

HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Executive Lead Member for Transport and Environment Strategy
Date:	3 October 2022
Title:	Project Appraisal: Hampshire Recycling Infrastructure Development
Report From:	Director of Economy, Transport and Environment

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Purpose of this Report

1. The purpose of this report is to set out the business case for investment in a new materials recovery facility at Chickenhall Lane in Eastleigh and associated works at the Waste Transfer Station network across Hampshire to enable the delivery of a new system for collecting dry recyclable waste across Hampshire that complies with the requirements for consistency in kerbside recycling services set out in the Environment Act 2021.

Recommendations

2. That the Executive Lead Member for Transport and Environment Strategy approves the Project Appraisal for a Materials Recovery Facility at Chickenhall Lane in Eastleigh and the associated necessary works to the Waste Transfer Station network, as outlined in this report, subject to granting of the necessary planning permission.
3. That approval be given to procure, spend and enter into the necessary contractual arrangements, in consultation with the Head of Legal Services, to implement the proposed development of the Materials Recovery Facility at Chickenhall Lane in Eastleigh and associated works to the Waste Transfer Station network across Hampshire, as set out in this report, at an estimated total cost of £30 million, with a £23.1million contribution from Hampshire County Council to be funded from prudential borrowing.
4. That authority to make the arrangements to implement the scheme, including minor variations to the design or contract, be delegated to the Director of Economy, Transport and Environment.

Executive Summary

5. This report seeks to:
 - set out the background to the project;
 - consider the finance for the project and set out the business case for the investment in the proposed development;
 - highlight the impact the project will have on the performance of the County Council and waste services across Hampshire; and
 - note the wider context of the proposal to the waste system in Hampshire.

Contextual Information

6. Hampshire County Council, as a Waste Disposal Authority (WDA), has a statutory duty for the disposal of municipal waste arisings in Hampshire. In order to fulfil this function, it has, in conjunction with its waste disposal partners, the unitary authorities of Portsmouth City Council and Southampton City Council, entered into a multi-year waste disposal service contract with Veolia UK Ltd.
7. The Waste Disposal Service Contract (WDSC) with Veolia is a Design, Build, and Maintain as well as Service contract, which requires the provision of the necessary infrastructure at the outset. The joint working arrangements put in place through the Project Integra partnership from 1997 onwards enabled the County Council to include recycling infrastructure within the remit of the WDSC, even though recycling activities are, in the main, the responsibility of Waste Collection Authorities (WCAs).
8. The recycling infrastructure delivered was originally designed to deal with a set specification in terms of inputs to sort, namely: plastic bottles, steel and aluminium cans, paper and cardboard. Whilst over time there have been some minor changes to this specification, it is limited in its scope from changing significantly without requiring major refurbishment or replacement to be able to accommodate and sort different material streams.
9. In December 2018, the Government published its Resources and Waste Strategy for England¹, which is the mechanism by which it will deliver on the ambition of the 25 Year Environment Plan to leave the environment in a better condition for future generations.
10. This was followed up with major consultations in February 2019 and April 2021 on the four key areas where legislative change is proposed:
 - consistency of recycling collections;
 - Deposit Return Scheme (DRS) for drinks containers;
 - Extended Producer Responsibility (EPR) for packaging; and
 - a plastics packaging tax.

¹ [Our waste, our resources: a strategy for England \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/764212/Our_waste_our_resources_a_strategy_for_England.pdf)

11. The key aim of the consistency of recycling collections work stream is to ensure a consistent range of material is collected in the kerbside recycling stream across England. At present, and based on the information gathered from the consultation documents to date, it is clear that the Government is seeking to maximise quality through material segregation when collecting, as well as identifying the below streams that would need to be collected from 2025:
 - cardboard;
 - paper;
 - aluminium & steel cans;
 - plastic bottles;
 - pots, tubs and trays (PTTs);
 - cartons;
 - glass; and
 - plastic films (from 2026/27).
12. At present the two Material Recycling Facilities (MRFs) located at Alton and Portsmouth are not capable of handling PTTs, plastic films, cartons, or glass, hence they will not be able to meet potential future legislative requirements. It is neither physically viable nor cost effective to upgrade the existing MRFs without significant renovation as set out in the report to the Executive Member for Economy, Transport and Environment on 2 July 2020².
13. The overarching Environment Act became law in November 2021. The Government is now working on the secondary legislation and guidance to support delivery of the consistency of recycling collections element. Due to changes within Government, there have been delays to the publishing of the Government's response to the Consistency in kerbside recycling consultation and progression of both the secondary legislation and announcement of the funding arrangements related to Extended Producer Responsibility and new burdens. This will now not be published in the autumn of this year as previously expected.

