

Completed acquisition by Tradebe Environmental Services Limited of Avanti Environmental Holdings Limited

Decision on relevant merger situation and substantial lessening of competition

ME/6768/18

The CMA's decision on reference under section 22(1) of the Enterprise Act 2002 given on 25 October 2018. Full text of the decision published on 15 November 2018.

Please note that [X] indicates figures or text which have been deleted or replaced in ranges at the request of the parties or third parties for reasons of commercial confidentiality.

SUMMARY

1. On 31 May 2018, Tradebe Environmental Services Limited (**Tradebe**) acquired Avanti Environmental Holdings Limited (**Avanti**) (the **Merger**). Tradebe and Avanti are together referred to as the **Parties**.
2. The Competition and Markets Authority (**CMA**) believes that it is or may be the case that each of Tradebe and Avanti is an enterprise; that these enterprises have ceased to be distinct as a result of the Merger; and that the share of supply test is met. The four-month period for a decision, as extended, has not yet expired. The CMA therefore believes that it is or may be the case that a relevant merger situation has been created.
3. The Parties overlap in the supply of hazardous waste management services in the UK.
4. Hazardous waste management services can be segmented in several possible ways, based, for example, on the different elements of the hazardous waste management process (such as collection, transfer, treatment and disposal) and method used. Both parties supply hazardous waste collection and transfer services and hazardous waste treatment and disposal services,

but Avanti is only active in treatment and disposal of hazardous waste through transfrontier shipment (**TFS**) to other EU countries.

5. For the purpose of this investigation, the CMA distinguished between the provision of hazardous waste collection and transfer services and the provision of hazardous waste treatment and disposal services. In light of material differences in pricing and customer preferences between different treatment and disposal methods, the CMA also assessed the effects of the Merger separately within the specific hazardous waste treatment and disposal services where the Parties overlap (ie the supply of hazardous waste treatment and disposal services through solvent reclamation and high temperature incineration). The CMA assessed the effects of the Merger in these services at national level.
6. While it was not necessary to conclude on the appropriate frame of reference, because competition concerns would not arise on any plausible basis, the CMA assessed the impact of the Merger within the following frames of reference:
 - (a) the supply of hazardous waste collection and transfer services within the UK;
 - (b) the supply of hazardous waste solvent reclamation services within the UK; and
 - (c) the supply of hazardous waste high temperature incineration services within the UK.
7. The CMA found that the Merger does not raise competition concerns as a result of horizontal unilateral effects. In particular:
 - (a) Competition concerns do not arise within the supply of hazardous waste collection and transfer services because Avanti is not an important constraint on Tradebe at present, the increment brought about by the Merger is limited, and the Merged Entity will continue to be sufficiently constrained by a range of alternative suppliers;
 - (b) Competition concerns do not arise within the supply of solvent reclamation services because the increment brought about by the Merger is limited, and the Parties were not close competitors and did not impose a significant competitive constraint on each other; and
 - (c) Competition concerns do not arise within the supply of high temperature incineration services because the increment brought about by the Merger is very limited (at [0-5]%); the available evidence (in particular the Parties'

internal documents and third-party views) indicates that the Parties are not particularly close competitors, and the Merged Entity will continue to be sufficiently constrained by a range of alternative suppliers.

8. There is also a vertical relationship between the Parties because they use each other's hazardous waste management services. In particular Tradebe uses Avanti's TFS routes to export hazardous waste, including for hazardous waste requiring high temperature incineration. The CMA found that the Merger does not raise competition concerns as a result of vertical effects, because there are several other suppliers of TFS available post-Merger.
9. Accordingly, the CMA believes that the Merger does not give rise to a realistic prospect of a substantial lessening of competition (SLC) as a result of horizontal unilateral effects in the provision of hazardous waste management services at a national level in all the frames of references.
10. The Merger will therefore **not be referred** under section 22(1) of the Enterprise Act 2002 (the **Act**).

ASSESSMENT

Parties

11. Tradebe is a family-owned international environmental services company that provides waste management services, predominantly for hazardous waste, to large/corporate customers and mid-size and small customers from a variety of industry sectors within Europe and the United States. Tradebe collects hazardous waste, which it transfers to its waste transfer stations across the UK. It also operates hazardous waste treatment and disposal facilities across the UK. In particular, Tradebe has: (i) a high temperature incinerator in Fawley; (ii) a fuel blending facility in Heysham; (iii) chemical recycling facilities in Knottingley, Sunderland and Rye; and (iv) a physico-chemical facility at Gwent. It also uses other waste management suppliers for treatment and disposal services in the UK as well as TFS routes to export waste to other EU countries for subsequent treatment and disposal by its outsourced suppliers.
12. The turnover of Tradebe in 2017 was approximately £108 million in the UK.
13. Avanti was formerly a subsidiary of SRCL Limited (trading as Stericycle). It provides a range of hazardous waste management services across the UK, as well as non-hazardous waste management services in Scotland. Avanti collects hazardous waste, which it transfers to its hazardous waste transfer station in Knowsley, Liverpool. Avanti also offers TFS services, exporting hazardous waste to other EU countries for subsequent treatment and disposal

by its outsourced suppliers. In Scotland, Avanti provides non-hazardous waste management services that do not overlap with Tradebe.

