A meeting of the **OVERVIEW AND SCRUTINY PANEL (ENVIRONMENT, COMMUNITIES AND PARTNERSHIPS)** will be held in **CIVIC SUITE, PATHFINDER HOUSE, ST MARY'S STREET, HUNTINGDON PE29 3TN** on **THURSDAY, 6 FEBRUARY 2025** at **7:00 PM** and you are requested to attend for the transaction of the following business:-

AGENDA

APOLOGIES

1. MINUTES (Pages 5 - 6)

To approve as a correct record the Minutes of the Overview and Scrutiny Panel (Environment, Communities and Partnerships) meeting held on 5th December 2024.

Contact Officer: B Buddle
01480 388008

2. MEMBERS' INTERESTS

To receive from Members declarations as to disclosable pecuniary and other interests in relation to any Agenda item.

Contact Officer: B Buddle
01480 388008

3. OVERVIEW AND SCRUTINY WORK PROGRAMME (Pages 7 - 18)

a) The Panel are to receive the Overview and Scrutiny Work Programme
b) Members to discuss future planning of items for the Work Programme

Contact Officer: B Buddle
01480 388008

4. **BUSINESS RATES - DISCRETIONARY RATE RELIEF POLICY** (Pages 19 - 56)

The Panel is invited to comment on the Business Rates Discretionary Rate Relief Policy.

Executive Cllr: S Ferguson

Contact Officer: Z Warren
01480 388461

5. **HYDROTREATED VEGETABLE OIL TRIAL** (Pages 57 - 110)

The Panel is invited to comment on the Hydrotreated Vegetable Oil Trial Report.

Executive Cllr: S Taylor

Contact Officer: A Rogan
01480 388082

6. **PROCUREMENT OF VEHICLES AND CONTAINERS FOR WEEKLY FOOD WASTE COLLECTION SERVICE** (Pages 111 - 154)

The Panel are invited to comment on the Procurement of Vehicles and Containers for Weekly Food Waste Collection Service Report.

Executive Cllr: S Taylor

Contact Officer: A Rogan
01480 388082

29 day of January 2025

Michelle Sacks

Chief Executive and Head of Paid Service

Disclosable Pecuniary Interests and other Registerable and Non-Registerable Interests.

Further information on Disclosable Pecuniary Interests and other Registerable and Non-Registerable Interests is available in the Council's Constitution

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regarding the streaming of Council meetings, please contact Democratic Services on 01480 388169.

The District Council also permits filming, recording and the taking of photographs at its meetings that are open to the public. Arrangements for these activities should operate in accordance with guidelines agreed by the Council.

Please contact Mrs Beccy Buddle, Democratic Services Officer (Scrutiny), Tel No: 01480 388008/e-mail Beccy.Buddle@huntingdonshire.gov.uk if you have a general query on any Agenda Item, wish to tender your apologies for absence from the meeting, or would like information on any decision taken by the Committee/Panel.

Specific enquiries with regard to items on the Agenda should be directed towards the Contact Officer.

Members of the public are welcome to attend this meeting as observers except during consideration of confidential or exempt items of business.

Agenda and enclosures can be viewed on the District Council's website.

Emergency Procedure

In the event of the fire alarm being sounded and on the instruction of the Meeting Administrator, all attendees are requested to vacate the building via the closest emergency exit.

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HUNTINGDONSHIRE DISTRICT COUNCIL

MINUTES of the meeting of the OVERVIEW AND SCRUTINY PANEL (ENVIRONMENT, COMMUNITIES AND PARTNERSHIPS) held in Civic Suite, Pathfinder House, St Mary's Street, Huntingdon PE29 3TN on Thursday, 5 December 2024.

PRESENT:	Councillor J E Kerr – Chair. Councillors T Alban, S Bywater, M A Hassall, M Kadewere, S Mokbul and D J Shaw.
APOLOGIES:	Apologies for absence from the meeting were submitted on behalf of Councillors S J Criswell, N J Hunt, C Lowe, S R McAdam and C H Tevlin.
IN ATTENDANCE:	Councillors L Davenport-Ray and S W Ferguson.

35. MINUTES

The minutes of the meeting of 5th December 2024 were approved as a correct record and were signed by the Chair.

36. MEMBERS' INTERESTS

No declarations were received.

37. OVERVIEW AND SCRUTINY WORK PROGRAMME

With the aid of a report by the Democratic Services Officer (Scrutiny) (a copy of which is appended in the Minute Book) the Overview and Scrutiny Work Programme and the current Notice of Key Executive Decisions which had been prepared by the Leader for the period 1st December 2024 to 31st March 2025 were presented to the Panel.

38. BUSINESS RATES - RURAL SETTLEMENT LIST

By means of a report by the Revenues and Benefits Manager (a copy of which was appended in the Minute Book), the Business Rates – Rural Settlement List report was presented to the Panel.

It was observed that the villages of Buckden and Diddington were two very separate locations and that by being considered together Diddington would potentially loose out under the scheme. It was confirmed to the Panel that there were no qualifying businesses within either village and that to separate the two would still leave Buckden defined as an urban settlement. It was proposed by Councillor Hassall to add an additional recommendation to the Cabinet report, this was seconded by Councillor Mokbul and the Panel voted unanimously in favour of forwarding the proposed recommendation to the Cabinet;

> 3) Separate the two villages of Buckden and Diddington, defining Buckden as an urban settlement and Diddington as a

rural settlement.

It was noted that it would be helpful to highlight in future reports which settlements have seen a change in definition and a future reference handy to highlight which settlements have seen a change in definition.

Following the discussion, it was

RESOLVED

that Cabinet be encouraged to consider the comments from Overview and Scrutiny when making a decision upon the recommendations within the report; and;

that Cabinet be encouraged to add the proposed recommendation 3 to the report;

3) to separate the two villages of Buckden and Diddington, defining Buckden as an urban settlement and Diddington as a rural settlement.

39. NET ZERO VILLAGES PROJECT PROPOSAL 2024/25

By means of a report by the Climate Co-ordinator, (a copy of which was appended in the Minute Book), the Net Zero Villages Project Proposal 2024/25 was presented to the Panel.

The Panel heard that the communications plan for the scheme would commence from 16th December 2024 and that details would also be included in the next Town and Parish newsletter as would the next Town and Parish Forum.

It was confirmed to that Panel that both Trusts and Parish Councils could apply for the scheme. It was noted that the scheme was only to be run in this financial year, however if future budgets allowed for continuation this would be considered.

The distribution of the grant funds to the applications was discussed, with the Panel being advised that the logistics of this had yet to be finalised. The subject of over subscription to the scheme was discussed, and the Panel heard that the team would advise unsuccessful applicants of alternative grant and funding opportunities as they became available.

The Panel heard that the Project Support Officer role would provide admin support to the scheme as well as a point of contact for applicants.

It was clarified to the Panel that should projects not be completed by 28th February 2025, the CPCA would be consulted and that the surplus funding would be returned to the CPCA.

Chair

Overview and Scrutiny Work Programme 2024-25

Performance and Growth Agenda Items			
Meeting Date	**Pre-Scrutiny**	**Scrutiny Review**	**Task and Finish Groups Working Groups**
5th March 2025	• Corporate Performance 2024/25 Quarter 3 Report • Market Towns Programme – Spring Update • Market Towns Programme – Part 2 report		
2nd April 2025	• Corporate Plan Update • Community Infrastructure Levy Funding		
4th June 2025	• Great Staughton Neighbourhood Plan Examination Outcome and Progression to Referendum • Economic Growth Strategy • Market Towns Programme – Summer Update		
Unscheduled/Pending Further Details			

Environment, Communities and Partnerships Agenda Items			
Meeting Date	**Pre-Scrutiny**	**Scrutiny Review**	**Task and Finish Groups Working Groups**
6th March 2025	• Garden Waste Incentive Scheme • Leisure Opportunities (Part Two report)		
3rd April 2025	• Huntingdon Sport and Health Hub Feasibility Report (Part Two report) •		
5th June 2025	• Play Sufficiency • One Leisure Independent Review Update • One Leisure Annual Review		
Unscheduled/ Pending Further Details			

Pending agenda items

Meeting Date	Item	Recommendation	Outcome
6th February 2025	Priority One Delivery Update Quarter 3	To be presented at the Member briefing instead of the meeting.	

Task and Finish Groups

Performance and Growth

Commercial Investment Strategy - Pending
Workshop to be arranged following completion of work being undertaken by CIPFA

Environment, Communities and Partnerships

Climate Working Group
Members: Cllrs T D Alban, J Kerr, C Lowe and D Shaw **Lead Officer:** Neil Sloper
Progress: **November 2022:** Initial Meetings held to establish Terms of Reference for the group. **April 2023:** Regular meetings established. Evidence and information gathering to be progressed. Group to be involved in the Electric Vehicle Charging Strategy Development. **January 2024:** Meetings held to discuss proposed work plan for the group and to discuss HVO Fuels project **November 2024:** Meeting to discuss future proposed projects **January 2025:** Group met to review the HVO draft report prior to its consideration by the Panel **Next Steps:** Review the membership of the group and increase the membership to 6 Councillors Meetings to be scheduled to allow involvement in proposed works.

Disabled Facilities Grants Group
Members: I P Taylor, B Banks, C Tevlin and C Lowe **Lead Officer:** Claudia Deeth
Progress: **February 2024:** Councillors invited to express their interest in being involved with the project. **August 2024:** initial meeting held and scope of project discussed **Next Steps:** A review of the DFG process has been commissioned via the HDC Transformation Team, once the feedback and outcomes of this have been received further meetings will be scheduled to establish Terms of Reference and timeline for the group. This is expected during Spring 2025

NOTICE OF EXECUTIVE KEY DECISIONS INCLUDING THOSE TO BE CONSIDERED IN PRIVATE

Prepared by: **Councillor Sarah Conboy, Executive Leader of the Council**
Date of Publication: **13 January 2025**
For Period: **1 February 2025 to 31 May 2025**

Membership of the Cabinet is as follows:-

Councillor Details		Councillor Contact Details
Councillor S J Conboy	Executive Leader of the Council and Executive Councillor for Place	Cloudberry Cottage 9 Earning Street Godmanchester Huntingdon PE29 2JD Tel: 01480 414900 / 07831 807208 E-mail: Sarah.Conboy@huntingdonshire.gov.uk
Councillor L Davenport-Ray	Executive Councillor for Climate, Transformation and Workforce	73 Hogsden Leys St Neots Cambridgeshire PE19 6AD E-mail: Lara.Davenport-Ray@huntingdonshire.gov.uk
Councillor S Ferguson	Executive Councillor for Resident Services and Corporate Performance	9 Anderson Close St Neots Cambridgeshire PE19 6DN Tel: 07525 987460 E-mail: Stephen.Ferguson@huntingdonshire.gov.uk

Councillor J Harvey	Executive Councillor for Governance and Democratic Services	c/o Huntingdonshire District Council Pathfinder House St Mary's Street Huntingdon Cambridgeshire PE29 3TN Tel: 07941 080531 E-mail: Jo.Harvey@huntingdonshire.gov.uk
Councillor S Howell	Executive Councillor for Communities, Health and Leisure	c/o Huntingdonshire District Council Pathfinder House St Mary's Street Huntingdon Cambridgeshire PE29 3TN Tel: 01733 794510 E-mail: Sally.Howell@huntingdonshire.gov.uk
Councillor B Mickelburgh	Executive Councillor for Finance & Resources	2 Grainger Avenue Godmanchester Huntingdon Cambridgeshire PE29 2JT Tel: 07441 392492 E-mail: Brett.Mickelburgh@huntingdonshire.gov.uk
Councillor T Sanderson	Deputy Executive Leader and Executive Councillor for Planning	29 Burmoor Close Huntingdon Cambridgeshire PE29 6GE Tel: 01480 436822 E-mail: Tom.Sanderson@huntingdonshire.gov.uk

Councillor S Taylor	Executive Councillor for Parks and Countryside, Waste & Street Scene	66 Wren Walk Eynesbury St Neots Cambridgeshire PE19 2GE Tel: 07858 032076 E-mail: Simone.Taylor@huntingdonshire.gov.uk
Councillor S Wakeford	Executive Councillor for Economy, Regeneration and Housing	4 Croft Close Brampton Huntingdon Cambridgeshire PE28 4TJ Tel: 07762 109210 E-mail: Sam.Wakeford@huntingdonshire.gov.uk

Notice is hereby given of:

- Key decisions that will be taken by the Cabinet (or other decision maker)
- Confidential or exempt executive decisions that will be taken in a meeting from which the public will be excluded (for whole or part).

A notice/agenda together with reports and supporting documents for each meeting will be published at least five working days before the date of the meeting. In order to enquire about the availability of documents and subject to any restrictions on their disclosure, copies may be requested by contacting the Democratic Services Team on 01480 388169 or E-mail Democratic.Services@huntingdonshire.gov.uk.

Agendas may be accessed electronically at the District Council's website.

Formal notice is hereby given under The Local Authorities (Executive Arrangements) (Meetings and Access to Information) (England) Regulations 2012 that, where indicated part of the meetings listed in this notice will be held in private because the agenda and reports for the meeting will contain confidential or exempt information under Part 1 of Schedule 12A to the Local Government (Access to Information) Act 1985 (as amended) and that the public interest in withholding the information outweighs the public interest in disclosing it. See the relevant paragraphs below.

Any person who wishes to make representations to the decision maker about a decision which is to be made or wishes to object to an item being considered in private may do so by emailing Democratic.Services@huntingdonshire.gov.uk.or by contacting the Democratic Services Team. If representations are received at least eight working days before the date of the meeting, they will be published with the agenda together with a statement of the District Council's response. Any representations received after this time will be verbally reported and considered at the meeting.

Paragraphs of Part 1 of Schedule 12A to the Local Government (Access to Information) Act 1985 (as amended) (Reason for the report to be considered in private)

1. Information relating to any individual
2. Information which is likely to reveal the identity of an individual
3. Information relating to the Financial and Business Affairs of any particular person (including the Authority holding that information)
4. Information relating to any consultations or negotiations or contemplated consultations or negotiations in connection with any labour relations that are arising between the Authority or a Minister of the Crown and employees of or office holders under the Authority
5. Information in respect of which a claim to legal professional privilege could be maintained in legal proceedings
6. Information which reveals that the Authority proposes:-
   (a)To give under any announcement a notice under or by virtue of which requirements are imposed on a person; or
   (b)To make an Order or Direction under any enactment
7. Information relating to any action taken or to be taken in connection with the prevention, investigation or prosecution of crime.

Huntingdonshire District Council
Pathfinder House
St Mary's Street
Huntingdon PE29 3TN.

Notes:- (i) Additions changes from the previous Forward Plan are annotated ***
(ii) Part II confidential items which will be considered in private are annotated ## and shown in italic.

Subject/Matter for Decision	Decision/ recommendation to be made by	Date decision to be taken	Documents Available	How relevant Officer can be contacted	Reasons for the report to be considered in private (paragraph no.)	Relevant Executive Councillor	Relevant Overview & Scrutiny Panel
Community Chest Grant Aid Awards 2024/25	Grants Panel	19 Feb 2025 19 Mar 2025		Claudia Deeth, Community Resilience Manager Tel: (01480) 388233 or email: Claudia.Deeth@huntingdonshire.gov.uk		S Howell & L Davenport-Ray	Environment, Communities & Partnerships
Final 2025/26 Budget and Medium Term Financial Strategy (2026/27 to 2029/30) including Capital Programme	Cabinet	11 Feb 2025		Suzanne Jones, Director of Finance and Corporate Services Tel: (01480) 388214 or email: Suzanne.Jones@huntingdonshire.gov.uk		B Mickelburgh	Performance & Growth

Subject/Matter for Decision	Decision/ recommendation to be made by	Date decision to be taken	Documents Available	How relevant Officer can be contacted	Reasons for the report to be considered in private (paragraph no.)	Relevant Executive Councillor	Relevant Overview & Scrutiny Panel
Treasury Management Capital and Investment Strategies	Cabinet	11 Feb 2025		Suzanne Jones, Director of Finance and Corporate Services Tel: (01480) 388214 or email: Suzanne.Jones@huntingdonshire.gov.uk		B Mickelburgh	Performance & Growth
Business Rates Discretionary Rate Relief Policy	Cabinet	11 Feb 2025		Katie Kelly, Revenue and Benefits Manager Tel: (01480) 388151 or email: Katie.Kelly@huntingdonshire.gov.uk		S Ferguson	Environment, Communities & Partnerships
Hydrotreated Vegetable Oil	Cabinet	11 Feb 2025		Andrew Rogan, Waste Operations Manager Tel: (01480) 388082 or email: Andrew.Rogan@huntingdonshire.gov.uk		S Taylor	Environment, Communities & Partnerships

Subject/Matter for Decision	Decision/ recommendation to be made by	Date decision to be taken	Documents Available	How relevant Officer can be contacted	Reasons for the report to be considered in private (paragraph no.)	Relevant Executive Councillor	Relevant Overview & Scrutiny Panel
Food Waste	Cabinet	11 Feb 2025		Andrew Rogan, Waste Operations Manager Tel: (01480) 388082 or email: Andrew.Rogan@huntingdonshire.gov.uk		S Taylor	Environment, Communities & Partnerships
Market Towns Programme - Spring Update	Cabinet	18 Mar 2025		Pamela Scott, Regeneration and Housing Delivery Manager Tel: (01480) 388486 or email: Pamela.Scott@huntingdonshire.gov.uk		S Wakeford	Performance & Growth
Market Towns Programme - Spring Update Report***##	Cabinet	18 Mar 2025		Pamela Scott, Regeneration and Housing Delivery Manager Tel: (01480) 388486 or email: Pamela.Scott@huntingdonshire.gov.uk	3	S Wakeford	Performance & Growth

Subject/Matter for Decision	Decision/ recommendation to be made by	Date decision to be taken	Documents Available	How relevant Officer can be contacted	Reasons for the report to be considered in private (paragraph no.)	Relevant Executive Councillor	Relevant Overview & Scrutiny Panel
Leisure Opportunities***##	Cabinet	18 Mar 2025		Gregg Holland, Head of Leisure Services Tel: (01480) 388157 or email: Gregg.Holland@huntingdonshire.gov.uk	3	S Howell	Environment, Communities & Partnerships
Community Infrastructure Levy Funding	Cabinet	15 Apr 2025		Claire Burton, Implementation Team Leader Tel: (01480) 388274 or email: Claire.Burton@huntingdonshire.gov.uk		T Sanderson	Performance & Growth
Corporate Plan Update***	Cabinet	15 Apr 2025		Neil Sloper, Assistant Director Strategic Insights and Delivery Tel: (01480) 388635 or email: Neil.Sloper@huntingdonshire.gov.uk		S Conboy	Performance & Growth

Public Key Decision – Yes

HUNTINGDONSHIRE DISTRICT COUNCIL

Title/Subject Matter: Business Rates Discretionary Rate Relief Policy

Meeting/Date: Overview & Scrutiny – Environment, Communities and Partnerships - 6 February 2025
Cabinet – 11 February 2025

Executive Portfolio: Cllr S Ferguson – Executive Councillor for Resident Services and Corporate Performance

Report by: Zoe Warren Council Tax and Business Rates Manager

Ward(s) affected: All

As a Billing Authority, Huntingdonshire District Council (HDC) has the power to set its own Business Rates Discretionary Rate Relief Policy in accordance with Section 47 of the Local Government Finance Act 1988. Provisions within the legislation allow Billing Authorities to award various types of discretionary relief to qualifying local businesses to reduce or remove Business Rates liability.

This year, only slight changes have been made to the policy to account for Government direction in Retail Hospitality and Leisure Relief, clearer information has been given on the amount of rural rate relief awarded and further criteria has been added to make the Section 44a process easier for businesses to navigate.

If adopted, the policy will come into effect on 1 April 2025.

RECOMMENDED

The Overview and Scrutiny Panel is invited to comment on the report and recommendations.

Public
Key Decision - Yes

HUNTINGDONSHIRE DISTRICT COUNCIL

Title/Subject Matter:	Business Rates – Discretionary Rate Relief Policy
Meeting/Date:	Overview & Scrutiny (Environment, Communities and Partnerships) 5 February 2025 Cabinet 11 February 2025
Executive Portfolio:	Cllr S Ferguson – Executive Councillor for Resident Services and Corporate Performance
Report by:	Zoe Warren Council Tax and Business Rates Manager
Ward(s) affected:	All

Executive Summary:

As a Billing Authority, Huntingdonshire District Council (HDC) has the power to set its own Business Rates Discretionary Rate Relief Policy in accordance with Section 47 of the Local Government Finance Act 1988. Provisions within the legislation allow Billing Authorities to award various types of discretionary relief to qualifying local businesses to reduce or remove Business Rates liability.

HDC recognises the importance of businesses to the local economy and the contribution that is made to the community by voluntary, charitable and non-profit making organisations.

The award of discretionary rate relief directly supports the corporate priority of forward-thinking economic growth. In 2024 the policy look and feel was updated to make it easier for businesses to understand and therefore access support.

This year, only slight changes have been made to the policy to account for Government direction in Retail Hospitality and Leisure Relief, clearer information has been given on the amount of rural rate relief awarded and further criteria has been added to make the Section 44a process easier for businesses to navigate.

The adoption of a formal policy ensures fair and consistent decision making, reducing the risk of legal challenge, which also supports the corporate priority to deliver good, high value-for-money services with good control and compliance with statutory obligations.

If adopted, the policy will come into effect on 1 April 2025.

Recommendation(s):

The Cabinet

RECOMMENDED

to

1) Adopt the Business Rates Discretionary Rate Relief Policy in APPENDIX A, to be effective from 1 April 2025.

2) Delegate authority for approval of future changes to the Discretionary Rate Relief Policy, where such changes are the result of Government direction or are minor wording changes, to the Section 151 officer, in consultation with the Executive Councillor for Resident Services and Corporate Performance**.**

1. PURPOSE OF THE REPORT

1.1 The Local Government Finance Act 1988 sets out provision for Billing Authorities to determine a Business Rates Discretionary Rate Relief Policy to provide support to local businesses by reducing or removing Business Rates liability for certain periods of time.

1.2 Legislative changes require the existing policy to be updated, and this report sets out the changes that have been made.

2. BACKGROUND

2.1 The current policy came into force on 1 April 2024 with the aim of setting out the types of relief available to businesses for the duration of the Rating List which comes to an end on 31 March 2026.

2.2 Whilst reviewing the Retail and Hospitality criteria set by Central Government the opportunity has been taken to review the section 44a wording of the current policy to making it easier for businesses to navigate and therefore access eligible support.

3. KEY IMPACTS

3.1 Whilst updating the policy for the legislative change, the opportunity has also been taken to review the section 44a wording, resulting in the following changes being made:

- Details of information to be provided within the application so that the claim can be considered
- The layout of pertinent information to ensure that information is clear

3.6 The existing Discretionary Rate Relief Policy is included in APPENDIX B for comparative purposes.

4. COMMENTS OF OVERVIEW & SCRUTINY

4.1 The comments of the relevant Overview and Scrutiny Panel will be forwarded to Cabinet prior to the reports consideration by the Cabinet.

5. TIMETABLE FOR IMPLEMENTATION

5.1 Annual bills for National Non-Domestic Rates will be processed and issued in March 2025 and the intention is that wherever possible, the bills will reflect the discretionary rate relief applicable.

6. LINK TO THE CORPORATE PLAN, STRATEGIC PRIORITIES AND CORPORATE OBJECTIVES

6.1 The policy aligns with the corporate priority of providing good, value for money services with good control and compliance with statutory obligations. The policy has now become more user friendly and easier to understand meaning less avoidable contact.

6.2 The policy also aligns with the corporate priority of forward-thinking economic growth, by supporting local businesses to claim all relief they are entitled to.

7. LEGAL IMPLICATIONS

7.1 The adoption of a formal discretionary rate relief policy ensures fair and consistent decision making and reduces the risk of legal challenge.

7.2 There is no legal implication other than for the policy to be formally determined in accordance with the legislation, to enable delegated officers to access and grant discretionary rate relief as appropriate to assist in qualifying local ratepayers.

7.3 Providing discretionary relief to ratepayers us likely to amount to a subsidy. Any relief provided by local authorities will need to comply with the UK's domestic and international subsidy control obligations. Ratepayers of organisations and businesses making an application for any relief under this policy must ensure they are compliant with subsidy allowance amounts.