Finance

14.	<u>Estimates</u>	<u>£'000</u>	<u>% of</u> <u>total</u>	<u>Funds Available</u>	<u>£'000</u>
	Design Fee	690	2.3	HCC Prudential Borrowing	23,100
	Client Fee	0		Portsmouth City Council Capital Funding	3,450

² [Recycling and Single Materials Recovery Facility Update-2020-07-02-EMETE Decision Day \(hants.gov.uk\)](https://hants.gov.uk/news/recycling-and-single-materials-recovery-facility-update-2020-07-02-emete-decision-day)

Supervision	0		Southampton City Council Capital Funding	3,450
Construction	12,000	40		
Civils Works				
Processing Costs	12,300	41		
Contingency	5,010	16.7		
Land	0			
Total	30,000	100	Total	30000

15. Maintenance Implications £'000 % Variation to Committee's budget

Net increase in current expenditure	0	0
Capital Charge		

16. As stated above, the County Council is working with both Portsmouth and Southampton City Councils on the project under the existing tripartite arrangement that exists for the management of the waste disposal contract. This arrangement sees each authority funding a set percentage of the total project cost of £30 million, with the County Council liable for 77% (£23.1 million) and Portsmouth and Southampton Cities liable for 11.5% (£3.45 million) each.
17. Both Portsmouth and Southampton City Councils have made provision within their capital programmes for the necessary funding to support this project and will be progressing with the necessary formal decisions on the MRF business case during quarter three of this year.
18. The County Council has worked with its contractor, Veolia, to develop a design for the proposed MRF facility, as well as to consider the works required across the waste transfer station network in order to determine the estimated project costs. At this stage of the project these have been broken down into the two key constituent parts, those associated with the civil engineering works to deliver the footprint and the building and then those associated with the processing infrastructure required to sort the materials and associated services.
19. The new infrastructure will be operated and maintained by the current contractor Veolia under the Waste Disposal Service Contract which currently runs until December 2030. It is proposed that a variation is put in place to recognise the provision of the new dry recycling infrastructure and its

replacement of the existing co-mingled infrastructure. As such the operation and maintenance costs of the facility and the associated infrastructure will be included in the WDSC, and there will be no maintenance implications arising from the proposals in this paper.

Programme

20. It should be noted that whilst a planning application has been submitted and determined as valid it has not yet been considered by the Regulatory Committee. Due to the need to progress with the project as quickly as possible the project appraisal is being brought forward now and approval will be subject to the outcome of the planning submission.
21. It is estimated that once planning permission is granted the project will take approximately 12–18 months until the facility is completed and has been fully commissioned.
22. The construction period is estimated to be just under 12 months, with the installation of the processing equipment taking up to four months and allowing two months for commissioning and testing to take place. Where possible, elements of the programme will be progressed in parallel to reduce the overall project timetable.
23. The changes required to the Waste Transfer Station (WTS) infrastructure will be undertaken concurrently with the development of the new MRF, with the completion of works expected at the same time as the MRF to enable the full system to work effectively.

Scheme details

24. The proposed development would comprise a MRF with capacity to process around 135,000 tonnes per annum (tpa) of dry recyclable material. It is anticipated however that the initial input of dry recyclable materials would be in the order of 107,000 tpa with the capacity available to increase this to meet the demand of anticipated housing growth across Hampshire during the life of the facility.
25. The MRF would process the following materials from Hampshire's local collection services, Household Waste Recycling Centres (HWRC) and Veolia's Waste Transfer Stations (WTS):
 - Newspapers and Pamphlets (N&P);
 - Mixed Paper (MP);
 - Old Corrugated Cardboard (OCC);
 - Mixed coloured Glass;
 - Mixed Bottles;
 - Polypropylene (PP);
 - Pots, tubs and trays (PTT);
 - Plastic Film;
 - Ferrous metals (Fe);

- Non-Ferrous metals (N-Fe); and
- Beverage cartons.

