

#### Town and Country Planning Act 1990 (as amended)

Planning and Compulsory Purchase Act 2004

The Town and Country Planning (Determination by Inspectors) (Inquiries Procedure) (England) Rules 2000 (as amended)

# PROOF OF EVIDENCE

## **ALAN POTTER**

#### on behalf of Dorset Council

Appeal by Powerfuel Portland Limited against the refusal by Dorset Council of Planning Application Ref. WP/20/00692/DCC for the construction of an energy recovery facility with ancillary buildings and works including administrative facilities, gatehouse and weighbridge, parking and circulation areas, cable routes to ship berths and existing off-site electrical sub-station, with site access through Portland Port from Castletown,

# at Portland Port, Castletown, Portland, Dorset, DT5 1PP

Planning Inspectorate References:	APP/D1265/W/23/3327692
Dorset Council References:	WP/20/00692/DCC
Date:	7th November 2023

# **Table of Contents**

1	Introduction	2
2	Focus of this Proof	4
3	Assessment of Compliance with Policy Tests	6
4	Conclusion	15
Αp	pendix 1: Assessment of Need	16
Αp	pendix 2: Assessment of Net Self Sufficiency	27
An	ppendix 3: Method Statement for Residual Waste Estimation	29

#### SUMMARY OF PROOF

This proof sets out my assessment of aspects of the refusal on which I have been instructed. Having undertaken a detailed analysis of the best available data I find that the Appeal proposal would not be compliant with aspects of Policy 1 or Policy 4 or Policy 6.

In particular with respect to the Policy tests posed I find that:

Would the Appeal Proposal result in waste being managed at the highest feasible level (applying the hierarchy in priority order as set out in Objective 1 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (2019))?

#### No.

Would the Appeal Proposal support the Bournemouth, Christchurch, Poole and Dorset area in moving towards/optimising net self-sufficiency (in line with Objective 2 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (2019))?

#### Yes to some degree.

Would the Appeal Proposal adhere to or be consistent with the proximity principle through being located as close as practicable to the proposed origin of waste to reduce total mileage waste is transported (in line with as per Objective 3 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (2019).

#### No.

Are none of the sites allocated for the purposes to which the Appeal relates available, or does the Appeal proposal provide advantages over those offered by the allocated sites?

#### The allocated sites are available, and the claimed advantages are uncertain.

Does the Appeal proposal support delivery of the Spatial Strategy underpinning the Waste Plan.

#### No.

The need which the Appeal proposal is intended to meet, is now far less, and the remaining need is capable of being met through an existing permission on the allocated site at Parley (allocation 7), which would support the Spatial Strategy underpinning the adopted Waste Plan as required by Policy 4 (clause c.) and Policy 6 (clause a.) in contrast to the Appeal proposal.

The Appeal proposal would generate substantial additional waste miles when compared with management at any one of the allocated sites, with associated adverse effects.

I understand that the Plan is to be read as a whole, and the above aspects are considered in the planning balance, as set out in other evidence.

#### 1 Introduction

- 1.1. My name is Alan Potter, I am an elected Fellow of the Chartered Institution of Wastes Management, a Chartered Environmentalist, a qualified environmental auditor to the Institute of Environmental Management and a member of the United Kingdom Environmental Law Association. I am a founding partner of minerals and waste planning consultancy BPP Consulting LLP.
- 1.2. I have worked in the field of waste management planning all my professional career (35 years) including:
  - 1. East Sussex County Council & Environment Agency: Waste Regulation and Waste Planning Authority including county wide waste strategy;
  - 2. Environmental Services Association; National Lead on waste planning matters including advising Government on development of waste policy;
  - 3. Consultancy preparing planning and permit applications for waste management facilities; research on behalf of the Royal Institution of Chartered Surveyors on the effectiveness of the waste planning system;
  - 4. BPP Consulting partner advising Waste Planning Authorities on the formulation of compliant waste plans including specific responsibility for production of Waste Needs Assessments (WNAs) and policy that flow from them. I have recently produced WNAs for Gloucestershire, Somerset amongst other WPAs and provided forecasts of Commercial and Industrial Waste arising in Dorset that informed the production of the current adopted Waste Plan.
  - 5. I am a serving member of the Government (DEFRA) Advisory Panel on Waste Data that informs the development and monitoring of national waste and resources policy. I am also a lead author of a lifecycle assessment study that informed development of Government guidance on the application of the Waste Hierarchy. I am chair of a national waste planning authority led, task and finish group developing guidance on the assessment of waste management facility capacity in England for Waste Planning Authorities formulating their Waste Local Plans.
- 1.3. I have been instructed by Dorset Council to provide independent professional evidence concerning one of the principal reasons for refusal of planning application WP/20/00692/DCC. The evidence which I have prepared and provide in this Proof of Evidence is true and accurate to the best of my knowledge. I confirm that the opinions expressed are my true professional opinions. I have no conflict of interest and confirm that this Proof of Evidence has been produced with full cognisance of the rules relating to such matters adopted by the relevant professional institutions.
- 1.4. This proof of evidence informs the Council's lead witness planning proof, that sets out the Council's case as a whole, assessing the planning balance between all the benefits and harms of the Appeal proposal.

#### 2 Focus of this Proof

- 2.1. Planning Application Ref. WP/20/00692/DCC (which is now the subject of this Appeal) was refused by the Council's Strategic Planning Committee at its meeting on 24th March 2023. The Decision Notice sets out three reasons for refusal. I have been instructed to provide evidence relevant to the first reason which is as set out below and to inform the overall planning balance:
  - 1. The proposed development, being located on a site that is not allocated in the Bournemouth, Christchurch, Poole and Dorset Waste Plan 2019, fails to demonstrate that it would provide sufficient advantages as a waste management facility over the allocated sites in the Plan. This is by reason of its distance from the main sources of Dorset's residual waste generation and the site's limited opportunity to offer co-location with other waste management or transfer facilities which, when considered alongside other adverse impacts of the proposal in relation to heritage and landscape, mean that it would be an unsustainable form of waste management. As a consequence, the proposed development would be contrary to Policies 1 and 4 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan 2019 and paragraph 158 of the NPPF.
- 2.2. I particularly focus on addressing the following questions:
- 2.3. Policy 1 compliance:
  - 1. Would the Appeal Proposal result in waste being managed at the highest feasible level (applying the hierarchy in priority order as set out in Objective 1 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (2019))?
  - 2. Would the Appeal Proposal support the Bournemouth, Christchurch, Poole and Dorset area in moving towards/optimising net self-sufficiency (in line with Objective 2 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (2019))?;
  - 3. Would the Appeal Proposal adhere to or be consistent with the proximity principle through being located as close as practicable to the proposed origin of waste to reduce total mileage waste is transported (in line with as per Objective 3 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (2019).
- 2.4. Policy 4 compliance and Policy 6 (clause a) compliance:
  - 4. Are none of the sites allocated for the purposes to which the Appeal relates available, or does the Appeal proposal provide advantages over those offered by the allocated sites?
  - **5.** Does the Appeal proposal support delivery of the Spatial Strategy underpinning the Waste Plan.

