



WASTE STRATEGY FOR ESSEX

Strategic Environmental Assessment (SEA)
Post Adoption Statement

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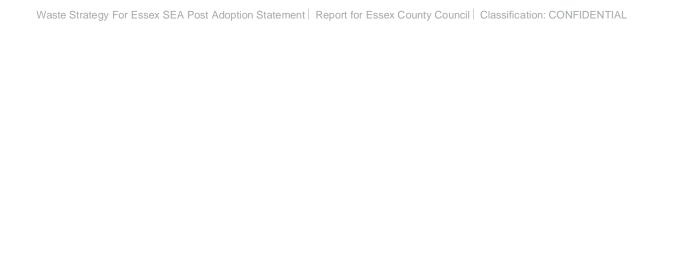
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1. INTRODUCTION

1.1 BACKGROUND TO THE WASTE STRATEGY FOR ESSEX

Essex County Council (ECC) is the statutory Waste Disposal Authority (WDA) for Essex and is obligated under the Environmental Protection Act 1990 to provide a range of waste services for the treatment and disposal of Local Authority Collected Waste.

To optimise the delivery of its statutory waste functions ECC works in partnership with the twelve Essex Waste Collection Authorities (comprising the district, city, borough councils of Essex), collectively with Essex County Council known as the Essex Waste Partnership (EWP).

The constituent authority members of the EWP are obligated to maintain a Joint Strategy setting out how household and similar wastes are to be managed. In light of new legislative and policy drivers by government, ECC has taken the decision to review, update and develop the Strategy to ensure it better reflects current needs and legislative requirements. The Waste Strategy for Essex sets out the vision and objectives of the EWP. It provides a framework detailing how the EWP will manage the waste that is produced by homes and businesses in the county for the next 30 years.

This new Strategy, covering the period up to 2054, brings a new focus on how the EWP will deliver an effective, efficient, and sustainable service for the future. Following the Environment Act 2021, national policy and the findings of the Essex Climate Action Commission 2020, the new Strategy updates the EWP's approach to reducing the impact that waste has on climate change. The Strategy is research based and sets out the reasons for the approach; the principles of what will be done; and the targets that the EWP will strive to meet.

The EWP will review this Strategy every five years to ensure alignment with any changes in national policy and legislation, trends in waste generation, and the development of new approaches and technologies.

1.2 THE STRATEGIC ENVIRONMENTAL ASSESSMENT PROCESS

The partnership's Waste Strategy has been subject to Strategic Environmental Assessment (SEA) in accordance with the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA' Regulations'). The SEA Environmental Report was issued for public consultation alongside the draft Waste Strategy from the 13th September to 22nd November 2023. This SEA Post Adoption Statement is being issued to accompany the final Waste Strategy.

1.3 PURPOSE OF THE SEA POST ADOPTION STATEMENT

This SEA Post Adoption Statement is produced in accordance with the provisions of SEA Regulation 16 (see Appendix A). In accordance with the SEA Regulations, this SEA Post Adoption Statement describes:

- How environmental considerations have been integrated into the final Waste Strategy (Section 2)
- How the Environmental Report has been taken into account (Section 3)
- How responses to the consultation have been taken into account (Section Error! Reference source not found.)
- The reasons for choosing the final Waste Strategy as adopted, in the light of the other reasonable alternatives dealt with (Section 5)
- The measures that are to be taken to monitor the significant environmental effects of implementation of the final Waste Strategy (Section 6).

2. HOW ENVIRONMENTAL CONSIDERATIONS HAVE BEEN INTEGRATED INTO THE FINAL WASTE STRATEGY

2.1 ENVIRONMENTAL CONSIDERATIONS IN THE WASTE STRATEGY

Environmental considerations were incorporated into the Waste Strategy from the outset. In line with national policy and legislation the strategy sets out the EWP's approach to reducing the impact that waste has on climate change and to reduce greenhouse gas emissions and achieve the goal of Essex becoming a net zero county by 2050.

This strategy commits the EWP to work together to minimise the impact that waste management has on the environment by transitioning to a circular economy. The waste hierarchy underpins the Strategy in focussing on waste prevention, minimisation and increasing the proportion of material recycled. For waste that cannot be recycled ECC propose to recover energy and materials to conserve resources via anaerobic digestion and Energy from Waste (EfW).

To develop the draft Strategy and inform the priorities, targets and ambitions, the EWP commissioned research into attitudes and behaviours towards waste and recycling. Systems modelling was also carried out to look at the type and volume of the waste currently in Essex, how this may change in future and different scenarios for managing the waste. Detailed systems modelling was carried out to explore the current activities across the EWP in terms of waste collection, treatment and disposal, and to investigate scenarios and opportunities for the future.