8. REASONS FOR THE RECOMMENDED DECISIONS

8.1 The recommendations are based on ensuring continuing support and fairness to qualifying local ratepayers.

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9. LIST OF APPENDICES INCLUDED

Appendix 1 – New Discretionary Rate Relief Policy
Appendix 2 – Previous Discretionary Rate Relief Policy

CONTACT OFFICER

Name/Job Title: Zoe Warren - Council Tax and Business Rates Manager
Tel No: 01480 388461
Email: zoe.warren@huntingdonshire.gov.uk

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Discretionary Rate Relief Policy

1. Introduction
The Local Government Finance Act 1988 makes provision for local authorities to award certain reliefs. This policy relates to the discretionary powers for Huntingdonshire District Council to award National Non-Domestic rates relief under Section 44A, Section 47 and Section 49 of the Local Government Finance Act 1988 and Section 69 of the Localism Act 2011

Huntingdonshire District Council recognises the importance of businesses to the local economy and the contribution that is made to the community by voluntary, charitable, and non-profit making organisations. This policy sets out the qualifying criteria for each of the different types of discretionary relief to ensure support is given appropriately and proportionately.

Each application will be considered on its own merits and consideration will be given to the guidance within this policy and national legislation. In determining awards, consideration would also be given to the interests of the Council Tax payers within Huntingdonshire. Decisions regarding rate relief will be communicated to the ratepayer in writing. If the decision is a refusal of the relief, full reasons for the refusal will be provided in the letter.

Discretionary Rate Relief cannot be granted to any premises occupied by the Council, or any Town or Parish Council, or major Precepting Authority (excepted premises).

Applying for Relief
Each application must be submitted on the Council's application form and supporting evidence provided as required.

The Council will not tolerate any business providing incorrect information in order to gain a reduction. Any ratepayer who is found to have falsely applied for relief, provided false information or representation in order to obtain rates relief could be subject to an investigation which may lead to prosecution.

Payment of Instalments
Ratepayers must continue to pay any rates that fall due whilst their application is pending. If payments are not received in line with the bill, the Council will continue with its normal recovery procedures to secure payment.

Period of award
Discretionary relief will generally be for the awarded for the duration of the rating list from the date awarded on the decision notice, unless notified otherwise or there is a change of circumstances which impacts on entitlement.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded they must notify the Council within 28 days.

Backdating
Where applications for Discretionary Rate Relief are successful and apply to a previous period, the Council may consider backdating the award. This does not apply to s44a relief where an inspection is necessary to confirm eligibility.

Applications should be received by 30th September in the year following the financial year for which relief is sought. Any applications received after that date will have backdating limited to the 1st April of the current financial year, unless exceptional circumstances apply, such as, a new property been brought into the rating list.

Cost of Relief
The cost of awarding discretionary relief is apportioned as follows:

50% Central Government.
40% District Council.
9% County Council.
1% Fire Service.

Where discretionary relief is given under Section 49 (Hardship) and section 69 of the Localism Act 2011, the full cost will fall to the Local Authority.

Subsidy Control
Providing discretionary relief to ratepayers is likely to amount to a subsidy, and so any relief provided by Local Authorities will need to comply with the UK's domestic and international subsidy control obligations.

The Subsidy Control Act 2022 allows an economic actor (e.g. a holding company and its subsidiaries) to receive up to £315,000 in a 3- year period. Business Rates payers applying for, or in receipt of, relief considered to be a subsidy will be required, on a self-assessment basis, to inform the Council if they are in breach of the cash caps or Minimal Financial Assistance (MFA) limit. Where such declarations are not received, relief will be refused or withdrawn. Further information on the subsidy control regime can be found at www.gov.uk/government/collections/subsidy-control-regime

2 Discretionary relief for Charitable organisations (Top up relief)

Hereditaments occupied by Charities are entitled to receive 80% Mandatory rate relief under Section 43 of the Local Government Act 1988. The Council has discretion to award an additional 20% in Discretionary Rate Relief.
Approval of up to 20% discretionary rate relief shall take into consideration:

- The extent their activities must meet the Council's corporate objectives and a demonstrable beneficial impact on the local community.
- The extent to which the organisation is local to Huntingdonshire and the benefits of the Authorities' residents.
- The financial position of the applicant.

The following organisations or premises will not normally be considered for Discretionary Charitable Relief regardless of their status:

- Administration offices for national charities
- Overseas aid organisations
- Charity shops and cafes operated by national charities or associated organisations.
- Housing Associations
- Schools and other educational establishments
- promotion of religious belief
- Organisations operating a restrictive membership policy for which a fee is payable.
- Empty properties
- Car parking spaces

Applications in respect of empty properties will not be considered.

Applications
All applications will be considered on the merits of the individual case. Any application will need to be supported with copies of the organisation's latest articles of Association / memorandum, clearly stating the objectives of the organisation along with their latest certified accounts.

Period & amount of Award
The Rateable Value limit for this relief is £51,000

Once granted, relief will be awarded for a fixed period providing there is no change in the organisation's activities. The organisation must notify the Council of any such changes within 28 days.

Huntingdonshire District Council would not normally consider backdating of discretionary rate relief applications unless there are exceptional circumstances, for example, a backdated entry into the rating list.

3 Section 47 - Not-for-profit organisations relief

A not-for-profit organisation or kindred organisation is one that is not established or conducted for profit, whose objectives are charitable but is not registered as a charity with HMRC.

In awarding discretionary relief, priority will be given to those organisations that provide greatest value to the community as well as considering overall affordability in terms of loss of income to the council. As such, applications will be considered favourably where:

- The organisation brings a net social, environmental or economic benefit to the community, and in this way contribute to the sustainable development of the District.

- The organisation can demonstrate that it's activities directly meet a local need, either by contributing to or implementation of the District Councils corporate objectives.

- The organisation can demonstrate that it provides facilities that which indirectly relieve the Council of the need to do so or enhance and supplement those which it does provide.

Membership should generally be open to all members of the community. Organisations which provide and seek to encourage the use of such facilities to all sections of the community will receive more sympathetic consideration than those which do not. Clubs or organisations will not be considered if they have membership rates set at such a high level as to exclude the general community.

Applications
All applications will be considered on the merits of the individual case. Any application will need to be supported with copies of the organisation's latest articles of Association / memorandum, clearly stating the objectives of the organisation along with their latest certified accounts.

Period & amount of Award
The Rateable Value limit for this relief is £51,000

Once granted, relief will be awarded for a fixed period providing there is no change in the organisation's activities. The organisation must notify the Council of any such changes within 28 days.

Huntingdonshire District Council would not normally consider backdating of discretionary rate relief applications unless there are exceptional circumstances, for example, a backdated entry into the rating list.

4 Section 44a (part-occupation) Relief

Where a property is only partly occupied temporarily and for a short period of time, the Council has discretion under Section 44A of the Local Government Finance Act 1988 to award a part empty relief. This is achieved by the council requesting that the Valuation Office Agency (VOA) provide a certificate to certify the rateable value of the occupied and empty areas.

This discretionary power does not alter the general rule that occupation of part of a property is considered to be occupation of the whole, and it is not intended that all properties which become partly occupied temporarily should have their liability reduced. As such, the Council would expect to see evidence of practical difficulties experienced in occupying the area in question as part of any application.

Applications will only be considered where the occupied and unoccupied parts can be easily defined and segregated and will remain this way temporarily, for a short time only. For the purposes of this policy, a period of up to 12 calendar months shall be considered to be temporary and longer periods shall not be considered temporary.

S44A relief will not normally be awarded in respect of different operative periods that contain the same area of unoccupied property that existed in preceding operative periods.

Rate relief under this section will not usually be awarded where the partial occupation may be considered to arise due to the ordinary day to day nature of the business(E.G the operation of a warehouse).

No award shall be made where it appears to the Council that the reason that part of the property is unoccupied is wholly or mainly for the purposes of applying for Section 44A relief.

Applications

A ratepayer making an application shall provide a plan clearly showing the dimensions of the occupied and unoccupied areas of suitable quality for the VOA to apportion the rateable value(s). The following information must also be included:

- The circumstances leading to the partial occupation
- The date from which partial occupation of the property began and when the property is likely to be fully occupied or fully unoccupied
- Details of the business's intention about the unoccupied parts. For example, when and how is the unoccupied area intended to become occupied

All applications will be subject to an inspection to verify the vacant areas, therefore retrospective application will not be considered.

Period & amount of Award

In the absence of a statutory definition of "short time" relief will only be awarded in line with normal empty property limits. I.e., Up to 6 months for all commercially assessed properties and 3 months for all others. *

Awards of Section 44A relief shall end at the earliest occurrence of one of the following:

- The end of the statutory period for which empty relief maybe allowed* (See Above)
- The end of the financial year i.e., 31 March in any year.
- All or part of the unoccupied area becoming occupied.
- The whole of the property becoming occupied
- The ratepayer ceasing to be liable for the property.
- If Council is unable to verify following reasonable notice the area remains unoccupied.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

5 Section 49 – Hardship Relief

The Council has discretion under Section 49 of the Local Government Finance Act 1988 to grant full relief, or part, on the grounds of "Hardship" but must first be satisfied that:

- The ratepayer would sustain hardship if the Authority did not do so, *and;*
- It is reasonable for the Authority to do so, having regards to the interests of persons liable to pay Council Tax set by it.

Applications
The ratepayer must submit a comprehensive application, together with all last 2 years audited accounts. (Bank statements) and any other information reasonably required.
The application would have to show what action it has already taken to lessen their hardship. This should include, but not limited to:

- seeking independent professional advice
- re-negotiating with creditors,
- re-structuring their business and pricing structure.
- demonstrating a clear business plan is in place to address the hardship.

The ratepayer would also need to demonstrate what significant detrimental effect on the local community it would have should it cease to trade. This would include, but would not be limited to, local employment and the importance of the company to the local area.

Every case will be considered on its own merits and will have particular regard to evidence of exceptional or unforeseen circumstances to justify reduction. Hardship Relief would not be considered in the following circumstances:

- Where the business is profitable, or where the business has experienced a minor loss in trade in comparison to the annual turnover of the business
- Where the drawings/remuneration of the Director(s) or proprietor are above a "reasonable" amount.
- Where the business is new, and hardship relief is being requested to fund the initial progression of the business
- Where the property is empty
- Where a similar facility is already being provided within the same locality or within a reasonable distance

Period & amount of Award
Awards of Hardship Relief would generally be awarded for a short period only, usually a maximum of six months.

The amount of Hardship Relief awarded would be determined on a case-by-case basis, but would not normally exceed £20,000, unless exceptional circumstances apply.
If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

6 Community Amateur Sports Clubs (CASC's)
Hereditaments occupied by Community Amateur Sports Clubs (CASC) are entitled to receive 80% Mandatory rate relief under Section 43 of the Local Government Act 1988. The Council has discretion to award an additional 20% in Discretionary Rate Relief.

Approval of up to 20% discretionary rate relief shall take into consideration:

- The extent their activities must meet the Council's corporate objectives and a demonstrable beneficial impact on the local community.
- The extent to which the organisation is local to Huntingdonshire and the benefits of the Authorities' residents.
- The financial position of the applicant.

We would expect CASCs to

- Be open to all sections of the community, except where legitimate restrictions apply.
- Have membership rates set at levels that do not exclude the general community.
- Demonstrate that the criteria by which it considers application for membership is consistent with open access.

Applications
All applications will be considered on the merits of the individual case. Any application will need to be supported with copies of the organisation's latest articles of Association / memorandum, clearly stating the objectives of the organisation along with their latest certified accounts.

Period & amount of Award
The Rateable Value limit for this relief is £51,000

Once granted, relief will be awarded for a fixed period providing there is no change in the organisation's activities. The organisation must notify the Council of any such changes within 28 days.

Huntingdonshire District Council would not normally consider backdating of discretionary rate relief applications unless there are exceptional circumstances, for example, a backdated entry into the rating list.

7. Local Newspapers Relief

This relief is available for office space occupied by local newspapers up to a maximum of one discount per hereditament, per title.

The premises must be occupied by a local newspaper and wholly or mainly used as office premises for journalists and reporters. The relief is not available for magazines.

Applications
Each application will be considered on its own merits following receipt of a completed form.

Where any other types of relief are applicable to the property, these will be applied first. The relief will be applied against the net bill.

Period & amount of Award
The sum of £1,500 relief is limited to a maximum of one discount:

- Per newspaper title; and
- Per hereditament

Awards will be made annually, up until 2024/25.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

8 Rural Rate Relief

Mandatory Rural Rate Relief is available for post offices, village shops, petrol filling stations and public houses subject to rateable value restriction, where they are the only business of that type in the rural settlement.

The Rural Settlement List is reviewed annually and designates settlements within a rural area which have a population of 3,000 or less. The list is published on our website under the business rate relief pages.

Properties that will benefit from the relief will be hereditaments that:

- The sole general store, food shop or post office with a rateable value of up to £8,500 or
- The sole public house or petrol filling station with a rateable value of up to £12,500

Any business that is entitled to mandatory Rural Rate Relief will receive ~~be eligible for the increased level of discount to~~ 100% relief.

Where a property meets the above qualifying criteria, but the rateable value is above the defined limits but below £16,500, the Council has discretion to award relief and will consider doing so where the property is used for the benefit of the local community and the award is in the interests of Council Taxpayers.

Applications
Where possible ratepayers entitled to relief under this local scheme will be identified by Huntingdonshire District Council. Ratepayers who believe they might be entitled to this relief should contact the Business Rates team.

Period & amount of Award
Discretionary Rural Rate Relief will be for the awarded for the duration of the rating list from the date awarded on the decision notice unless notified otherwise or there is a change of circumstances which impacts on entitlement.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

~~The Government announced in the Autumn Statement on 23 November 2016 that the relief will double from 50% to 100% from 1 April 2017.~~

~~The government is not changing legislation, instead local authorities are required to adopt a local scheme and decide each individual case using their discretionary relief powers introduced by the Localism Act (under Section 47 of the Local Government Finance Act 1988).~~

9 Section 69 relief – Localism Act 2011

Section 69 of the Localism Act 2011 amends the 1988 Act to allow local authorities the discretion to award rate relief to all types of businesses.

The cost of any relief awarded is fully funded by the Local Authority, and therefore is borne solely by council taxpayers of the borough. It is therefore essential that relief is only given to those ratepayers who will bring significant benefit to the area.

Applications for rate relief under this section of the Policy will normally only be considered favourably where the Council is satisfied that an award will result in tangible benefits to local residents and in particular where the award will directly result in attracting businesses, investment or jobs to the local area.

Applications
Written applications will be accepted and reviewed in consultation with the Councils economic development team. Every case would be considered on its own merit and any award would be an exception rather than the rule and would be time limited.

Applications will need to be supported by a minimum of:

- Details of the business and its importance to the local community. Examples could include (but not limited to) the benefits of employment, uniqueness of business, growth
- Copies of last 2 years accounts
- Copy of Business Plan
- Clear reasoning for the request
- Details of the number of people that are, or who will be, employed by the business that reside in Huntingdonshire. Details of future employment opportunities and business growth
- Any other evidence that the ratepayer feels supports their application
- Details of other support received from other sources, or support requested from other sources

Period & amount of Award
Any relief granted is at a maximum of £20,000 and for up to one financial year only.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

10 Retail Hospitality and Leisure relief 2025/26

The Retail, Hospitality and Leisure Business Rates Relief scheme will provide eligible, occupied, retail, hospitality and leisure properties with a 40% relief, up to a cash cap limit of £110,000 per business.

Hereditaments that meet the eligibility for Retail, Hospitality and Leisure scheme will be occupied hereditaments which meet all of the following conditions for the chargeable day: they are wholly or mainly being used:

- as shops, restaurants, cafes, drinking establishments, cinemas or live music venue
- for assembly and leisure; or
- as hotels, guest & boarding premises or self-catering accommodation

Relief will not be awarded to hereditaments that are being used for the provision of the following services to visiting members of the public:

- Financial services (e.g. banks, building societies, cash points, bureaux de change, short-term loan providers, betting shops)
- Medical services (e.g. vets, dentists, doctors, osteopaths, chiropractors)
- Professional services (e.g. solicitors, accountants, insurance agents/ financial advisers, employment agencies, estate agents, letting agents)
- Post office sorting offices

~~**Applications**~~
~~All possible qualifying properties will be identified based on the property description given to an assessment by the Valuation Office Agency, and if identified by the Authority the relief will automatically be awarded and should show on your annual bill.~~

Period & amount of Award
In 2025/26, the amount of relief awarded will be equivalent to 40% of the chargeable amount, after other reliefs and exemptions apply, up to a cash cap of £110k per business (not per premises).

The business must not exceed either the £110,000 cash cap for or the Small Amounts of Financial Assistance limit of £315,000 over 3 years.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

11. Supporting Small Business Rate Relief

At the 2022 Autumn Statement on 17 November, the Chancellor announced that the 2023 Supporting Small Business scheme will cap bill increases at £600 per year for businesses losing eligibility for some or all Small Business Rate Relief or Rural Rate Relief at the 2023 revaluation.

Charities and Community Amateur Sports Clubs, who are already entitled to mandatory 80% relief, are not eligible for 2023 Supporting Small Business Relief.

To support these ratepayers, the 2023 Supporting Small Business Relief scheme will limit the increase in ratepayers bills to a cash value of £600 per year. This cash maximum increase ensures that ratepayers do not face large bill increases in 2023/24 after transitional relief and small business rate relief (as applicable) have been applied.

Ratepayers eligible for the 2023 Supporting Small Business Relief and whose 2023 rateable values are £51,000 or more, will not be liable to pay the supplement to fund small business rate relief.

The 2023 Supporting Small Business scheme replaces the previous scheme which was introduced in 2017 to support small and medium ratepayers who had seen large increases in their bills at the 2017 revaluation.

There is no second property test for eligibility for the 2023 Supporting Small Business Relief scheme. However, those ratepayers who during 2022/23 lost entitlement to Small Business Rate Relief (because they failed the second property test) but have, under the rules for Small Business Rate Relief, been given a 12 month period of grace before their relief ended - can continue on the 2023 Supporting Small Business Relief scheme for the remainder of their 12 month period of grace.

Applications
The Supporting Small Business Rates relief is effective from 01 April 2023. Businesses that meet the eligibility criteria will automatically be awarded the Supporting Small Business Rates Relief. Small Business Rate Relief or Rural Rate Relief will not be applied to further reduce the bill.

Period & amount of Award
Eligible ratepayers will see their bill increases capped at £600 per year.

12 Review of Decisions

There is no statutory right of appeal against a decision regarding discretionary rate relief unless the decision is so unreasonable that no reasonable person could have reached it ('Wednesbury principles').

However, Huntingdonshire District Council recognises that ratepayers should be entitled to have a discretionary decision reviewed if dissatisfied with the outcome.

Only the ratepayer or authorised agent may ask for a review against the decision not to award relief, or the level of relief awarded. An application for review must be made within 14 days of the notification of decision.

Reviews must be in writing specifying reasons why a decision should be amended and may be supported by relevant new or additional evidence where relevant. The Review will be deemed to be discontinued if further evidence requested from the ratepayer has not been received within 14 days of the request.

Any review will be completed within 28 days of receipt unless exceptional circumstances apply and will be conducted by an officer who was not part of the original decision.

Business Rates remain payable as demanded pending the outcome of any application or review.

Discretionary Rate Relief Policy

1. Introduction
The Local Government Finance Act 1988 makes provision for local authorities to award certain reliefs. This policy relates to the discretionary powers for Huntingdonshire District Council to award National Non-Domestic rates relief under Section 44A, Section 47 and Section 49 of the Local Government Finance Act 1988 and Section 69 of the Localism Act 2011

Huntingdonshire District Council recognises the importance of businesses to the local economy and the contribution that is made to the community by voluntary, charitable, and non-profit making organisations. This policy sets out the qualifying criteria for each of the different types of discretionary relief to ensure support is given appropriately and proportionately.

Each application will be considered on its own merits and consideration will be given to the guidance within this policy and national legislation. In determining awards, consideration would also be given to the interests of the Council Tax payers within Huntingdonshire. Decisions regarding rate relief will be communicated to the ratepayer in writing. If the decision is a refusal of the relief, full reasons for the refusal will be provided in the letter.

Discretionary Rate Relief cannot be granted to any premises occupied by the Council, or any Town or Parish Council, or major Precepting Authority (excepted premises).

Applying for Relief
Each application must be submitted on the Council's application form and supporting evidence provided as required.

The Council will not tolerate any business providing incorrect information in order to gain a reduction. Any ratepayer who is found to have falsely applied for relief, provided false information or representation in order to obtain rates relief could be subject to an investigation which may lead to prosecution.

Payment of Instalments
Ratepayers must continue to pay any rates that fall due whilst their application is pending. If payments are not received in line with the bill, the Council will continue with its normal recovery procedures to secure payment.

Period of award
Discretionary relief will generally be for the awarded for the duration of the rating list from the date awarded on the decision notice, unless notified otherwise or there is a change of circumstances which impacts on entitlement.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded they must notify the Council within 28 days.

Backdating
Where applications for Discretionary Rate Relief are successful and apply to a previous period, the Council may consider backdating the award. This does not apply to s44a relief where an inspection is necessary to confirm eligibility.

Applications should be received by 30th September in the year following the financial year for which relief is sought. Any applications received after that date will have backdating limited to the 1st April of the current financial year, unless exceptional circumstances apply, such as, a new property been brought into the rating list.

Cost of Relief
The cost of awarding discretionary relief is apportioned as follows:

50% Central Government.
40% District Council.
9% County Council.
1% Fire Service.

Where discretionary relief is given under Section 49 (Hardship) and section 69 of the Localism Act 2011, the full cost will fall to the Local Authority.

Subsidy Control
Providing discretionary relief to ratepayers is likely to amount to a subsidy, and so any relief provided by Local Authorities will need to comply with the UK's domestic and international subsidy control obligations.

The Subsidy Control Act 2022 allows an economic actor (e.g. a holding company and its subsidiaries) to receive up to £315,000 in a 3- year period. Business Rates payers applying for, or in receipt of, relief considered to be a subsidy will be required, on a self-assessment basis, to inform the Council if they are in breach of the cash caps or Minimal Financial Assistance (MFA) limit. Where such declarations are not received, relief will be refused or withdrawn. Further information on the subsidy control regime can be found at www.gov.uk/government/collections/subsidy-control-regime

Discretionary relief for Charitable organisations (Top up relief)

Hereditaments occupied by Charities are entitled to receive 80% Mandatory rate relief under Section 43 of the Local Government Act 1988. The Council has discretion to award an additional 20% in Discretionary Rate Relief.
Approval of up to 20% discretionary rate relief shall take into consideration:

- The extent their activities must meet the Council's corporate objectives and a demonstrable beneficial impact on the local community.
- The extent to which the organisation is local to Huntingdonshire and the benefits of the Authorities' residents.
- The financial position of the applicant.

The following organisations or premises will not normally be considered for Discretionary Charitable Relief regardless of their status:

- Administration offices for national charities
- Overseas aid organisations
- Charity shops and cafes operated by national charities or associated organisations.
- Housing Associations
- Schools and other educational establishments
- promotion of religious belief
- Organisations operating a restrictive membership policy for which a fee is payable.
- Empty properties
- Car parking spaces

Applications in respect of empty properties will not be considered.

Applications
All applications will be considered on the merits of the individual case. Any application will need to be supported with copies of the organisation's latest articles of Association / memorandum, clearly stating the objectives of the organisation along with their latest certified accounts.

Period & amount of Award
The Rateable Value limit for this relief is £51,000

Once granted, relief will be awarded for a fixed period providing there is no change in the organisation's activities. The organisation must notify the Council of any such changes within 28 days.

Huntingdonshire District Council would not normally consider backdating of discretionary rate relief applications unless there are exceptional circumstances, for example, a backdated entry into the rating list.

Section 47 - Not-for-profit organisations relief

A not-for-profit organisation or kindred organisation is one that is not established or conducted for profit, whose objectives are charitable, but is not registered as a charity with HMRC.