26. The MRF would comprise the following key components as illustrated in Drawings 1 and 2 below:

- site entrance using the already constructed entrance and access track;
- a gate house and weighbridges;
- a portal framed MRF building (approximately 131m long by 80m wide by 15.5m high) with roller shutter doors;
- 2 Fire Water Tanks (approximately 10.3m wide in diameter and 12m high);
- Pumphouse (approximately 7m by 8m and 3m high);
- staff and visitor parking;
- offices and Materials Analysis Facility;
- lighting and security fencing; and
- circulation areas.

27. In addition to the development of the new MRF, it is necessary to undertake works across the Waste Transfer Station (WTS) network in Hampshire to enable the amended material streams to be stored and bulked for onward transport. These works will involve changes to the internal layout of the WTS buildings such that the bays in which material streams are tipped are suitable to accommodate not only the new twin stream dry recycling system but also, where feasible, a container for kerbside collected food waste to be tipped in.

Drawing 1 – Proposed Ground Floor Site Plan



Please note that the internal layout is not finalised due to the lack of clarity from Government regarding the detail associated with what materials will be identified as needing to be collected in the Consistency in Recycling Collections.

Drawing 2 – Proposed Roof Site Plan



Scheme Business Case

28. To support the work, a substantial model was developed to map the current waste system and associated cost to allow different scenarios to be run to reflect the introduction of new recycling infrastructure and the impact this would have on material flows through the system. The output shows the difference in cost between the current system and the scenario that has been modelled.
29. There are a number of assumptions related to the modelling that have the potential to change the final financial outcome. However, a significant contingency has been included in the project costs to take account of these. In light of the current economic situation the project timeline and costs are under review, however it should be noted that the level of uncertainty in the supply chain market means that any cost provided by suppliers may only be held for a maximum of two weeks. The key assumptions include:

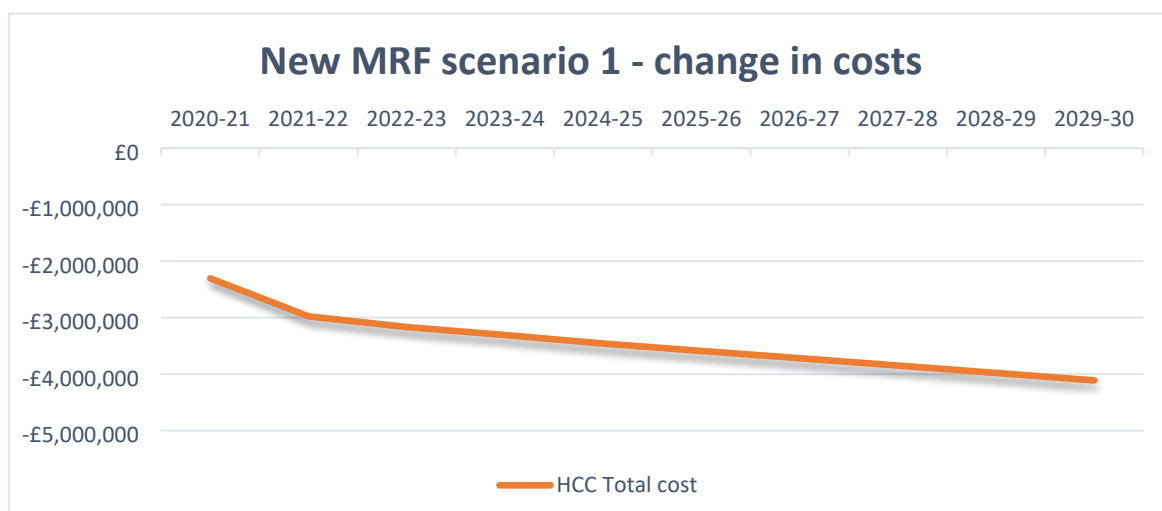
- Material Volumes – waste volume forecasts have been used to inform the model, but the service is demand driven and tonnage can vary depending on resident behaviour;
 - Capital Costs – based on work estimates from contractors, these are subject to change once works are tendered. Borrowing costs associated with the figures in the financial section above are included in the model calculations;
 - Waste System – it is assumed that all local authorities in Hampshire will switch to the twin stream system using set tipping locations for material. This is subject to change to suit operational needs and this could affect the financial outcome as each tipping location has its own cost;
 - Waste composition – 2018 waste composition data was used to inform waste volumes for diverted waste streams. As a snapshot taken at a point in time the composition data can vary from actuals, particularly as COVID-19 has had an impact on behaviour and therefore waste composition; and
 - Material income values – current material values were used to inform the model, but these are subject to fluctuation both up and down in global markets over time.
30. The model was configured to reflect a twin stream system, with those materials not currently collected (e.g., pots, tubs tray, cartons and glass) diverted from either the residual waste stream or other streams as appropriate. Capture rates of material are based on the Waste and Resources Action Programme³ (WRAP) data, with contamination rates for the material streams set at the rates assumed by the contractor in its proposal.
31. The scenario assumes that the two existing MRF facilities (Alton and Portsmouth) will close, along with Netley waste transfer station and all material will be diverted, mostly via other waste transfer stations, to the new facility in Eastleigh with some fibre being delivered to the current Portsmouth MRF for sorting and baling. The existing Portsmouth MRF will be converted to a fibre polishing plant to process a portion of the fibre stream, this will separate the paper and card so it can be bulked and sent to market for recycling.
32. The Alton MRF site will remain a site within the waste disposal service contract, the County Council retains an option to purchase the site under the contract at the end of the contract period in December 2030. Consideration is currently being given to how this site can be utilised for other waste operations, these would be subject to separate decisions and planning processes.
33. The modelling shows that there is an annual reduction in cost to Hampshire County Council of £2.3 million (see Graph 1 below), once the borrowing costs have been deducted, which is the result of a number of factors:

³ [About us | WRAP](#)

- reduced residual waste costs, as material that is currently in that stream will switch to the recycling stream (pots, tubs trays, cartons and flexible plastics). This shift includes existing recyclables that currently remain in the residual waste that are captured as overall performance is increased with a new system and increased communications;
- increased income from both increased tonnages of recyclable material collected and sale of additional residual waste capacity to process commercial and industrial waste; and
- reduction of capital costs associated with the existing infrastructure that will no longer be in use.

This saving set out above contributes towards the delayed package of waste related savings from the Transformation to 2021 and the delivery of the overall waste savings programme remains on track to meet the current savings timetable.

Graph 1: Total change in annual revenue costs



34. The modelling shows that the proposed investment in the new MRF offers annual revenue savings to the County Council as well as proving the basis for a new dry recycling system in Hampshire that will deliver a significant improvement in both the recycling performance and carbon impact of the waste system as a whole.

Consultation and Equalities

35. The development of the strategy for the new recycling system has been the subject of extensive consultation at both officer and Member level with all Project Integra partners and was ratified as part of the new Project Integra Joint Municipal Waste Management Strategy⁴ which was formally approved by the County Council in September 2021.

⁴ [Joint Municipal Waste Management Strategy-2021-09-23-EMETE Decision Day \(hants.gov.uk\)](https://hants.gov.uk/joint-municipal-waste-management-strategy-2021-09-23-emete-decision-day)

36. Prior to the submission of the planning application consultation was undertaken with the MP for Eastleigh, Paul Holmes, the Deputy Leader of Eastleigh Borough Council, Paul Bicknell and those County Councillors whose Wards are close to the development. These are Councillor Parker-Jones, Councillor Irish, Councillor Park and Councillor Broomfield.
37. Those consulted recognise the need for a change to the recycling system in Hampshire and that provision of new infrastructure will provide the opportunity for residents to recycle more.
38. All of those consulted have raised concerns regarding the impact that the proposed scheme will have on the traffic on the local road network, particularly Bishopstoke Road, due to the congestion that is currently experienced in the area.
39. As part of the planning process the application will be subject to a full public consultation as well as providing an opportunity for any other party to review and make a submission to the planning authority.
40. This decision is related to the construction of new recycling infrastructure and the development itself has been assessed as having a neutral impact on residents with protected characteristics. However, this decision will facilitate a significant change to kerbside recycling services and therefore indirectly there will be a positive impact for residents with the protected characteristics of age, disability, pregnancy and maternity, as well as those impacted by poverty and rurality, who will be able to recycle more items at the kerbside and avoid the need to make journeys to other places to recycle certain items like pots, tubs, trays and cartons.

Climate Change Impact Assessments

41. Hampshire County Council utilises two decision-making tools to assess the carbon emissions and resilience of its projects and decisions. These tools provide a clear, robust, and transparent way of assessing how projects, policies and initiatives contribute towards the County Council's climate change targets of being carbon neutral and resilient to the impacts of a 2°C temperature rise by 2050. This process ensures that climate change considerations are built into everything the Authority does.