The systems modelling examined waste collection and disposal methods and the environmental and cost implications of alternative scenarios and sensitivities. Each scenario set out a different approach to the management of four key waste streams: dry recycling, food waste, garden waste, and residual waste with varying collection frequencies i.e. on a weekly, fortnightly or three weekly basis.

In the case of this SEA and the Waste Strategy, these scenarios and associated sensitivities that fed into the development of the Strategy were the subject of the assessment and were considered to be reasonable alternatives in the context of the SEA Regulations.

In terms of treatment alternatives, these were not looked at as part of the modelling. It is important to note that landfill was not considered a viable Business As Usual option primarily due to its negative environmental impacts, limited capacity and the overall government approach to disincentivising the use of landfill, and is therefore not a long term option. As a result, the focus shifted towards utilising energy from waste methods. This shift is driven by the need to reduce waste volumes, minimise greenhouse gas emissions, and harness energy potential from waste materials through more sustainable and efficient means.

A Best Practicable Environmental Scenario (Option) (BPES) lifecycle assessment was carried out for each of the scenarios to enable them to be considered in terms of emissions to air (including climate change impacts), water and land; deliverability; performance against national targets; performance against the EWP vision; and financial cost.

Environmental factors were considered and modelled in the determination of the short-list scenarios using a Waste and Resources Assessment Tool (WRATE). The WRATE model was chosen due to the ability to assess a variety of environmental criteria including, each with separate weightings:

- Quantitative assessment of Greenhouse Gas (GHG) emissions (CO_{2eq})
- Evaluation of local and wider transport impacts distance travelled (collections & haulage)
- Acid rain potential
- Potential water pollution
- Human toxicity
- Resources depletion

In addition to the above factors modelled within WRATE, the following environmental factors were included in the scenarios modelling:

- Waste reduction (quantitative assessment)
- Quantitative assessment of recycling rate (Local Authority collected waste)

The results of the scenarios modelling were put into a scenarios appraisal model, together with agreed qualitative environmental and sustainability factors, to determine the BPES.

Sustainability issues and agreed qualitative environmental issues were also considered within the scenarios appraisal under separate criteria including: the quantitative assessment of jobs created or sustained; evaluation of local energy creation and potential for useable heat; potential for litter, noise and odour.

Whilst the SEA had not been commissioned at the time of deciding these criteria, the findings of the WRATE modelling informed the assessment under each SEA topic scoped in. In addition, following the SEA methodology developed during the Scoping stage, meant that topics that had not been covered via the WRATE process would also be considered more holistically, such as biodiversity, flora and fauna, landscape and visual amenity and archaeology and cultural heritage.

In addition to the six scenarios, four sensitivities were also included as part of the Scenarios Appraisal and modelling. Assessment of the highest scoring scenario (Scenario 2), as shown in Table 2.1: Scenario 2 Collection and Treatment, then incorporated the modelling of the additional scenarios known as chosen sensitivities / types of treatment.

Table 2.1: Scenario 2 Collection and Treatment

	Collection	Treatment	
Dry Recycling	Comingled, fortnightly	Dry Recycling	MRF
Food Waste Garden Waste	Separate, weekly Separate, fortnightly (no subscription)	Food Waste Garden Waste	Wet AD Open Air Windrow (OAW) Composting
Residual Waste	Three-weekly	Residual Waste	EFW - Moving Grate

The 4 sensitivities were:

- Sensitivity 1: Addition of front-end recycling to the EfW facility for household residual waste
- Sensitivity 2: Addition of combined heat and power (CHP) at the EfW facility
- Sensitivity 3: Addition of carbon capture utilisation and storage technology (CCUS) at the EfW facility
- Sensitivity 4: Introduction of householder charges for garden waste collections

2.2 ENVIRONMENTAL CONSIDERATIONS VIA THE SEA PROCESS

2.2.1 Overview

Environmental considerations have been integrated into the Waste Strategy throughout the SEA process and particularly through:

- The review of the context and baseline for the SEA and Waste Strategy
- The development of the assessment framework used to assess the effects of the draft Waste Strategy; and
- The assessment of the Waste Strategy and reasonable alternatives to it.

2.2.2 Context and Baseline

The relevant aspects of the state of the environment and its evolution without the implementation of the Waste Strategy were considered from the outset of the SEA process along with the environmental aspects likely to be significantly affected. These were reported on in the SEA Scoping Report which was subject to consultation with the SEA Consultation Bodies; the Environment Agency, Historic England and Natural England, from 14^{th} February $2023 - 22^{nd}$ March 2023.