In awarding discretionary relief, priority will be given to those organisations that provide greatest value to the community as well as considering overall affordability in terms of loss of income to the council. As such, applications will be considered favourably where:

- The organisation brings a net social, environmental or economic benefit to the community, and in this way contribute to the sustainable development of the District.

- The organisation can demonstrate that it's activities directly meet a local need, either by contributing to or implementation of the District Councils corporate objectives.

- The organisation can demonstrate that it provides facilities that which indirectly relieve the Council of the need to do so or enhance and supplement those which it does provide.

Membership should generally be open to all members of the community. Organisations which provide and seek to encourage the use of such facilities to all sections of the community will receive more sympathetic consideration than those which do not. Clubs or organisations will not be considered if they have membership rates set at such a high level as to exclude the general community.

Applications
All applications will be considered on the merits of the individual case. Any application will need to be supported with copies of the organisation's latest articles of Association / memorandum, clearly stating the objectives of the organisation along with their latest certified accounts.

Period & amount of Award
The Rateable Value limit for this relief is £51,000

Once granted, relief will be awarded for a fixed period providing there is no change in the organisation's activities. The organisation must notify the Council of any such changes within 28 days.

Huntingdonshire District Council would not normally consider backdating of discretionary rate relief applications unless there are exceptional circumstances, for example, a backdated entry into the rating list.

Section 44a (part-occupation) Relief

Occupation of part of a property is considered occupation of the whole. Where a property is only partly occupied temporarily and for a short period of time, the Council has discretion under Section 44A of the Local Government Finance Act 1988 to award a part empty relief. This is achieved by the council requesting that the Valuation Office Agency (VOA) provide a certificate to certify the rateable value of the occupied and empty areas.

Applications will only be considered where the occupied and unoccupied parts can be easily defined and segregated. For the purposes of this policy a period of up to 12 calendar months shall be considered to be temporary and longer periods shall not be considered temporary.

S44A relief will not normally be awarded in respect of different operative periods that contain the same area of unoccupied property that existed in preceding operative periods. Rate relief under this section will not usually be awarded where the partial occupation may be considered to arise due to the ordinary day to day nature of the business(E.G the operation of a warehouse).

No award shall be made where it appears to the Council that the reason that part of the property is unoccupied is wholly or mainly for the purposes of applying for Section 44A relief.

Applications
A ratepayer making an application shall provide a plan clearly showing the dimensions of the occupied and unoccupied areas of suitable quality for the VOA to apportion the rateable value(s). All applications will be subject to an inspection to verify the vacant areas, therefore retrospective application will not be considered.

Period & amount of Award
In the absence of a statutory definition of "short time" relief will only be awarded in line with normal empty property limits. I.e., Up to 6 months for all commercially assessed properties and 3 months for all others. *

Awards of Section 44A relief shall end at the earliest occurrence of one of the following:

- The end of the statutory period for which empty relief maybe allowed* (See Above)
- The end of the financial year i.e., 31 March in any year.
- All or part of the unoccupied area becoming occupied.
- The whole of the property becoming occupied
- The ratepayer ceasing to be liable for the property.
- If Council is unable to verify following reasonable notice the area remains unoccupied.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded they must notify the Council within 28 days.

Section 49 – Hardship Relief

The Council has discretion under Section 49 of the Local Government Finance Act 1988 to grant full relief, or part, on the grounds of "Hardship" but must first be satisfied that:

- The ratepayer would sustain hardship if the Authority did not do so, *and;*
- It is reasonable for the Authority to do so, having regards to the interests of persons liable to pay Council Tax set by it.

Applications
The ratepayer must submit a comprehensive application, together with all last 2 years audited accounts. (Bank statements) and any other information reasonably required.
The application would have to show what action it has already taken to lessen their hardship. This should include, but not limited to:

- seeking independent professional advice
- re-negotiating with creditors,
- re-structuring their business and pricing structure.
- demonstrating a clear business plan is in place to address the hardship.

The ratepayer would also need to demonstrate what significant detrimental effect on the local community it would have should it cease to trade. This would include, but would not be limited to, local employment and the importance of the company to the local area.

Every case will be considered on its own merits, and will have particular regard to evidence of exceptional or unforeseen circumstances to justify reduction. Hardship Relief would not be considered in the following circumstances:

- Where the business is profitable, or where the business has experienced a minor loss in trade in comparison to the annual turnover of the business
- Where the drawings/remuneration of the Director(s) or proprietor are above a "reasonable" amount.
- Where the business is new and hardship relief is being requested to fund the initial progression of the business
- Where the property is empty
- Where a similar facility is already being provided within the same locality or within a reasonable distance

Period & amount of Award
Awards of Hardship Relief would generally be awarded for a short period only, usually a maximum of six months.

The amount of Hardship Relief awarded would be determined on a case-by-case basis, but would not normally exceed £20,000, unless exceptional circumstances apply.
If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded they must notify the Council within 28 days.

Community Amateur Sports Clubs (CASC's)

Hereditaments occupied by Community Amateur Sports Clubs (CASC) are entitled to receive 80% Mandatory rate relief under Section 43 of the Local Government Act 1988. The Council has discretion to award an additional 20% in Discretionary Rate Relief.

Approval of up to 20% discretionary rate relief shall take into consideration:

- The extent their activities must meet the Council's corporate objectives and a demonstrable beneficial impact on the local community.
- The extent to which the organisation is local to Huntingdonshire and the benefits of the Authorities' residents.
- The financial position of the applicant.

We would expect CASCs to

- Be open to all sections of the community, except where legitimate restrictions apply.
- Have membership rates set at levels that do not exclude the general community.
- Demonstrate that the criteria by which it considers application for membership is consistent with open access.

Applications
All applications will be considered on the merits of the individual case. Any application will need to be supported with copies of the organisation's latest articles of Association / memorandum, clearly stating the objectives of the organisation along with their latest certified accounts.

Period & amount of Award
The Rateable Value limit for this relief is £51,000

Once granted, relief will be awarded for a fixed period providing there is no change in the organisation's activities. The organisation must notify the Council of any such changes within 28 days.

Huntingdonshire District Council would not normally consider backdating of discretionary rate relief applications unless there are exceptional circumstances, for example, a backdated entry into the rating list.

Local Newspapers Relief

This relief is available for office space occupied by local newspapers up to a maximum of one discount per hereditament, per title.

The premises must be occupied by a local newspaper and wholly or mainly used as office premises for journalists and reporters. The relief is not available for magazines.

Applications
Each application will be considered on its own merits following receipt of a completed form.

Where any other types of relief are applicable to the property, these will be applied first. The relief will be applied against the net bill.

Period & amount of Award
The sum of £1,500 relief is limited to a maximum of one discount:

- Per newspaper title; and
- Per hereditament

Awards will be made annually, up until 2024/25.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

Rural Rate Relief

Mandatory Rural Rate Relief is available for post offices, village shops, petrol filling stations and public houses subject to rateable value restriction, where they are the only business of that type in the rural settlement.

The Rural Settlement List is reviewed annually and designates settlements within a rural area which have a population of 3,000 or less. The list is published on our website under the business rate relief pages.

Properties that will benefit from the relief will be hereditaments that:

- The sole general store, food shop or post office with a rateable value of up to £8,500 or
- The sole public house or petrol filling station with a rateable value of up to £12,500

Any business that is entitled to mandatory Rural Rate Relief will be eligible for the increased level of discount to 100% off their business rates bill.

Where a property meets the above qualifying criteria, but the rateable value is above the defined limits but below £16,500, the Council has discretion to award relief and will consider doing so where the property is used for the benefit of the local community and the award is in the interests of Council Taxpayers.

Applications
Where possible ratepayers entitled to relief under this local scheme will be identified by Huntingdonshire District Council. Ratepayers who believe they might be entitled to this relief should contact the Business Rates team.

Period & amount of Award
Discretionary Rural Rate Relief will be for the awarded for the duration of the rating list from the date awarded on the decision notice unless notified otherwise or there is a change of circumstances which impacts on entitlement.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

The Government announced in the Autumn Statement on 23 November 2016 that the relief will double from 50% to 100% from 1 April 2017.

The government is not changing legislation, instead local authorities are required to adopt a local scheme and decide each individual case using their discretionary relief powers introduced by the Localism Act (under Section 47 of the Local Government Finance Act 1988).

Section 69 relief – Localism Act 2011

Section 69 of the Localism Act 2011 amends the 1988 Act to allow local authorities the discretion to award rate relief to all types of businesses.

The cost of any relief awarded is fully funded by the Local Authority, and therefore is borne solely by council taxpayers of the borough. It is therefore essential that relief is only given to those ratepayers who will bring significant benefit to the area.

Applications for rate relief under this section of the Policy will normally only be considered favourably where the Council is satisfied that an award will result in tangible benefits to local residents and in particular where the award will directly result in attracting businesses, investment or jobs to the local area.

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Written applications will be accepted and reviewed in consultation with the Councils economic development team. Every case would be considered on its own merit and any award would be an exception rather than the rule and would be time limited.

Applications will need to be supported by a minimum of:

- Details of the business and its importance to the local community. Examples could include (but not limited to) the benefits of employment, uniqueness of business, growth
- Copies of last 2 years accounts
- Copy of Business Plan
- Clear reasoning for the request
- Details of the number of people that are, or who will be, employed by the business that reside in Huntingdonshire. Details of future employment opportunities and business growth
- Any other evidence that the ratepayer feels supports their application
- Details of other support received from other sources, or support requested from other sources

Period & amount of Award
Any relief granted is at a maximum of £20,000 and for up to one financial year only.

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

Retail Hospitality and Leisure relief

The 2023/24 Retail, Hospitality and Leisure Business Rates Relief scheme will provide eligible, occupied, retail, hospitality and leisure properties with a 75% relief, up to a cash cap limit of £110,000 per business.

Hereditaments that meet the eligibility for Retail, Hospitality and Leisure scheme will be occupied hereditaments which meet all of the following conditions for the chargeable day: they are wholly or mainly being used:

- as shops, restaurants, cafes, drinking establishments, cinemas or live music venue
- for assembly and leisure; or
- as hotels, guest & boarding premises or self-catering accommodation

Relief will not be awarded to hereditaments that are being used for the provision of the following services to visiting members of the public:

- Financial services (e.g. banks, building societies, cash points, bureaux de change, short-term loan providers, betting shops)
- Medical services (e.g. vets, dentists, doctors, osteopaths, chiropractors)
- Professional services (e.g. solicitors, accountants, insurance agents/ financial advisers, employment agencies, estate agents, letting agents)
- Post office sorting offices

Applications
All possible qualifying properties will be identified based on the property description given to an assessment by the Valuation Office Agency, and the relief will automatically be awarded and should show on your annual bill for 2023/24.

Period & amount of Award
In 2023/24 & 2024/24, the amount of relief awarded will be equivalent to 75% of the chargeable amount, after other reliefs and exemptions apply, up to a cash cap of £110k per business (not per premises).

The business must not exceed either the £110,000 cash cap for 2023/24 or the Small Amounts of Financial Assistance limit of £315,000 over 3 years (including 2023/24).

If the ratepayer experiences any change in circumstances which would impact on the eligibility for any relief awarded, they must notify the Council within 28 days.

Supporting Small Business Rate Relief

At the 2022 Autumn Statement on 17 November, the Chancellor announced that the 2023 Supporting Small Business scheme will cap bill increases at £600 per year for businesses losing eligibility for some or all Small Business Rate Relief or Rural Rate Relief at the 2023 revaluation.

Charities and Community Amateur Sports Clubs, who are already entitled to mandatory 80% relief, are not eligible for 2023 Supporting Small Business Relief.

To support these ratepayers, the 2023 Supporting Small Business Relief scheme will limit the increase in ratepayers bills to a cash value of £600 per year. This cash maximum increase ensures that ratepayers do not face large bill increases in 2023/24 after transitional relief and small business rate relief (as applicable) have been applied.

Ratepayers eligible for the 2023 Supporting Small Business Relief and whose 2023 rateable values are £51,000 or more, will not be liable to pay the supplement to fund small business rate relief.

The 2023 Supporting Small Business scheme replaces the previous scheme which was introduced in 2017 to support small and medium ratepayers who had seen large increases in their bills at the 2017 revaluation.

There is no second property test for eligibility for the 2023 Supporting Small Business Relief scheme. However, those ratepayers who during 2022/23 lost entitlement to Small Business Rate Relief (because they failed the second property test) but have, under the rules for Small Business Rate Relief, been given a 12 month period of grace before their relief ended - can continue on the 2023 Supporting Small Business Relief scheme for the remainder of their 12 month period of grace.

Applications
The Supporting Small Business Rates relief is effective from 01 April 2023. Businesses that meet the eligibility criteria will automatically be awarded the Supporting Small Business Rates Relief. Small Business Rate Relief or Rural Rate Relief will not be applied to further reduce the bill.

Period & amount of Award
Eligible ratepayers will see their bill increases capped at £600 per year.

Review of Decisions

There is no statutory right of appeal against a decision regarding discretionary rate relief unless the decision is so unreasonable that no reasonable person could have reached it ('Wednesbury principles').

However, Huntingdonshire District Council recognises that ratepayers should be entitled to have a discretionary decision reviewed if dissatisfied with the outcome.

Only the ratepayer or authorised agent may ask for a review against the decision not to award relief, or the level of relief awarded. An application for review must be made within 14 days of the notification of decision.

Reviews must be in writing specifying reasons why a decision should be amended and may be supported by relevant new or additional evidence where relevant. The Review will be deemed to be discontinued if further evidence requested from the ratepayer has not been received within 14 days of the request.

Any review will be completed within 28 days of receipt unless exceptional circumstances apply and will be conducted by an officer who was not part of the original decision.

Business Rates remain payable as demanded pending the outcome of any application or review.

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Public
Key Decision - Yes

HUNTINGDONSHIRE DISTRICT COUNCIL

Title/Subject Matter:	Hydrotreated Vegetable Oil (HVO) Trial
Meeting/Date:	Overview & Scrutiny (Environment, Communities and Partnerships) 6 February 2025
Executive Portfolio:	Executive Councillor for Parks and Countryside, Waste and Street Scene Cllr Simone Taylor
Report by:	Andrew Rogan-Head of Operational Services
Ward(s) affected:	All or list individual Ward(s)

RECOMMENDATION

The Overview and Scrutiny Panel is invited to comment on the finding of the medium-term trial of using Hydrotreated Vegetable Oil (HVO) as an alternative to standard road diesel from the Cabinet report attached.

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Public
Key Decision – Yes

HUNTINGDONSHIRE DISTRICT COUNCIL

Title/Subject Matter:	Hydrotreated Vegetable Oil (HVO) Trial
Meeting/Date:	Informal Cabinet – 20 January 2025. O&S (Environment, Communities & Partnerships) 6 February 2025 Cabinet – 11 February 2025.
Executive Portfolio:	Executive Councillor for Parks and Countryside, Waste and Street Scene Cllr Simone Taylor
Report by:	Andrew Rogan- Head of Operational Services
Wards affected:	All Wards

Executive Summary:

In 2023, Huntingdonshire District Council approved a Climate Strategy and action plan with the aim of tackling some of the key issues identified. (Appendix 1)

A Greenhouse Gas (GHG) emissions report produced by Local Partnership identified the Carbon (CO_2) emissions from the combined Councils' fleet of vehicles represent 36.7% of the organisation's total CO_2 emissions, with a total of 1,347 tonnes. It is the single largest emitter after heating and electricity and decarbonising the fleet was listed as the number one key priority for the Council.

A pilot project was agreed upon, and in November 2023, HDC began a medium-term trial using Hydrotreated Vegetable Oil or HVO as an alternative to standard road diesel in a controlled group of vehicles, plant and machinery. These were representative of the fleet's overall makeup, and included refuse collection vehicles, vans, mowers and streets sweepers.

This project not only underscored HDCs commitment to sustainability and improving the quality of life for local people as set out the Corporate Plan 2023-2028, but it also enabled us to explore new technologies and ways of thinking, with the aim of creating an organisation-wide ethos of continuous improvement.

The trial was comprehensive and designed to evaluate the performance of HVO in terms of engine efficiency, power output, fuel consumption and overall vehicle operation. In addition, the project explored potential gaps in the supply chain, production capacity limitations, transportation, and infrastructure.

Emergency response capability and compatibility were also tested during the project, and in the spirit of ongoing collaboration, the emergency services were invited to join the trial, which resulted in Cambridgeshire Fire and Rescue and Cambridgeshire Constabulary providing a variety of their operational vehicles to be included in the project. The vehicles were refuelled at the Eastfield House operational depot where twenty-four-hour access was arranged. This collaboration worked extremely well, with all partners eager to continue working in partnership beyond the trial and into full implementation.

HVO is an accredited sustainable product and the carbon emissions from the use-phase of HVO is considered to amount to zero as the amount of bio-based carbon dioxide released upon combustion equals the amount that renewable raw material absorbed in an earlier stage.

However, there are some emissions that need to be included for the production and transportation of the fuel. For this reason, the calculations of the reduced emissions from the use of HVO have been based on 82% and not 100%.

Transferring from standard road diesel to HVO would reduce the vehicle fleet emissions by around 1,100 tonnes of CO_2 annually compared with standard road diesel, this would reduce the current level of over 1,300 tco²e to approx. 200 CO_2 annually and would reduce HDC's overall CO_2 footprint by around 30%. HVO would be viewed as a stepping stone to net zero, and we would continue to explore alternative fuel technologies that could be adopted once they have reached maturity.

The trial concluded at the end of June 2024, and during the trial, HVO has performed exceptional well, with no impact on engine efficiency, power output, fuel consumption, vehicle operational performance, or emergency response capability. In addition to fuel testing, the increased engagement of emergency service partners has led to wider discussions on options for closer collaboration across a variety of areas, including seeking alternative funding opportunities from them.

The purpose of this report is to update Cabinet on the outcomes of the project, and for Cabinet to consider the recommendations set out in this report.

Recommendation(s):
It is recommended that Cabinet.

- Agree to adopt the use of Hydrotreated Vegetable Oil across the Council's fleet based on the successful trial.
- Approve delegated authority to the Corporate Director for Place and Section 151 Officer, in consultation with the Executive Councillor for Finance & Resources and the Executive Councillor for Parks and Countryside, Waste and Streets to take operational decisions regarding the implementation and ongoing management of the HVO initiative.
- To authorise HDC officers to engage with neighbouring authorities to explore the wider HVO adoption across Cambridgeshire and Peterborough.
- Endorse continued collaboration with Cambridgeshire Fire and Rescue Service and Cambridgeshire Constabulary on HVO usage and other partnership opportunities.

- Endorse HDC's engagement with the Cambridgeshire and Peterborough Combined Authority to explore potential funding for HVO implementation and ongoing usage and opportunities for wider HVO adoption among Cambridgeshire partners.

1. PURPOSE OF THE REPORT

1.1 The purpose of this report is to update Cabinet on the outcomes of the trial of using HVO as an alternative to standard road diesel, and for Cabinet to consider the recommendations in this report.

2. BACKGROUND

2.1 Greenhouse Gas (GHG) emissions report produced by Local Partnership identified the Carbon (CO_2) emissions from the combined Councils' fleet of vehicles represent 36.7% of the organisations total CO_2 emissions, with a total of 1,347 tonnes. It is the single largest emitter after heating and electricity and decarbonising the fleet was listed as the number one key priority.

2.2 In response to this, a pilot project was agreed, and in November 2023, HDC began a medium-term trail using Hydrotreated Vegetable Oil or HVO as an alternative to standard road diesel in a controlled group of vehicles and plant machinery that were representative of the fleet's overall makeup.

2.3 The trial was designed to evaluate the performance of HVO in terms of engine efficiency, power output, fuel consumption and overall vehicle operation. In addition, the project explored potential gaps in the supply chain, production capacity limitations, transportation, and infrastructure.

2.4 Emergency response capability and compatibility were also assessed during the project, and in the spirit of ongoing collaboration, the emergency response services were invited to join the trial, which resulted in Cambridgeshire Fire and Rescue, and Cambridgeshire Constabulary providing a variety of their operational vehicles to access HVO from the Eastfield House Operational Depot as part of the project. This was designed to not only test the fuel, but also site access and current infrastructure limitations.

2.5 HDC currently has two 45,000 litre fuels tanks, located at the Eastfield House Operational Depot. During the last several years, global and domestic events have raised concerns regarding fuel security on multiple occasions.

2.6 The two tanks, with a combined capacity of 90,000 litres of bunkered fuel have insulated the organisation from some of this turbulence and have also been central to emergency response planning. It was a priority for HDC to ensure involvement of the emergency response partners to explore the impacts of switching to HVO. Although HVO is a fuel the emergency services have been testing individually as a way to reduce the CO_2 emissions.

2.7 HVO is classed as drop-in alternative fuel to regular diesel meaning it can be mixed with standard road diesel in any quantity. The project had three phases designed to evaluate this, phase one looked at transitioning vehicles using standard road diesel over to using HVO, second phase was the continued running solely on HVO, with the final phase transitioning vehicles back to using standard road diesel.

2.8 In terms of vehicle warranty, HVO is approved by the leading original equipment manufacturers (OEMs) and engine manufacturers, which cover all the current vehicles owned and operated by HDC.

2.9 HVO is chemically similar to conventional fossil fuel diesel and complies with European Fuel Standard EN1590, however, it is not biodiesel, which is chemically different than HVO.

2.10 It is a renewable energy source, International Sustainability & Carbon Certification (ISCC) approved and is produced from 100% sustainable renewable waste feedstocks coming from waste cooking oil, residues etc, - reducing CO_2 by up to 90% through its life cycle. HVO is also a much cleaner fuel and delivers significant reductions in harmful tailpipe emissions, which helps to improve air quality.

2.11 There have been some concerns raised regarding the sustainability of the feed stock used in the production of HVO, however, it should be noted that ISCC is a globally recognised, stringent system, it is recognised by the European Commission and complies with the sustainability criteria of the Renewable Energy Directive (RED II). Furthermore, The ISCC certification process involves thorough audits conducted by independent third-party certification bodies. These audits assess various aspects, including land use, feedstock origin, greenhouse gas emissions, labour conditions, and traceability.

2.12 Some concerns have also been raised with HVO and its connection with Palm Oil production and deforestation. Neste, the Global leading producer of HVO, and where the majority of HVO in the UK originates, has a clear stand against actions that would cause deforestation and are fully committed to preventing deforestation in its supply chains. Neste reduced its refinery inputs of conventional palm oil to zero at the end of 2023. There is no palm oil in the product, there may be traces of POME, which is palm oil mill effluent, which is already a waste product, which is used instead of it being put in landfill.

2.13 For a local authority in England to measure and verify the sustainability claims of HVO fuel can be challenging to have complete certainty. However, ISCC certification provides a high level of assurance that the HVO fuel meets strict sustainability criteria throughout its supply chain.

2.14 Currently, HVO is not manufactured in the UK, although several UK companies import (Neste) and distribute HVO in the UK.

https://www.neste.com/sustainability/biodiversity/forests

2.15 HVO is an accredited sustainable product and carbon emissions from the use-phase of renewable diesel are considered to amount to zero as the amount of bio-based carbon dioxide released upon combustion equals the amount that renewable raw material absorbed in an earlier stage.

2.16 However, there are some emissions that need to be included for the production and transportation of the fuel. For this reason, the calculations of the reduced emissions have been based on 82% and not 100%

2.17 HVO would be viewed as a stepping stone to net zero, and we would continue to explore zero emission technologies as they mature and become operationally viable.

3. FINDINGS OF THE TRIAL.

3.1 HVO was tested over a wide range of areas to ensure it was fully usable. Table 1 shows the areas of testing and outcomes.

