move to fortnightly refuse collections has resulted in a decrease in household waste going to the EFW. A comparision of refuse compared with the corresponding months from 2022 is as follows: - April reduction of 24%, May reduction of 16% and June reduction of 24%.
Energy Efficiency	Investigate how the Council's existing and new Housing Stock (including sheltered housing complexes), and other Council assets, can become more energy efficient.	Approval of an energy efficient programme.	H&P	apr-25	In progress	In progress. Energy audits to be carried out, included in the Ten Year Development Strategy and Roadmap approved by the September 2022 Housing and Property Committee.
Energy Efficiency	Undertake an energy audit of the housing stock and every corporate building owned by the Council and make recommendations for reduced natural gas/oil consumption and for energy efficiency which could include smart meters, changes to fuel type, improved building fabric and insulation, servicing or replacing ageing boilers, testing and monitoring building efficiency.	Audits conducted, recommendations made for improvement where possible.	H&P	apr-25	In progress	In progress and Included in the Ten Year Development Strategy and Roadmap approved by the September 2022 Housing and Property Committee.
Energy Efficiency	Investigate energy efficient new house and property builds, eg, passive house construction for new builds, and make recommendations for low carbon homes and heating, in line with the prohibition on installing fossil fuel heating systems in new buildings from 2025	Approval of an energy efficient programme.	H&P	apr-25	In progress	Covered in the current business cases proposing Passivhaus developments for new developments. Added to the Ten Year Startegy and Roadmap approved by the September 2022 Housing and Property Committee

Action category	Action	Success Indicator	Owning Dept	Timeframe	Progress at a Glance	Update - June 2023
	vehicle and plant renewal policy where possible.	Lower emissions from the fleet thereby reducing the Council's carbon footprint.	E&R	Ongoing		Current regulations only allow for petrol, diesel, LPG. Electric vehicles are not within the regulations but are not precluded. The regulations severely hamper the Council's ability to adopt lower carbon fuel sources. Fleet Services has recommended the purchase of a small fleet of EV vehicles during 22 and again in 2023 (report due to ExCo in September 2023). They are also investigating the potential of using HVO fuels in place of diesel. According to research, using HVO reduces a diesel vehicles exhaust emissions by up to 85%. However, whilst there is a supplier on the island willing to provide this fuel, they need central government to agree to using this too, who so far have not shown much interest in this. As long as HVO is sourced as a byproduct rather than directly produced, then this could be a good