14. The turnover of Avanti in 2017 was approximately £23 million in the UK.

Transaction

15. Tradebe entered into a Sale and Purchase Agreement with SRCL Limited on 31 May 2018 which involved the purchase from SRCL Limited of the entire issued share capital of Avanti for a total consideration of £[<] million.
16. The Parties submitted that the rationale for the transaction is to enable Tradebe to expand its waste transfer station business, as well as its distribution network, with an increased focus in Scotland. Tradebe believed that Avanti had a good management team and a different customer base to Tradebe, making it an attractive acquisition.¹
17. Tradebe informed the CMA that the Merger had not been notified in any other jurisdiction.

Jurisdiction

18. Each of Tradebe and Avanti is an enterprise. As a result of the Merger, these enterprises have ceased to be distinct.
19. The turnover test is not met because the UK turnover of Avanti does not exceed £70 million.
20. The Parties overlap in the supply of hazardous waste management services in the UK, more specifically, within: the supply of hazardous waste collection and transfer services; the supply of hazardous waste solvent reclamation services; and the supply of hazardous waste high temperature incineration services.
21. As explained in more detail below in paragraphs 76-79, the CMA found that the Parties' combined shares in the provision of solvent reclamation services to UK customers is around [70-80]% (with an increment of [0-5]% brought about by the Merger). The CMA therefore considers that the share of supply test is met.
22. The Merger completed on 31 May 2018 and was first made public on the same day the merger completed. The four-month deadline for a decision

¹ [<] and Tradebe's response to Enquiry Letter dated 5 July 2018, [<].

under section 24 of the Act is 8 November 2018, following extensions under section 25(2) of the Act.

23. The CMA therefore believes that it is or may be the case that a relevant merger situation has been created.
24. The initial period for consideration of the Merger under section 34ZA(3) of the Act started on 7 September 2018 and the statutory 40 working day deadline for a decision is therefore 1 November 2018.

Counterfactual

25. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (ie the counterfactual). For completed mergers the CMA generally adopts the pre-merger conditions of competition as the counterfactual against which to assess the impact of the merger. However, the CMA will assess the merger against an alternative counterfactual where, based on the evidence available to it, it believes that, in the absence of the merger, the prospect of these conditions continuing is not realistic, or there is a realistic prospect of a counterfactual that is more competitive than these conditions.²
26. In this case, there is no evidence supporting a different counterfactual, Tradebe submitted that it understood that SRCL Limited had decided upon a strategy to dispose of non-core assets, which included Avanti.³ Tradebe further submitted that the business of Avanti would have deteriorated if SRCL Limited had been unable to sell it to another buyer (if not Tradebe). Tradebe did not, however, submit any evidence to suggest that the continuation of existing competitive conditions was not a realistic prospect. The CMA therefore believes the pre-Merger conditions of competition to be the relevant counterfactual.

Background

27. By way of background, before consideration of the relevant frames of reference and competitive assessment, the CMA first describes the market context in relation to the supply hazardous waste management services in the UK.

² [Merger Assessment Guidelines](#) (OFT1254/CC2), September 2010, from paragraph 4.3.5. The [Merger Assessment Guidelines](#) have been adopted by the CMA (see [Mergers: Guidance on the CMA's jurisdiction and procedure](#) (CMA2), January 2014, Annex D).

³ Tradebe's response to Enquiry Letter dated 5 July 2018, paragraph 18.

28. There are two stages to hazardous waste management services. First, the hazardous waste is collected from a customer's site and taken to a waste transfer station. At the waste transfer station, the hazardous waste is sorted and repackaged into appropriate containers for treatment (a process known as 'bulking') before being sent to a treatment facility. Second, the hazardous waste is transported from the waste transfer station to another facility for treatment or disposal. Hazardous waste treatment and disposal services include a wide variety of processes (such as solvent reclamation and high temperature incineration).
29. Suppliers of hazardous waste management services use a variety of different business models, using their own treatment facilities and/or outsourcing various parts of this process to other firms, as well as accepting this waste at various points during processing. Hazardous waste may be treated within the UK or exported to other EU countries from waste transfer stations by using TFS. Hazardous waste requiring high temperature incineration can only be exported to be treated in facilities with 'energy recovery' status. Incineration for certain hazardous wastes (such as pharmaceutical waste) that require complete destruction may only be performed in the UK to comply with strict environment regulations as well as the duty of care⁴ obligations of the waste producers/customers. Customers are typically quoted and charged a single price for the bundled service by the hazardous waste management provider.
30. The Parties both provide hazardous waste collection and transfer services (ie they collect hazardous waste and transfer it to their hazardous waste transfer stations). The Parties also provide hazardous waste treatment and disposal services, although there are differences in the way in which they each provide these services. Tradebe mainly offers hazardous waste treatment and disposal services from its own UK facilities. Avanti does not own any hazardous waste treatment and disposal facilities but instead exports hazardous waste to other EU countries for its subsequent treatment and disposal by its outsourced suppliers.
31. The CMA found that customers generally prefer to procure hazardous waste management services on an 'as required' basis, rather than entering into long-term contracts for the treatment of hazardous waste. The CMA's investigation indicated that prices tend to be agreed through bilateral negotiation, with formal tender processes being used by only a minority of customers.