Table 1

Supply Chain	**Outcome**
Availability of fuel	HVO availability is comparable with standard road diesel. We have not encountered any supply chain issues during this project. The main production of HVO is based in Europe (Finland and the Netherlands) which is increasing to meet increasing demand. It is readily available to order through procurement frameworks.
Lead time for delivery	Lead times were shown to be 2-3 days. This matches standard road diesel.
Compatibility of delivery to tank	The equipment, infrastructure and process to deliver HVO is exactly the same as standard road diesel, with no issues encountered.
Dispensing of fuel	No issues were encountered. The equipment, infrastructure and process to dispense HVO exactly matched standard road diesel. We only need to recalibrate the pump due to minor volumetric differences; pumps are calibrated annually as a matter of course.
Fuel tank compatibility	The fuel tanks required no modifications and performed exactly the same as standard road diesel.
Affordability	HVO currently tracks around £0.18ppl above the price of standard road diesel. This is within the envelope of the current MTSF spend for fuel as standard road diesel prices are low. Moving to HVO would cost the council more than should it remain on standard road diesel. However, this is a relatively low cost, high impact spends, with the additional spend reducing the fleets co2e emissions by 82% extremely quickly. Not implementing or deferring to a later date may cost the council significantly more. (See section 5 for further details).
Fuel Usage	**Outcome**
Litres used	54,000 litres of HVO used during the pilot project. • HDC used 49,816 litres • Fire service 3.613 litres • Police service 571 litres
Transition-To	All vehicles were tested for ‘Drop-Fuel’ compatibility. HVO was mixed directly with standard road diesel already in the vehicle fuel tanks at various ratios. No initial preparation or cleaning of vehicle fuel tanks was conducted prior to the mixing. There was no noticeable change in the vehicle’s performance.

Transition-From	All vehicles were transitioned back to using standard road diesel, without any prior preparation or cleaning of vehicle fuel tanks.
Engine performance	There was no noticeable difference in engine performance across the full range of vehicles involved in this project. It was noted by Cambridgeshire Constabulary, that one of their vehicles was involved in high-speed pursuits with no noticeable difference in vehicle performance under heavy load. Cambridge Fire and Rescue vehicles were also involved in high-speed driving, again, no noticeable difference in engine performance were reported.
Cold weather performance	The project ran through the winter months specifically to test it in a range of weather conditions. There was no noticeable difference in cold weather performance.
MPG or hour worked	All vehicles mpg while operating on HVO were comparable with standard road diesel +/- 2%
Overall vehicle operation	There was no noticeable difference reported across all vehicles
Vehicle servicing-Maintenance	There was no impact on servicing or routine maintenance. Vehicle running on HVO were serviced in line with current service scheduling. No breakdowns were reported where HVO was the cause. No vehicles were withdrawn from the project due to being incompatible with the fuel. There were no increases in serviceable parts being changes more frequently etc.

3.2 In conclusion, we did not encounter any issues with using HVO during the project. Availability of HVO is good, with main production based in Europe (Finland and the Netherlands) which has ongoing plans and capacity for increasing production. It is readily available to order through procurement frameworks.

3.3 The are no operational barriers to using HVO in terms of overall vehicle performance, mpg, power outputs, or maintenance.

3.4 It is fully compatible with our current infrastructure, processes and procedures, and fully compatible with the emergency service requirements.

4. ALTERNATIVES FUELS CONSIDERED

4.1 Other alternatives for this pilot project to de-carbonise the fleet were researched; electric, Hydrogen, biodiesel, were also considered.

4.2 Electric

i. There are limited models of electric RCV commercially available. The costs of the vehicles are anywhere from 80%-120% greater than a conventional diesel engine version.

ii. Electricity costs to power the vehicles have increased significantly over recent years, although it still remains slightly less than fossil fuels costs.

iii. There are currently no models of electric RCVs that would complete the full operational demands across the entire district.

iv. Historically, EV's would have had additional savings in the form of zero road fund licence, however, Government has since added additional tariffs for EVs. In addition, there would be additional costs in the form of suitable electric vehicle charging points and associated infrastructure at the Eastfield House depot.

v. Electric refuse collection vehicles (RCVs) and associated technology is still in their infancy. There are some authorities that are early adopters, notably the City of London, however, they are predominantly in urban areas, and all have had varying degrees of success.

4.3 Biodiesel

i. Otherwise known as Fatty Acid Methyl Ester (FAME) is a diesel fuel replacement produced from plant and vegetable oils. Such oils cannot be blended directly with conventional diesel and so a chemical reaction using methanol and sodium hydroxide as a catalyst is used to convert vegetable/plant oils into their constituent methyl esters.

ii. These can then be blended with diesel at levels of up to 10%. However, the standard norm in the UK is to blend biofuels to a maximum of 7% of the total fuel.

iii. Biodiesels also have their own issues: Palm oil-based fuels block the vehicle's filters; Biodiesel can oxidise if left too long in a storage tank and it goes rancid; and Biodiesel has a corrosive effect on vehicle engine's rubber components.

4.4 Hydrogen

i. Although lots of progress has been made regarding hydrogen technology, the options of hydrogen powered refuse collection vehicles are extremely limited. The cost of the vehicles is anywhere from 300%-400% greater than a diesel-powered version.

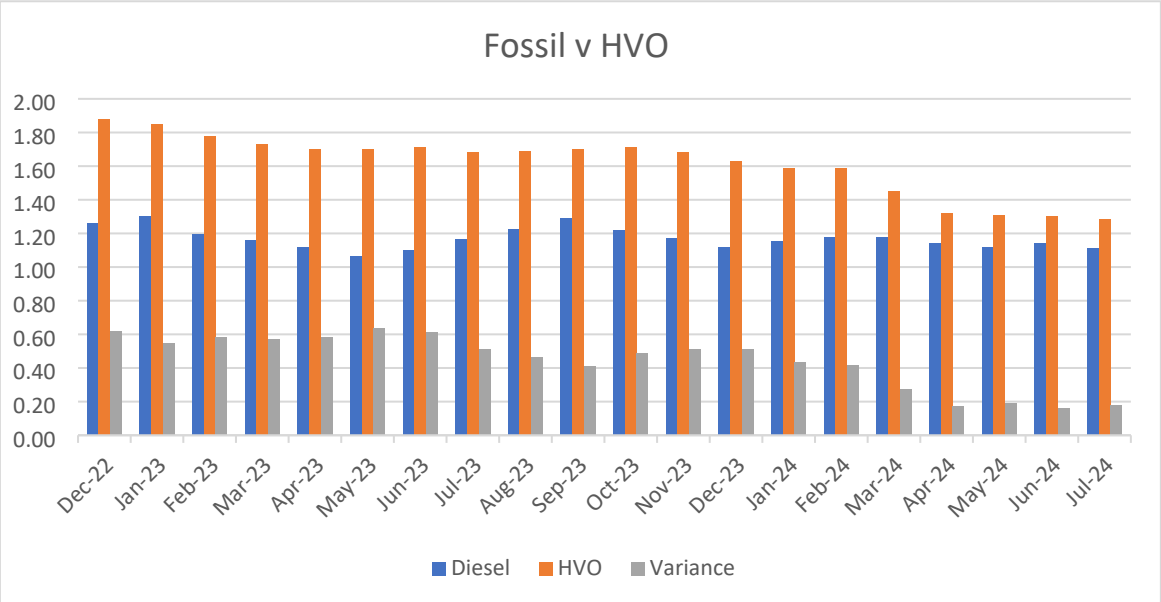
ii. Most are still in the prototype phase, with even less options around hydrogen supply and infrastructure.

iii. Therefore, for the above reasons, EVs, biodiesel and hydrogen technologies have not been considered as a suitable alternative fuel in this trial.

5. FINANCIAL

5.1 HVO is more expensive to purchase than standard road diesel. Over a period from December 2022 to July 2024, the price per litre tracked anywhere between £0.62p to £0.18p. higher than standard road diesel. Table 2. Shows the cost difference between standard road diesel and HVO.

Table 2



5.2 Based on HDC's average annual fuel usage of approx. 550,000 litres moving to HVO could increase costs on fuel anywhere from £100k at £0.18ppl to £340k at £0.62ppl, based on the price differences we have tracked.

5.3 However, this is a high carbon saving Impact for relatively low cost. It is an easier option to implement than many other potential carbon impact saving proposals and does not require any additional capital expenditure or changes to current infrastructure or operational delivery.

5.4 In terms of cost per ton of CO_2 saved, this project offers exceptional value even at £0.62ppl costing approx. £309 per ton of CO_2 saved, as a comparator, two recent HDC capital decarbonisation projects, had a total cost of £8,636 per ton of CO_2 saved.

5.5 There are options to agree a fixed quantity and price per litre of HVO over a period of between 12 and 24 months. This would give HDC more certainty and mitigate potential spikes in prices, although, prices may drop and HDC could be paying more than market rate.

5.6 As the trial has shown, moving from standard road diesel to HVO then back again is easy to implement with no impact on operational delivery of the services. Should the cost of HVO become unsustainable we could have the option to transition back to standard road diesel, although this would be seen as a step backwards.

5.7 Adopting any new technologies to reduce CO_2 emissions from the council's fleet will require investment. However, HDC is firmly committed to reducing fleet emissions, and this project offers exceptional value for money, achieving CO_2 savings at a lower cost per unit compared to alternative technologies.

6. COMMENTS OF OVERVIEW & SCRUTINY

6.1 The comments of the relevant Overview and Scrutiny Panel will be provided to the Cabinet prior to its consideration of this report.

7. KEY IMPACTS / RISKS

7.1 This is a relatively low cost but high Carbon Impact Saving initiative which will substantially reduce the overall CO2 emissions from the fleet by 82%. There is no impact on current infrastructure with no impact on resource to implement.

7.2 If the change to alternative fuels does not go ahead then deeper Carbon Impact Savings and potentially even higher costs to achieve them will have to be made within other areas of the Councils to deliver the aspiration of being Zero Carbon by 2040.

7.3 Adopting Hydrotreated Vegetable Oil (HVO) can significantly enhance fuel security for HDC by diversifying its energy sources and reducing dependence on traditional fossil fuels. HVO's extended shelf life, reportedly up to 10 years, allows for larger fuel reserves to be maintained without risk of degradation, ensuring a stable supply during potential shortages or emergencies.

7.4 Furthermore, as a drop-in fuel compatible with existing diesel infrastructure, HVO enables HDC to enhance its fuel security without significant investment in new equipment or systems, offering a flexible and resilient approach to fuel management.

7.5 The fuel would be purchased through an appropriate framework, and although extremely difficult to forecast, we could agree a fixed cost over a defined period or pay a spot price as we do with standard road diesel. We would continually monitor the cost of HVO, and should it become financially unsustainable we could take the decision to cease using HVO and move back to standard road diesel.

7.6 There has been a clear focus of collaborative working on this project, failure to progress may hamper future partnership working opportunities.

8. LINK TO THE CORPORATE PLAN, STRATEGIC PRIORITIES AND/OR CORPORATE OBJECTIVES

8.1 This project aligns with all three key priorities within the Corporate Plan

Priority 1 - Improving quality of life for local people.
Priority 2 - Creating a better Huntingdonshire for future generations.
Priority 3 - Doing our core work well.

8.2 This project aligns fully with the organisation’s environmental strategy and net zero 2024 targets.

9. LEGAL IMPLICATIONS

9.1 There are no known legal implications.

10. RESOURCE IMPLICATIONS

10.1 There would be a resource requirement from the procurement team supporting the procurement of the fuel.

11. ENVIRONMENT AND CLIMATE CHANGE IMPLICATIONS

11.1 The use of HVO across the HDC fleet will significantly reduce the CO2 emissions by around 1,100 tonnes of CO2 annually. This would reduce the councils' overall emissions by approx. 30% and significantly contribute to the council's ambition of Net Zero by 2040.

11.2 HVO is a much cleaner fuel during the burning phase in comparison with standard road diesel and produces less harmful tailpipe emissions, contributing to improved air quality.

12. REASONS FOR THE RECOMMENDED DECISIONS

12.1 The implementation of HVO across HDCs fleet will contribute directly to the ambitions of the environmental strategy and support all three key priorities set out in the Corporate Plan 2023-2028.

13. LIST OF APPENDICES INCLUDED

Appendix 1 – Climate Strategy
Appendix 2 – Neste – A Guide to Making a Change

CONTACT OFFICER

Name/Job Title: Andrew Rogan, Head of Operational Services
Email: andrew.rogan@huntingdonshire.gov.uk

Huntingdonshire
DISTRICT COUNCIL

Climate Strategy

Foreword

As global temperatures rise and extreme weather events become more frequent, the most vulnerable suffer and are least able to adapt. Huntingdonshire's residents and wildlife already feel the effects and more dramatic changes are likely in the decades to come. This Council must consider its duty of care and use its position of influence to act. **We therefore declare a Climate and Ecological Emergency.**

This Climate Strategy outlines the Council's vision for addressing that emergency with an Action Plan designed to lead us to a net zero carbon council by 2040 and to strongly influence district-wide action on emissions and biodiversity. The six objectives reflect the priorities of our residents and the strategic goals of this council.

Actions required by council service areas will be delivered through spending wisely and systemic change. Capital investments will require individual business cases.

The participation of our local communities will be essential. Local people want to take action, but look to this council for leadership. Therefore, we will bring together our parish councils, local businesses and environmental interest groups each year in a Climate Conversation summit. This will provide a platform for knowledge sharing as well as signposting to resources and funding. We will check in with our stakeholders, share our council's progress and review our plans.

Our response to the climate and ecological emergency will be embedded into every action taken and each decision made by this council. Together with the help of local people, we will support the recovery of Huntingdonshire's ecology and play our part in tackling climate change.

Lara Davenport-Ray
Executive Councillor for
Climate & Environment

We will be a Council that proactively tackles the climate crisis and ecological emergency, working closely with partners, and leading by example

	BUILDINGS	ENERGY AND RENEWABLES	NATURE	TRAVEL AND TRANSPORT	WASTE, RECYCLING AND RESOURCE MANAGEMENT	COMMUNITY
	The buildings and infrastructure around us shape how we live, our health and our well being. We need to ensure what is built is as environmentally sustainable as possible	**We need to reduce emissions caused by our activities and ensure that our energy is from renewable sources**	**We know our residents highly value the open spaces and natural environment in Huntingdonshire. We need to protect, restore and improve our environment, and build resilience to extreme weather events**	**We want to see a Huntingdonshire where our residents are able to access what they want locally, with effective lower carbon transport options and safe cycling routes**	**We want to see a Huntingdonshire where much less is thrown away**	**Our communities should shape the places they live in to be better adapted to the future climate**
ACTIONS – POSITIVE EXAMPLE	Improve the energy efficiency of Council buildings, and by 2040 stop using gas for heating Adapt our buildings and make our services more resilient to prepare for the impacts of climate change	Look for opportunities to install renewable energy generation on our land and buildings Implement an Energy Strategy to guide our future decisions on renewable energy supply and resilience	Deliver community developed plans for greater biodiversity gain and more trees on our land	Develop a plan to invest in fleet to reduce emissions from council owned vehicles to zero by 2040 Understand how our staff travel for work, and how we can reduce these emissions	Reduce the carbon impact and waste from our own services and those we commission	Openly share progress against our climate targets Include climate and biodiversity in our impact assessments to ensure they are embedded in our decision making
ACTIONS – ENABLER	Support development of sustainable communities through our Local Plan review to provide lower carbon places for people to live and work	Support schemes that help communities and businesses reduce their emissions and use renewable energy	Engage our communities, partners and businesses in managing their open spaces for nature, sharing opportunities to increase biodiversity	Seek partnerships and funding to enhance our electric vehicle charging infrastructure Work with partners to expand the infrastructure for sustainable and low carbon travel	Improve information, knowledge and advice to increase the recycling rate of municipal waste and reduce the amount of our waste that goes to landfill	Host Huntingdonshire's annual Climate Conversation for sharing of best practice, concerns and priorities
ACTIONS – ENCOURAGER	Use Sustainable Business Awards to recognise and promote great practice Work with our partners and communities to adapt to the needs of climate change	Support the sharing of guidance and advice to residents and businesses on measures they can take to improve energy efficiency, insulation, switch to low carbon heating, and install renewables	Work with communities and businesses to help them look after the natural environment, including delivering community litter picking/river cleaning projects	Promote the health benefits of active travel and alternative travel choices	Support and celebrate re-use and recycling schemes to reduce the use of disposable products	Work with communities and partners to support climate action across the district

The Climate Strategy is the Council's response to the climate crisis and ecological emergency. It sets out what we will do to play our part in addressing climate change. We will be a **positive example** to others by reducing our own emissions and adapting our service to the changed climate, an **enabler** to support action within our communities and across our partners, and an **encourager** to ensure all efforts help to deliver our ambition of a Carbon Net Zero council by 2040.

Vision and Objectives

"77% OF RESPONDENTS* SAID IT IS 'VERY IMPORTANT' OR 'ESSENTIAL' THAT WE TAKE ACTION ON CLIMATE CHANGE"

* Of those responding to the Council's 2022 Climate Survey.

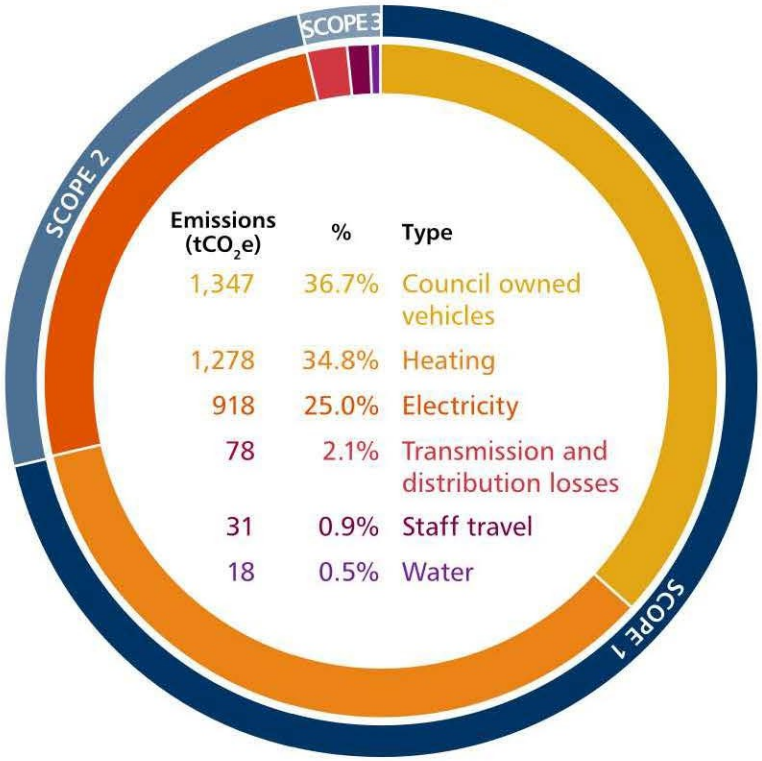
Why? – Evidenced Priorities

Impacts of the climate crisis and ecological emergency are visible across the world and within Huntingdonshire. All of us need to take action. This Council has an important role in leading this action. This strategy sets out what we will do to improve our own operations, but also how we will work with others to ensure district-wide change. Our approach will also reflect the importance of supporting our residents and businesses at a time of increasing cost of living.

Council Key Priorities

1. Decarbonise Fleet
2. Reduce energy use, shift to renewables
3. Procure wisely

What Causes the Council's Greenhouse Gas Emissions of 3,670 tCO_2e?



Emissions (tCO_2e)	%	Type
1,347	36.7%	Council owned vehicles
1,278	34.8%	Heating
918	25.0%	Electricity
78	2.1%	Transmission and distribution losses
31	0.9%	Staff travel
18	0.5%	Water

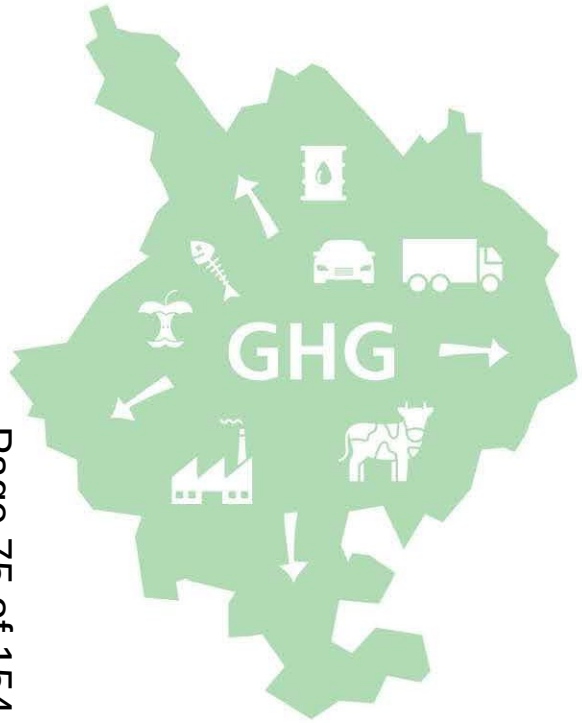
SCOPE 1 EMISSIONS
Direct emissions from the Council's owned or controlled sources. This includes on-site energy, e.g. natural gas and fuel

SCOPE 2 EMISSIONS
Indirect emissions from purchased or acquired energy, e.g. electricity steam, heat, or cooling

SCOPE 3 EMISSIONS
All indirect emissions that occur in the value chain e.g. the emissions resulting from staff travelling to work

"32% OF RESPONDENTS* SAID THE COUNCIL'S HIGHEST PRIORITY SHOULD BE TAKING ACTION TO REDUCE ITS OWN EMISSIONS"

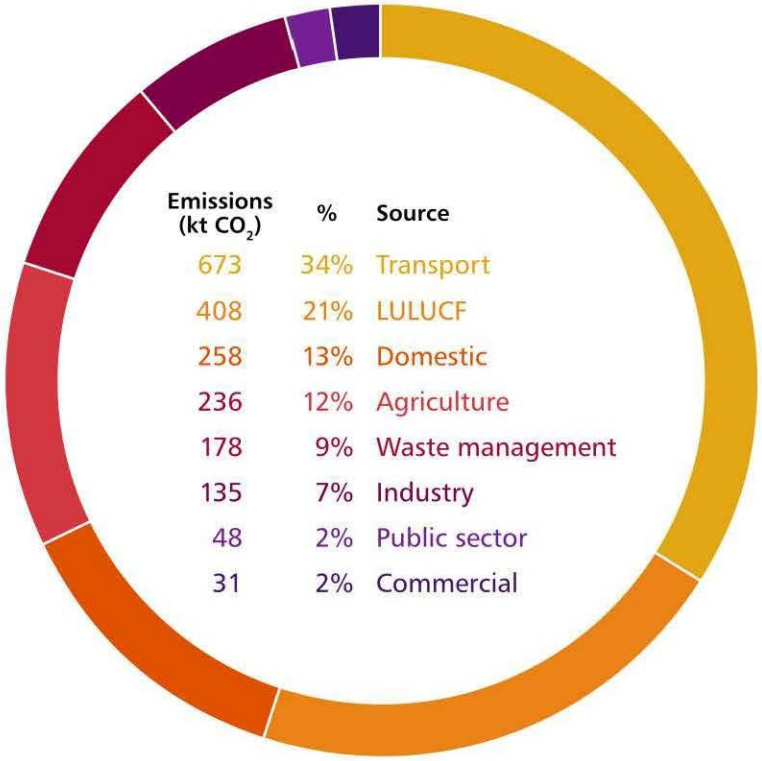
* Of those responding to the Council's 2022 Climate Survey.



District-wide Key Priorities

1. Sustainable travel with low emissions
2. Reduce energy use, shift to renewables
3. Increase biodiversity and natural capital

What Causes Huntingdonshire's Greenhouse Gas Emissions of 1,966 kt CO_2?



Emissions (kt CO_2)	%	Source
673	34%	Transport
408	21%	LULUCF
258	13%	Domestic
236	12%	Agriculture
178	9%	Waste management
135	7%	Industry
48	2%	Public sector
31	2%	Commercial

"40% OF RESPONDENTS* SAID THE COUNCIL'S HIGHEST PRIORITY SHOULD BE ENCOURAGING OTHERS TO REDUCE THEIR EMISSIONS"

* Of those responding to the Council's 2022 Climate Survey.