Baseline environmental conditions and relevant plans and programmes were considered across Essex. Schedule 2 of the SEA Regulations require that the assessment includes information on the 'likely significant effects' on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, including architectural and archaeological heritage, landscape and the inter-relationships between the issues referred to'. These topics formed the basis for the collection and analysis of contextual and baseline information.

Consistent with the requirements of Schedule 2 of the SEA Regulations listed below, Appendix D of the Environmental Report set out the collated contextual and baseline information on a SEA topic-by-topic basis:

Schedule 2:

- (2) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.,
- (3) The environmental characteristics of areas likely to be significantly affected.,
- (4) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Council Directive <u>79/409/EEC</u> on the conservation of wild birds(<u>1</u>) and the Habitats Directive.

From the review of plans and programmes and analysis of current and projected baseline conditions (contained in Appendix C and D of the Environmental Report), a number of key environmental issues were identified. These issues were summarised in Table 3.1 of the Environmental Report.

2.2.3 Assessment Framework

The assessment framework developed during the Scoping stage and used to assess the Waste Strategy comprised of 11 SEA objectives and associated guide questions. The objectives and guide questions reflected the topics contained in Schedule 2(6) of the SEA Regulations and were informed by:

- The review of relevant plans and programmes and associated environmental protection objectives;
- The baseline information and key issues that have been identified;
- An understanding of the likely generic effects arising from the construction and operation of waste infrastructure; and
- Responses to the Scoping consultation.

2.2.4 Assessment of the Waste Strategy

Assessing the draft Waste Strategy against the SEA objectives helped to ensure that environmental factors have been fully considered in the development of the Strategy. Further detail is provided in Section 3 of this report.

3. HOW THE ENVIRONMENTAL REPORT HAS BEEN TAKEN INTO ACCOUNT DURING PREPARATION OF THE STRATEGY

3.1 SUMMARY OF THE FINDINGS OF THE ENVIRONMENTAL ASSESSMENT

The findings of the SEA Environmental Report have been used by ECC to help inform the development of its Waste Strategy by more holistically considering the likely significant effects of its implementation against each of the SEA topics scoped in and by promoting potential mitigation and monitoring opportunities. The development of the Waste Strategy was underpinned by various scenarios and sensitivities which were presented for BPES modelling. These alternatives were then assessed against the SEA framework.

The likely significant environmental effects of implementing the draft Strategy were identified, described and evaluated in accordance with the requirements of the SEA Regulations. A summary is presented in this section. The detailed assessment of the draft Strategy is contained in Section 5 of the Environmental Report.

3.1.1 Scenarios Assessment

Overall, the assessment of six short-listed waste management scenarios found that the draft Strategy would have a range of positive effects across the majority of the SEA objectives, relative to the current baseline. This broadly reflected the socio-economic and environmental benefits associated with sustainable waste management and moving waste up the waste management hierarchy. No significant (major) positive effects were identified which reflected the context of a non-spatial strategy which examined different collection and frequencies of waste streams and an assumed change in treatment.

Negative effects were identified across several SEA objectives. No significant negative effects were assessed but moderate negative effects were assessed on population and human health and landscape and visual amenity objectives which are related to three-weekly waste collections and the potential impact of waste accumulation if, for example, users were not fully using recycling and food waste services.

The BPES assessment determined that Scenario 2 was the highest scoring scenario and was therefore used to evaluate the likely impacts of the sensitivities. The sensitivities were also assessed using the SEA assessment framework.

When developing the final version of the Strategy, the partnership has considered the findings of the SEA Environmental Report by:

- retaining the focus on sustainable waste management and moving waste up the waste management hierarchy by committing to service design and supporting activities that will deliver waste prevention, reuse, recycling and recovery;
- introducing commitments that reduce the carbon impact of waste operations such as reducing plastic waste in residual waste and increasing the use of alternative fuels for waste vehicles;
- committing to a range of measures supporting businesses to work sustainably;
- committing to providing residents with information, education and inspiration to make full use of services and reduce waste, and reuse and recycle more;
- committing to the provision of accessible and extensive public reuse and recycling services;
- committing to clear and ambitious targets on service provision, waste reduction and the proportion of waste to be reused, recycled or composted.

3.1.2 Sensitivities Assessment

A range of positive and negative effects were assessed against each of the SEA objectives on all sensitivities. The following significant effects were identified.

