DETERMINATION OF MERGER NOTIFICATION M/18/053 – PANDAGREEN / KNOCKHARLEY LANDFILL AND NATUREFORD

Section 21 of the Competition Act 2002

Proposed acquisition by Sretaw 2 Limited, through Pandagreen Limited, of sole control of Knockharley Landfill Limited, and the proposed Acquisition by Sretaw Unlimited Company, through ST Cloud Limited, of sole control of Natureford Limited.

Dated 6 February 2019

Introduction

1. On 9 July 2018, in accordance with section 18(1)(a) of the Competition Act 2002, as amended (the "Act"), the Competition and Consumer Protection Commission ("the Commission") received a notification (the "Notification") of a proposed acquisition whereby (i) Sretaw 2 Limited ("Sretaw 2"), through its wholly owned subsidiary Pandagreen Limited ("Pandagreen"), would acquire the entire issued share capital of Knockharley Landfill Limited ("Knockharley") ("Transaction 1"), and (ii) subject to the completion of Transaction 1, Sretaw Unlimited Company ("Sretaw"), through its wholly owned subsidiary ST Cloud Limited ("ST Cloud") would acquire the entire issued share capital of Natureford Limited ("Natureford") ("Transaction 2") (collectively, the "Proposed Transaction"). The completion of Transaction 2 is conditional on the prior completion of Transaction 1. Pandagreen and ST Cloud are the notifying parties (the "Parties").

The Proposed Transaction

2. The Proposed Transaction is to be implemented in two stages, Transaction 1 and Transaction 2. Transaction 2 is conditional upon the completion of Transaction 1 and the implementation of a separate option exercise notice (the "Ballynagran Option

Exercise Notice"). The Ballynagran Option Exercise Notice is a separate transaction which is not subject to the Notification.

- 3. Transaction 1 is to be implemented pursuant to an irrevocable option consisting of an exercise notice dated 28 June 2018 according to which Pandagreen will acquire the entire issued share capital and thus sole control of Knockharley from AGB Landfill Holdings Limited ("AGB"). AGB is an indirect wholly-owned subsidiary of Natureford, which acts as a holding company for Knockharley, Ballynagran and Kilcullen Landfill Limited ("Kilcullen").
- 4. Following and conditional upon (i) the completion of Transaction 1 and (ii) the transfer (pursuant to the Ballynagran Option Notice) of the entire issued share capital of Ballynagran Landfill Limited ("Ballynagran")¹ from AGB to Baronglen Limited ("Baronglen"), which is the ultimate holding company of Natureford,² Transaction 2 is to be implemented pursuant to an irrevocable option consisting of an exercise notice dated 28 June 2018 according to which ST Cloud will acquire the entire issued share capital and thus sole control of Natureford.

The Undertakings Involved

Sretaw, ST Cloud, Sretaw 2 and Pandagreen

- 5. Sretaw 2 is a private limited company incorporated in the State. Pandagreen is a wholly-owned subsidiary of Sretaw 2. Sretaw is an unlimited company incorporated in the State. ST Cloud is a wholly owned subsidiary of Sretaw. Sretaw and Sretaw 2 are both owned and controlled by Mr Eamon Waters (99% of each) and Mr Robert Waters (1% of each). Pandagreen, ST Cloud, their respective parents (Sretaw and Sretaw 2) and their parents' subsidiaries (together the "Purchaser Group") are involved in various sectors within the State, including:
 - waste collection, processing and recycling;
 - retail supply of electricity and gas;

¹ Ballynagran is currently owned and controlled by AGB. AGB is an indirect wholly-owned subsidiary of Natureford.

² Baronglen Limited is ultimately controlled by Ms Deirdre Stevenson.

- landfill gas utilisation;
- sale, lease and maintenance of bins;
- fleet leasing³ and maintenance services;
- drain cleaning, jetting services and drain unblocking;
- the hotel and pub sector; and
- property development.
- 6. For the financial year ended 30 December 2017,⁴ the Purchaser Group's worldwide turnover was approximately [..], of which approximately [..] was generated in the State. Of the Purchaser Group's turnover in the State, approximately [..] was generated from the waste and utilities sector, and approximately [..] from the property and hotel sector.

The Target Companies – Knockharley and Natureford

- 7. The Target Companies are currently wholly-owned and controlled by Ms Deirdre Stevenson through Baronglen.
- 8. Natureford, a private limited company incorporated in the State, is a wholly owned direct subsidiary of Baronglen. AGB, the indirectly wholly-owned subsidiary of Natureford, acts as a holding company for Knockharley, Ballynagran and Kilcullen.
- 9. Knockharley, located at Knockharley landfill in Navan, Co. Meath, is engaged in the construction, operation and development of Knockharley landfill. Knockharley landfill accepts non-hazardous waste for both disposal and recovery. Knockharley's landfill licence allows for the disposal of 200,000 tonnes of non-hazardous waste (i.e. mixed municipal waste, bulky waste, construction & demolition ("C&D") waste and certain categories of soil, and stone) per annum; however, planning restrictions only allow for the disposal of 88,000 tonnes of non-hazardous waste per annum. Knockharley's landfill licence allows for the recovery of 112,000 tonnes of non-hazardous waste material (i.e.