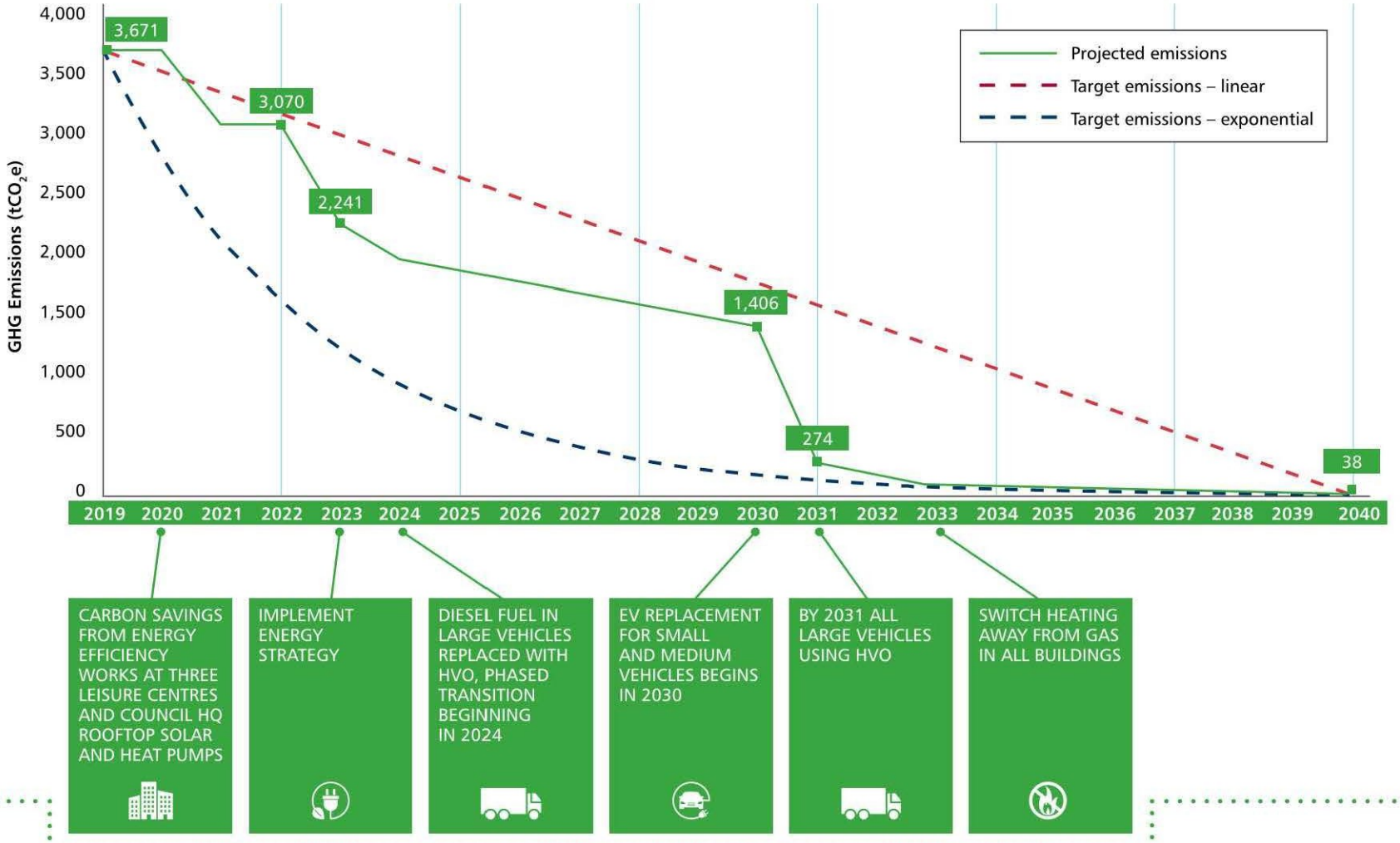
Our Pathway to Carbon Net Zero 2040

The red and blue show two target lines we could follow.

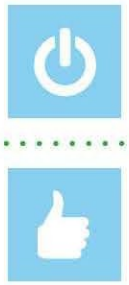
Green shows the impact of the changes we expect to make through our current action plan to reduce emissions, based on what is currently known about improving technology.

Our action plan will be revisited annually, if opportunities arise that improve the business case for action, we will reduce our carbon emissions earlier.

Carbon Pathway Scenarios to 2040



Our Priority Actions

	Key Climate Actions			
We will be a Positive Example:		Review our assets to understand opportunities to improve the building fabric, energy efficiency and carbon impact of our buildings	Undertake a fleet review to determine when our vehicles should be switched from petrol/diesel to low carbon alternatives	Define a pathway for the council to move to 100% renewable energy usage
We will Enable and Encourage:		Enhance environmental aspects of the Local Plan where possible to do so	Deliver programme of biodiversity with the CPCA to include Community and Council Open Spaces	Work with partners to promote and support more active and net zero carbon travel

How we will Achieve our Objectives?

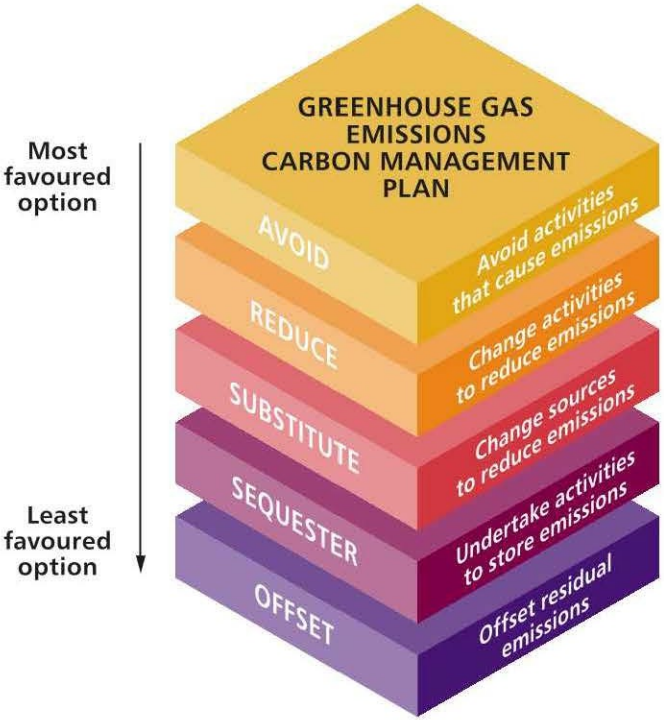
The Council will be a positive example in its approach to making decisions with due regard to the impact on climate and environment.

By focussing on our key actions we will make progress towards our Carbon Net Zero council 2040 target. We will track progress against our pathway, calculated using the Greenhouse Gas emissions calculating tool, developed by Local Partnerships and the Local Government Association. This will be updated and shared with our community and partners at Huntingdonshire's annual Climate Conversation summit.

Actions required by council service areas will be delivered through spending wisely and systemic change. These will be included in the budget for each service area and be subject to the annual budget-setting of the Council.

Capital investments will require individual business cases to ensure prioritised and economically sustainable investment.

The Council will follow a hierarchy of action, prioritising reduction in emissions through changing activity and demand for energy and fossil fuels, then replacing fossil fuels. Recognising the importance of carbon sequestration and the high value placed on our natural and biodiverse environment, the Council will increase the natural capture of carbon through changed land management regimes and tree canopy enlargement.
The Council will only consider carbon offset as a very last resort as this does not address the need to reduce and adapt consumption that the Climate Crisis and Ecological Emergency require.



Priority Actions by Theme

Buildings

The buildings and infrastructure around us shape how we live, our health and our well being. They are also a significant source of GHG emissions. For the Council 60% of our emissions come from heating and using electricity in our buildings.

"78% OF RESPONDENTS* SAID THE COUNCIL SHOULD USE PLANNING RULES SO NEW DEVELOPMENTS MEET SUSTAINABILITY STANDARDS"

* Of those responding to the Council's 2022 Climate Survey.

Positive Example

Improve the energy efficiency of Council buildings and by 2040 stop using gas for heating.

Adapt our buildings and make our services more resilient to prepare for the impacts of climate change.

Enabler

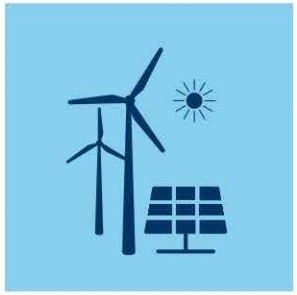
Support development of sustainable communities though our Local Plan review to provide lower carbon places for people to live and work.

Encourager

Use the Sustainable Business Awards to recognise and promote great practice.

Work with our partners and communities to adapt to the needs of climate change.

Priority Actions by Theme



Energy and Renewables

Energy is one of the most significant contributors to our emissions. Factors outside of our control, such as recent energy prices rises and the war in Ukraine, highlight the need for us to increase the resilience of our local energy supply, and reduce our consumption.

"88% OF RESPONDENTS* SAID THEY HAVE REDUCED THEIR ELECTRICITY USE WITH ENERGY EFFICIENCY MEASURES"

"73% OF RESPONDENTS* SAID THE COUNCIL SHOULD FOCUS ON RENEWABLE ENERGY"

Positive Example

Look for opportunities to install renewable energy generation on our land and buildings.

Implement an Energy Strategy to guide our future decisions on renewable energy supply and resilience.

Enabler

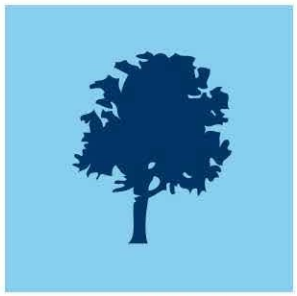
Support schemes that help communities and businesses reduce their emissions and use renewable energy.

Encourager

Support the sharing of guidance and advice to residents and businesses on measures that they can take to improve energy efficiency, insulation, switch to low carbon heating, and install renewables.

* Of those responding to the Council's 2022 Climate Survey.

Priority Actions by Theme



Nature

Nature benefits health, as well as being a haven of biodiversity, and important natural processes. Huntingdonshire has a wealth of green spaces and natural assets, rich in biodiversity providing a home for many native species and a link to the natural environment for our residents.

"83% OF RESPONDENTS* SAID THE COUNCIL SHOULD RESTORE NATURE AND PLANT TREES"

"20% OF RESPONDENTS* SAID THEIR HOME OR BUSINESS HAD BEEN DAMAGED BY EXTREME WEATHER"

Positive Example

Deliver community developed plans for greater biodiversity gain and more trees on our land.

Enabler

Engage our communities, partners and businesses in managing their open spaces for nature, sharing opportunities to increase biodiversity.

Encourager

Work with communities and businesses to help them look after the natural environment, including delivering community litter picking/river cleaning projects.

* Of those responding to the Council's 2022 Climate Survey.

Priority Actions by Theme

Travel and Transport

In response to climate change we need to consider how we travel and how the food we eat and the products we buy reach us.

We will work with our partners and our transport authorities to support more environmentally sustainable choices through the infrastructure they provide.

"46% OF RESPONDENTS* SAID THAT THE COUNCIL SHOULD SWITCH TO ELECTRIC VEHICLES"

Positive Example

Develop a plan to invest in fleet to reduce emissions from council owned vehicles to zero by 2040.

Understand how our staff travel for work, and how we can reduce these emissions.

Enabler

Seek partnerships and funding to enhance our electric vehicle charging infrastructure.

Work with partners to expand the infrastructure for sustainable and low carbon travel.

Encourager

Promote the health benefits of active travel and alternative travel choices.

* Of those responding to the Council's 2022 Climate Survey.

Priority Actions by Theme

Waste, Recycling and Resource Management

We generate waste as a by-product of almost all of our activities. Resource management describes how we can work together to consume less, reduce waste and recycle the valuable resources we have. Huntingdonshire residents already recycle more than 50% of their waste, but the recycling rate has plateaued.

"80% OF RESPONDENTS* SAID THE COUNCIL SHOULD IMPROVE RECYCLING RATES"

"93.6% OF RESPONDENTS* SAID THEY WERE MAXIMISING THEIR OWN RECYCLING"

Positive Example

Reduce the carbon impact and waste from our own services and those we commission.

Enabler

Improve information, knowledge and advice to increase the recycling rate of municipal waste and reduce the amount of our waste that goes to landfill.

Encourager

Support and celebrate re-use and recycling schemes to reduce the use of disposable products.

* Of those responding to the Council's 2022 Climate Survey.

Priority Actions by Theme

Community

The many communities of Huntingdonshire have a significant role in responding to climate change. The Council must work with our communities to build resilience to future extreme weather events, support community initiatives to benefit the climate and ecology whilst enabling more positive impact to achieve Carbon Net Zero.

"12% OF RESPONDENTS* THINK THE COUNCIL SHOULD PROVIDE ADVICE AND GUIDANCE ON ACCESS TO INFORMATION AND FUNDING FOR RESIDENTS AND BUSINESSES TO HELP THEM ADDRESS CLIMATE CHANGE"

Positive Example

Openly share progress against our climate targets.

Include climate and biodiversity in our impact assessments to ensure they are embedded in our decision making.

Enabler

Host Huntingdonshire's annual Climate Conversation for sharing of best practice, concerns and priorities.

Encourager

Work with communities and partners to support climate action across the district.

* Of those responding to the Council's 2022 Climate Survey.

Monitoring Progress Together

We will **enable** our communities, businesses and partners through an Annual Climate Conversation event to showcase their efforts, share what has worked, challenges and priorities.

We will continue to **encourage** action through the event and sharing the positive impacts for Huntingdonshire's climate and environment.

We will openly share our own progress in this conversation, but also to listen to changing challenges and priorities which may need to be reflected in revised actions.

The inaugural event will be an opportunity to share progress and seek input on our priority actions:

- Biodiversity for All Programme
- Local Plan Revision
- Sustainable Travel

Feedback from the Climate Conversation will be captured in an annual report. This will sit alongside formal annual reporting of the Council's achievements against its action plan and any revisions that are recommended.

Further Information

Huntingdonshire DISTRICT COUNCIL

Huntingdonshire District Council
Pathfinder House, St Mary's Street, Huntingdon PE29 3TN

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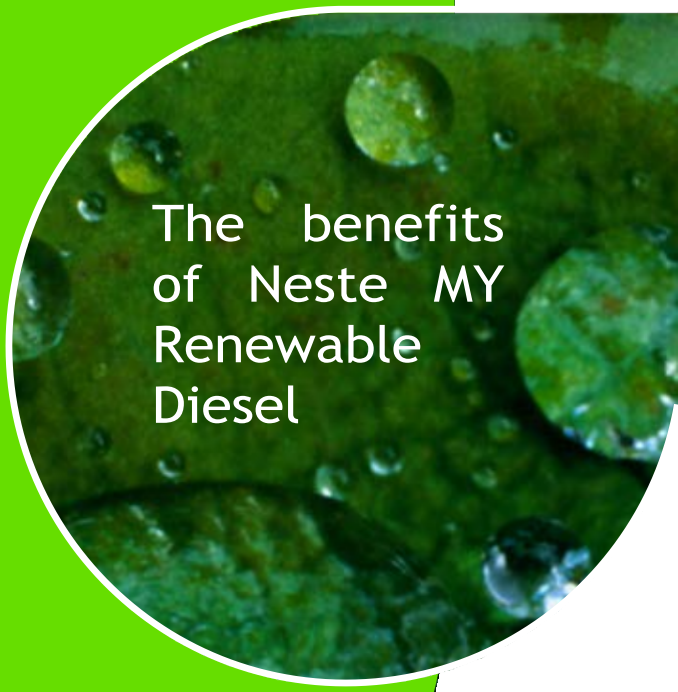
W huntingdonshire.gov.uk
Huntingdonshire
huntsdc

A GUIDE FOR MAKING A CHANGE

Choose a renewable fuel for your future



NESTE

14. THIS GUIDE IS FOR YOU, CHANGE-MAKER

It is time to make a choice for the future. The fight against global warming is ongoing, and a growing number of people are joining it. Customers demand commitment to reducing emissions and are asking for proof - not just words. Political decision-makers define new legislation which makes it clear: fossil fuels are no longer an option.

Some tough decisions will need to be made, but we have tried to make this one easier for you. With Neste MY Renewable Diesel we provide a solution that is easy to apply and does not compromise performance. In this guide we have gathered the tools for you to start the change in your organisation.

15. WHY NESTE MY RENEWABLE DIESEL?

Globally, 100% renewable diesel sales are increasing for both private and public fleets. More and more renewable diesel is used by customers that are especially aware and keen on bioenergy or reduced tailpipe emissions.

The decade-long experience has proven that Neste MY Renewable Diesel ™ meets the fuel standards. It is a safe, high-quality fuel option that does not require any changes to your existing fleet, maintenance infrastructure, or fuel logistics process.

Waste and residue account for 83% of Neste's total raw material usage to produce renewable products. Our current efforts are focused on the utilization of even lower quality waste and residue materials as well as on the development of promising new, materials, such as algae and microbial oils.

Neste MY Renewable Diesel is fully suitable and beneficial also for older diesel vehicles.

Laboratory tests and field trials show that Neste MY Renewable Diesel has behaved similarly to fossil fuels regarding issues that could appear in the logistic chain, e.g., corrosion, storage stability, microbiological growth, water separation, elastomeric materials, delivery pump filters etc.

Neste MY - An easy step for more sustainable transport

- All year round including severe winters
- No modifications to vehicles
- No modifications to fuel logistics or service stations
- Trouble-free logistics and operation

Transport industry transformation is here:

Customers demand lower emissions

Global trends in the transport sector indicate that transport and logistics companies are now actively seeking to reduce greenhouse gas (GHG) emissions created by their fleets.

One of the most prominent factors driving the change towards more sustainable attitude in the transportation industry is customer demand. Both consumer and corporate customers appreciate transport companies' commitment to reducing emissions – increasingly often even demand it.

Just as in other markets, customers are now actively seeking proof that transportation and logistics companies take environmental action and make more sustainable choices.

According to IPC Cross-border e-Commerce Shopping Survey (2018), up to 47% of e-commerce customers would like a carbon-neutral delivery for products they order online.

The changes in legislation around the world also push the change towards renewables. For example, the EU Biofuels Directive requires that the share of renewable energy to be used in transport should be 10 % in every member state by 2020. According to the European Environment Agency, this target is expected to be met primarily through biofuels.

Many transportation companies have already switched into alternative renewable fuels, and the pressure for more sustainable choices is growing across the industry. The potential benefits of reducing emissions, both in terms of cost savings and brand equity, are clearly understood – even in a somewhat traditional industry such as logistics and transport.

Transportation industry can move forward fast on sustainability, should their customers so desire, as the last few years have shown us.

“Just as in other markets, customers are now actively seeking proof that transportation and logistics companies take environmental action and make more sustainable choices.”

Salla Ahonen,
Vice President
Sustainability

Fossil fuels are no longeranoptionfor thefuture

Amidst the ongoing transformation towards renewable fuels, many companies have a lot of questions and reservations around the cost of switching to renewable diesel.

As the pressure for fighting climate change is becoming more and more critical, also the transport and logistics industry will have to adjust and make more sustainable choices.

The early adopters have shown that the extra cost of renewable diesel can be carried over to the customer. The consumers and business buyers alike are already willing to pay for more sustainable products and services, and this trend is growing as we move forward.

"The consumers and business buyers alike are already willing to pay for more sustainable products and services, and this trend is growing as we move forward."

Seppo Mikkonen,
R&D Fellow

Soon, using fossil fuels will no longer be an option. Therefore, the cost of Neste MY Renewable Diesel should not be compared to the current prices of fossil diesel.
The comparison should be done within alternative fuels and vehicle technologies, such as biogas and electrical vehicles.

In this guide we aim to address the most common questions and considerations related to switching renewable fuels in professional transport. We hope it will help you fast-forward your business towards a future with reduced GHG emissions.

16. NESTE MY RENEWABLE DIESEL BENEFITS

Safe & sustainable fuel

- Significantly lower emissions
- Cleaner fuel, cleaner combustion
- Clear sustainability
- No odour

Easy to switch

- Just drop in and go
- Compatible with your current infrastructure
- Lower Maintenance Costs

Superior performance

- Serious power
- Superior cold-weather performance
- Can be stored for a long time

SUSTAINABILITY

90% less greenhouse gas emissions than fossil fuels – how is it possible?

Neste MY Renewable Diesel is produced by hydrotreatment from waste and residue fat fractions originating from food, fish, and slaughterhouse industries as well as from non-food grade vegetable oil fractions.

Because it is made from waste and bio-based materials, using Neste MY does not release any new carbon dioxide (CO2) into the atmosphere.

As plants and trees grow, they bind carbon dioxide onto themselves through photosynthesis. When Neste MY burns in a vehicle engine, the carbon dioxide simply returns to the atmosphere. This is considered zero net emitting, as the CO2 would have existed free in the atmosphere regardless of the fuel manufacturing and consumption process.

Fossil fuels are also part of the carbon circulation cycle, but the carbon bound in oil or coal has been out of the circulation for thousands or even millions of years. Therefore, burning fossil fuels is considered to increase the amount of carbon dioxide in the atmosphere. The CO2 released from fossil fuels builds up in the atmosphere and speeds up the climate change.

FLEXIBILITY

No need to tie yourself to one option

For transport companies, any new fuel or energy solution with only one supplier is often an unendurable commitment. With several companies supplying paraffinic renewable diesel, the possibility to tender and change suppliers is an option if needed.

You can always also change back to fossil diesel – either partly or fully – with no cost or alternations to fuel logistics, fleet, or maintenance setup. Instead with other options that require different vehicles, fuel logistic systems or maintenance practices (such as gas, high ethanol blend or electrical vehicles), the change back to old fuel solution or supplier is often too costly even to remain a consideration.

FAST SWITCH

Neste MY - A fast switch solution to renewable fuel

Switching to a new fuel will often create extra work or training needs for your maintenance crew.

If a fleet is converted to run on gas, the vehicles need to be converted, new fuel supply logistics to be built and gas detectors installed into vehicle depots and repair

shops. When switching to electrical vehicles, the entire fleet needs to be updated and charging stations installed.

As Neste MY can be used in normal diesel vehicles, switching to it will not require investments in conversion or new equipment. The same applies for fuel logistic systems: just order Neste MY into the existing diesel fuel storage tanks and begin to run your fleet with renewable fuel. The maintenance staff can carry out their work as before, and the need for maintenance may possibly even reduce as a result of switching to a cleaner, high-quality fuel product with very little or no impurities.

Hydrotreating gives Neste MY Renewable Diesel corresponding composition as traditional diesel

The hydrotreating of vegetable oils as well as suitable waste and residue fat fractions to produce renewable diesel is a quite new but already mature manufacturing process of a commercial scale.

Neste's renewable fuel manufacturing process is based on the company's vast oil refining know-how. In the process, hydrogen is used to remove oxygen from the triglyceride vegetable oil molecules and to split the triglyceride into three separate chains, thus creating hydrocarbons similar to those already existing in diesel fuel.

This allows blending in flexible ratios without any concerns regarding fuel quality.

Properties of Neste MY have much more similarities with high-quality Sulphur free fossil diesel fuel than with fuels containing ester type biodiesel (FAME). As a matter of fact, the properties of renewable diesel are very similar to the synthetic gas-to-liquids (GTL) diesel fuel, which was earlier considered to be the best diesel fuel for engines and regarding tailpipe emissions.

Now Neste MY offers the same compositional benefits as GTL but with remarkably lower greenhouse gas emissions.

HIGH QUALITY, GREAT PERFORMANCE

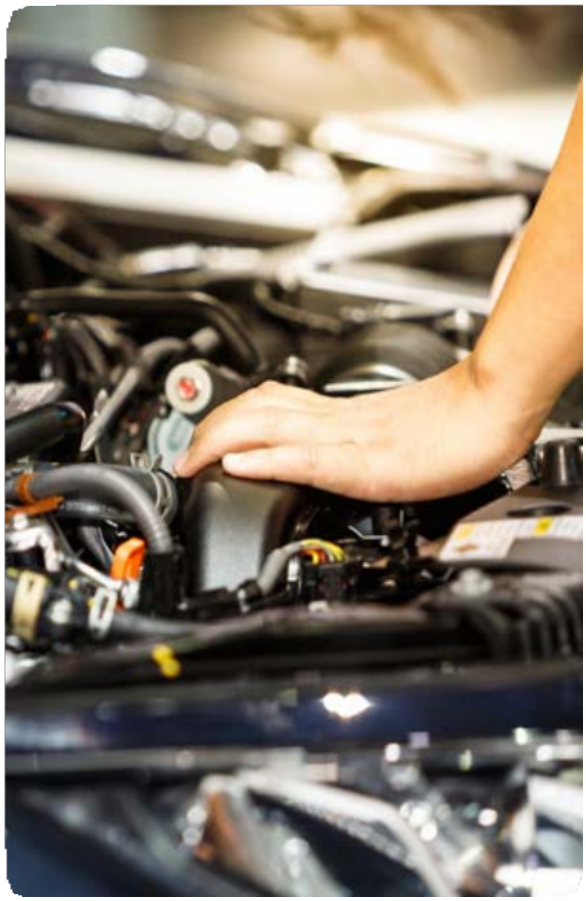
Neste MY Renewable Diesel Properties

- Highest heating value among current biofuels
- Very high cetane number (>70) - low density (~780 kg/m3)
- Sulphur-free (<5 mg/kg)
- Very low aromatics (<1 wt-%)
- Reasonable distillation range, not exceeding 90% and 95% distillation points

If used for blending diesel fuels at refineries or terminals, cetane number, density, sulphur, and aromatics offer economic and technical benefits to be utilized.