#### 3 Assessment of Compliance with Policy Tests

- 1. Would the Appeal Proposal demonstrably result in waste being managed at the highest feasible level of the waste hierarchy?
- 3.1. The Appeal proposal would involve the incineration of up to 202,000 tonnes of waste each year for at least 25 years from commencement of operation, were it to be granted permission. Incineration of waste is classed as disposal, unless sufficient energy is captured and utilised to meet the minimum threshold referred to as R1. Incineration plants that meet R1 are considered to be classed as facilities subjecting the waste managed to a recovery process. However when considering the waste hierarchy, this is classed as 'other recovery' to distinguish it from management methods such as recycling and composting that are considered to offer superior environmental benefits.
- 3.2. Given the waste hierarchy is to be implemented in priority order, i.e. from the top down, waste producers and managers must consider how waste can first be prevented, then reused, then recycled or composted (plus organic waste treatment) before it should be subject to 'other recovery' or disposal.
- 3.3. As recycling seeks to increase to meet national policy requirements more materials will need to be extracted from the waste stream. An incinerator that is seeking to meet the R1 requirement and hence be classed as recovery rather than disposal, must burn a minimum amount of waste each year to produce the minimum amount of energy needed to drive its electricity generation process. This requirement will last for at least 25 years. Hence there is an element of competition between the management methods, and where the supply is limited this competition will be for the same waste (or what might be called feedstock).
- 3.4. Without any form of intervention, the fate of the materials in waste would be left to the market to decide. If that were the case given that generally speaking managing waste through incineration is a cheaper solution when compared to managing it through recycling methods, more waste would go to incineration, meaning the resource value of the materials that might be gained through recycling would be lost. Hence the Government has introduced minimum targets for recycling through its Waste Strategy, plus other requirements such as making compliance with the Waste Hierarchy a legally binding requirement on all waste holders when handling waste, to constrain the operation of the market and force waste to be subject to management higher up the hierarchy than might otherwise be the case.

- 3.5. My updated assessment of need for residual waste management capacity in Dorset & BCP presented in Appendix 1 to this proof shows that:
  - 1. the capacity proposed in the Appeal proposal would be far in excess of the local need which is estimated to be as low as 25,000 tpa by the end of the Plan period;
  - 2. there is no apparent regional need; and
  - 3. there is no apparent national need.
- 3.6. As a consequence of the revised estimates I have found that the requirement for additional management capacity for residual waste in the Dorset & BCP (the Dorset subregion) is significantly less than the proposed capacity of the Appeal plant of 202,000 tpa. Combined with the apparent absence of a wider (beyond Dorset subregion) need, were the plant to be built it can be expected that waste that would otherwise be managed further up the waste hierarchy risks being locked into management by a method nearer the bottom of the hierarchy. This risk increases over time as recycling targets rise, requiring a wider range of materials to be separated out. This is because in practice decisions to invest in the sorting capacity needed to deliver the statutory recycling targets is deterred because the investment may be undercut by the contracts already in place to supply energy from waste plants. In this context, it is notable Government has very recently acknowledged the long term nature of residual waste disposal contracts supplying energy from waste plants in its response to consultation on simpler recycling released 25 October 2023<sup>1</sup> and has proposed transitional arrangements to defer the introduction of certain aspects of the forthcoming separate collection of recyclates due to their existence, so demonstrating the direct tension between supply to EfW plants and improving recycling.
- 3.7. Therefore, it cannot be said that the Appeal Proposal would result in waste being managed at the highest feasible level of the waste hierarchy as required by the adopted Waste Plan (Policy 1 expressing Objective 1). On the contrary it can be expected to operate in the opposite direction.

5 | Page

<sup>&</sup>lt;sup>1</sup> Consultation outcome Government response Updated 25 October 2023 https://www.gov.uk/government/consultations/consistency-in-household-and-business-recycling-in-england/outcome/government-response

# 2. Would the Appeal Proposal support the Bournemouth, Christchurch, Poole and Dorset area in moving towards/optimising net self-sufficiency?

- 3.8. To understand if the proposal will support or undermine the Waste Plan area's aspiration of achieving self sufficiency, it is necessary to establish the extent to which net self sufficiency is currently being achieved in the Plan Area. Analysis of the most recent data, presented in Appendix 2, indicates that the Plan area is not apparently fully achieving net self sufficiency overall, so the additional provision of capacity would therefore assist in meeting this objective.
- 3.9. However, it should be noted that self sufficiency is normally interpreted as 'net', as the day-to-day management of waste is subject to market forces and rarely respects administrative boundaries. Hence addition of the term 'net' allows for flows of waste into and out of a waste plan area, with the objective of achieving an overall balance of provision of capacity. It is evident that this approach has been applied in the adopted Waste Plan as Policy 1-Sustainable waste management includes reference to 'net self sufficiency'.
- 3.10. Moreover, there is no expectation in Government policy for every waste plan area to provide for the management of every tonne of waste actually produced within its area. This may be due to a combination of factors, such as arisings being in closer proximity to waste management facilities located outside the Plan area, as well as the provision of facilities being subject to economies of scale. This is recognised in the national Planning Practice guidance which states:

# Do the self-sufficiency and proximity principles require each waste planning authority to manage all of its own waste?

Though this should be the aim, there is no expectation that each local planning authority should deal solely with its own waste to meet the requirements of the self-sufficiency and proximity principles. Nor does the proximity principle require using the absolute closest facility to the exclusion of all other considerations. There are clearly some wastes which are produced in small quantities for which it would be uneconomic to have a facility in each local authority. Furthermore, there could also be significant economies of scale for local authorities working together to assist with the development of a network of waste management facilities to enable waste to be handled effectively.

The ability to source waste from a range of locations/organisations helps ensure existing capacity is used effectively and efficiently, and importantly helps maintain local flexibility to increase recycling without resulting in local overcapacity. Paragraph: 007 Reference ID: 28-007-20141016 Revision date: 16 10 2014

3.11. Given that Plan area waste destined for 'other recovery' (aka energy from waste) is currently largely being managed at the Bridgwater EfW plant following

pre-treatment at Canford Magna MBT plant, and these inputs represent a substantial amount of the total input to the Bridgwater EfW plant, the waste arising in Dorset is being managed in a way which ensures that existing capacity i.e. at Bridgwater EfW is being used effectively and efficiently, while maintaining local flexibility to increase recycling without resulting in local over capacity as indicated by the updated need case, as the planning practice guidance advises. Therefore while the Appeal proposal would contribute towards net self sufficiency, the imperative of the Plan area being so for residual waste management is reduced with ready availability of capacity in proximity to the Plan area. It is notable that the Northacre EfW plant in Wiltshire has been granted consent recently and this was predicated upon waste being received from Dorset and BCP too.

- 3. Would the Appeal Proposal be consistent with, the proximity principle through being located as close as practicable to the proposed origin of waste to reduce the total mileage of waste is transported?
- 3.12. To understand the importance of consistency of proposals for residual waste management capacity with the proximity principle, it is necessary to consider the Spatial Strategy upon which the site allocations are predicated. This is set out on pages 26 and 27 of the Plan and states, in connection with the provision of residual waste management capacity:

"Appropriate facilities are needed to manage this waste, whilst ensuring that value is obtained through the recovery of energy wherever practicable. Provision will be made for residual waste treatment facility(s) to manage waste derived throughout the Plan area. The need for strategic residual waste treatment facilities will primarily be addressed through new capacity in south east Dorset.