³ This involves the leasing of trucks and other vehicles(for example bin trucks, skip trucks, artic trucks and vans)

⁴ Turnover figures as per the Parties' management accounts.

⁵ Recovery waste is used for daily cover and site engineering at Knockharley Landfill. It does not incur a landfill levy and is therefore a more cost-efficient alternative to disposal.

fines materials⁶, incinerator bottom ash, certain categories of soil, stone, and rubble as well as woodchip). Knockharley landfill is also used for the purposes of landfill gas utilisation.⁷

- 10. Post transaction, including after the transfer of the entire issued share capital of Ballynagran to Baronglen, Natureford will be the ultimate holding company of AGB, and, as a result, Kilcullen.
- 11. In addition to its ownership of Ballynagran, Kilcullen and Knockharley, AGB assumes the EPA Closure Restoration and Aftercare Management ("CRAMP")⁸ liabilities for all these three landfill sites.
- 12. Kilcullen used to operate as a landfill site until it was closed in December 2011. It is still used for the purposes of landfill gas utilisation.⁹
- 13. For the financial year ended 31 December 2017, the Target Companies' combined worldwide turnover was approximately [..] was generated in the State.

Rationale for the Proposed Transaction

14. The Notification states:

"The Proposed Transaction will provide greater operational flexibility to the Purchaser Group."

Preliminary Investigation

Contacts with the Undertakings Involved

⁶ Fines are a by-product produced during the waste treatment/ recycling process and consist of materials such as wood, aggregate, glass, ceramics and organics. Fines are normally extracted from municipal waste streams via the use of a trommel screen.

⁷ Sretaw 2, through its subsidiary Bioverda Power Systems Ltd ("Bioverda"), holds an exclusive contract to utilise landfill gas from Knockharley.

⁸ EPA authorisations require closure plans, restoration/aftercare plans (e.g. RMPs, DMPs, CRAMPs) and environmental liabilities risk assessments (ELRAs) to be prepared to the satisfaction of and agreed with the EPA. The objective of the CRAMP is to ensure that the facility is closed and decommissioned in a manner that does not give rise to environmental pollution and to identify the need for and extent of any post closure monitoring and aftercare.

⁹ Sretaw 2, through its subsidiary Bioverda, holds an exclusive contract to utilise the gas from Kilcullen.



- 15. On 16 August 2018, the Commission served Requirements for Further Information ("RFIs") on both Pandagreen and Knockharley pursuant to section 20(2) of the Act. This adjusted the deadline within which the Commission had to conclude its assessment of the Proposed Transaction.
- 16. The Commission received a full response to the RFI from Knockharley on 14 September 2018.
- 17. Pandagreen provided its full response to the RFI on 14 December 2018. As a result, the "appropriate date" (as defined in section 19(6)(b)(i) of the Act) became 14 December 2018. 10
- 18. During its investigation, the Commission requested and received, on an on-going basis, further information and clarifications from both Knockharley and Pandagreen.

Third Party Submissions

- 19. The Commission received three third party submissions in relation to the Proposed Transaction. All three submissions highlighted issues concerning the potential negative competitive effects arising from the Proposed Transaction.
- 20. Competition issues raised in submissions included concerns that, after the implementation of the Proposed Transaction:
 - Pandagreen would exclusively use Knockharley landfill to serve only its own disposal and recovery needs;
 - Pandagreen would leverage its newly acquired position in the disposal/recovery market in order to enhance its dominant position in several downstream processing and collection markets by raising competitors' costs. This strategy would be particularly effective for certain streams of waste which, for either regulatory or economic reasons, can only be disposed of/recovered at non-hazardous landfills in the State for example, bulky waste, certain categories of soil, stone and rubble, as

¹⁰ The "appropriate date" is the date from which the time limits begin to run for making a determination pursuant to section 21 and/or section 22 of the Act.

well as C&D fines and Commercial and Industrial ("C&I") fines¹¹. Submissions also outlined that there was a capacity shortage for these streams of waste in the State.

- Pandagreen, already having substantial supply agreements with other disposal/recovery outlets in the State, would have a strong position in these markets post-Transaction; and
- Transaction 1 would lead to Pandagreen having effectively full control over Ballynagran.