Both positive and negative effects were found for Sensitivities 2 and 3. The positive contribution to resource recovery and emission reduction that Sensitivity 3 could provide, would enhance the circular economy, and was assessed as having a significant positive effect on material assets and waste management, yet the unproven scale of carbon capture left uncertainty. The GHG emissions savings made through CCUS technology were considered to be a significant positive effect.

In addition, significant negative effects were identified on material assets and waste management for Sensitivities 2 and 3 due to the significant infrastructure required by the addition of CHP and CCUS technology respectively.

The assessment found no positive or negative significant effects for Sensitivities 1 or 4.

When developing the final version of the Strategy, the partnership has considered the findings of the SEA Environmental Report concerning Sensitivities 2 and 3 by:

- carefully considering the need to take further action to reduce greenhouse gas emissions from waste treatment processes.
- stating an aim to capture and use heat from EfW facilities to improve the efficiency of residual waste treatment.
- committing to investigate how best to reduce greenhouse gas emissions from EfW processes by using carbon capture, utilisation and storage.
- committing to explore ways to offset the impact of unavoidable greenhouse gas emissions.
- including a target to "Reduce our greenhouse gas emissions and contribute to achieving net zero by 2050".
- stating an aim to lobby government to secure investment in research, development and innovation.

3.1.3 Cumulative Assessment

The cumulative assessment of each sensitivity in combination with highest scoring Scenario 2 assessed mixed effects across several SEA objectives, particularly, material assets and waste management, population and human health, air and climate and water.

Significant positive effects were reported on material assets and resource use for Sensitivity 3 reflecting that in capturing carbon emissions, the technology contributes positively to resource recovery and emission reduction, enhancing the circular economy approach, however, again it is important to note that the technology is unproven at scale. Significant positive effects were also reported on one of the air and climate SEA objectives for Sensitivities 2 and 3 acknowledging the positive effect that CHP and CCUS have on reducing greenhouse gas emissions respectively.

Significant negative effects were reported on material assets for Sensitivities 2 and 3, primarily due to the introduction of significant additional infrastructure. Moderate negative effects were assessed on population and human health and landscape and visual amenity across all sensitivities due to the impact of three-weekly collections of residual waste on population and human health and landscape and visual amenity.

When viewed from a strategic standpoint in combination with other non-spatial plans and programmes, rather than in terms of scenarios and sensitivities, the draft Strategy was assessed as having potential positive cumulative effects across SEA objectives, particularly material assets and waste management. It is not expected that significant negative effects would arise from the draft Strategy's in-combination effects with other plans and programmes. While aligning with waste hierarchy goals will necessitate increased utilisation of existing and potentially new waste facilities, it was acknowledged that negative environmental impacts during construction and operation are anticipated. These must be identified, assessed, and mitigated through legislative frameworks, including the NPPF, local waste plans, and environmental permitting processes. In the event that the county council proposes development of new waste facilities, appropriate community engagement and public consultation will be undertaken.

3.1.4 Other Considerations

As well as identifying the likely significant effects of the Strategy, another important influence and consideration of the SEA was to highlight the future assessment and consenting of treatment facilities. Implementation of scenarios and sensitivities could ultimately involve site selection, including EfW facilities, and their environmental effects would need to be assessed through Environmental Impact Assessment (EIA) under the relevant regulations. Construction and operation of new waste management infrastructure could yield negative effects related to land use, vehicle movements, air emissions, and landscape impact relative to the baseline. New site locations would adhere to waste local plans consistent with the National Planning Policy Framework (NPPF) and National Planning Policy for Waste (NPPW), subject to SEA and HRA, and necessitate planning permissions and environmental consents. The operation of waste management facilities would also be subject to environmental permitting. In the event that the county council proposes development of new waste facilities, appropriate community engagement and public consultation will be undertaken.

The SEA also identified a range of mitigation and enhancement measures. These measures are principally project/service-level mitigation identified which could address the potential negative environmental effects associated with waste collection services.

4. HOW RESPONSES TO THE CONSULTATION HAVE BEEN TAKEN INTO ACCOUNT

4.1 INTRODUCTION

Consultation is a fundamental part of the SEA process and is based on the principle that plan and programme making is better where it is transparent, inclusive and uses information that has been subject to public scrutiny. In this context, the partnership sought to ensure that those with an interest in, or who would be affected by the Waste Strategy for Essex should have the opportunity to present their views on the draft Waste Strategy and the accompanying Environmental Report.

This section provides a summary of the consultation on the draft Waste Strategy and SEA Environmental Report, providing a signpost to how responses have been taken into account.