⁴ Waste producers need to ensure that the waste is disposed of in accordance with the relevant legislation of the country where the waste is produced.

Frame of reference

32. Market definition provides a framework for assessing the competitive effects of a merger and involves an element of judgement. The boundaries of the market do not determine the outcome of the analysis of the competitive effects of the merger, as it is recognised that there can be constraints on merging parties from outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others. The CMA will take these factors into account in its competitive assessment.⁵

Product scope

33. The Parties consider that the relevant product frame of reference is the provision of ‘hazardous waste management’ services and should not be narrowed further.
34. As mentioned above, the Parties overlap in the provision of hazardous waste collection and transfer services, and in the provision of hazardous waste treatment and disposal services.
35. In *Veolia/Cleanaway*,⁶ the European Commission, in line with previous decisions, distinguished between the collection and disposal of hazardous waste and also indicated that different methods of hazardous waste disposal could constitute separate product markets.
36. The European Commission also found, again in *Veolia/Cleanaway*,⁷ that the choice of disposal method and facility will be determined by regulatory restrictions, suitability, cost-effectiveness and environmental considerations. In addition to these considerations, UK-based customers that responded to the CMA also mentioned their duty of care obligations.⁸ In previous cases,⁹ the CMA also identified a certain subset of hazardous waste in which the merging parties in those cases overlapped (ie healthcare waste management) as a distinct frame of reference.¹⁰
37. Most customers that responded to the CMA’s investigation stated that, under UK waste regulations, the treatment and disposal options available to

⁵ *Merger Assessment Guidelines*, paragraph 5.2.2.

⁶ European Commission Case COMP/M.4318 – *Veolia/Cleanaway*, paragraphs 10-13

⁷ European Commission Case COMP/M.4318 – *Veolia/Cleanaway*, paragraph 19.

⁸ See footnote 4 above.

⁹ For example, OFT Case ME/6499/14 - *Healthcare Environmental Services Limited/G.W. Butler Limited*, and CC case ME/5036/11 - *Stericycle Inc/Ecowaste Southwest Limited*.

¹⁰ In this case, we have not assessed the market for healthcare waste management separately, given the very limited overlap that the Parties have in managing this waste.

customers will be determined by the nature of their hazardous waste stream and so will not generally be substitutable with other treatment or disposal options. Customers also told the CMA that, in some cases, multiple treatment types may be available for a certain type of hazardous waste. In these circumstances, customers noted that they would generally choose the most environmentally sustainable treatment method possible.

38. As noted above, Avanti is only active in the treatment of hazardous waste through TFS. Several customers told the CMA that using TFS services for hazardous waste can be a substitute to the treatment and disposal of hazardous waste in the UK (see paragraph 96 below). In particular, for hazardous waste requiring high temperature incineration, TFS provides access to incinerators that allows energy to be recovered from hazardous waste. TFS may even be preferred to UK-based incineration in some circumstances. Therefore, the CMA believes that the export of hazardous waste for treatment and disposal through TFS to other EU countries is a substitute for the treatment of hazardous waste in the UK for many waste streams. Given the reasons above, the CMA considered it appropriate to include TFS services in the frames of reference for the supply of hazardous waste treatment and disposal services, as defined below.
39. For the reasons described above, the CMA has assessed whether it is appropriate to assess the effects of the Merger by reference to each type of hazardous waste management services in which the Parties overlap:
(i) hazardous waste collection and transfer, (ii) solvent reclamation and (iii) high temperature incineration.
40. In addition, the CMA notes that Tradebe and Avanti offer solvent recovery to secondary liquid fuel to customers.¹¹ The CMA notes that Avanti's activities in this regard are limited and that Avanti does not carry out these services itself (eg in 2017, Tradebe treated [redacted] tonnes of solvent waste using this process at its own facilities, whereas Avanti collected [redacted] tonnes of solvent waste for subsequent treatment by its UK outsourced suppliers). In practice, Avanti operates only as a waste transfer station for solvent recovery to secondary liquid fuel and therefore the CMA considers that there is no meaningful overlap between the Parties in relation to the supply of solvent recovery to secondary liquid fuel services.¹² These services are not considered further in this decision.

¹¹ Solvent recovery is a process that involves the conversion of solvent waste into a secondary liquid fuel (also known as cemfuel).

¹² The solvent waste which Avanti received for recovery to secondary liquid fuel is counted as a part of Avanti's volume in the market for hazardous waste collection and transfer.