However, additional capacity may also be appropriate elsewhere to ensure the capacity gap is adequately addressed and when it will result in a good spatial distribution of facilities providing benefits such as a reduction in waste miles. Four existing waste management sites are allocated to address this need through the intensification or re-development of existing operations (Inset 7, 8, 9 and 10)."

- 3.13. The Inspector's report into the Plan examination (CD12.34) sets out why the strategy has been arrived at in the following terms:
  - 24. Because the population is concentrated in the south-east of the plan area, within Bournemouth, Poole and Christchurch, strategic provision is required close to those urban areas. The plan has identified strategic requirements for residual waste management and recycling and allocates sites to meet those requirements, which are well related to the sources of waste. This approach is consistent with achieving self-sufficiency and proximity.

Bournemouth, Dorset and Poole Waste Local Plan, Inspector's Report 31 January 2019

- 3.14. The greatest concentration of waste arises within the Bournemouth, Christchurch and Poole area (referred to as the South East Dorset conurbation) and so, to be consistent with the proximity principle, the Spatial strategy of the Plan supports provision of capacity in that part of the Plan area, and four sites are allocated there as shown on Figure 1 below/overleaf.
- 3.15. Provision is also made for waste transfer capacity so that waste arising in rural west Dorset can be aggregated "for more efficient transport". Site allocations are made to facilitate the sustainable movement of waste at the following locations:
  - Blandford waste management centre; and
  - a transfer station for the Dorchester area; and.
  - a transfer station and replacement of the Wareham waste vehicle depot.
- 3.16. The Plan also identifies a need for the development of a transfer station to facilitate "the sustainable movement of waste in the east of Dorset", but does not include an allocation for this.
- 3.17. Figure 1, which is based on the Key Diagram that illustrates the Spatial Strategy included as Appendix 1 of the adopted Waste Plan and which I have adapted for the purposes of my evidence, shows the following:
  - The population distribution and residual household waste arisings across the Plan area including the urban areas where population and waste arisings are most concentrated;
  - key transfer stations where waste from rural Dorset is currently aggregated (and then moved to Canford Magna for conversion into RDF).
  - the sites allocated in the Plan for residual waste management capacity (and waste transfer for completeness);
  - relevant sections of the Dorset Advisory Lorry Route (as per Figure 10 of adopted Waste Plan); and
  - the Appeal site.
- 3.18. Figure 1 shows that the majority of the population lives in the east of the Plan area, accounting for around four fifths of the total population of Dorset and BCP. If this distribution is taken as a proxy for the production of residual waste from homes and businesses, this suggests that, were a single facility to be provided for the final management of residual waste for the whole Plan area, it ought to be sited in the east of the Plan area for waste miles to be minimised. This is

- the approach upon which the Plan's Spatial Strategy is predicated, and upon which the site allocations were made.
- 3.19. One only needs to glance at Figure 1 to see that in the context of the Plan area as a whole, Portland offers the exact opposite of a good spatial distribution being an island. If the Appellant is targeting BCP and Dorset's residual waste, the Appeal Site is remote and poorly located to the main areas of waste arisings from the south east Dorset conurbation.
- 3.20. While the Proximity Principle is defined elsewhere, in this case compliance with Policy 1 requires facilities to be "appropriately located relative to the source of the waste". The source of any road borne waste into the site is likely to be largely BCP and nearer parts of south east Dorset largely but even most other parts of Dorset are more proximate to the allocated sites such as Canford than to Portland, particularly taking account of road infrastructure. Different arguments may apply to sea borne waste but this is extremely unlikely to be Dorset and BCP origin waste, which the Waste Plan is principally concerned with, and long distance transport of such waste to Portland raises a question of proximity for these sources, regardless of transport mode.

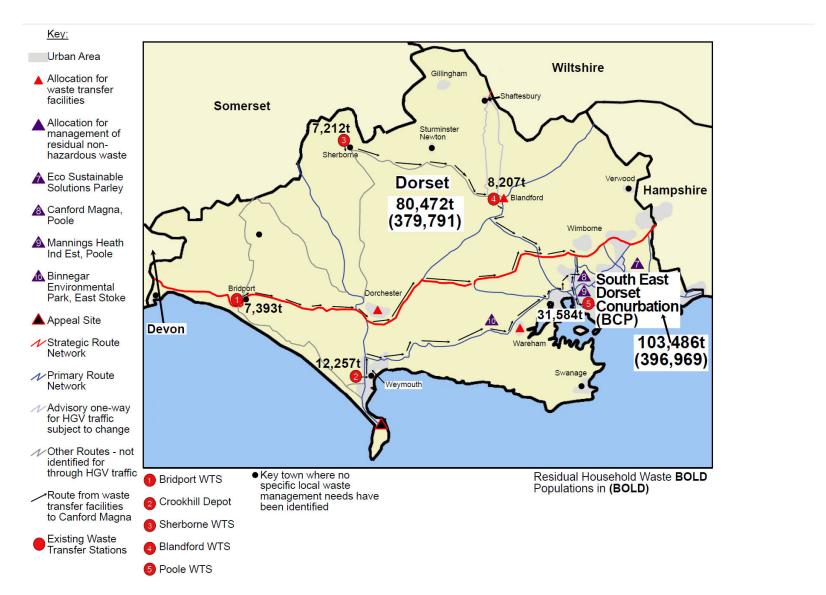


Figure 1: LACW Flows and Adopted Waste Plan Spatial Strategy vis a vis Appeal Proposal

- 4. Are none of the sites allocated for the purposes to which the Appeal relates available, or does the Appeal proposal provide advantages over those offered by the allocated sites?
- 3.21. This section of my proof only deals with the first part of this question, as the matter of the possible advantages the Appeal site may offer over the allocated sites, is dealt with in other evidence. Given the Appeal proposal is on a site that is not allocated, Policy 4 comes into play (along with Policy 6 -Recovery of Waste).
- 3.22. The adopted Waste Plan allocates a number of sites for waste development to meet the identified needs set out in the Plan. This includes four sites for accommodating facilities to manage residual waste, for which an approximate shortfall of 232,000 tpa was identified to arise by the end of the Plan period. The specific sites and purpose are set out in Policy 3 – 'Site allocated for waste management development' in the following terms:

"The following existing permitted waste sites are allocated for their potential for intensification and re-development, including facilities for the management of non-hazardous waste:

Inset 7 - Eco Sustainable Solutions, Chapel Lane, Parley

Inset 8 – Land at Canford Magna, Magna Road, Poole

Inset 9 – Land at Mannings Heath Industrial Estate, Poole

Inset 10 – Binnegar Environmental Park, East Stoke"

- 3.23. The details of each site provided in the Plan include the tonnages of residual waste to be managed against which each site's suitability for inclusion as an allocation was assessed as follows:
  - 7.Eco Sustainable Solutions Parley 160,000 tpa;
  - 8. Canford Magna Poole c25,000 tpa
  - 9. Mannings Heath Ind Est, Poole 100,000tpa
  - 10.Binnegar Environmental Park, East Stoke 100,000tpa
- 3.24. Hence all the above sites were assessed individually on the basis of accepting a significantly smaller tonnage than that now proposed to be managed by the Appeal proposal. This suggests that the intention was not to provide for the full amount of capacity gap projected at the end of the Plan period at a single site, rather that provision would be made by step-wise intensification. In this way over provision of capacity that might compromise the movement of waste further up the waste hierarchy could be avoided.