4.2 CONSULTATION DURING THE SEA

At each stage of the SEA process, there is a requirement to consult the statutory Consultation Bodies. In England these are the Environment Agency, Historic England, and Natural England. The present SEA process comprised the following consultation stages:

- An SEA Scoping Report issued to the Consultation Bodies for consultation for 5 weeks from 14th February 2023 to 22nd March 2023 where their opinions were sought on the proposed scope and level of detail proposed. Responses were received from Historic England and Natural England.
- The SEA Environmental Report was published with the draft Waste Strategy for Essex on ECC's
 website from 13th September 2023 to 22nd November 2023 for a ten-week period, for both statutory
 and public consultation.
- The SEA Environmental Report and SEA Post Adoption Statement will be published with the final Waste Strategy on ECC's website.

Changes to the Waste Strategy made as a result of consultation are described in Section 4.4 of this Post Adoption Statement.

4.3 CONSULTATION RESPONSES TO THE SEA

4.3.1 SEA Consultation Bodies

ECC published its draft Waste Strategy in September 2023 and received a number of responses during the consultation period which ran from 13th September 2023 to 22nd November 2023. Responses received from SEA Consultation Bodies, Partner Organisations and the wider public on the SEA Environmental Report have been considered by the partnership when developing the final version of the strategy document. Full details will be published with the final Waste Strategy in the Essex Waste Partnership Response to Consultation.

ECC commissioned an independent third party, Enventure Research, to analyse and evaluate the responses to the consultation and to prepare a Summary Report¹, which has helped to inform this Post Adoption Statement.

As part of consultation the SEA Consultation Bodies were invited to provide statutory responses to the Environmental Report which are outlined here:

 Natural England confirmed that, in their view, the proposals contained within the Strategy will not have significant effects on sensitive sites that Natural England has a statutory duty to protect. There was some confusion in their response around the status of the SEA process with respect to the Waste Strategy but comments made with relevance to the SEA Environmental Report specifically stated:

'We welcome your approach to addressing NE's comments made in response to the SEA scoping consultation, through the SEA Environmental Report, and supporting the Plan's targets, aspirations and ambitions to minimise environmental impacts, including air and water quality impacts, and to contribute towards climate change targets including net zero greenhouse gas emissions. Given the

¹ Enventure Research (2024) Draft Waste Strategy for Essex, Draft Executive Summary Report.

overarching nature of the strategy and its aim to provide a framework for waste management in Essex, NE is unable to provide any more substantive comments. We have checked our records and based on the information provided, we can confirm that in our view the proposals contained within the plan will not have significant effects on sensitive sites that Natural England has a statutory duty to protect'.

- The Environment Agency noted 'that the Strategy is not intended to consider new, or increased use of
 existing waste management facilities. We also note that any additional waste management facilities
 that may be required will be identified, assessed, and mitigated (as necessary) through the Essex
 Waste Plan, planning applications and Environmental permitting requirements. Therefore, we currently
 have no comment to make on these documents'.
- No response was received from Historic England.

4.3.2 Responses from Partner Organisations

Four EWP member organisations provided their response to the consultation. Three of these gave feedback on the SEA, saying they felt that the Environmental Report correctly identified the likely significant effects of the Strategy.

4.3.3 Wider Public Opinion on the SEA

As part of the wider public consultation respondents were invited to provide their feedback on the SEA Environmental Report. 288 respondents (equivalent to 7% of full survey respondents) chose to answer the questions specifically focussed on the SEA.

Of those who gave feedback on the SEA, 54% thought the Environmental Report correctly identified the likely significant effects of the draft waste strategy and 46% thought that it did not.

Respondents were asked for their views on the likely significant environmental effects of the draft strategy, with the most common theme from these being disagreement with incineration, particularly from residents in Basildon.

Other themes amongst the comments included that there was little or no perceived impact, uncertainty, not enough information, or information that was too complicated to understand.

Respondents were asked if there was anything else to say about the Environmental Report, the most common theme was disagreement with incineration, particularly from residents in Basildon with the second most popular theme being to communicate, engage and listen to residents.

As part of the consultations, many comments from respondents were made relating to incineration when asked if there was anything else to say about the SEA. However, it should be noted that within the other question responses there was widespread support given for Energy from Waste more generally across the region's respondents.

The Waste Strategy for Essex is not a spatial plan and does not propose new infrastructure or facilities as part of its implementation. Therefore, as previously noted it was assumed for the purposes of the SEA that capacity at existing reprocessing facilities would be utilised.