Hazardous waste collection and transfer services

41. As indicated in paragraph 28 above, hazardous waste collection and transfer services involve collecting hazardous waste from a customer (or, less commonly, having it delivered by the customer) and transporting it to a hazardous waste transfer station where it goes through the bulking process.
42. Waste streams (such as by-products of manufacturing processes) from larger customers may go directly to treatment facilities rather than passing through a hazardous waste transfer station.
43. While some large customers may not use hazardous waste transfer stations for large waste streams, third-party evidence indicates that most customers cannot bypass the waste transfer stage (for example, by ensuring waste is repackaged in the appropriate container for the treatment facility). As the available evidence indicates that there is limited ability, in practice, to bypass the hazardous waste transfer process, the CMA consider that it is appropriate, for the purpose of this investigation, to assess the effect of the Merger by reference to the supply of hazardous waste collection and transfer services taken together.

Solvent reclamation services

44. Solvent reclamation¹³ is a type of hazardous waste treatment that involves the recovery of useable solvents from wastes containing solvents such as hexane or acetone. By comparison with other methods,¹⁴ this method of treatment is regarded as the most environmentally sustainable means of managing solvent wastes and is also economically appealing to customers because the recovered solvents have an economic value and can be resold back into the market.
45. Solvent reclamation is sometimes purchased by customer on a 'toll' basis, where the resulting recycled solvents are returned to the producer for reuse.
46. Customers producing a solvent waste stream that is compatible with solvent reclamation are generally unwilling to substitute this treatment for solvent recovery to secondary liquid fuels or high temperature incineration. This is for commercial reasons, as treatments generally increase in price the more environmentally unsustainable they are, as well as being driven by regulatory

¹³ Solvent reclamation is also referred to as solvent distillation, or solvent recycling.

¹⁴ For examples solvent recovery through secondary liquid fuels production (also known as cempfuel) – which involves the conversion of solvent waste into fuel - is regarded as less environmentally sustainable than solvent reclamation and is more expensive for the customer to use as a treatment route. It is used on solvent waste which is unsuitable for solvent reclamation, such as due to contamination.

and corporate social responsibility considerations to use the most environmentally sustainable option.

47. For the reasons described above, the CMA therefore considers that it is appropriate, for the purpose of this investigation, to assess the effect of the Merger by reference to the supply of solvent reclamation services.

High temperature incineration services

48. High temperature incineration is a process involving the incineration of hazardous waste at high temperatures (usually higher than 1000 degrees celsius).
49. In *Veolia/Cleanaway*,¹⁵ the European Commission defined a distinct product market for high temperature incineration of hazardous waste. The Commission found evidence that indicated that the incineration of commercial and industrial hazardous waste in the high temperature incinerators constituted a separate product market as a number of waste streams, such as pharmaceutical waste, could not be treated by other types of thermal treatments such as lime kilns.
50. As explained above in paragraph 30, Tradebe is able to incinerate hazardous waste at its high temperature incinerator in Fawley,¹⁶ while Avanti has TFS agreements with incinerators in other EU countries which provide energy recovery¹⁷ from certain hazardous wastes.
51. Third parties told the CMA that high temperature incineration is costly and has the lowest environmental desirability, and that incineration is the last option for many types of waste that cannot be treated by means of solvent reclamation or solvent recovery through secondary liquid fuel.
52. Given that demand-side substitution to other forms of treatment is very limited, the CMA found it appropriate, for the purpose of this investigation, to assess the effect of the Merger by reference to the provision of high temperature incineration services.

Conclusion on product scope

53. For the reasons set out above, the CMA has assessed the impact of the Merger within the following frames of reference:

¹⁵ European Commission Case COMP/M.4318 – [Veolia/Cleanaway](#), paragraph 25.

¹⁶ In some cases, Tradebe outsources high temperature incineration services to other suppliers in the UK.

¹⁷ Paragraph 38.

- (a) the supply of hazardous waste collection and transfer services;
 - (b) the supply of hazardous waste solvent reclamation services; and
 - (c) the supply of hazardous waste high temperature incineration services.
54. However, it was not necessary for the CMA to reach a conclusion on the appropriate product frame of reference because no competition concerns arise on any plausible basis.

Geographic scope

Hazardous waste collection and transfer services

55. Tradebe submitted that the market for the provision of hazardous waste management services is national in scope. The Parties stated that hazardous waste travels large distances, primarily because transportation costs tend to be a small proportion of the price charged for hazardous waste management services. Tradebe and Avanti submitted that their customers are located at some distance from their waste transfer stations, as well as treatment and disposal sites.
56. The Parties provided data on the origin (ie customer location) of the hazardous waste received at their own sites. The CMA's analysis of this data indicates that the 80% catchment area¹⁸ of Avanti's hazardous waste transfer station is 286km. Given the location of Avanti's site near Liverpool, this radius covers a large proportion of Great Britain.
57. In light of the evidence set out above, the CMA considered the appropriate geographic scope for the competition assessment of the provision of hazardous waste collection and transfer services to be national. For completeness, the CMA has also considered, in its competitive assessment, whether its findings could vary within a narrower geographic frame of reference around Avanti's hazardous waste transfer station.

Hazardous waste treatment and disposal services

58. In *Veolia/Cleanaway*,¹⁹ the European Commission considered that product markets for hazardous waste treatment and disposal services would generally be no wider than national, although the precise scope of these markets (ie

¹⁸ Catchment areas are calculated as the 80th percentile of the distance travelled by the waste consigned to the site, by weight.