Climate Change Adaptation

42. There are two climate variables that pose a vulnerability to this project: heavy rainfall and surface water flooding, and extreme storm and wind events. Whilst the risk is not considered to be high both have the potential to impact on the operation of the facility once constructed. It is anticipated that these risks can be mitigated through the detailed design process and with consideration regarding the construction processes used.

43. The project is important for meeting Hampshire County Council's strategic priorities by providing the infrastructure required to significantly improve the environmental performance across Hampshire in terms of recycling and diversion of residual waste from Energy From Waste (EFW) facilities. This contributes towards the strategic aim to ensure that 'People in Hampshire enjoy a rich and diverse environment.' In addition, the facility will represent a significant investment in new recycling infrastructure that will provide local employment and support economic development aims, therefore contributing to the strategic aim to ensure that 'Hampshire maintains strong and sustainable economic growth and prosperity'.

Carbon Mitigation

44. This project will support the delivery of a change to a twin stream kerbside recycling service across Hampshire with the outcome of increasing the recycling performance across the County. This system has been assessed against the alternatives of maintaining a fully comingled recycling service or opting for a 'kerbside sort' system and determined the best option, with a carbon impact assessment being a key factor in the decision. This assessment showed that the twin stream system would result in a significant reduction in carbon emissions compared with the current co-mingled service and an equal reduction to that achieved through a kerbside sort system.
45. The modelling work has shown that the preferred twin stream system delivers a significant increase in the overall recycling rate for the Project Integra partnership of 13.4%. This significant shift in recycling performance results in a reduction of the equivalent of -13,603 tonnes of CO₂ per annum compared to the current system from a waste disposal perspective. Whilst from a whole system perspective there is small increase in the carbon impact of the collection of material (2,175 tonnes of CO₂ equivalent) there is a significant overall reduction of -11,428 tonnes of CO₂ equivalent.

Statutory Procedures

46. A planning application has been submitted for the proposed development and therefore this project appraisal is subject to the approval of that application.⁵

Land Requirements

47. The County Council owns the land required for the proposed development and therefore there are no land requirements associated with this project appraisal.

⁵ [def | Hampshire County Council \(hants.gov.uk\)](https://hants.gov.uk)

Maintenance Implications

48. The new infrastructure will be operated by the current contractor Veolia under the Waste Disposal Service Contract which currently runs until December 2030. It is proposed that a variation is put in place to recognise the provision of the new dry recycling infrastructure and its replacement of the existing co-mingled infrastructure. As such the operation and maintenance costs of the facility and the associated infrastructure will be included in the WDSC. This will mean there are no maintenance implications arising from the proposals in this paper.

REQUIRED CORPORATE AND LEGAL INFORMATION:

Links to the Strategic Plan

Hampshire maintains strong and sustainable economic growth and prosperity:	yes
People in Hampshire live safe, healthy and independent lives:	no
People in Hampshire enjoy a rich and diverse environment:	yes
People in Hampshire enjoy being part of strong, inclusive communities:	no

Other Significant Links

Links to previous Member decisions:	
<u>Title</u> Recycling Infrastructure Planning Application-2021-10-28-EMETE Decision Day (hants.gov.uk)	<u>Date</u> 23.09.2021
Direct links to specific legislation or Government Directives	
<u>Title</u> The Environment Act 2021 - Environment Act 2021 (legislation.gov.uk)	<u>Date</u> 09.11.2021

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

Document

Location

None

EQUALITIES IMPACT ASSESSMENT:

1. Equality Duty

The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited by or under the Act with regard to the protected characteristics as set out in section 4 of the Act (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation);
- Advance equality of opportunity between persons who share a relevant protected characteristic within section 149(7) of the Act (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic within section 149(7) of the Act (see above) and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- The need to remove or minimise disadvantages suffered by persons sharing a relevant protected characteristic that are connected to that characteristic;
- Take steps to meet the needs of persons sharing a relevant protected characteristic that are different from the needs of persons who do not share it;
- Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

2. Equalities Impact Assessment:

This decision is related to the construction of new recycling infrastructure and the development itself has been assessed as having a neutral impact on residents with protected characteristics. However, this decision will facilitate a significant change to kerbside recycling services and therefore indirectly there will be a positive impact for residents with the protected characteristics of age, disability, pregnancy and maternity, as well as those impacted by poverty and rurality, who will be able to recycle more items at the kerbside and avoid the need to make journeys to other places to recycle certain items like pots, tubs, trays and cartons.