- 3.25. In this context it is notable that permission has already been granted at one of the allocated sites, Eco Sustainable Solutions for a residual waste management facility accepting c60,000tpa<sup>2</sup>. Another site, Canford Magna is the subject of a live application for an ERF seeking to burn up to 260,000 tonnes of waste per annum.
- 3.26. It is also notable that the Sustainability Appraisal of the Waste Plan, *Waste Plan Sustainability Appraisal Report August 2018* (CD12.32) found the following:
  - **3.22** The Waste Planning Authority is confident that the appropriate needs have been identified. Sufficient sites are proposed for allocation in the final Plan to reduce the likelihood of unsuitable sites being permitted on appeal. In some cases it has been considered appropriate to rely on criteria based policies rather than site specific allocations to aid flexibility.
- 3.27. It can be concluded that at least two of the four site allocations are actively seeking to accommodate capacity for the management of residual waste in the Dorset subregion, and given that all four sites are established waste management facilities are also subject to safeguarding under Policy 24, all are considered to remain available for development. Hence the test of Policy 4a that "there is no available site allocated for serving the waste management need that the proposal is designed to address" is not met.

### **Advantages**

**3.28.** While the matter of claimed advantages is largely addressed in other evidence, when considering the issue of the overall waste miles associated with provision of the capacity proposed at the Appeal site, these waste miles would be expected to increase. this is because, when compared with development of the allocated waste sites, more waste would have to travel from the south east Dorset conurbation, assuming the appeal proposal, albeit a merchant plant, would be seeking to meet Dorset's needs in the first instance. This is illustrated in Table 1 below where distances from the waste transfer facilities serving rural Dorset to Canford Magna (a site allocation) is compared with those that would be travelled to the Appeal site. This shows that at least an additional total of 4.1 million waste miles per tonne of waste would be travelled were the plant subject to this Appeal to be consented and built and waste arising in Dorset ended up being managed at it, in preference to one of the allocated sites. It should also be noted that such a flow would be contrary to the Spatial Strategy that any proposal on an unallocated site is required to support under clause c. of Policy 4.

**12** | Page

<sup>&</sup>lt;sup>2</sup> See Officer's Report and Decision Notice for application 8/21/0207/FUL Proposed development comprising the installation of a low carbon Energy Recovery Facility for the generation of electricity and heat through a low emissions thermal process using residual waste. (CD 12.33a & 12.33b)

Table 1: Comparative distances to Canford Magna vs Appeal site

	Distance	(miles)		Tonnes Residual	Additional LACW
From	Canford Magna	Appeal Site	Difference	LACW Managed	waste miles per year
BCP SE Dorset conurbation	<10	37	+27	71,902	1,941,354
Poole WTS	4	36	+32	31,584	1,010,688
Direct Haul from East Dorset (Verwood)	11	47	36	45,403	1,634,508
Blandford WTS	13.1	30.9	+26.8	8,207	219,948
Bridport WTS	40.4	21.3	-19.1	7,393	-141,206
Sherborne WTS	36.8	30.4	-6.4	7,212	-46,157
Chickerell WTS	33	5	-28	12,257	-343,196
Total				183,958t	4,275,939

3.29. Finally while the Appellant claims that the Appeal site offers the advantage of the ability to provide carbon capture, that is not available on the allocated sites, I note no space is actually identified to accommodate the necessary infrastructure as part of the application, and a number of the allocated sites have sufficient space to accommodate such infrastructure. In that regard the current application for a similar sized EfW plant at Canford Magna does include such land.

# 5. Does the Appeal proposal support delivery of the Spatial Strategy underpinning the Waste Plan?.

- 3.30. The requirement for a proposal seeking to provide capacity located on a non-allocated site to support the adopted Waste Plan's Spatial Strategy is set out in clause c of Policy 4 and also clause a of Policy 6. While the Spatial Strategy for residual waste management set out on page 27 of the adopted Waste Plan does allow for the possibility of additional capacity being provided 'elsewhere', this is only on the basis that:
  - the capacity gap is not already adequately addressed; and
  - is on the proviso that it results in a good spatial distribution of facilities providing benefits such as a reduction in waste miles.

#### 3.31. My assessment is that:

- the significantly reduced capacity gap is being addressed through applications on allocated sites; and
- the proposed Appeal site is located a considerable distance from the south east Dorset conurbation. As a result it would generate additional 4.2 million waste miles per annum as compared with the allocated sites in the movement of residual waste arising from the Local Authority Collected Waste stream alone.

Therefore, the proposal does not support delivery of the Spatial Strategy that underpins the adopted Waste Plan.

#### 4 Conclusion

4.1. Having undertaken a detailed analysis of the best available data of relevance to the aspects of the refusal on which I have been instructed, I find that the Appeal proposal would not be compliant with aspects of Policy 1 or Policy 4 or Policy 6. In particular with respect to the Policy tests posed that:

Would the Appeal Proposal result in waste being managed at the highest feasible level (applying the hierarchy in priority order as set out in Objective 1 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (2019))?

No.

Would the Appeal Proposal support the Bournemouth, Christchurch, Poole and Dorset area in moving towards/optimising net self-sufficiency (in line with Objective 2 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (2019))?

Yes to some degree.

Would the Appeal Proposal adhere to or be consistent with the proximity principle through being located as close as practicable to the proposed origin of waste to reduce total mileage waste is transported (in line with as per Objective 3 of the Bournemouth, Christchurch, Poole and Dorset Waste Plan (2019).

No.

Are none of the sites allocated for the purposes to which the Appeal relates available, or does the Appeal proposal provide advantages over those offered by the allocated sites?

The allocated sites are available, and the claimed advantages are uncertain.

Does the Appeal proposal support delivery of the Spatial Strategy underpinning the Waste Plan.

No.

- 4.2. The need which the Appeal proposal is intended to meet, is now far less, and the remaining need is capable of being met through an existing permission on the allocated site at Parley (allocation 7), which would support the Spatial Strategy underpinning the adopted Waste Plan as required by Policy 4 (clause c.) and Policy 6 (clause a.), in contrast to the Appeal proposal.
- 4.3. The Appeal proposal would generate substantial additional waste miles when compared with management at any one of the allocated sites with associated adverse effects.
- 4.4. I understand that the Plan is to be read as a whole, and the above aspects are considered in the planning balance, as set out in other evidence.