It is important to note that potential land use changes arising from future actions, such as implementing the outcomes of procurement exercises and pinpointing site-specific EfW locations, will require project level assessment under the relevant statutory frameworks, including EIA. This will ensure the identification of any potential significant environmental effects and the consideration of opportunities to prevent, minimise, or offset these effects. Moreover, a comprehensive public consultation will be required to gather input and insights from stakeholders. As such, the potential impacts and necessary assessments for various evolving aspects related to the Waste Strategy will be required to be examined in detail at appropriate stages in accordance with UK legislation.

In light of the consultation responses no changes have been made to the SEA.

4.4 CONSULTATION RESPONSES TO THE STRATEGY

A total of 4545 responses to the consultation were received. This included 4,224 responses to the full survey and 321 responses to the Easy Read survey. Only 16 paper copies were received, with the rest captured online. Of the 4,545 responses, 24 were received from organisations.

There was a large response to the consultation across the county with all districts cities and boroughs represented in the response with some being slightly over-represented (Basildon and Chelmsford) and others being slightly under-represented (Epping Forest).

The main findings from respondents to the consultation questions were as follows:

Response to all aspects of the draft strategy saw larger proportions agreeing overall than disagreeing, whilst feelings that the targets and ambitions are about right were most common. However, there was some preference for the ambitions and targets to be achieved sooner.

Some also believe that elements of the strategy, particularly zero waste, are unachievable or too ambitious, which has led to some disagreement, although these are minority proportions.

There was widespread acknowledgement that waste collection and recycling services need to be convenient and easy to use if the targets and ambitions are to be met.

Many respondents believe that businesses and manufacturers need to do more particularly in relation to reducing packaging and ensuring that items can be repaired easily and cost effectively.

Although there is widespread support for Energy from Waste, there is some concern related to the environmental impact particularly in Basildon that is leading to higher levels of disagreement in that district compared with other areas.

There are some concepts regarding energy recovery that are hard for some people to understand, particularly the use of anaerobic digestion for the treatment of food waste.

Some respondents were concerned that there will be increased costs in the future that will be passed onto taxpayers. These concerns were particularly seen in relation to the priority approach proposed to move to a circular economy and to innovate and work collaboratively.

Some respondents were concerned that innovation carried risk and adopting a circular economy was unachievable and outside the control of the partnership. Respondents however supported the need to work together and maximise opportunities to increase recycling in public spaces, reduce litter and ensure convenient recycling services; all elements of delivering a circular economy.

Other areas of 'Collaborate and innovate' such as 'Explore carbon capture, utilisation and storage, and carbon offsetting to mitigate unavoidable greenhouse gas emissions' had lower levels of support driven by a significant proportion of respondents who were not sure, indicating a lower level of respondent understanding of this area.

Education and support for residents with their waste and recycling is viewed as important and this should also include engaging with residents and listening to their feedback.

Although the majority agreed with the approach to research, planning and monitoring, there is some belief that more frequent reviews of the strategy will be necessary than the five year cycle proposed.

4.4.1 Changes to the Strategy following the Consultation

The consultation response, insight and government policy updates have been fully considered by the Essex Waste Partnership when reviewing what revisions to apply to the Waste Strategy for Essex. Details of how consultation response, insight and government policy updates have been considered and reflected in the Waste Strategy for Essex are detailed in the Essex Waste Partnership Response to Consultation report² and are summarised in this section.

Analysis of the consultation comments identified some broad themes that respondents felt should be considered when updating the Strategy such as 'achievability of the strategy and the need for clear actions' and 'the role businesses can play'. Changes have been applied to the Strategy document to reflect these themes such as clearly setting out actions the partnership will take to achieve the approach and targets. This includes:

• Strengthening engagement with businesses. This initiative started with a webinar held in April 2024, focusing on actions that businesses can adopt and the opportunities stemming from the shift towards a more circular economy;

² Essex Waste Partnership (2024) Waste Strategy for Essex 2024-2054 Essex Waste Partnership Response to consultation

- Continued consideration of the high-level themes when creating the action plans to deliver the Strategy
 vision. For example, concerns around costs and the environmental impact of incineration will be
 addressed when deciding on services, technology choices and infrastructure design;
- Commitment to continuing engagement with residents and communities for the lifetime of the Strategy.

In addition, throughout the Strategy document, the following changes have been applied:

- Simplified language and removal of unnecessary technical terms to ensure ease of understanding;
- Removal of information in the draft strategy that was included solely to provide context;
- Targets have been aligned to each section of the partnership's approach to help residents hold the partnership to account for progress and performance.