¹⁹ European Commission Case COMP/M.4318 – *Veolia/Cleanaway*, paragraph 11.

local, regional, or national) was left open, as this was likely to vary according to the type of waste and/or operation concerned.

59. Tradebe and Avanti both supply hazardous waste treatment and disposal services including, in particular, solvent reclamation and high temperature incineration to UK customers. Avanti's hazardous waste treatment and disposal services are provided by outsourced suppliers in other countries within the EU (primarily in north-west Europe) in relation to the hazardous waste that Avanti exports to these countries through TFS.
60. Third parties confirmed that UK customers could use any company in the UK that provides the hazardous waste treatment and disposal services they require, irrespective of where in the UK those facilities are located.
61. As explained in paragraph 38 above, the CMA found that the hazardous waste treatment and disposal services supplied to UK customers from outside the UK by way of TFS are an alternative to some customers. However, to have access to these services, UK customers must use the TFS services supplied by UK hazardous waste management companies that operate from the UK and maintain the necessary relationships with non-UK-based firms that provide the relevant hazardous waste treatment and disposal services.
62. For the reasons above, the CMA believes, for the purposes of this case, that the appropriate geographic frame of reference for the supply of solvent reclamation and high temperature incineration services is national.
63. However, it was not necessary for the CMA to reach a conclusion on the appropriate geographic frame of reference because no competition concerns arise on any plausible basis.

Conclusion on frame of reference

64. For the reasons set out above, the CMA has considered the impact of the Merger within the following frames of reference:
 - (a) The supply of hazardous waste collection and transfer services within the UK;
 - (b) The supply of solvent reclamation services within the UK; and
 - (c) The supply of high temperature incineration services within the UK.

Competitive assessment - Horizontal unilateral effects

65. The CMA's assessment has focussed on whether the Merger could give rise to horizontal unilateral effects within each of the frames of references set out above. Horizontal unilateral effects may arise when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged firm profitably to raise prices or to degrade quality on its own and without needing to coordinate with its rivals.²⁰
66. In undertaking this assessment, the CMA considered the Parties' shares of supply in the overlapping activities,²¹ as well as evidence (primarily the Parties' internal documents and third-party views) relating to the closeness of competition between the Parties and the competitive constraints provided by alternative suppliers.²²

The supply of hazardous waste collection and transfer services

Shares of supply

67. Table 1 below shows the CMA's estimates of shares of supply for hazardous waste collection and transfer services in England²³ using the EA data.²⁴

Table 1: Shares of supply for hazardous waste transfer services in England, 2017²⁵

Firm	Tonnes (annual)	Share
Tradebe	[<]	[0-5]%
Avanti	[<]	[0-5]%

²⁰ [Merger Assessment Guidelines](#), from paragraph 5.4.1.

²¹ The CMA estimated volume (tonnes) shares of supply based on data provided by the English Environment Agency (EA) and the data of the Parties. As explained above, Avanti transfers hazardous waste to third parties for subsequent treatment and disposal by these outsourced suppliers. Where these third parties are located in the UK, this volume has been attributed to the third party rather than to Avanti. Where these third parties are outside the UK, this volume is attributed to Avanti. This is because UK-based waste producers do not contract directly with overseas waste managers, and instead use UK-based waste transfer stations which have longer-term commercial relationships with the third-party suppliers outside the UK. By contrast, Avanti's arrangements for treatment and disposal with third party UK suppliers tend to be ad hoc in nature and end-customers may contract directly with these third parties.

²² The CMA contacted customers and competitors, which included providers and brokers, of the Parties, and the EA of England, Wales and Scotland.

²³ The Environment Agency's data on hazardous waste movements includes all hazardous waste which was produced in the UK and which was consigned (ie moved) to a site in England. Avanti's sole hazardous waste site is in England. The CMA understands that Tradebe's sites in Wales and Scotland are not focussed on hazardous waste transfer. For these reasons, figures for waste received in England cover the area in which the Parties' activities overlap, and represent all the increment resulting from the Merger.

²⁴ The Environment Agency records the quantity of waste which is brought to sites for onward transfer to other sites for treatment (be it recovery or disposal). This activity has been treated as representing the hazardous waste transfer and collection. All of the waste consigned to Avanti's Knowsley site is recorded in the CMA's calculations as referring to the supply of hazardous waste transfer and collection.

²⁵ Data on the volume of storage of hazardous waste received in England pending any further recovery or disposal operations any further recovery or disposal operations is used to capture hazardous waste collection and transfer activities.