## **Appendix 1: Assessment of Need**

- A1.1. The starting point in establishing need is the Waste Local Plan evidence base paper, Background Paper 1 Waste Arisings and Projections (November 2017) (CD12.35). This was used to generate estimates of arisings from which forecasts were projected and these were then compared with the capacity offered by existing waste management facilities to establish whether a capacity gap existed or was predicted to emerge. This paper relied on data for 2015.
- A1.2. At the time it was formulated, the headline requirements for additional residual waste management capacity to be planned for in the Waste Plan are set out in the box commencing the section relating to Recovery, entitled "The need for facilities for the treatment of waste". This states the following:

Identified Need 7: We estimate that there could be a shortfall of approximately 232,000tpa in capacity for managing non-hazardous residual waste at the end of the Plan period. There is a need to make provision for facilities to manage residual waste. It is proposed to achieve this through allocation of sites for intensification or development (Insets 7 to 10).

A1.3. The shortfall of approximately 232,000tpa in capacity for managing non-hazardous residual waste was predicated on the production of at least 414,000 tpa of LACW and 497,000 tonnes of Commercial & Industrial waste in 2023 (Table 2 of the Waste Plan - p39), these figures having been arrived at by applying an average annual growth rate of 0.9% for LACW and 1.4% for C&I waste respectively to the baseline values generated for 2015.

#### A1.4. However, I note that:

- the data relied on are old and do not reflect recent trends or current arisings, nor more recent waste policy;
- the most recent LACW data released by DEFRA for the combined authorities gives a value of 397,859 tonnes actually produced in 2021-22, hence some 16,200 tonnes less than forecast or just under 4%. This suggests that the growth rate applied of 0.9% for LACW is some 0.5% above the growth rate that ought to be applied, that being 0.35%.
- data for C&I waste arising is less readily available, but reference to the most recent national forecasts released by Government<sup>3</sup> (CD.12.36) indicates that commercial waste arisings are projected to increase steadily from 2022 to 2050 with an average annual growth rate of +0.68% per annum, whilst industrial waste arisings are projected to progressively fall with an average annual growth rate of -0.21% per annum. Hence it is apparent that the average annual growth rate applied to generate the Waste Plan forecast of 1.4% for C&I waste is far in excess of the more recent national estimate. The growth rate is more likely to lie somewhere

<sup>&</sup>lt;sup>3</sup> 'Future Waste Arisings' DEFRA, Eunomia April 2021 (CD 12.36)

between -0.21% and +0.68% depending on the ratio of commercial to industrial waste arising in the Plan area.

- A1.5. The ratio of commercial to industrial waste can be ascertained by reference to the Defra commissioned Commercial and Industrial Waste Survey 2009<sup>4</sup>, which provides a split of waste arisings by the commercial and industrial sector and by WPA in the South West region (Table N1 page 135). Therefore, a combined C&I waste growth rate can been calculated as follows:
  - Commercial waste represented 70% of C&I waste arisings: 70% of +0.68% = 0.48%
  - Industrial waste represented 30% of C&I waste arisings: 30% of -0.21% = -0.06%

#### 0.48 + -0.06% = +0.42% p.a.

- A1.6. Therefore, an overall +0.42% growth rate per annum ought to be applied to the 2015 C&I baseline value to forecast C&I waste arisings to 2033.
- A1.7. The combined effect of the revised growth rates is set out in Table 2 below.

Table 2: LACW & C&I waste forecast for Dorset subregion applying revised Growth Factors to 2015 baseline values (updated Table 2 of Waste Plan) ton

	2015	2018	2023	2028	2033
LACW	387,000	391,897	400,196	408,671	417,325
C&I waste	447,000	451,710	459,670	467,771	476,015
Total	834,000	843,607	859,866	876,442	893,340

- A1.8. Table 2 shows that applying the updated growth factors, combined waste arisings are expected to rise by c59,500 tonnes by the end of the Plan period. This is in contrast to the adopted Plan's projection of an increase of 191,000 tonnes. This reflects a reduction in overall growth rate from 23% to 7% over the 18 year period (equating to average c4% per annum). Hence the starting position from which the capacity gap is assessed, has fallen substantially.
- A1.9. The next factor to consider when assessing the quantity of residual waste that will require management through different methods, is to determine appropriate targets to be met in the management of each waste stream. Since formulation of the targets (in 2015) used to generate tonnages requiring management capacity for recycling/composting, and in turn the resultant tonnages of residual waste, the following policy measures have been adopted at national level:
  - virtual elimination of biodegradable waste from landfill by 2028

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<sup>&</sup>lt;sup>4</sup> Commercial and Industrial Waste Survey 2009 Final Report (DEFRA., December 2010) (CD 12.37)

- 65% recycling of all municipal waste by 2035 with no more than 10% ending up in landfill
- halving of residual waste by 2042
- elimination of all avoidable waste by 2050.
- A1.10.NPPW (CD 9.2) at paragraph 2 requires that waste planning authorities take account of the
  - "...Government's latest advice on forecasts of waste arisings and the proportion of waste that can be recycled."
- A1.11.Government advice included in the national Planning Practice Guidance<sup>5</sup> is that arisings are likely to grow but only modestly. The Third Annual Monitoring Report for The Resource & Waste Strategy, published by DEFRA (CD12.38) sets out a framework for categorising wastes according to how readily different materials that occur in the residual waste stream can be recycled as follows:
  - 1. Readily recyclable with current technologies
  - 2. Potentially recyclable with technologies in development
  - 3. Potentially substitutable to a material that could be recycled
  - 4. Difficult to recycle or substitute.
- A1.12. It concludes that "...in 2017 an estimated 53% of residual waste (by weight) consisted of readily recyclable materials, with only 8% being completely unavoidable. This represents a significant opportunity to further decrease the amount of residual waste produced in England." (page 25). The above guidance represents the Government's latest advice on the proportion of waste that can be recycled.

#### Assessment of Residual Waste Arisings in Plan area

A1.13. National Planning Practice Guidance states the following:

"Planned provision of new capacity and its spatial distribution should be based on robust analysis of best available data.."

Paragraph: 035 Reference ID: 28-035-20141016

A1.14. Therefore I have used the latest Environment Agency WDI data for 2022 to generate estimates of the tonnage of residual waste that might be suitable for management through EfW produced in the Dorset subregion in 2022.

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<sup>&</sup>lt;sup>5</sup> Paragraph: 032 Reference ID: 28-032-20141016

- A1.15. To do this it is necessary to consider tonnages of waste identified in the Waste Data Interrogator as:
  - arising in the subregion going to EfW and landfill as these represent final fates<sup>6</sup>; plus
  - arising in the subregion being exported for management outside England (as this is not reported in the WDI); plus
  - arising in the subregion sent to transfer/treatment facilities outside the subregion (as such waste will not be identified as arising in the subregion at its final destination); minus (to avoid double counting);
  - arising outside the subregion sent to transfer/treatment facilities inside the subregion (as such waste will be incorrectly identified as arising in the subregion at its final destination after it leaves the transfer/treatment facility, so will have been counted in the tonnages above).
- A1.16. And then generate tonnages of residual waste, which are taken to be represented by the following waste types/codes:
  - Biodegradeable waste: LOW 20 02 01
  - Combustible waste (RDF) LOW 19 12 10
  - Mixed municipal waste: LOW 20 03 01
  - Other wastes arising from mechanical treatment of wastes: LOW 19 12 12.