The partnership also identified an opportunity to enhance the strategy with additional content. Commitments have been added to:

- Work together to increase recycling in public spaces, reduce litter and fly tipping;
- Regularly review the strategy to ensure it is fit for purpose and to publish progress reports;
- Lobby government for better regulation to tackle waste at source, ensuring manufacturers and retailers play their part to reduce waste.

The changes to wording of the Strategy do not include any additions that would necessitate further assessment.

5. REASONS FOR SELECTING THE WASTE STRATEGY AS ADOPTED IN THE LIGHT OF THE OTHER REASONABLE ALTERNATIVES

Regulation 12 (2) of the SEA Regulations requires that ECC identifies, describes and evaluates the likely significant effects on the environment of implementing the Strategy, and reasonable alternatives, taking into account its objectives and geographical scope.

This section of the Post Adoption Statement sets out the reasons for selecting the Waste Strategy for Essex as adopted.

Consideration of alternatives was undertaken in discussion with a wide range of stakeholders. The extent to which alternatives could be considered 'reasonable' was influenced by the existing legislative and policy context that the document must reference and align with, and the current Government commitments and targets. As a result, undeliverable or contradictory scenarios were excluded early in the process and a narrow range of scenarios was taken forward for detailed modelling.

Detailed technical work was carried out to explore the current activities across the EWP in terms of waste collection, treatment and disposal, and to investigate scenarios and opportunities for the future. In the case of this SEA and the Waste Strategy these scenarios and associated sensitivities that fed into the development of the Strategy have been the subject of the assessment and the scenarios and sensitivities are considered to be reasonable alternatives in the context of the SEA Regulations.

The modelling carried out as part of the Strategy data gathering and assessment process went on to inform an appraisal of the proposed scenarios and sensitivities³. The scenarios and sensitivities were assessed against previously agreed criteria and weightings to ensure that the impacts of the scenarios were fully considered from a sustainability and technical perspective and to identify a BPES.

The modelling demonstrated that making no changes to the collection and disposal approaches was not acceptable as it would not deliver the level of ambition required by the partnership. Compared to the 'do nothing' scenario all modelled alternatives performed better. However, the expected difference in performance between these alternatives was not shown to be significant. These results informed the partnership's decision not to prescribe a collection model based on one BPES in the draft Strategy. In addition, due to the unique limitations and contexts of each Constituent Council, it was not considered practical to propose one BPES in the Strategy, but rather to focus on the approaches and targets of the assessed scenarios and sensitivities that performed better in the appraisal, within the context of the EWP and the potential barriers that might exist in different areas.

In this context the approach followed in the Strategy was closely linked to the waste management hierarchy but in a manner that provided each council with local flexibility in designing their services to meet local needs. However, the partnership developed statements outlining the activities that may be delivered in order to realise the ambitions of the draft Strategy.

When developing the Strategy targets and ambitions, the modelling was used to assess the deliverability and define the level of aspiration.

The partnership considered the results of the sensitivity analysis and, where the performance of the model improved, the sensitivity was taken forward for inclusion in the draft Strategy.

As the public have been broadly supportive of the strategy it has not been necessary to make any substantive changes to the final version proposed for adoption. In the finalisation of the Strategy no changes have been made to the basis of the Strategy aside of some changes to wording. The key changes that have been made in response to the feedback received are:

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³ Ricardo (2023) Waste Strategy for Essex Final Report. Available at: https://consultations.essex.gov.uk/rci/waste-strategy-for-essex-consultation/supporting_documents/WSfE%20appendix%206%20%20Full%20report%20on%20technical%20options.pdf

- Language has been simplified and unnecessary technical terms or jargon have been removed to ensure the strategy is easy to understand.
- The vision statement has been updated to ensure it more strongly aligns with the strategy focus on waste reduction, reuse and recycling.
- The commitments and high-level actions proposed by the partnership have been updated to make them easier to understand. These will be used by the partnership as the basis for the development of detailed action plans.
- The targets and ambitions have been updated and consolidated to ensure only things which can be quantified and measured are included.
- The strategy position on landfill has been strengthened by committing to ceasing the use of landfill by 2030.
- Interim steps to achieve a target have been removed from the strategy. These will be incorporated into future action plans to ensure progress can be consistently measured.
- A commitment has been added to regularly review the strategy to ensure it is fit for purpose and to publish progress reports to ensure continued transparency.
- A commitment has been added to work together to increase recycling in public spaces, reduce litter and fly tipping.
- The strategy now includes an enhanced commitment by the partnership to lobby government for better regulation to tackle waste at source, ensuring manufacturers and retailers play their part to reduce waste.
- The strategy has been updated to better reflect the role of business and communities and the need for the partnership to support them to reduce the impact of waste.