Combined	[X]	[0-5]%
Slicker	[X]	[5-10]%
Augean	[X]	[5-10]%
European Metal Recycling Ltd	[X]	[0-5]%
Welton Aggregates Ltd	[X]	[0-5]%
MAC Contracting Ltd	[X]	[0-5]%
Interterminals	[X]	[0-5]%
Future Industrial Services Ltd	[X]	[0-5]%
Veolia	[X]	[0-5]%
Others	[X]	[60-70]%
Total	[X]	100%

Source: EA data

68. The table above shows that the estimated combined share of the Parties is [0-5]% (by volume), which is relatively low and at a level that does not raise competition concerns. These estimates show that the provision of hazardous waste collection and transfer services is highly fragmented, with Augean and Slicker being the largest suppliers (both will be more than twice the size of the Merged Entity) and numerous other providers of hazardous waste transfer stations, of similar scale to the Merged Entity, being available.
69. In addition, the CMA notes that estimated shares of the supply for hazardous waste collection and transfer for hazardous waste produced on the basis of the 80% catchment area of Avanti's waste transfer station in Knowsley, Liverpool are generally very similar to those calculated on a national basis. On this basis, the Parties' combined share would be [0-5]% (by volume), which again is relatively low and does not raise competition concerns.

Closeness of competition

70. The Parties provided few pre-Merger documents assessing the relevant competitive landscape. These pre-Merger documents prepared by Tradebe identify Avanti's hazardous waste transfer station in Knowsley, Liverpool as being a large established station and significant competitor in this area.²⁶ These documents indicate that the Parties viewed each other as close competitors for hazardous waste collection and transfer services. However, in these documents Tradebe also identified other significant competitors such as Veolia, Mulberry, Greenway Environmental, CSG Lanstar and Future Industrial Services. We interpreted these internal documents alongside the other evidence assessed below.

²⁶ See for instance, Tradebe's response to Enquiry Letter dated 5 July 2018, [X]; and Tradebe's response to RFI 2 dated 13 September 2018, [X].

71. One customer indicated that there are differences in the Parties' service offering, noting that Avanti provided a better service quality and response time than Tradebe. However, the vast majority of the customers that responded to the CMA's investigation generally considered that the Parties' offering was similar and that they would consider both Parties as an alternative for the supply of hazardous waste collection and transfer services. In particular, one third party ([§<]) considered that the Parties' hazardous waste transfer stations in Liverpool were close alternatives.

Competitive constraints

72. Most third parties that responded to the CMA's questionnaire indicated that there were other alternative suppliers for the hazardous waste collection and transfer services (including the one third party that expressed the concern that the merger may reduce the number of these stations in the Liverpool area).

CMA's assessment

73. Based on the evidence set out above, the CMA believes that Parties' competed for and were close alternatives for the supply of hazardous waste collection and transfer services.
74. However, there are numerous alternative hazardous waste transfer stations available post-Merger that would act as a sufficient competitive constraint on the Parties in the UK.
75. Therefore, the CMA found that the Merger does not give rise to a realistic prospect of an SLC in the provision of hazardous waste collection and transfer services at national level.

The supply of solvent reclamation services

Shares of supply

76. The CMA estimated shares of supply for solvent reclamation, shown in the table below, for England²⁷ based on the EA's data and the data on Avanti's TFS volumes submitted by the Parties.²⁸

²⁷ The sites at which Tradebe stated they perform solvent reclamation are all within England, meaning their full volume of solvent reclamation is included in the EA figures.

²⁸ The EA's system of recovery and disposal codes has a specific code for "Solvent reclamation/regeneration" which captures the activity of solvent reclamation

77. Avanti submitted²⁹ that it received a total of [X] tonnes of hazardous waste which went on to solvent reclamation in 2017. Avanti exported [X] tonnes of this waste through TFS, with the remaining being transferred on to UK producers.

78. **Table 2:** Shares of supply for solvent reclamation, 2017, England

Firm	Tonnes (annual)	Share
Tradebe	[X]	[70-80]%
Avanti TFS volume	[X]	[0-5]%
Combined	[X]	[70-80]%
Veolia	[X]	[10-20]%
BIP Organics	[X]	[5-10]%
Rutpen	[X]	[0-5]%
Absolute Solvents	[X]	[0-5]%
Biffa	[X]	[0-5]%
Others	[X]	[0-5]%
Total	[X]	100%

Source: EA. Avanti's TFS volume from Avanti response to RFI dated 13 September

79. The table above shows that the Parties' estimated combined share of supply at [70-80]% (by volume) is significant, and that Merged Entity will be, by far, the largest supplier of solvent reclamation services post-Merger. This data also shows, however, that the position of Avanti, which has a very small share of supply at [0-5]% (by volume) is marginal and therefore that the Merger will bring about little change in the existing market structure.

Closeness of competition and competitive constraints

80. The Parties submitted that they were not each other's closest competitor for solvent reclamation services, as they did not view these services provided through TFS to be a substitute. Tradebe identified Veolia, BIP, Rutpen and Chemoxy as its competitors for these services.

81. The majority of the customers that responded to the CMA did not identify Avanti as a close alternative to Tradebe for the supply of solvent reclamation services, because they prefer to use suppliers with facilities in the UK for the supply of solvent reclamation services.

82. The supplier that most third parties identified as competing with Tradebe for the supply of solvent reclamation services was Veolia. Although two customers of Tradebe stated there were not many alternatives available to

²⁹ Avanti's response to the request for information dated 13 September 2018, paragraph 4.

Tradebe for the supply of solvent reclamation services, these customers did not use Avanti for the supply of these services in the past and did not identify Avanti as imposing a competitive constraint on Tradebe.