#### A1.17. It should be noted that:

- 1. The above waste description 'mixed municipal waste' covers both black bag waste destined for disposal/recovery i.e. residual waste and commingled recyclates going for recycling via a Material Recycling Facility. Therefore, to identify the tonnage of true residual waste, inputs to these types of facilities (MRFs) have been excluded from the tonnage going for export (item 3 in Table 1) and to receiving sites outside of Dorset subregion calculation (item 4 in Table 1).
- 2. The waste description 'other wastes' LOW code 19 12 12 covers any type of residue from the mechanical treatment of waste from waste processing sites. A significant number of these deal with construction and demolition waste in the form of skips, the processing residues of which are commonly referred to as 'trommel fines'. These fines are subject to loss on ignition testing to establish that they are sufficiently inactive to qualify for a lower rate of landfill tax when disposed of to landfill.<sup>7</sup> This material is often used as daily cover on non-

<sup>&</sup>lt;sup>6</sup> Note to avoid double counting inputs to Dorset subregion intermediate facilities of Dorset subregion waste, tonnages have been ignored on the basis that their outputs will either go to final fate (item 1) or to facilities outside Dorset subregion (item 2).

<sup>&</sup>lt;sup>7</sup> HMRC guide to qualifying fines for landfill tax purposes ttps://www.gov.uk/government/publications/excise-notice-lft1-a-general-guide-to-landfill-tax/excise-notice-lft1-a-general-guide-to-landfill-tax#lower-rate-qualifying-fines (CD 12.39)

hazardous waste landfill sites so also serves a useful purpose. These wastes are therefore by definition not suitable for incineration. An estimation of 50% of the tonnage sent to landfill has been assumed to be suitable for incineration based on other detailed data work. The value for residual waste to landfill shown in Table 3 reflects this.<sup>8</sup>

Table 3 below shows how the quantity of residual waste has been determined.

Table 3: Residual waste arising in Dorset subregion 2021 & 2022 Source: WDI (values in 000s tonnes)

No	Component	2021	2022	Constituent Data Values
1	Dorset/BCP waste to Landfill in England	36.3	39.7	50% 191212 plus mixed municipal and biodegradable. No RDF reported
2	Dorset/BCP waste to EfW in England	32.4	67.4	RDF plus mixed municipal plus 191212
3	Exports outside England from Dorset/BCP sites	85.8	54.8	Only RDF (191210) reported
4	Transfers of Dorset/BCP waste to transfer/treatment sites outside Dorset/BCP	46.5	24.4	Transfer/Treatment only as others may involve non residual mixed municipal i.e. commingled recyclates.
5	Waste from outside Dorset/BCP to Dorset/BCP transfer/treatment sites	-22.5	-2.2	191212 plus mixed municipal and biodegradable.
	Total Residual Waste	178.5	184.1	

- A1.18. Table 3 shows that the arisings of residual waste that may be suited to EfW from the subregion is currently in the region of between 178kt (2021) and 184kt (2022). Given that the final values arrived at in Table 3 deducts 50% of the 191212 waste going to landfill (on the basis that while residual, it is not suitable for incineration as explained in para A1.17), and this accounted for a further c20,000 tonnes sent to landfill, to get an overall value for residual waste arisings in the Plan area this 20,000 tonnes has been reinstated giving a figure of 204,000 tonnes (based on 2022 data).
- A1.19.I have then applied the updated growth rate to the updated baseline residual waste value of 204,000 to project arisings of residual waste to 2033. and deducted the capacity set out in Table 7 of the Waste Plan (assumed to still be valid), to generate the updated residual waste capacity requirement presented in Table 4 overleaf.

<sup>&</sup>lt;sup>8</sup> See Technical Note submitted to the Medworth DCO Examination Beyond Waste (August 2023). (CD.12.40)

Table 4: Residual waste Management Capacity Requirement estimation updated arisings (updated Table 7 of Waste Plan) tonnes

	2023	2028	2033
Updated Residual Waste Arising projected forward (starting value from Table 3 adjusted for 191212)	204,000	207,901	208,697
Minus Capacity (Table 7 Waste Plan)	142,000	125,000	125,000
Updated Capacity shortfall	-62,000	-82,901	-83,697

- A1.20. Table 4 shows that the residual waste management capacity requirement has more than halved from 232,000 tonnes to c84,000 tonnes in 2033, simply through the application of the updated growth rate to the updated baseline value. It should also be noted that this is a peak value for the end of the Plan period.
- A1.21. While this exercise does not replicate the whole process by which the Plan waste management requirements were calculated, that would require production of a whole new Waste Needs Assessment, one aspect that is of direct relevance to the consideration of need is the introduction of a legally binding target to reduce residual waste by half by 2042 set out in *The Environmental Targets (Residual Waste) (England) Regulations 2023*,(CD12.45) that came into force on 30 January 2023. As recognised in the most recent *National Infrastructure Assessment* released by the National Infrastructure Commission, this is expected to put a brake on the need for further EfW capacity development in England in the medium to long term. If this is factored into the assessment, by projecting forward to 2042, the results shown in Table 5 arise for the Plan milestone years. These have then been subject to the same process as described above to arrive at what may be regarded as a true or more accurate updated residual waste management requirement for the Plan area.

Table 5: Residual waste Management Capacity Requirement estimation updated arisings plus 50% reduction by 2042 (updated Table 7 of Waste Plan) tonnes

	2023	2028	2033
Updated Residual Waste Arising projected forward (starting value from Table 3+)	204,000	207,901	208,697
Application of Env Act target of halving residual by 2042	204,000	177,158	150,316
Minus Capacity (Table 7 Waste Plan)	142,000	125,000	125,000
Final Capacity shortfall	-62,000	-52,158	-25,316

A1.22. Table 5 shows that the estimated residual waste management requirement has reduced to 25,000 tpa by the end of the Plan period. I consider this value to be a more up to date and reliable value on which to base decisions on provision of

additional capacity. Given permission has already been granted on an allocated site for a 60,000tpa facility for the management of residual waste, it might be said this capacity gap has already been met. I also note that the adopted Waste Plan spans a fourteen year period from adoption (2019) to the end of 2033. Given the lengthy process by which the Waste Plan was developed, this means that the evidence base underpinning the plan is currently at least eight years. I note that paragraph 1.9 of the Plan states:

- 1.9 Although the Waste Plan covers a 15 year period, it is likely that a review will take place well before this time. The National Planning Policy Framework allows for the Plan to be reviewed in whole or in part, allowing it to remain up to date and respond quickly to changing circumstances. The Minerals and Waste Development Scheme will contain details of any review of the Waste Plan.
- A1.23. The starting point for any review process is production of the Authority Monitoring Report (AMR) which is to be produced at least annually. However I note that the most recent published AMR (CD12.41) covers the year 2020 and a review of the application of the relevant policies set out in Table 4 relating to Waste Plan-Policy Monitoring states that "Waste management capacity not yet tested" (page 64). Hence this is the first occasion since adoption that the validity of the Plan's forecasts and capacity gap estimations have been tested at appeal.