Lowest fuel consumption of current biofuels

Neste MY's heating value is higher than that of FAME, which means that a smaller amount of Neste MY than FAME is required for meeting a fixed bioenergy mandate. Neste MY's fuel consumption rate is slightly lower with Neste MY blends compared to FAME blends at the same bioenergy level.



100% Neste MY consumption is only about 3% higher than that of summer grade fossil fuel but about 5% lower than with 100% FAME.

Engine performance equal to EN 590

In modern engines, the maximum power output of the engine is related to the efficiency of the engine, injector energizing time, fuel pressure, and energy content of the fuel. In some modern common rail injection systems, it has been seen that with the same indicated injection duration, more paraffinic fuel is injected. With this type of injection system, Neste MY produces the same engine power and torque as EN 590 diesel. If compared to winter grade diesel, the maximum power of the engine can be even higher.

CARE-FREE MAINTENANCE

Neste MY Renewable Diesel keeps the engine and exhaust aftertreatment system cleaner than other biodiesels

- Similar or better engine oil condition due to reasonable distillation range and hydrocarbon type chemistry
- Low tendency for injector fouling as neat and in diesel fuel blends

Clean combustion

Ash-free combustion guarantees long lifetime for exhaust catalysts and particulate filters.

Distillation characteristics influence how fuel is evaporated when it is sprayed into the combustion chamber. Fractions boiling at too high temperatures may not burn completely, or they may wet cylinder walls. As a result, engine oil will be diluted reducing viscosity of the oil, which is a well-known challenge related to FAME use as a blending component. Neste MY does not cause additional engine oil dilution due to its distillation range.

No harmful reactions with engine oil

Ester-based FAME may cause harmful chemical reactions with engine oil if it enters the crankcase. Neste MY consists of hydrocarbons which is not incompatible with the oil and does not risk engine durability. Therefore, it does not require additional maintenance measures, such as changing the engine oil more frequently than traditional high-quality fossil diesel fuels.

Low risk for injector fouling

In tests, Neste MY showed cleaner injectors than a high-quality standard diesel fuel both with 100% renewable diesel and as a 30% blend.

Performance additive packages that contain detergent, corrosion inhibitor and antifoam agents, for example, are used commonly in high-quality diesel fuels. Although Neste MY performs well in injector fouling tests, an additive package should be considered for corrosion protection if fuel systems are exposed to water condensation.

COLD PROPERTIES

Neste MY can deliver high performance in any weather

- Excellent cold properties: cloud points down to -40 ºC (-40 °F) can be reached
- Severe winter and arctic grades available thanks to the isomerization process
- High bio mandate blending ratios possible all year round
- No risk for impurity precipitation temperatures above cloud point
- Density remains the same regardless of cloud point

In professional use, it is essential that diesel fuels suit the purpose around the year. The cold properties of Neste MY can be improved to satisfy severe and arctic climate grades down to -40 °C (-40 °F). Unlike with FAME, the cold properties of Neste MY can be adjusted in the isomerization unit with all feedstocks. This means that a high bio mandate content can be met by using Neste MY all year round without risking cold operability or encountering problems with fuel logistics. However, due to economic and yield challenges excellent cold properties should be produced only when needed.

Viscosity may also affect cold operability in some applications. Viscosity of Neste MY at -15 °C (5 °F) is about 15 mm2/s which is around the same as of fossil diesel fuels and only half of FAME's viscosity.

Neste MY keeps auxiliary heaters clean

Auxiliary heaters Neste MY operates in fuel burning auxiliary heaters as well as or even better than fossil diesel. As opposed to FAME, Neste MY does not have any problems with cold properties; therefore, it operates without trouble also in cold conditions.

STABILITY

Fuel properties allow trouble-free logistics and safe long-term storing

- Behaves in logistics like fossil diesel fuel, i.e. no issues with: stability: no need for “use before” date
  - water separation - microbiological growth
  - impurities causing precipitation above cloud point

Neste MY’s stability is at the same level of conventional fossil diesel, which means that there is no need to apply a “use before” date. There is no risk of problems if vehicles or stationary engines are out of use for extended periods.

Neste MY may be safely left in the tank in seasonally used equipment, such as agricultural machines, boats, or emergency generator sets.

Since Neste MY consists of only hydrocarbons, the traditional stability methods used for fossil diesel fuel are applicable. Because of this, the methods developed for FAME do not apply for Neste MY Renewable Diesel.

Sulphur content – Neste MY can be used to bring down the Sulphur content of fossil diesels

The Sulphur content of Neste MY coming out from the production process is <1 mg/kg. Due to possible contaminants within normal diesel fuel logistics, Sulphur content within Neste MY fuel specification is set to
≤5.0 mg/kg.

If the Sulphur content of the base diesel fuel or blending component is slightly above the legal specification, blending of Neste MY can bring the blend to meet the requirements set by the most modern exhaust aftertreatment systems.

Ash and metals content – Ash-free combustion

Ash content of Neste MY is very low, <0.001%. Because of its ash-free combustion, Neste MY offers at least as long lifetime in current and future vehicles as high quality fossil diesel fuel for exhaust aftertreatment systems.

Filterability – No risk of filter blocking

A lot of fuel filter blocking issues have occurred in Europe over the last few years due to poor diesel fuel quality. This is not the case with Neste MY. The filter blocking tendency (FBT) of Neste MY is usually around 1.0-1.1 with no risk of filter blocking when using 100% Neste MY.

Water content – No water issues in logistics

The solubility of water into Neste MY is similar to fossil diesel fuels or even lower. This means that water issues do not require any additional measures in fuel logistics compared to fossil diesel fuels.

Microbial growth

In special applications, such as marine fuels and extended parking periods, ester type biodiesel (FAME) used in diesel fuel has been found to sometimes promote microbial growth. Test results show that Neste MY as such or used as a blending component in diesel fuels does not require any additional precautions compared to fully fossil diesel fuels.

Appearance and Oduor

In temperatures above the cloud point, Neste MY is clear and bright, its colour is almost water-like and it does not have an unpleasant diesel fuel type odor. There are no impurities that precipitate in temperatures above the cloud point in neat Neste MY and FAME free diesel fuel blends. Below cloud point, paraffins make Neste MY cloudy. Crystallized paraffins may also settle during an extended storage, which is a known phenomenon also for fossil fuels.

FIELD TRIALS
Neste MY Renewable Diesel

- Extensive trials in many countries
- Fleets up to 300 vehicles
- Mileages as high as over 300,000 km/ vehicle
- All year round - including severe winters

Extensive field trials have been carried out with Neste MY Renewable Diesel in Finland, Sweden, Germany, and Canada. The fuel has performed excellently in these trials, both at 100% content and a variety of blending ratios.

The trials have conclusively cleared the product for any operability issues or need for extra maintenance for fuel filters, fuel systems, fuel hoses, seals in fuel systems, engines, or exhaust aftertreatment devices. The same applies to fuel logistics: the trial uses did not reveal any differences compared to fossil diesel fuel use regarding water, microbiological growth, storage stability and material issues.

"We found absolutely no disruption to any aspects of our operation, from fuelling procedures and maintenance intervals to vessel performance and costs. The greatest operational benefit has been the reduction of soot, which is a benefit to both our riders and our machinery."

Joe Bugard,
Executive Vice President
Red and White Fleet

Case Study:

A 3-year trial with 300 buses

confirmed the high quality of Neste MY Renewable Diesel

In a field trial in Finland, about 300 buses were driving in the Helsinki Metropolitan Area from 2007 to 2010 all year round down to ambient temperatures below -25 ºC (-13 °F). The goal of the study was to improve the urban air quality and to promote the use advanced biofuels in public transport.

Most of the buses used a fuel blend containing up to 30% of Neste MY Renewable Diesel in EN 590 fuel, and 11 buses were running with 100% Neste MY Renewable Diesel.

Both old and modern buses from several manufacturers representing Euro II to EEV emission levels were included in the test fleet as well as some retrofit exhaust aftertreatment systems.

A total of 22 million litres of blended fuel and 1 million litres of 100% Neste MY Renewable Diesel were consumed during the trial. The buses ran a total of 50 million kilometres with the fuel blend and 1.5 million kilometres with the neat Neste MY Renewable Diesel. This gives an average distance of 170,000 km per bus, with some of them driving considerably further. Analyses of used engine oils did not show any extra maintenance requirements, or any other differences compared to running with standard diesel fuel.

100% Neste MY Renewable Diesel was left in a refuelling storage tank for 8 months after the test was completed. The fuel was clear and free from microbiological growth after the storage time.

"Changing to renewable diesel allowed us to immediately reduce emissions from our entire fleet, rather than making a series of small improvements as we replace one vehicle at a time."

Charles Anderson,
General Manager
Westcat

NESTE HAS DECADES OF EXPERIENCE IN DEVELOPING FUELS

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Public
Key Decision - Yes

HUNTINGDONSHIRE DISTRICT COUNCIL

Title/Subject Matter: Procurement of Vehicles and Containers for Weekly Food Waste Collection Service.

Meeting/Date: Overview & Scrutiny (Environment, Communities and Partnerships) 6.02.2025

Executive Portfolio: Executive Councillor for Parks and Countryside, Waste and Street Scene Cllr Simone Taylor

Report by: Andrew Rogan-Head of Operational Services

Ward(s) affected: All Wards

RECOMMENDATION

In 2026, all Councils are legally required to deliver a weekly food waste collection service from all households. The Overview and Scrutiny Panel is invited to comment on the Cabinet report attached.

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Public
Key Decision - Yes
* Delete as applicable

HUNTINGDONSHIRE DISTRICT COUNCIL

Title/Subject Matter: Procurement of Vehicles and Containers for Weekly Food Waste Collection Service.

Meeting/Date:
O&S (Environment, Communities & Partnerships) 06.02.2025.
Cabinet – 11.02.2025.

Executive Portfolio: Executive Councillor for Parks and Countryside, Waste and Street Scene
Cllr Simone Taylor

Report by: Andrew Rogan, Head of Operational Services

Ward(s) affected: All Ward(s)

Executive Summary:

In November 2021 the amended Environment Act was enacted laying a foundation for enhanced waste management and recycling across the UK. In alignment with this the Government released the Simpler Recycling requirements in May 2024. These requirements outline consistent waste collection methods aimed at reducing landfill waste and supporting sustainable resource recovery.

Under this legislation, all Councils in England (unless transitional arrangements have been requested and agreed) are now mandated to implement a separate, weekly food waste collection service from households by 31 March 2026.

To support this transition, DEFRA allocated a capital funding payment of £1,802,468 to HDC in May 2024 to facilitate the purchase of essential equipment including food waste caddies, bins and dedicated collection vehicles. Additionally, DEFRA has committed to providing transitional resource funding for 2024/25; with ongoing resource and revenue costs to be available from 1 April 2026, though specific allocations are still pending.

Extensive route modelling has been undertaken to determine the number and size of vehicles required for the dedicated weekly food waste service. This modelling has identified that 12-ton dedicated food waste vehicles would be the most efficient and effective to deliver the service. There will be a need for eleven 12-tonne collection vehicles, nine of which will be operational and two spare vehicles to cover vehicle breakdown and maintenance. Moreover, the Council will need to procure 90,000 23-litre kerbside caddies and 90,000 7-litre kitchen

caddies and approximately 400 communal bins to support households in the transition to weekly food waste collection.

Around 50% of local authorities in England do not currently offer separate weekly food waste collections. Under the Environment Act the mandate to establish these collections across England by 31 March 2026 aims to standardise recycling practices, reduce greenhouse gas emissions from landfill and support anaerobic digestion for renewable energy generation. This will create high demand for vehicles and caddies, making early procurement essential to meet the Council's needs. With an estimated 12-month lead time for vehicle delivery, prompt action on placing orders will be crucial. The onward delivery of the project will be planned, communicated and reported through the Corporate Plan actions.

The purpose of this report is to seek Cabinet’s approval to delegate authority to the Corporate Director of Place and section 151 officer in consultation with the Executive Councillor for Parks and Countryside, Waste and Street Scene, Executive Councillor for Finance and Resources.

- To pursue the procurement of equipment and onward delivery of the separate weekly food waste collections project to meet the Government mandated deadline of April 2026.

Recommendation(s):

For cabinet to approve to delegate authority to the Corporate Director of Place and section 151 officer in consultation with the Executive Councillor for Parks and Countryside, Waste and Street Scene, Executive Councillor for Finance and Resources to pursue the procurement of equipment and onward delivery of the separate weekly food waste collections project to meet the Government mandated deadline of April 2026.

1. PURPOSE OF THE REPORT

1.1 The purpose of this report is to seek Cabinet's approval to delegate authority to the Corporate Director of Place and section 151 officer in consultation with the Executive Councillor for Parks and Countryside, Waste and Street Scene, Executive Councillor for Finance and Resources to pursue the procurement of equipment and the onward deliver of a separate weekly food waste collection service by April 2026.

2. WHY IS THIS REPORT NECESSARY/BACKGROUND

2.1 In November 2021, amendments were made to the Environment Act and became law for the UK. The Government outlined how the legislation will work, by publishing the Simpler Recycling requirements in May 2024.

2.2 All Councils are now legally required to introduce a separate weekly food waste collection from households by 31 March 2026.

2.3 To enable residents to participate and contribute to the Council achieving this a small internal food waste caddy (approx. 7 litres) will need to be provided to households for use in the kitchen. This provides the household with somewhere to store food waste in the short term and helps improve collection yields

2.4 Residents will empty their food waste into an external 23 litre food waste caddy which can be placed beside their existing bins for collection.

2.5 Where communal collections exist—currently totalling 459 sites—these locations must be evaluated to determine the necessary communal bin facilities. Typically, flats are provided with a small caddy that residents use to transfer waste into a shared 140-litre bin.

2.6 Liners are used by some Councils, but not entirely, consideration will need to be given in due course as to their inclusion into the food waste collection service.

2.7 Evidence produced by The Waste and Resources Action Programme (WRAP) indicated that higher yields are achieved if caddy liners are provided, however, this would impose a significant ongoing cost to the council along with an ongoing impact on internal services in connection with the day-to-day management of the liners. At this point Government will not commit to either capital funding, or ongoing revenue funding for caddy liners.

2.8 Waste collection teams will then empty the material from these external 23 litre caddies or communal bins into a specific food waste collection vehicle.

2.9 Food waste will then be delivered to the Alconbury waste transfer station as part of Cambridgeshire County Council's PFI contract arrangements and then processed through an Anaerobic Digestion (AD) plant.

2.10 Extensive route modelling has been undertaken to establish the most effective and efficient vehicle size and type.

2.11 This modelling indicates that a 12-ton food waste vehicle would be best suited, compared with the standard 7.5-ton variant. The Council will need to purchase new dedicated food waste collection vehicles. Current lead times are estimated at a minimum of 12 months and further pressure on the supply chain is likely as all local authorities which do not currently collect food waste will be looking to procure vehicles.

2.12 In addition to requiring additional dedicated vehicles there is a need to procure both internal and external food waste caddies, plus additional bins for communal properties.

2.13 The Government has provided the Council with new burdens capital funding of £1,802,468.00 for the purchase of food bins (this includes internal kitchen caddies, external kerbside caddies and communal bins, but not liners) and food waste collection vehicles, and has indicated it will provide ongoing new burdens revenue funding although, there had been no confirmation of the amount, what that would cover or for how long.

3. OPTIONS CONSIDERED

3.1 Separate weekly food waste collections are a legal requirement for HDC from April 2026, do nothing is not an option that had been considered due to potential legal challenge, government sanctions and reputational damage.

3.2 Options have been explored around how we could incorporate separate weekly food waste collection into our current service delivery model, however, it would be too problematic from an operational perspective, and a waste disposal perspective.

3.3 We explored options around using split bodied vehicles that have an additional compartment for food waste meaning we could collect more than one material at a time. This would require significant investment in new 26t vehicles, along with a full re-routing exercise. In addition, compartments will fill at differing rates meaning multiple trips to the tip will be required.

3.4 Collecting food waste separately increases yields and ensures we have full visibility on the amount of food waste we collect, which enables us to understand capture rates across the district. This information will enable HDC to deliver targeted communications and educational material and monitor their impacts.

3.5 Food waste that is collected separately can be treated through anaerobic digestion which efficiently captures methane for energy production. Keeping food waste separate ensures it is managed in the most environmentally friendly and efficient way.

3.6 A considerable amount of work has been undertaken to identify the number of rounds and vehicles required to service all domestic properties in Huntingdonshire. The modelling is based on data from Wrap's' Household Food Waste Collections Guide' with sensitivity analysis being included on 'put-out rates' ranging from 30%-60% to reflect the WRAP data. (Appendix 1 & 2)

3.7 All procurement will be conducted in line with the Public Contracts Regulations (PCR) to provide best value, financially, socially and environmentally, we will be receiving support from WRAP as they were pivotal in calculating the funding allocation based on market data.

4. COMMENTS OF OVERVIEW & SCRUTINY

4.1 The comments of the relevant Overview and Scrutiny Panel will be forwarded to Cabinet prior to its consideration of this report.

5. KEY IMPACTS / RISKS

5.1 It is anticipated that large numbers of local authorities will implement new or extended food waste collection services between 2024 and 2026. There will be a very high demand for new vehicles and containers during this period. This may drive up the cost of equipment as demand outstrips supply. The capital funding provided may not cover the total capital expenditure at this phase of the project. Should this be the case, HDC could look to fund and additional capital funding requirement through its current fleet capital programme.

5.2 There is a high likelihood of procurement bottlenecks which could create supply delays and impact the implementation timescales of a new service. The council should act quickly to determine requirements and to proceed with procurements as early as possible.

5.3 There is a risk that mandatory deadlines may be hard to achieve. Assurance has been sought from Government that in the event mandatory deadlines are not met due to factors outside our control, there will be no adverse financial or legal implications.

5.4 The introduction of food waste collections may carry a significant reputational risk. Service changes must be carefully designed and planned, comprehensively and clearly communicated to residents, and implemented and operated to a high standard to ensure resident satisfaction.

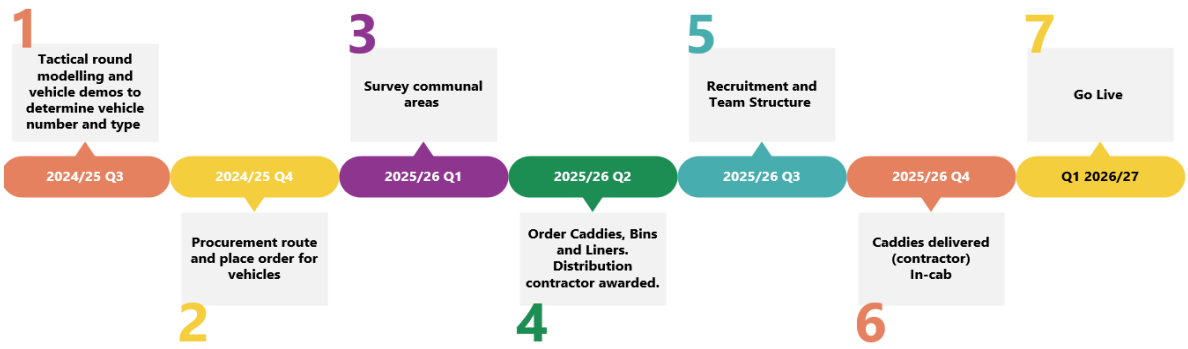
5.5 A clear and comprehensive communications plan will be developed as part of the ongoing project delivery. It is the aim of HDC to ensure all members are involved with the communications plan and messaging to ensure all areas of the district are fully supported during the transition.

5.6 There are many interdependencies with Cambridgeshire County Council (CCC) as the waste disposal authority. CCC do have a contract in place until 2027 for the food waste to be processed through and AD plant. We will continue to work with all partners across the region to ensure the food waste is being processed correctly.

5.7 DEFRA has committed to providing resource transitional funding for 2024/25, with ongoing resource and revenue costs to be available from 1 April 2026, although specific allocations are still pending.

6. WHAT ACTIONS WILL BE TAKEN/TIMETABLE FOR IMPLEMENTATION

6.1 The timeline below indicated the high-level milestone needed for the project, although some of the milestones may alter once we start to engage with the market.



6.2 Defra have yet to provide any details on the level of funding for councils to implement the separate weekly food waste collections, however, it is predicted the funding provided by Defra will cover items such as: communications plan; community engagement; leaflets and promotional material; updates to IT systems and In-cab systems; and additional resource. Although we are not yet at the detailed planning stage, we anticipate the roll out of the food waste service will use the same methodology that successfully delivered the changes to the garden waste collection service.

6.3 Once approval has been obtained, we will look to procure vehicles, caddies and bins as quickly as possible to ensure we can physically meet the deadline of 2026.

6.4 A survey of all communal areas will be conducted in Q1 2025/26 to establish the requirements for communal bins.

6.5 In Q2 2025/26 we would look to procure a bin delivery contractor to handle the distribution of caddies to households.

6.6 We would look to start the recruitment process in Q3 2025/26 of the additional teams needed for the new service.

6.7 In Q4 we would look to have the round fully digitised and integrated into our current systems such as the online calendar, e-forms and in-cab etc.

6.8 Throughout 2025/26 an extensive communications plan will be developed and delivered.

6.9 The above is a basic timeline showing some of the key milestones, however, a full project team will be assembled and a full implementation plan formulated.

7. LINK TO THE CORPORATE PLAN, STRATEGIC PRIORITIES AND/OR CORPORATE OBJECTIVES

(See Corporate Plan)

8. LEGAL IMPLICATIONS

8.1 The amended Environment Act was enacted, laying a foundation for enhanced waste management and recycling across the UK. Under this legislation, the Council is now mandated to implement a separate, weekly food waste collection service from households by 31 March 2026.

8.2 Failure to comply with the new regulation my result in the council being sanctioned or penalised by Government.

8.3 Failure to comply with the new legal requirement may result in significant reputational damage to the organisation.

9. FINANCE IMPLICATIONS

9.1 To support this transition, DEFRA allocated a capital funding payment of £1,802,468 to HDC in May 2024 to facilitate the purchase of essential equipment, including food waste caddies, bins and dedicated collection vehicles. Additionally, DEFRA has committed to providing resource transitional funding for 2024/25, with ongoing resource and revenue costs to be available from 1 April 2026, though specific allocations are still pending.

9.2 The table below show the indicative capital cost of purchasing vehicles, caddies and bins. These cost may change depending on supply and availability once we approach the market.

Description	Number Required	(soft market testing) Unit Cost	Total
12t Collection Vehicle	11	£128,135.00	£1,409,485
23ltr Kerbside Caddy	90,000	£3.30	£297,000
7ltr Kitchen Caddy	90,000	£1.15	£103,500
140ltr Communal Bins	400	£16.00	£6,400.00
		Total	**£1,816,385**
		Defra Capital Funding	£1,802,468

10. RESOURCE IMPLICATIONS

10.1 At this stage of the project there will be a resource implication on procurement, waste and recycling, waste minimisation, and the wider operational management teams.

11. ENVIRONMENT AND CLIMATE CHANGE IMPLICATIONS

11.1 In 2021/22, 6.4 million tonnes of food (and drink) waste was generated from UK households, of which 4.7 million tonnes is categorised as edible and 2 million tonnes inedible or unavoidable. This equates to 95 kg per person per year or 227 kg per household per year or 247 kg per household of four.

11.2 Producing food requires significant resources including land, energy and water. Globally, 25–30% of total food produced is lost or wasted, and food waste is estimated by the Intergovernmental Panel on Climate Change to contribute 8-10% of total man-made greenhouse gas (GHG) emissions.