MONITORING OF THE WASTE STRATEGY

6.1 **OVERVIEW**

The SEA Regulations require that the Post Adoption Statement sets out the measures that are to be taken to monitor the significant environmental effects of the implementation of the Strategy.

As set out in Government Guidance⁴, it is not necessary to monitor everything or monitor an effect indefinitely. Rather, monitoring needs to be focused on significant environmental effects.

Monitoring is required to track the environmental effects to show whether they are as predicted, to help identify any adverse impacts and trigger deployment of mitigation measures.

6.2 MONITORING MEASURES

The SEA Regulations require that ECC monitors the significant environmental effects from the implementation of the Waste Strategy so it can identify unforeseen effects at an early stage and act to take relevant or appropriate action to remedy any problems.

Given the range of indicators currently in use, and to avoid duplication, it is recommended that existing indicators are utilised wherever possible. As required by the SEA Regulations monitoring indicators are focussed on those objectives where potential for likely significant effects of the strategy's implementation have been identified. Monitoring indicators are not provided for all SEA objectives.

Potential monitoring indicators were identified as part of the SEA process and were documented in the Environmental Report and are shown in Table 6.1. These have been reviewed and are still deemed appropriate.

Table 6.1: Indicators for Monitoring Effects

SEA Objective	Waste Monitoring Indicator	
	Amount of arisings, split by waste streams	
Material Assets and Waste Management	Total waste per household	
	Residual waste arising per household	
	Percentage reused/recycled/composted	
	Amount of energy generated	
	Percentage of users satisfied with waste services	
Population and Human	Number of nuisance related complaints	
Health	Percentage missed collections	
	Number of environmental permit breaches for waste facilities	
Soil, Geology and Land- Use	Number of fly tipping incidents per annum	
	Waste miles travelled to dispose of waste	
	Waste vehicle capacity utilisation rates	
Air and Climate	CO ₂ saved through greater alignment with the waste hierarchy	
	Percentage of low emission vehicles and plant	

⁴ Office of the Deputy Prime Minister ODPM et al (2005) A Practical Guide to the Strategic Environmental Assessment Directive. Available from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf

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SEA Objective	Waste Monitoring Indicator
	Energy use in waste operation
Landscape and Visual Amenity	Number of nuisance-related complaints such as noise, dust, and overflowing bins related to local landscape and streetscape.

The Resource and Waste Strategy includes a 25 Year Environment Plan Outcome Indicator Framework⁵ in development for monitoring progress against Resource and Waste Strategy policies and commitments that consists of a number of measures and which reflect progress against the following six policy priorities: increasing resource productivity; reducing greenhouse gas emissions; reducing waste production; increasing recycling; and reducing landfilling. Where deemed appropriate the monitoring indicators set out in the Resource and Waste Strategy may be used to monitor the Waste Strategy for Essex once fully developed. The EWP will consider their inclusion as part of the strategy review process.

⁵ Outcome Indicator Framework for the 25 Year Environment Plan (defra.gov.uk)

7. THE AVAILABILITY OF DOCUMENTS

The adopted Final Waste Strategy for Essex and accompanying SEA documentation will be available on the ECC website at:

https://consultations.essex.gov.uk/rci/waste-strategy-for-essex-consultation/

APPENDICES

APPENDIX A SEA POST ADOPTION PROCEDURES

Part 4 of the SEA Regulations requires ECC, 'as soon as is reasonably practicable' after the adoption of the Waste Strategy, to:

- Make a copy of the Final Waste Strategy for Essex and the accompanying Environmental Report available at its principal office for inspection by the public at all reasonable times and free of charge;
- 2. Notify the public and potentially affected parties of their availability;
- 3. Inform the Consultation Bodies and other parties who responded;
- 4. Issue a statement containing:
 - a) How environmental considerations have been integrated into the Waste Strategy;
 - b) How the Environmental Report has been taken into account;
 - c) How consultation responses have been taken into account;
 - d) The reasons for choosing the Waste Strategy as adopted;
 - e) Measures to monitor the significant environmental effects of the Waste Strategy.

Requirements 1 to 3 have been fulfilled by the publication of the Waste Strategy and SEA documents on ECC's website, and informing all consultees of the publication. In addition, with respect to requirement 1, a hardcopy will be available for inspection on request.

The publication of this SEA Post Adoption Statement fulfils Requirement 4.



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