83. The evidence above indicates that the Parties were not close competitors and did not impose a significant competitive constraint on each other.

CMA's assessment

84. Based on the evidence set out above, the CMA therefore believes that the Parties are not close competitors and Avanti did not pose a significant competitive constraint on Tradebe for the supply of solvent reclamation services prior to the Merger. Therefore, the Merger will not bring about any meaningful change in market structure.
85. The CMA notes that this is consistent with the position of third parties, which have not raised any merger specific concerns about the impact of the merger within this segment.
86. Therefore, the CMA found that the Merger does not give rise to a realistic prospect of an SLC in the provision of solvent reclamation services to UK customers.

The supply of high temperature incineration services

Shares of supply

87. As explained above, Avanti does not operate its own high temperature incineration facilities in the UK but instead provides high temperature incineration services to UK-based customers by using TFS services to export the hazardous waste to non-UK based incinerators.
88. For the reasons set out above, the CMA considers that high temperature incineration through TFS is a sufficiently close alternative to UK-based incineration to be included within the relevant frame of reference and has, on this basis, included TFS in the shares of supply estimates set out below.³⁰
89. The shares of supply for high temperature incineration of hazardous waste in the UK, including through TFS are set out in the table below.³¹

³⁰ For UK-based incinerators, tonnage has been ascribed to the owners of those incinerators. For waste exported through TFS, tonnage has been ascribed to the UK company which performs the TFS.

³¹ Based on EA data on quantities of hazardous waste requiring high temperature incineration, including waste exported from the UK through TFS. Waste requiring high temperature incineration can only be exported to be treated in facilities with 'energy recovery' status.

Table 3: Shares of supply for UK high temperature incineration, including TFS tonnage, 2017

Firm	Tonnes (annual)	Share
Tradebe	[X]	[10-20]%
Avanti	[X]	[0-5]%
Combined	[X]	[20-30]%
Veolia	[X]	[40-50]%
Technip	[X]	[5-10]%
Totus Environmental	[X]	[0-5]%
Grundon	[X]	[0-5]%
Regroup	[X]	[0-5]%
Augean	[X]	[0-5]%
Others	[X]	[10-20]%
Total	[X]	100%

Source: EA (TFS volumes) and third parties' data ([X], confirmed by Tradebe)

90. The table above shows that the Parties' estimated combined share of supply is [20-30]% (by volume), and that Tradebe will be the second largest supplier of high temperature incineration post-Merger, after Veolia. The increment resulting from the Merger is not significant ([0-5]).
91. Table 3 also shows that there are at least six alternative suppliers of high temperature incineration, including some suppliers providing this service through TFS (and are therefore likely to have some spare capacity), with a higher share than Avanti.

Closeness of competition

92. The Parties submitted that they are not each other's closest competitor for high temperature incineration, as they did not view the export of hazardous waste through TFS to be an alternative for incineration in UK incinerators. Instead, they viewed Veolia and Augean as the closest competitors to Tradebe's high temperature incineration services.
93. The CMA considered evidence of the extent to which the Parties compete closely based on third party comments and any focus on each other in their internal documents.
94. The Parties' internal documents indicate that they did not view each other as close competitors for high temperature incineration services. Within the internal documents submitted by the Parties, only one Tradebe internal document refers to Avanti's TFS model for high temperature incineration as

an alternative for high temperature incineration services in UK incinerators (when these incinerators are at full capacity).³²

95. The majority of customers and competitors that responded to the CMA's investigation indicated that the Parties are not close competitors because they do not view high temperature incineration outside the UK through TFS as a close substitute for high temperature incineration in the UK. In particular:
- (a) Most customers considered other providers of high temperature incineration services in the UK, such as Veolia and Auegan, to be the closest competitors to Tradebe;³³
 - (b) Some customers of Avanti told the CMA that they use Avanti's TFS services because they prefer the most environmentally sustainable option for the particular hazardous waste they produce (ie the incineration for energy recovery through TFS to other EU countries); and
 - (c) Some competitors submitted that they generally did not consider the Parties as close alternatives to each other, because some forms of waste are prohibited from leaving the UK through TFS.
96. Two customers that responded to the CMA considered the non-UK high temperature incineration services provided by Avanti to be an alternative to UK based high temperature incineration. More specifically:
- (a) One Tradebe customer told the CMA [redacted] (although this customer expressed a preference for UK based high temperature incineration); and
 - (b) Another Tradebe customer stated that, before the Merger, [redacted].
97. The CMA notes that these customers of Tradebe used or were considering using Avanti's TFS services for hazardous waste requiring high temperature incineration as a second-best option to high temperature incineration in the UK.
98. In the round, the CMA considers that the available evidence indicates that the Parties' offerings are differentiated and that they are not particularly close competitors.

³² Tradebe's response to Enquiry Letter dated 5 July 2018, [redacted].

³³ With regard to hazardous waste treatment and disposal services in general, two customers also indicated that given the Parties' differentiated services, the Merger would be beneficial if Tradebe provided more alternatives for waste treatment and disposal services than prior to the Transaction.