# Management of Waste Arising Beyond the Plan Area - Assessment of Appellant's Need Case

- A1.24. Having established that the proposed plant is not required to meet a need arising in the Dorset subregion, I have considered the evidence submitted by the Appellant to seek to substantiate its claim that the plant is needed to manage waste from further beyond the subregion.
- A1.25. The Appellant's Statement of Case states:
  - 1.50 Overall, there is a compelling national and regional need case for the provision of new energy recovery facilities to divert more residual waste away from landfill and enable more of the RDF material produced in the UK to be managed in the UK to provide more sustainable lower carbon energy and reduce exports.

The Appellant's Waste Needs Statement suggests that the tonnage of residual waste arising in the former South West planning region was 2.6Mt. I have undertaken an assessment of data applying the method presented above to 2022 data. This indicates arisings to be c1.93Mt as shown in Table 6. This is 26% less than the value included in the Appellant's assessment.

Table 6: Estimated arisings of residual waste in the South West (2022) (000s tonnes)

WPA	To Landfil I	To EfW	Export s	Transfer s Out	Transfer s In	Total
Dorset Sub Region	39.7	67.4	54.8	24.4	-2.2	184.1
Bath & NE Somerset	2.9	92.6	0.0	2.8	-0.3	98.0
Bristol	28.7	195.1	42.6	5.7	-31.6	240.5
Cornwall	16.6	218.1	0.7	8.3	-11.1	232.6
Devon	105.8	198.2	1.8	10.1	-53.5	262.4
Gloucestershire	60.6	191.3	26.0	8.3	-17.7	268.5
Isles of Scilly	0.0	0.0	0.0	-	0.0	0.0
North Somerset	12.3	8.0	0.0	1.0	-5.8	15.5
Plymouth	1.6	91.6	0.0	13.8	0.0	107.0
Somerset	56.2	65.7	2.1	8.0	-21.3	110.7
S.Gloucestershire	0.0	158.0	4.9	3.4	-6.4	159.9
Swindon	0.2	50.5	0.2	0.2	-0.7	50.4
Torbay	0.8	42.5	0.0	16.2	-5.0	54.5
Wiltshire	77.6	40.9	25.9	6.7	-8.5	142.6
Region Totals	403.0	1,419. 9	159.0	108.9	-164.1	1,926.7

Within the region there is already a total of c.1.94Mt of EfW capacity which is operational, under construction or consented as shown in Table 7.

**Table 7: EfW capacity in the South West** 

Waste Planning Area	Plant Name	Capacity ktpa
Bristol	Avonmouth	350
Cornwall	Cornwall	240
Devices	Exeter	60
Devon	Hill Barton	24
Gloucestershire	Javelin Park	190
Plymouth	Devonport	265
Somerset	Bridgwater	100
S. Gloucestershire	Severnside	197
Wiltshire	Northacre	243
Region EfW Total		1,939

- A1.26. Table 7 above includes the Northacre Energy from Waste Facility, located in Westbury, Wiltshire, that was granted permission on appeal in February 2023. Once operational (expected c.2026), this facility will accept approximately 243,000 tonnes of residual waste per year. The facility is being provided to service a municipal waste contract with Wiltshire Council and so actual delivery is regarded as having a high degree of certainty. The need case for this facility accounted for waste coming from Dorset, Bournemouth and Poole.<sup>9</sup>
- A1.27. A simple comparison between arisings of residual waste of 1.93Mt from Table 6 and existing EfW capacity of 1.94Mt in Table 7 shows that a marginal surplus of capacity already exists in the south west region. Therefore, contrary to the Appellant's claim, there is not a compelling need case for additional EfW capacity to serve the South West region. It should be noted this conclusion has been arrived at without taking account of the impact of the Government target to halve residual waste by 2042 on available arising, which when factored in as shown in Table 5, can be expected to have a profound effect on suppressing availability of residual waste arisings in the medium to long term.

#### **Assessment of National Need**

A1.28. The Second National Infrastructure Assessment produced by the National Infrastructure Commission (CD 12.43) <sup>10</sup> <sup>11</sup> <sup>12</sup>released in October 2023 presents the most current assessment of EfW capacity. The Assessment sets out the following position for waste management capacity in general in England starting from the position of compliance with the waste hierarchy with the aim of maximising resource efficiency and decarbonising the solid waste sector. This is in the following context:(note that the footnote numbering relating to the extract has been kept so as to provide a true reproduction):

"Government action is needed to limit the waste sector's impact on the environment and achieve net zero. The more waste that is generated, the bigger the impact on the environment. The solid waste sector contributes around five per cent of the UK's carbon emissions. 422 13 The sector's emissions are not declining and recycling rates have stalled at around 45 per cent. 42314" The Second National Infrastructure Assessment page 124

<sup>&</sup>lt;sup>9</sup> Market Due Diligence - Northacre EfW Merchant Waste Tolvik Consulting July 2019 CD12.42

<sup>&</sup>lt;sup>10</sup> The National Infrastructure Commission is an executive agency of the Treasury established to provide impartial, expert advice and make independent recommendations to the government on economic infrastructure.

<sup>&</sup>lt;sup>11</sup> The NIC produces a National Infrastructure Assessment once in every Parliament, setting out its assessment of long term infrastructure needs with recommendations to government

<sup>&</sup>lt;sup>12</sup> The Second National Infrastructure Assessment National Infrastructure Commission (October 2023)

<sup>&</sup>lt;sup>13</sup> 422 For the Commission, the waste sector includes emissions from energy from waste plants which are not included under waste sector emissions in government statistics. See also Climate Change Committee (2020), The Sixth Carbon Budget: Waste

<sup>&</sup>lt;sup>14</sup> 423 Department for Environment, Food and Rural Affairs (2023), UK Statistics on Waste; Climate Change Committee (2020), The Sixth Carbon Budget: Waste

- A1.29. The Commission examined three principal sources of waste local authority collected waste, commercial and industrial waste, and construction and demolition waste and conducted its assessment within the context of the following legal requirements to drive waste up the hierarchy:
  - plans must be in place detailing measures to ensure 65 per cent of municipal waste, including household waste and household like waste from commercial and industrial sources, is recycled by 2035 15
  - the volume of residual waste per person which is not reused or recycled must be halved by 2042 from 2019 levels
  - by 2050, avoidable waste must be eliminated by recycling or reusing any waste which possibly can be reused or recycled.<sup>16</sup>
- A1.30. The Commission concluded the following (emphasis added):

"These targets mean recycling rates will need to continue to improve beyond 2035. Meeting the 2042 target would represent a municipal recycling rate of around 75 per cent. 42817 Analysis for the Commission suggests that meeting the government's targets and delivering a net zero waste sector requires a significant increase in recycling infrastructure in the future."