11.3 The new service is targeted to divert approx. 6,000 tonnes of food waste currently collected in the refuse waste stream to a dedicated food waste recycling service. This would result in an indicative net carbon emissions savings of around minus 468 tCO2e per annum. (WRAP-Carbon Waste and Resources Metric Appendix 3)

11.4 The new fleet of food waste vehicles are able to run on Hydrotreated Vegetable Oil (HVO) which would align with the organisational goals of decarbonising the fleet.

11.5 Whilst the purchase of new vehicles and containers will have a negative impact arising from the embodied carbon (i.e. the energy and emissions arising from the manufacturing process), such negative implications can reasonably be assumed to be offset within a short period of time with the increased diversion of food waste from landfill.

12. REASONS FOR THE RECOMMENDED DECISIONS

12.1 The amended Environment Act was enacted laying a foundation for enhanced waste management and recycling across the UK. Under this legislation, the Council is now mandated to implement a separate, weekly food waste collection service from households by 31 March 2026.

12.2 DEFRA allocated a capital funding payment of £1,802,468 to HDC in May 2024 to facilitate the purchase of essential equipment, including food waste caddies, bins and dedicated collection vehicles.

13. LIST OF APPENDICES INCLUDED

Appendix 1 – WRAP-Household Food Waste Collection Guide.
Appendix 2 – WRAP-Household Food Waste Collections Elected Members Summary Guide.
Appendix 3 – Carbon WARM Report.

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Appendix 1 - https://www.wrap.ngo/sites/default/files/2024-02/WRAP-Household-Food-Waste-Collections-Guide-V17.pdf

Appendix 2 - https://www.wrap.ngo/sites/default/files/2024-02/WRAP-Household-Food-Waste-Collections-Elected-Members-Summary-Guide-INTERACTIVE.pdf

Appendix 3 - Carbon Waste and Resources Metric

A methodology for assessing the greenhouse gas impacts of waste management

WRAP's vision is a world in which resources are used sustainably.

Our mission is to accelerate the move to a sustainable resource-efficient economy through re-inventing how we design, produce and sell products; re-thinking how we use and consume products; and re-defining what is possible through re-use and recycling.

Find out more at www.wrap.org.uk

Document reference WRAP (2021) Carbon Waste and Resources Metric.

Written by: Billy Harris and Keith James, WRAP

Front cover photography: image credit: pixabay/images/id-1325882

14. EXECUTIVE SUMMARY

The Carbon Waste and Resources Metric (Carbon WARM) has been developed by WRAP on request by DEFRA to allow monitoring and evaluation of the impacts of the Resources and Waste Strategy in terms of its Greenhouse Gas emissions impact, measured as carbon dioxide equivalent (CO_2e). This is intended to supplement traditional weight-based monitoring and evaluation with an approach that focuses more on the environmental (climate) impacts of waste and resource management, and supersedes the metric published in 2012.

In addition, many of the UK's local authorities have declared a climate emergency, committing themselves to urgent action to reduce their carbon emissions. Carbon WARM can be used to show how increasing recycling of waste can contribute to this agenda.

Envisaged uses include:

- Monitoring and reporting on the CO_2e saved by moving waste management further up the hierarchy.
- Calculating the proportion of the potential CO_2e saving that has been realised.
- Modelling the GHG impacts of different combinations of waste management options.

Carbon WARM factors have different system boundaries and different scope than those published by BEIS for company Greenhouse Gas Emission reporting, though the underlying data is in many cases the same. This is to allow comparison of waste management approaches for a given material, rather than facilitate business carbon accounting. They also differ in presentation from the Scottish Carbon Metric, which provides a weighting system based on the relative merits of different materials.

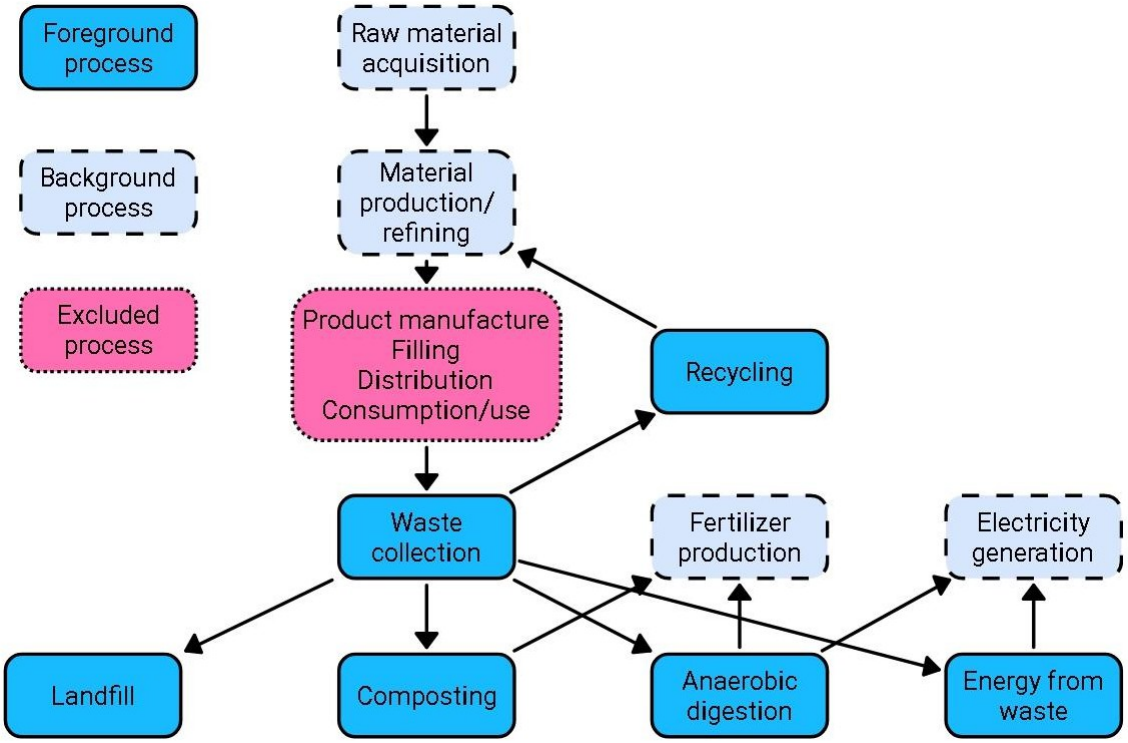
While the factors contained herein represent the best available information on greenhouse gas emissions for waste management options in the UK, the data are subject to uncertainty and are based on averages. They may not reflect specific facilities or other activities (e.g. a process powered solely by renewable energy). The results should be regarded as indicative of the relative impacts of waste treatment options, rather than as a precise carbon footprint. Care should be taken not to model scenarios that produce a spurious conclusion. For example, when modelling energy from waste, account should be taken of the required fuel mix for an EfW facility, as opposed to picking materials based purely on relative emissions.

Carbon WARM does not affect the information which Local Authorities should report through WasteDataFlow. It should be seen as complementary to the existing waste hierarchy guidance document. The hierarchy considers a wider range of environmental impacts than the carbon metric, and should, in the absence of a specific Life Cycle Assessment, be regarded as a more robust guide to the best environmental option. For further details on the waste hierarchy please also see the DEFRA evidence summary on applying the waste hierarchy.

This work does not constitute a Life Cycle Assessment, but is underpinned by a lifecycle thinking approach, in that it aims to account not only for waste treatment emissions but also for any other emissions entailed or avoided by a process. This is important as, in most cases, the main benefits of recycling are not "waste management" benefits at all but are associated with the avoided raw material acquisition. For example, recycling of metals will have a higher GHG emission from the recycling process than from landfill (metals do not biodegrade to produce CO2 or methane in landfill), but recycling metals produces a usable product and reduces the need for production of metals from raw materials (a much more carbon- intensive process), and the consequent emissions.

The system boundaries used in modelling the metric values are show in the figure below.

System boundaries for Carbon WARM



The metric values, normalised relative to landfill emissions, are shown below.

Carbon WARM, normalized vs landfill (kg.CO_2e/tonne)

	Closed loop recycling	Open Loop recycling	Energy from Waste	Anaerobic digestion	Compost used in horticulture	Compost used in agriculture	Landfill
Food	NA	NA	-664	-705	-671	-611	0
Garden	NA	NA	-656	-657	-594	-493	0
Food and garden	NA	NA	-662	-670	-616	-525	0
Paper and board	-1,146	NA	-1,260	NA	NA	NA	0
Steel	-1,071	NA	10	NA	NA	NA	0
Aluminium	-7,478	NA	15	NA	NA	NA	0
Mixed (cans)	-3,377	NA	12	NA	NA	NA	0
Glass	-335	24	-1	NA	NA	NA	0
Textiles	-14,760	NA	-7	NA	NA	NA	0
Dense plastics	-599	196	1,682	NA	NA	NA	0
Film	-541	196	1,466	NA	NA	NA	0
Wood	-1,306	NA	-1,096	NA	NA	NA	0

15. CONTENTS

Acknowledgements

The authors are grateful for the peer review carried out by Robin Curry, and the technical input throughout development from Andrew Woodend, Javier Igartua and Oliver Lysaght from Defra.

1.0 Introduction

The Carbon Waste and Resources Metric (Carbon WARM) has been developed by WRAP on request by DEFRA to allow monitoring and evaluation of the impacts of the Resources and Waste Strategy in England in terms of its Greenhouse Gas emissions impact, measured as carbon dioxide equivalent (CO_2e). This is intended to supplement traditional weight-based monitoring and evaluation with an approach that focuses more on the environmental (climate) impacts of waste and resource management.

Envisaged uses include:

- Monitoring and reporting on the CO_2e saved by moving waste management further up the hierarchy.
- Calculating the proportion of the potential CO_2e saving that has been realised.
- Modelling the GHG impacts of different combinations of waste management options.

In addition to use by DEFRA, Carbon WARM is intended to form the basis of a spreadsheet- based tool for use by local authorities or other parties seeking to make waste management decisions based on GHG emissions impact.

The approach taken has been to produce a series of carbon factors that quantify the net CO_2e emissions relative to a "default" waste management technology (landfill) for a range of materials and the following treatment options:

1) Closed loop recycling
2) Open-loop recycling
3) Energy from waste
4) Anaerobic digestion
5) Composting

This metric is not a "footprint" (i.e. it is not a statement of the absolute emission that can be attributed to a material, product or activity) but rather a relative measure that quantifies the carbon saving (or additional emission) relative to landfill for a given material / treatment combination. It is not suitable for Greenhouse Gas Inventory reporting – those who require factors for GHG Inventories should use the factors published by BEIS[1].

Carbon WARM is similar in most respects to the Scottish Carbon Metric[2], with the primary difference being that Carbon WARM is reported in kg CO_2e per tonne of material relative to landfill, rather than the Scottish approach, which uses an index-based "carbon weighting".

This work does not constitute a Life Cycle Assessment, but is underpinned by a lifecycle thinking approach, in that it aims to account not only for waste treatment emissions but also for any other emissions entailed or avoided by a process. This is important as, in most cases, the main benefits of recycling are not "waste management" benefits at all but are associated with the avoided raw material acquisition. For example, recycling of metals will have a higher GHG emission from the recycling process than from landfill (metals do not biodegrade to produce CO_2 or methane in landfill), but recycling metals produces a usable product and reduces the need for production of metals from raw materials (a much more carbon- intensive process), and the consequent emissions.

The methodology used in the development of Carbon WARM is underpinned by the following standards:

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[1] https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting

[2] https://www.zerowastescotland.org.uk/our-work/carbon-metric

- ISO 14040:2006: Environmental management — Life cycle assessment — Principles and framework
- ISO 14044:2006: Environmental management — Life cycle assessment — Requirements and guidelines
- PAS 2050 (2011): Specification for the assessment of the life cycle greenhouse gas emissions of goods and services
- The World Resource Institute and the World Business Council for Sustainable Development Greenhouse Gas Protocol Initiative

2.0 Methodology

2.1 Choice of metric

Global warming is widely recognised as a serious global threat (e.g. Stern 2006), and is a focus for national and international policy efforts, such as through the work of the IPCC. In this context, Carbon WARM quantifies waste management options in terms of their contribution to global warming, as an alternative to approaches based on quantifying tonnes of material, with the principal aim of supporting the UK Government's climate change policy.

Other environmental impact categories (e.g. resource depletion, acidification, eutrophication, health impacts) have not been included in this metric for three primary reasons:

a) While climate science still faces significant uncertainties, the main issues around climate change and the role of anthropogenic GHG emissions are well understood relative to many other areas.
b) This is also the area for which the most robust emissions data are available.
c) Emissions of GHG to the atmosphere have a known environmental impact that is independent of when and where the emission occurs. This is not the case with most other emissions, where the location of the impact is critical and the environmental impact may or may not occur. For example, particulate emissions that might affect human health are critically dependent on factors such as population density – it is not possible to reliably quantify an impact based simply on emissions data, and such metrics usually quantify potential rather than actual impact.

Since the main driver of anthropogenic climate change is CO_2 emissions, global warming impact is quantified in units of carbon dioxide equivalent (CO_2e).

The "strength" of a greenhouse gas is driven by two factors:

a) The quantity of infrared radiation (heat) emitted by the Earth that the gas absorbs (the higher the absorption the greater the warming effect).
b) The length of time the gas remains in the atmosphere before it is broken down (the longer the gas lasts the greater the warming effect).

For example, methane absorbs more heat than carbon dioxide but decays (into CO_2) over a period of approximately 12 years. Carbon dioxide itself, while a weaker absorber, persists in the atmosphere for a much longer period, with full removal by geological processes taking over 1 million years (Archer, 2007).

This means that, in order to compare the global warming potential of greenhouse gases, their impact must be accounted for over a period of time. The longer this period, the lower the warming potential of a short lived gas such as methane will be relative to CO_2 (because methane decays into CO_2 and CO_2 is so long lived, the rates converge over time). Carbon WARM uses the commonly accepted period of 100 years, with this metric known as GWP100.

Table 1 shows the GWP100 potential of several major greenhouse gasses, as produced by the IPPC Fourth Assessment Report (AR4, 2007) and Fifth Assessment Report (AR5, 2014). Although the AR5 factors are now the internationally recommended values, this report uses the factors from AR4, to maintain comparability with the annually published BEIS GHG conversion factors.

Table 1: Global warming potential of selected greenhouse gasses (AR4 and AR5)

	GWP100 (AR4)	GWP100 (AR5)
Carbon dioxide	1	1
Methane	25	28
Nitrous oxide	298	265
CFC11	4,750	4,660
Sulphur Hexafluoride	22,800	23,500

2.2 Treatment of biogenic carbon

Climate scientists distinguish two types of carbon cycle, the long (geological and fossil) and the short (biogenic) cycles.

The long cycles take place over millions of years. Carbon is sequestered in the earth through geological processes (such as weathering of silicate rocks) and emitted into the atmosphere through volcanic activity. Carbon is also sequestered through the production of fossil fuels (coal, gas and oil) from organic matter, and burning fossil fuels releases this back into the atmosphere, increasing the atmospheric concentration of CO_2 in a way that is effectively permanent.

The biogenic (short) carbon cycle is the cycle by which plants and animals take up carbon from the soil and atmosphere and release it back into the soil and atmosphere. This is assumed to be an ongoing process, with the carbon released by respiring and decaying organisms being effectively offset by the carbon take up from photosynthesising and growing organisms. The two cycles may not always be exactly balanced, but there is also a limit on how much CO_2 emission biogenic carbon can account for – all of life on Earth accounts for about 500 Gt of biogenic carbon, compared with around 5,000 for fossil carbon.

Table 2: Sources of biogenic and non-biogenic carbon

Source / type	**Weight of carbon (Gt)**
Ocean	
Oxidised	38,000
Dissolved organic	600
Living	1
Land	
Living organic	500
Dead organic	1,500
Earth	
Fossil fuels	5,000
Sedimentary rocks	1,200,000
Atmosphere	
Atmospheric carbon	700

Source: Archer (2007)

For this reason, climate models are traditionally based on fossil carbon emissions and treat biogenic carbon emissions as climate neutral, as, over time, carbon released into the atmosphere from organic matter will be taken back up. More sophisticated models account for biogenic carbon from land use change (LUC), with a potential total emission of around 1,500 Gt; for example, if an area of woodland is turned into buildings then the land is no longer able to take up carbon from the atmosphere. However, land use change is extremely

difficult to model and to attribute to a tonne of material, and so does not figure in the calculations for Carbon WARM [3].

2.3 Territorial versus consumption based approaches

There are two primary ways of allocating emissions from production of products and services, based either on the country where the production took place (territorial approach) or where the product or service was consumed (the consumption-based approach).

1) Territorial approach. This approach is based on quantifying production emissions based on the country in which goods and services are produced. Applying this approach to England, all emissions associated with goods and services produced in England would be counted, while production emissions from goods consumed or disposed of in England but produced in other countries would be omitted (as they would be counted as emissions from these other countries).
2) Consumption-based approach. This approach allocates production emissions to the country in which the product is consumed. Using a consumption based approach, production emissions from goods and services produced overseas but consumed in England would be allocated to England, while production emissions from goods and services produced in England but exported would be allocated to the country in which they were consumed.

This metric uses a consumption-based approach to allocating carbon emissions, for the following reasons.

1) Consumption-based accounting is generally regarded as a fairer and more equitable approach to quantifying emissions, as the burden is placed on the ultimate beneficiaries of the production process (the consumers) rather than the producers (see, for example, Helm, 2014). It also avoids the distortions that can arise as an unintended consequence of policy. For example, EU emissions policy has had the effect of displacing some polluting industries to developing countries, with the end products imported to the EU for consumption. A territorial approach would tend to understate the emissions footprint of EU consumption.
2) The aim of Carbon WARM is to quantify the global emissions impact of treating products and materials at end of life. These are, almost by definition, goods consumed in the UK, but which are in many cases imported, and the resource-use impacts of waste treatment technologies would be overlooked under a territorial approach.

2.4 System boundaries

System boundaries for the analysis **include** the following stages

- Extraction and refining of raw material
- Production of material product (e.g. paper, metal ingot, plastic flake)
- Collection and of product or material at end of life (transport impacts)
- Emissions associated with the treatment or disposal option
    - Landfill (default option)
    - Closed loop recycling

[3] *This is a complicated issue. For example, in the case of anaerobic digestion of food waste, Land Use Change is not a significant issue. However, food waste may be codigested with other feedstocks for which LUC is an issue (e.g. grass silage). A decision would then need to be made as to whether to allocate all LUC emission to the silage alone, or to attribute some of this to food (e.g. if grass silage functions as additive to enable more effective digestion). Such considerations are beyond the scope of this work.*

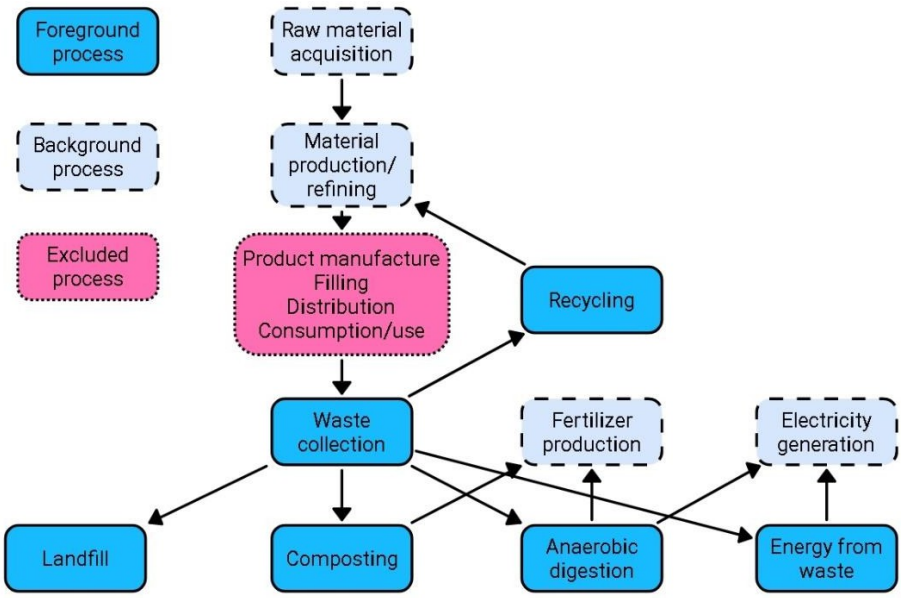
    - Open loop recycling
    - Energy from waste
    - Anaerobic digestion
    - Composting
- Emissions offset by the treatment or disposal option – assumed to be electricity generation and heat for energy from waste, compost / fertiliser production for composting and a mix of electricity and digestate for anaerobic digestion.
    - Closed loop recycling offsets the raw material extraction and refining stage for the material recycled
    - Open loop recycling offsets the raw material extraction and refining stage for the material that is substituted

The following stages are **excluded** from the system:

- Production of finished product (e.g. manufacture of bottles or cans).
- Packing and filling
- Distribution
- Use

The rationale behind excluding these emissions is that they are independent of the disposal option chosen for the material and have no bearing on the relative environmental impacts of disposal options. Taking this approach simplifies the analysis and allows for a wider and more straightforward application of closed-loop recycling, which is defined here as material to material rather than product to product. This is a more realistic representation of the UK's recycling systems, which typically produce as output a raw material ready to be input into a manufacturing process rather than a finished consumer product.

System boundaries for Carbon WARM



2.5 Emissions from foreground processes

2.5.1 TRANSPORT EMISSIONS

Only transport emissions associated with collection and transport for reprocessing are included explicitly in this model. Transport emissions associated with material extraction, refining and manufacture are already accounted for in the materials factors of the BEIS Greenhouse gas reporting conversion factors 2019, while those associated with distribution, retail and use of the finished product are excluded from the scope.

Factors for emissions from disposal transport are taken from the annual BEIS Greenhouse Gas reporting conversion factors for 2019. For more detail see Hill *et al*. (2019). Key assumptions for transport distances are shown in Table 3 below.

Table 3: Transport assumptions used in calculating disposal emissions

Material / destination	One way distance	Mode of transport	Source
Initial collection to transfer station or MRF	25km	Refuse collection vehicle, average load 12.9 tonnes	ERM (2008)
Onward transport to			
Landfill	10 km	Refuse collection vehicle, average load 12.9 tonnes	ERM (2008)
MSW incinerator	10 km		ERM (2008)
Composting	10 km		Assumed comparable to landfill
Recycling / reprocessing	100km	Bulk transport	Fisher (2006)

2.5.2 LANDFILL

Landfill emissions are critical to Carbon WARM as all figures for waste management options are presented as a cost or saving relative to disposal to landfill. All landfill emissions were supplied directly by DEFRA based on the MELMod landfill emissions model and are the same as the gas emissions factors supplied by BEIS.

2.5.3 RECYCLING

Emissions from recycling processes were taken from a range of sources, based on the approach used for the calculation of the Closed-Loop Source and Open-Loop Source factors in the Material Use sector of the BEIS GHG Factors. Sources used include the Ecoinvent LCA database, lifecycle data from industry bodies and DEFRA and WRAP reports examining the impacts of waste treatment options. For a list of references see the BEIS GHG methodology (Hill, et al., 2019).

When calculating the factors, closed loop recycling emissions are assumed to offset purchase of the same material (the closed loop is material to material, not product to product). Where open loop recycling is calculated, emissions are assumed to offset another material (e.g. open loop recycling of plastics is assumed to offset wood, as garden furniture and other wood substitutes are a common end fate of open loop recycled plastics).

2.5.4 ENERGY FROM WASTE

Energy from Waste emissions factors were sourced directly from the Ecoinvent lifecycle database, which contains municipal incineration emissions for a wide range of materials and products.

Energy generation from energy from waste (used to calculate electricity generation) has been calculated using the lower heating value of the fuels and an assumed efficiency of 22% for EfW technologies. An additional 4% has been credited for generation of heat. Both these figures are derived from Tolvik (2019) and take account the calorific value of waste, aggregate UK EfW performance and the electricity only / CHP mix.

2.5.5 ANAEROBIC DIGESTION

Anaerobic digestion emissions are assumed to be 1.95% of generated methane (based on Liebetrau, J. *et al.* 2017). There is considerable uncertainty around this estimate, with fugitive methane emissions varying between facilities. Methane generation and conversion to electricity is based on performance data supplied by ADBA.