Competitive constraints

99. As shown in the market share table above,³⁴ Veolia is the market leader in the supply of high temperature incineration services in the UK. This is consistent with the evidence submitted by third parties, with most customers generally identifying Veolia as a large supplier of high temperature incineration services. The CMA therefore considers that Veolia is likely to pose the greatest constraint on the Parties post-Merger.
100. Third parties that responded to the CMA also indicated there are alternatives available that provide high temperature incineration of hazardous waste in the UK. Some respondents stated that there is nothing that distinguishes Avanti's TFS offering for hazardous waste requiring high temperature incineration from the offer of other TFS providers, suggesting that other suppliers will continue to constrain the Parties post-Merger.
101. The evidence available to the CMA indicates that UK-based high temperature incinerators are close to capacity. Capacity data submitted by the Parties, the internal documents of the Parties and evidence from several third parties all indicated that the incinerators in the UK are operating at or close to capacity. Some third parties that responded to the CMA noted that some incinerators in other EU countries, that have agreements with UK TFS providers, may also be approaching their capacity limit (albeit that the available evidence indicates that there is likely to be more capacity available through TFS than in the UK). The available evidence does not indicate that Avanti is better-placed than other TFS providers to expand its capacity (and might therefore represent a more significant competitive constraint than is suggested by its existing market presence).
102. The CMA's third-party market test revealed that several customers named waste brokers as alternatives, despite these firms not possessing treatment facilities or providing TFS services themselves. The CMA noted that these customers mentioned that waste brokers work with a large number of credible waste management suppliers to provide cost-effective rates for collection and a range of disposal of waste (hazardous and non-hazardous waste) services to waste producers across the UK. While waste brokers are not alternative suppliers for these services, they appear to play an important role in facilitating competition. More specifically, because brokers are well-informed about the available capacity in the industry and can easily match customer needs to the required treatment, they help make the market structure more competitive.

³⁴ Paragraph 89.

103. This is also consistent with third party evidence that indicates for some customers, changing suppliers is relatively straightforward and that customers would generally switch to alternative suppliers if the Merged Entity increased prices for high temperature incineration services. While a few of these customers showed that they were concerned that the Merger may raise prices, they also named credible alternatives to Tradebe in this market. One customer suggested that prices had already increased since the Merger, although this customer also noted that it was not clear whether the price increase was linked to the Merger.
104. Overall, the CMA found that the Merged Entity remains sufficiently constrained by a number of other suppliers of high temperature incineration services that offer similar to Avanti.

Conclusion on horizontal unilateral effects

105. For the reasons set out above, the CMA found that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in relation to any of the frames of references considered above.

Vertical effects

106. Vertical effects may arise when a merger involves firms at different levels of the supply chain. Vertical mergers may be competitively benign or even efficiency-enhancing, but in certain circumstances can weaken rivalry, for example when they result in foreclosure of the merged firm's competitors. The CMA only regards such foreclosure to be anticompetitive where it results in an SLC in the foreclosed market(s), not merely where it disadvantages one or more competitor.
107. There is, technically, a vertical relationship between the Parties' activities because they use each other's TFS routes and hazardous waste treatment and disposal services. Avanti only received [0-5]% of its overall revenue in 2017 from Tradebe and Tradebe accounted for [0-5]% of the volume of waste Avanti exported through TFS. The available evidence indicates that such vertical relationships between suppliers of hazardous waste treatment and disposal services are common practice in the industry.³⁵
108. A third party raised the concern that, after the Merger, the merged entity could limit third party access to Avanti's TFS routes, or to deteriorate the conditions

³⁵ In certain circumstances a waste processor may find it more economical to pay another firm to process some waste than to process themselves.

of access, limiting the ability of other suppliers of hazardous waste treatment and disposal services to effectively compete with the Merged Entity.

109. The CMA found, however, that the Merged Entity does not have the ability to foreclose competitors' access to TFS routes, including for hazardous waste requiring high temperature incineration. Given the conclusions on the horizontal effects of the merger, as set out above, even if the Merged Entity were to foreclose access to Avanti's TFS routes, its competitors could use the services of several other suppliers of TFS.
110. As the CMA has concluded that the Merger will not provide the Merged Entity with the ability to foreclose the Parties' rivals from access to TFS, the CMA has not assessed the impact of the Merger on its incentive to foreclose or the effect of a foreclosure strategy on competition.
111. Accordingly, the CMA found that the Merger does not give rise to a realistic prospect of an SLC as a result of vertical effects in relation to any of the frames of reference considered above.

Barriers to entry and expansion

112. Entry, or expansion of existing firms, can mitigate the initial effect of a merger on competition, and in some cases may mean that there is no SLC.²⁹
113. In the present case, the CMA has not had to conclude on barriers to entry or expansion as the Merger does not give rise to competition concerns on any basis.

Decision

114. Consequently, the CMA does not believe that it is or may be the case that the Merger has resulted, or may be expected to result, in an SLC within a market or markets in the United Kingdom.
115. The Merger will therefore **not be referred** under section 22(1) of the Act.

Colin Raftery
Senior Director
Competition and Markets Authority
25 October 2018