National Infrastructure Commission The Second National Infrastructure Assessment page 125

A1.31. With respect to Energy from Waste the Commission states the following (emphasis added):

"Energy from waste is a major source of waste emissions, second only to landfill.<sup>44218</sup> To hit net zero, as Figure 4.6 indicates, the tonnage of waste treated at energy from waste plants without carbon capture and storage will need to reduce by around a quarter by 2035 and by around 80 per cent by 2050.<sup>44319</sup> As recycling rates increase, the total volume of waste going to energy from waste, with or without carbon capture, will decrease.<sup>44420</sup>"

A1.32.In order to inform its assessment and recommendations, the National Infrastructure Commission commissioned consultants (Ricardo) to undertake analysis and modelling on waste arisings and waste treatment methods in

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<sup>&</sup>lt;sup>15</sup> 426 HM Government (2020), The Waste (Circular Economy) (Amendment) Regulations 2020

<sup>&</sup>lt;sup>16</sup> 427 Department for Environment, Food and Rural Affairs (2023), Environmental Improvement Plan 2023

<sup>&</sup>lt;sup>17</sup> 428 Department for Environment, Food and Rural Affairs (2022), Environment Act Targets Impact Analysis: Waste Reduction

<sup>&</sup>lt;sup>18</sup> 442 Climate Change Committee (2020), The Sixth Carbon Budget: Waste

<sup>&</sup>lt;sup>19</sup> 443 Commission analysis

<sup>&</sup>lt;sup>20</sup> 444 Ricardo (2023), Waste Infrastructure Technology Mix report

England<sup>21</sup> (CD12.44). This reported on both the mix and capacity of waste infrastructure required now and in a range of potential future scenarios out to 2055. The key findings of the report, insofar as EfW capacity is concerned, are reproduced below:

"EfW capacity is modelled to reduce from the baseline capacity of approximately 17Mt under all modelled scenarios. EfW with CCS transitions with capacity modelled to become available in 2030.

The table below shows the estimated capacity requirements in 2042 where there is the target to achieve a 50% reduction in residual waste being sent to landfill and EfW, and 2050.

### Scenario 2042 Capacity 2050 Capacity

Scenario	2042 Capacity			2050 Capacity		
Facility Type	EfW	EfW CCS	Total	EfW	EfW CCS	Total
Scenario 1	7Mt	7Mt	14Mt	1Mt	11Mt	12Mt
Scenario 2	7Mt	6Mt	13Mt	1Mt	9Mt	10Mt
Scenario 3	9Mt	7Mt	16Mt	4Mt	10Mt	14Mt
Scenario 4	6Mt	6Mt	12Mt	1Mt	8Mt	9Mt

The estimated capacity requirements for EfW in 2042 (including both EfW and EfW with CCS) in the lowest scenario are approximately 12Mt (scenario 4). The highest capacity requirements are approximately 16Mt (scenario 3). In 2050 the lowest capacity requirements are approximately 9Mt and highest requirements approximately 14Mt under the same scenarios."

Waste Infrastructure Technology Mix Report for National Infrastructure Commission Ricardo (page 74)

A1.33. Therefore, based on the very latest analysis of the national position, in order to meet the legally binding target of reduction in residual waste by 2042 as per the Environment Act, EfW capacity would be expected to fall from the current operational or consented amount of 17Mt<sup>22</sup>. Hence contrary to the Appellant's claim, there is no compelling need case for additional EfW capacity in England.

26 | Page

<sup>&</sup>lt;sup>21</sup> Waste Infrastructure Technology Mix Report for National Infrastructure Commission Ricardo Final Issue 22/08/2023

<sup>&</sup>lt;sup>22</sup> By at least 1 million tonnes or as much as 5 million tonnes depending on which scenario is followed.

# A2 Appendix 2: Assessment of Net Self Sufficiency

- A2.1. There is no national policy expectation that each and every Waste Planning Authority (WPA) provides for waste management facilities of all types. Rather it is understood that different WPA areas may offer conditions favourable to the development of specific types of facility. This is most apparent when considering landfill capacity which is dependent on geological conditions, but may also apply to other facility types such as EfW plants and MRFs where economies of scale normally apply. This means that a critical mass of feedstock is required and this might need to be sourced from multiple WPA areas. That is why the principle of self-sufficiency has been qualified to relate to "net" self-sufficiency. This allows for flows of waste out of a Waste Plan area to waste management facilities, which would be offset by inward flows of waste-to-waste management facilities located within the source Waste Plan area to some degree. The key objective is that the consented capacity within a Waste Plan area is sufficient on balance to manage the total quantity of waste predicted to arise within the particular Waste Plan area, even if some of the waste actually ends up being managed outside the Waste Plan area in which it arises.
- A2.2. A starting point to assess compliance with net self-sufficiency is to assess the balance of flows to and from waste management facilities located in a specific plan area, in this case the Dorset subregion (including Bournemouth, Poole and Christchurch). Most waste management facilities can only operate if they have secured an environmental permit from the Environment Agency. As part of ongoing compliance with these permits, operators are required to submit returns on the quantities of waste received for management. These returns include records identifying the origin of the waste as well as the location of the receiving facility. These returns are collated by the Environment Agency and released in a single database called the Waste Data Interrogator (WDI). Therefore, it is possible to compare flows of waste into permitted facilities in Dorset, with flows of Dorset waste going to permitted facilities outside Dorset. This is illustrated for 2022 in Figure 1 below<sup>23</sup>.

27 | Page

<sup>&</sup>lt;sup>23</sup> To avoid double counting the tonnage of waste managed at the MBT plant at Canford Magna has only been taken to be 10% of the input value to account for the fact that the output that is subsequently sent to EfW accounts for c90% of the input tonnage.

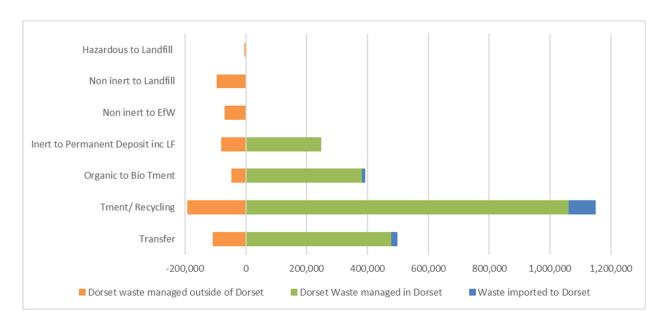


Figure 1: Balance between waste managed within Dorset vs Dorset waste managed outside (WDI 2022)

A2.3. The balance shown in Figure 1 can be taken as a snapshot of the progress towards achieving net self-sufficiency in waste management in the Dorset subregion. This shows that the majority of the Dorset subregion's waste is managed within the subregion. However, it is apparent that in 2022 more waste was exported than was imported so overall net self sufficiency was not achieved.

<u>Total waste managed in Dorset (Dorset subregion waste managed in Dorset + imports)</u>

Total waste managed from Dorset (Dorset subregion managed in Dorset + exports)

For 2022 this equates to

<u>2,281,940 tonnes</u> = 83% 2,760,968 tonnes

- A2.4. As Figure 1 shows actual tonnages managed in 2022, rather than total waste management capacity, it will likely underestimate the contribution Dorset sites may make towards management capacity as many site types rarely operate to their full capacity every year. Normally capacity is assessed either by reference to planning consents, or peak inputs over a five year period.
- A2.5. The robustness of reliance on capacity in other Plan areas for the management of some waste streams arising in the Dorset subregion can be established through

engagement with other WPAs hosting facilities that the subregion's waste has or may travel to, under the Duty to Cooperate.

# A3 Appendix 3: Method Statement for Residual Waste Estimation

See separate document