Electricity generation is based on the calorific value of the methane, assuming 40% generation efficiency and adjusting for 10% parasitic load, based on ADBA data. Use of nutrients from anaerobic digestion is assumed to offset nitrate fertiliser, consistent with its predominant use as an agricultural soil improver.

2.5.6 COMPOSTING

Composting process losses and emissions are based on published lifecycle inventories (Boldrin *et al.* 2010). Use of the outputs of the composting process as soil improver is assumed to offset nitrate, phosphate and potash fertilisers (87%) and peat (13%). Figures are based on end-market analysis from WRAP (2008) *Realising the value of organic waste*, with agricultural use assumed to offset use of fertiliser and horticultural use offsetting peat.

The methodology used in producing this metric will tend to understate the benefits of composting. In order to adopt a generic approach that can be applied to all materials with minimal change, the model takes no account of carbon sequestration, or of benefits that do not offset the use of an existing product (i.e. peat based soil improver or fertiliser). The role of compost in maintaining soil quality and organic content, an in displacing the need for manure from (highly carbon intensive) ruminant livestock is not quantified in this model and should not be underestimated. Nicholson et al (2016) and Martinez-Blanco et al (2013) recognise that the use of compost has a range of proven benefits, including pest and disease suppression, soil workability, biodiversity, crop nutritional quality, and crop yield. Many of these could also contribute to reduced greenhouse gas emissions. However, although proven these benefits are not quantified and therefore are not captured in life cycle assessment.

Boldrin *et al* (2009) suggest that between 2% and 14% of carbon input in compost may still be present after 100 years, and note that, since carbon content in compost is in the order 56–386 kg/tonne, 1–54 kg C tonnes of carbon could be bound in soil, equivalent to 4–198 kg of CO_2e per tonne of compost.

2.6 Background processes

2.6.1 EXTRACTION AND REFINING OF RAW MATERIAL

CO_2e emissions for extraction and refining of virgin materials are sourced from the annual BEIS Greenhouse Gas reporting conversion factors for 2019. Where the BEIS factors report on specific products made from a material, the factors associated with the raw material extraction and refining have been extracted from the BEIS model and used instead – this applies to steel and aluminium cans.

Emissions from extraction and refining of raw material are used to account for the benefits of recycling, where recycling of a material reduces the need to extract and refine more raw virgin materials. The extraction emissions are not added as a burden to disposal solutions (landfill and EfW) but are included as a credit to recycling approaches (i.e. the CO_2e associated with a raw material is subtracted from the recycling emissions). Note that the raw material is the one that the recycled material substitutes for – this will be the same material in the case of closed loop recycling and a different material in the case of open loop recycling (e.g. if plastics are recycled into panelling that replaces wood).

2.6.2 GENERATION OF ENERGY BY ENERGY FROM WASTE AND ANAEROBIC DIGESTION

Treatment methods that generate electricity for the grid are credited with saving the emissions necessary to generate the same amount of electricity. The factor used (0.292kg / kWh) is based on the BEIS UK grid average, including well to tank (fuel extraction for generation) emissions but excluding transmission losses, for 2019.

For heat from energy from waste, the credit for avoided emissions is based on BEIS (2019) factors for onsite heat and steam.

In these factors, a credit for generating energy is added for energy from waste and for anaerobic digestion. The MELMod figures that quantify landfill emissions already include the impact of electricity generated at the cap.

2.6.3 Benefits of soil nutrients produced from composting and anaerobic digestion

Treatment methods that produce beneficial soil additives (compost and digestate) are credited with an emission saving based on the quantity of fertiliser that would be offset. Where outputs are used in agricultural applications, they are taken to offset a quantity of nitrate, phosphate and potash fertilisers equal to the readily available nutrients in the output produced from a tonne of input material. Where outputs (compost only) are used in horticultural applications, they are taken to offset one tonne of peat-based soil improver. The impacts of producing a tonne of fertiliser are based on calculations conducted by WRAP (WRAP 2019, unpublished) which utilise data on fertilizer production and use from Brentrup et al (2016) and Fertilizers Europe. The impacts of producing a tonne of peat-based compost are taken from Boldrin et al (2010).

Compost, digestate and fertiliser emissions are restricted to production emissions only – use phase emissions (fuel use in application and nitrous oxide emissions from soil) are outside the scope of this metric.

2.7 Emissions from waste treatment options

The formulae below summarise the calculations for emissions factors for each element of the Metric.

Landfill

$$\square_{\square\square} = \square_{\square} + \square_{\square}$$

EfW

$$F_{Wi} = W_i + T_w - E_{Wi}$$

Recycling (open or closed loop)

$$F_{Ri} = R_i + T_w - P_j$$

Anaerobic digestion Composting

$$F_{Ai} = A_i + T_A - E_{Ai} - N_{Ai}$$

Where:

$$F_{Ci} = C_i + T_C - N_{Ci}$$

F – Unadjusted emission factor for waste treatment method (L, W, R, A, C) and material (i) L – Landfill emission for material
W – EfW emission
R – Recycling emission
A – Anaerobic digestion emission C
– Composting emission
T – Transport emissions for a given treatment method
E – Emissions from alternative generation of energy from a given material / treatment method (grid average)
N – Emissions from alternative (nitrate) fertilizer production offset by composting or AD.
i – Material at end of life
j – Material substituted by recycled product (for closed loop recycling i = j)

2.8 Non-standard methodology (or methodological problems)

2.8.1 **GLASS**

The report used for the production of the closed loop recycling factor for glass (Enviros 2003) includes remelt in the reported emissions factor. As such it also includes packaging forming emissions and is therefore a product-to-product factor. This does not create a

significant issue however, as the remelt and forming emissions will be similar for both virgin material and recycled glass. Thus, when comparing closed loop recycling with other options, any additional credit given for recycling (due to forming being taken into account) will also be added to the emissions from the recycling process itself, so that the forming emissions cancel out.

2.8.2 TEXTILES

The majority of textiles collected via local authority recycling collections are destined for reuse. In addition, textile recycling is rarely truly closed loop and no LCA studies of 100% closed loop recycling could be located. The approach used varied from the standard in that was based on a weighted average of two scenarios – 70% reuse and 30% recycling[4].

The recycling assumptions were based on analysis of a scenario (the "downcycling scenario") from a Masters thesis (Spathas 2017). This scenario is based on a virgin textiles mix of 40% cotton and 60% polyester, which is compared with a recycled equivalent consisting of 80% recycled and 20% virgin materials. This was converted to an emissions factor for 1 tonne of 100% recycled yarn by subtracting 20% of the emissions from the virgin equivalent and dividing the result by 80%. The results were then normalised to the appropriate reference flow of 1 tonne of materials collected for recycling.

The re-use scenario is a product to product (rather than material to material) analysis, and used different data on the CO_2e impact of the product offset (Beton et al 2009), with one tonne of reused clothing assumed to offset 280kg of new clothing purchases (Stevenson and Gmitrowitz 2013). The average lifetimes of new clothing (3.31 years) and second-hand clothing (5.31 years) were also accounted for (Langley et al 2013) and used to weight the end of life (landfill) emissions. An estimated 10% wastage was also figured into the reuse scenario, with this material assumed to offset paper towel (i.e. recycling to wipers).

2.9 Data sources

Data have been taken from a range of sources, including lifecycle assessment databases, published figures from trade associations, WRAP and DEFRA publications and third party data from sources including academic journals and the International Panel on Climate Change. Data on several waste management options has been taken from Ecoinvent and WRATE.

2.10 Data quality

All data used has been assessed against the following quality standard.

Table 4: Quality standard for data used in Carbon WARM

Time related coverage	Data should be less than five years old	Ideally, data should represent the year of the study. However, data for many material profiles is updated on an occasional basis or is a one-off value.
Geographical coverage	Data should be representative of products and technologies in England / UK	Many datasets reflect European average production. Ecoinvent reflects mostly Swiss or German production technologies.
Technology coverage	Data should represent the average technology mix for England / UK	A range of information is available, covering best in class, average or pending technology. Average is considered most

[4] *This split is an estimate, produced based on internal discussion with the Sustainable Clothing Action Plan team within WRAP. There is a lack of reliable data on the end fates of collected textiles.* WRAP's (2016) *Textiles market situation report* estimates *that approximately 70% of textiles that remain in the UK are destined for reuse, but that the majority of textiles are exported (mostly to Africa and Eastern Europe). While the majority of these textiles will also be destined for reuse, the relative proportions of reuse, recycling and disposal are not known.*

		appropriate and has been used where available.
Precision / variance	No requirement	Many datasets provide average data with no discussion of the range. Many Ecoinvent profiles are based on a single data point. It is therefore not possible to identify variance.
Completeness	Datasets should be reviewed to ensure they cover all inputs and outputs pertaining to the lifecycle stage	
Representativeness	Data should represent UK conditions	See above data quality factors.
Consistency	Methodology should be applied consistently	Carbon WARM is based on the underlying methodology used for the BEIS GHG reporting factors. The model was externally reviewed and updated for consistency in 2016.
Reproducibility	An independent practitioner should be able to follow the same method and arrive at the same results	
Sources of data	Data will be derived from credible sources and databases	Public domain data have been used where possible and all data sources referenced. In some cases it has been necessary to use data from unpublished work or commercially sensitive data shared under a non-disclosure agreement.
Uncertainty of information		See above discussion of variance. Uncertainties will also arise from assumptions and setting of system boundaries.

2.11 Use of data below the quality standard

In many cases, material emissions inventories are updated on an occasional or periodic basis, while lifecycle inventory data for waste management processes is often based on European data and updated only infrequently. While every effort has been made to locate data that meet the standard set out above, in a range of cases it been necessary to utilise the best data available, despite not all quality criteria being met. The most commonly encountered data issues are age, geographical coverage and availability. Cases where the data quality criteria have not been met are outlined below. Each case has been classified as red (priority), amber or green (lower priority) based on the potential level of error and the likely significance of such an error on the results.

Table 5: Transport parameters below quality threshold

Reference	Data	Issue
Fisher, K. (2006) Impact of Energy from Waste and Recycling Policy on UK Greenhouse Gas Emissions, London: Defra	Typical distance travelled (100km) between MRF and reprocessor	Data are older than 5 years. Data do not account for current mix of UK and overseas reprocessing.
ERM (2008) Waste and Resources Assessment Tool for the Environment (WRATE) Version 1	Typical distance travelled (10km) between transfer and disposal	Data are older than 5 years. Some calculations assume onward travel by RCV.

Table 6: Food waste parameters below quality threshold

Reference	Data	Issue
Boldrin, A., Hartling, K., Laugen, M. and Christensen, T (2010) Environmental inventory modelling of the use of compost and peat in growth media preparation	Emissions factors for composting of food and garden wastes	Data are older than 5 years.
WRAP (2008) Realising the value of organic waste	Nutrient content of fertilisers	Data are older than 5 years.
WRAP (2010) The energy impact of waste management: recycling and energy from waste	Calorific value of food	Data are older than 5 years

Table 7: Garden waste parameters below quality threshold

Reference	Data	Issue
Boldrin., A., Hartling, K., Laugen, M. and Christensen, T (2010) Environmental inventory modelling of the use of compost and peat in growth media preparation	Emissions factors for composting of food and garden wastes	Data are older than 5 years.
WRAP (2010) Performance analysis of mixed food and garden waste collection schemes, p.3	Proportion of food and garden waste in mixed organics collections	Data are older than 5 years.
WRAP (2010) The energy impact of waste management: recycling and energy from waste	Calorific value of green waste	Data are older than 5 years

Table 8: Paper and card parameters below quality threshold

Reference	Data	Issue
Saori, S. and Bontinck, P.A. (2012) Streamlined LCA of Paper Supply Systems	Recycling impact	Data are older than 5 years

WRAP (2010) The energy impact of waste management: recycling and energy from waste	Calorific value of paper and card	Data are older than 5 years

Table 9: Glass parameters below quality threshold

Reference	Data	Issue
Enviros (2003) Glass Recycling - Life Cycle Carbon Dioxide Emissions, Sheffield: British Glass	Glass production and remelt emissions	Data are older than 5 years

Table 10: Aluminium parameters below quality threshold

Reference	Data	Issue
EAA (2013) *Environmental profile report for the European Aluminium industry*	Yield rate for aluminium scrap reprocessing	Data are older than 5 years. Note: all other data on aluminium are taken from 2018 update.

Table 11: Textiles parameters below quality threshold

Reference	Data	Issue
WRAP (2010) The energy impact of waste management: recycling and energy from waste	Calorific value of textiles	Data are older than 5 years
Spathas, T (2017) The environmental performance of high value recycling for the fashion industry	"Closed loop" recycling scenario	Data are from a Master's Thesis.
Beton, E. *et al* (2009) *Environmental improvement potential of textiles (IMPRO-Textiles)*	Emissions from clothing production (reuse scenario)	Data are older than 5 years
Stevenson, A. and Gmitrowitz, E. (2013) *Study into consumer second-hand shopping behaviour to identify the re-use displacement effect*	Displacement effect of second-hand clothing	Data are older than 5 years.
Langley, E., Durkacz, S. and Tanase, S. (2013) *Clothing longevity and measuring active use*	Average life of clothing	Data are older than 5 years

Table 12: Plastics parameters below quality threshold

Reference	Data	Issue
Shonfield, P. (2008) LCA of management options for mixed waste plastics	Recycling and energy recovery impacts	Data are older than 5 years
WRAP (2010) The energy impact of waste management: recycling and energy from waste	Calorific value of plastics	Data are older than 5 years
Plastics Europe (2014) Plastics Europe Ecoprofiles	GHG impacts of plastics production	Data are older than 5 years

Table 13: Wood parameters below quality threshold

Reference	Data	Issue
Wilson,J. (2010) "Life-cycle inventory of particleboard in terms of resources, emissions, energy and carbon", Wood and Fiber Science	Emissions from production of particleboard	Data are older than 5 years
WRAP (2010) The energy impact of waste management: recycling and energy from waste	Calorific value of wood	Data are older than 5 years

3.0 *Results*

Table 14 and Table 15 below show the calculated values for each material / waste management combination. Table 14 shows these results as a footprint (see above for details on scope and boundaries), while Table 15 shows the difference between each approach and landfill. In these tables, the value represents a carbon emission, while negative values represent a carbon saving.

Table 14: Carbon WARM, unnormalized values (kg.CO_2e/tonne)

	Closed loop recycling	Open Loop recycling	Energy from Waste	Anaerobic digestion	Compost used in horticulture	Compost used in agriculture	Landfill
Food	NA	NA	-37	-78	-44	16	627
Garden	NA	NA	-77	-78	-15	86	579
Food and garden	NA	NA	-70	-78	-24	67	592
Paper and board	-104	NA	-218	NA	NA	NA	1042
Steel	-1062	NA	19	NA	NA	NA	9
Aluminium	-7469	NA	24	NA	NA	NA	9
Mixed (cans)	-3368	NA	21	NA	NA	NA	9
Glass	-326	33	8	NA	NA	NA	9
Textiles	-14315	NA	438	NA	NA	NA	445
Dense plastics[5]	-590	205	1691	NA	NA	NA	9
Film[5]	-532	205	1475	NA	NA	NA	9
Wood	-477	NA	-268	NA	NA	NA	828

Table 15 Carbon WARM, normalized vs landfill (kg.CO_2e/tonne)

	Closed loop recycling	Open Loop recycling	Energy from Waste	Anaerobic digestion	Compost used in horticulture	Compost used in agriculture	Landfill
Food	NA	NA	-664	-705	-671	-611	0
Garden	NA	NA	-656	-657	-594	-493	0
Food and garden	NA	NA	-662	-670	-616	-525	0
Paper and board	-1,146	NA	-1,260	NA	NA	NA	0
Steel	-1,071	NA	10	NA	NA	NA	0
Aluminium	-7,478	NA	15	NA	NA	NA	0
Mixed (cans)	-3,377	NA	12	NA	NA	NA	0
Glass	-335	24	-1	NA	NA	NA	0
Textiles	-14,760	NA	-7	NA	NA	NA	0
Dense plastics	-599	196	1,682	NA	NA	NA	0
Film	-541	196	1,466	NA	NA	NA	0
Wood	-1,306	NA	-1,096	NA	NA	NA	0

[5] *Due to concerns around the reliability of the heating value of plastics (the figures rely on non-peer-reviewed publications with few corroborating sources), a simple sensitivity analysis was conducted by raising and lowering the LHV by 25%. This produced an (unnormalized) range of 1,519-1,863 kg.CO2e/t for dense plastics and 1,250-1,701 kg.CO2e/t for plastic film.*

4.0 *Conclusions*

This document has set out the methodology and calculated values for Carbon WARM, a tool to allow monitoring and evaluation of the impacts of waste management in England in terms of its greenhouse gas emissions impact, measured as carbon dioxide equivalent (CO_2e), as a supplement to traditional weight-based monitoring.

As noted in the methodology, the following caveats should be observed while using Carbon WARM:

1) The data contain a significant level of uncertainty. Results are based on the best available published Lifecyle Assessment data, but these assessments themselves are inevitably subject to a degree of uncertainty. In addition, production of the metric has required the combining of LCA outputs from a range of studies, some with different scopes, system boundaries and functional units. While every attempt has been made to reconcile these issues, such manipulation increases the potential for error. The results should be regarded as indicative of the relative impacts of waste treatment options, rather than as a precise carbon footprint.
2) Data are indicative of **average** performance. Carbon WARM attempts to provide an estimate of the average GHG impact of a given treatment option for a given material. It does not take account of differences in performance between different facilities, or of other activities (e.g. additional sorting requirements, or variations in transport emissions according to site location). In cases where the metric values are relatively close (e.g. within approximately 100 kg/tonne) it is likely that individual differences will be more important than differences in the values given by the metric.
3) Carbon WARM should not replace or overrule the waste hierarchy. Without a full lifecycle assessment covering a suitable range of impact categories, the Waste Hierarchy should be regarded as a more robust guide to the integrated environmental impact of a waste management approach. The metric is intended to aid decision making and impact evaluation in terms of greenhouse gas emissions. There are critical areas of impact (e.g. air quality, water quality, nitrate emissions, human and eco-toxicity, resource depletion etc.) that the metric does not capture.
4) Carbon WARM can be used to model many scenarios, but not all scenarios will be realistic or even physically possible. Care should be taken not to model scenarios that produce a spurious conclusion. For example, when modelling energy from waste it is important to take into the account the fuel requirements (and available feedstock) of an EfW plant, rather than cherry picking based purely on the Metric scores.

With these caveats observed, Carbon WARM provides a tool that Government, local authorities and businesses can use to assess the greenhouse gas impacts of their waste management activities.

16. APPENDIX 1: MATERIAL SUBSTITUTION RATES FOR RECYCLING

Table 16: Materials substitution rates for recycling

Material	Tonnes of primary material saved per tonne of input	References
Aluminium cans and foil	0.925	EAA (2013) Environmental profile report for the European Aluminium industry, p. 58
Steel cans	0.916	Broadbent, C. (2016) "Steel's recyclability: demonstrating the benefits of recycling steel to achieve a circular economy", International Journal of Life Cycle Assessment, 21:1656:1665
Glass	0.95	http://www.gpi.org/recycling/glass- recycling-facts *"Recycled glass can be substituted for up to 95% of raw materials."*
Wood	1.11	Wilson,J. (2010) "Life-cycle inventory of particleboard in terms of resources, emissions, energy and carbon", Wood and Fiber Science, 42, pp. 90-106. *Return of over 1.0 is due to inclusion of additives (wax and urea-formaldehyde resin).*
Paper	0.833	No published value. Typical estimate based on a trip value of 6 (e.g. https://recyclenation.com/2017/06/how- many-times-can-recyclables-be-recycled/) using method in Baumann and Tillman (2004)
Board	0.93	Based on input of 1.08kg of board to manufacture of 1kg of Wellenstoff (FeFCO 2018)
Plastics (all polymers and formats)	0.665	Shonfield, P. (2008) LCA of Management Options for Mixed Waste Plastics, Banbury: WRAP, p. 25. *Scenario G recalculated to include mechanical recycling of film.*
Digestate (from food) replacing fertiliser as N	0.0054	WRAP (2016) *Field experiments for quality digestate and compost in agriculture.*
Compost replacing (N) fertiliser	From garden: 0 From food waste: 0.0013 From mixed: 0.0003	Compost nutrient content: http://www.wrap.org.uk/content/compost- calculator Input to compost output rate: Boldrin, A., Hartling, K., Laugen, M. and Christensen, T (2010) "Environmental inventory modelling of the use of compost

		and peat in growth media preparation", *Resources, Conservation and Recycling*, 54(12), 1250-1260
Compost replacing peat	From garden: 0.68 From food waste: 0.43 From mixed: 0.61	Boldrin, A., Hartling, K., Laugen, M. and Christensen, T (2010) "Environmental inventory modelling of the use of compost and peat in growth media preparation", *Resources, Conservation and Recycling*, 54(12), 1250-1260. *Assumes 1 tonne of finished compost replaces 1 tonne of peat-based growth medium.*
Textiles (recycling)	0.537	Spathas, T. (2017) The environmental performance of high value recycling for the fashion industry, p. 24. *Downcycling model weighted to remove virgin component of modelled output.*
Textiles (reuse)	0.28	Stevenson, A. and Gmitrowitz. E. (2013) *Study into consumer second-hand shopping behaviour to identify the re-use displacement effect,* Banbury: WRAP

17. APPENDIX 2: GREENHOUSE GAS CONVERSION FACTORS AND EMISSION SOURCES

Table 17: GHG conversion factors and emission sources

Industrial designation or common name	Chemical formula	Lifetime (years)	Radiative efficiency ($Wm^{-2}ppb^{-1}$)	GWP 100 (AR4)	Possible sources of emission
Carbon dioxide	CO_2	Variable*	1.4×10^{-5}	1	Combustion of fossil fuels
Methane	CH_4	12	3.7×10^{-4}	25	Decomposition of biodegradable material, enteric emissions
Nitrous oxide	NO_2	114	3.03×10^{-3}	298	Manure, soil management, agricultural residue burning, sewage
Sulphur hexafluoride	SF_6	3,200	0.52	22,800	Leakage from electricity substations, magnesium smelters, some consumer goods
HFC 134a (R134a refrigerant)	CH_2FCF_3	14	0.16	1,430	Substitution for ozone-depleting substances, refrigerant manufacture / leaks, aerosols, distribution of electricity
Dichlorodifluoro- methane CFC 12 (R12 refrigerant)	CCl_2F_2	100	0.32	10,900	
Difluoromono-chloromethane HCFC 22 (R22 refigerant)	$CHClF_2$	12	0.2	1,810	

* CO_2 is an extremely stable molecule and is removed from the atmosphere by organic or geological processes rather than by chemical breakdown. No single lifetime can be given for CO_2 because of the differences in time scales associated with the short (organic) and long (geologic) carbon cycles.

18. APPENDIX 3: PEER REVIEW STATEMENT

Technical peer review: Methodology for the Carbon Waste and Resources Metric (Carbon WARM)

An independent peer review was undertaken of the methodology of the *Carbon WARM* study, with the goal of ensuring that the methodology was robust, the underlying assumptions valid and that both the methodology and assumptions were clearly described in the methodology report.

The peer review was an iterative process which involved review of a series of drafts of the Methodology and the accompanying Excel spreadsheet. The first peer review took place in March 2019 and comprised the peer review of the draft methodology report and Excel model and an accompanying document setting out recommendations for future development and updating.
This was followed by a second peer review in June 2019, of the revised methodology report and Excel model. In addition, throughout the peer review process there was ongoing dialogue and discussion with the WRAP research team, which provided a good insight into the process of methodology and model development.

Throughout the process of developing the methodology and model, the WRAP research team have made clear efforts to provide transparency in the methodological and model development, and have taken a robust approach to the gathering and use of both sources and data, for example, through the use of the data quality standard, for the assessment of the data.

In summary, I am satisfied that the research presented in this report provides a transparent and robust basis to enable the monitoring and evaluation of the impacts of the Resources and Waste Strategy in England in terms of its Greenhouse Gas emissions impact, measured as carbon dioxide equivalent (CO_2e).

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