Market Enquiries

21. During its investigation the Commission contacted a number of the Parties' customers and competitors in the State including waste processors, waste collectors, construction companies and a number of Knockharley's competitors. The Commission also contacted the Environmental Protection Agency ("EPA") and the Eastern-Midlands Waste Regional Office.

Competitors

- 22. The Commission sent questionnaires to 39 waste collectors in the State (7 of which were integrated waste processors) and received a high response rate.
- 23. Of Pandagreen's competitors who responded to the questionnaire, approximately half raised concerns that the Proposed Transaction would have a negative impact on competition in waste collection and waste processing markets in the State. The majority of respondents who raised concerns were located in the Greater Dublin Area ("GDA")¹² and compete directly with Pandagreen in either waste collection, waste processing, or both. The following concerns were raised by Pandagreen's competitors:

¹¹ C&D and C&I fines are fines which are extracted from waste which has been collected from C&D and C&I premises respectively.

¹² For the purposes of this Determination, the GDA comprises Counties Dublin, Meath, Kildare and Wicklow; i.e. the areas administered by Dublin City Council, Dún Laoghaire-Rathdown County Council, Fingal County Council, South Dublin County Council, Meath County Council, Kildare County Council and Wicklow County Council.



- Pandagreen already has significant control of waste disposal outlets in the State through long term waste supply agreements, and the Proposed Transaction strengthens this existing strong position;
- There are capacity shortages in the disposal and recovery markets for non-hazardous wastes in the State. These capacity shortages are particularly problematic for the disposal and recovery of waste that cannot be incinerated or exported (e.g. certain categories of C&D waste). This means that Knockharley has market power and that, post-transaction, Pandagreen may be able to limit access to Knockharley in order to increase Pandagreen's market share in the downstream treatment/processing and collection markets for these waste streams;
- Pandagreen could divert material which is currently being exported from the State to Knockharley instead. This would exacerbate the capacity shortages in the disposal/recovery markets, and would displace customers of Knockharley.

Customers

24. The Commission also sent questionnaires to 19 of Pandagreen's commercial waste collection customers¹³ and received a high response rate. All respondents indicated that they did not think the Proposed Transaction would have an impact on their business activities in the State. In addition, most customer respondents indicated that there were multiple suppliers of commercial waste collection services in the State and that there were no formal contracts with any of the companies in the Purchaser Group. The respondents outlined that this meant they could switch service provider at any time.

Expert economic advice

The Parties relied on a detailed competition economics analysis prepared by Compecon
 Competition Economics (the "Compecon Report") as part of the Notification.¹⁴

¹³ Mainly C&D customers.

¹⁴ Compecon, "Report on acquisition of landfill Sites" dated 9 July 2018.

Industry Background

- 26. The Commission has examined the non-hazardous¹⁵ waste management sector in various merger determinations including M/16/008 PandaGreen/Greenstar (the "2016 Determination")¹⁶ and M/18/005 Thorntons/A Plus.¹⁷ The Commission also examined the landfill gas utilisation sector in M/17/013 PandaGreen/Bioverda Power Systems & Starrus LFG.¹⁸ The Commission's analysis of these sectors provides a useful background to its analysis of the Proposed Transaction.¹⁹
- 27. The Commission's analysis of the competitive effects of the Proposed Transaction focuses on the collection, processing, as well as the disposal and recovery of non-hazardous waste. The Purchaser Group is also involved in the collection and processing of hazardous waste, albeit to a limited extent. Furthermore, the Proposed Transaction will not have an impact on the hazardous waste market in the State as none of the Target Companies are involved in the hazardous waste sector in the State.
- 28. In essence the waste management sector consists of four sequential elements:
 - a. Production of waste (at domestic and commercial premises),
 - b. Collection of waste (from domestic and commercial premises),
 - c. Processing of waste, and

¹⁵ For more information on hazardous waste, including relevant European and Irish legislation, see EPA, *National Hazardous Waste Management Plan 2014-2020* (2014), available at: http://www.epa.ie/pubs/reports/waste/haz/NHWM Plan.pdf.

¹⁶ M/16/003 *PandaGreen/Greenstar*, available at: https://www.ccpc.ie/business/mergers-acquisitions/merger-notifications/m16008-pandagreen-greenstar/.

¹⁷ M/18/005 *Thorntons/A Plus*, available at: https://www.ccpc.ie/business/mergers-acquisitions/merger-notifications/m18005-thorntonsa-plus/.

M/17/013 PandaGreen/Bioverda Power Systems & Starrus LFG, available at: https://www.ccpc.ie/business/mergers-acquisitions/merger-notifications/m17013-pandagreen-bioverda-power-systems-starrus-lfg/.

¹⁹ The Commission's predecessor the Competition Authority also examined the waste management sector in its enforcement decision of 2005: *Enforcement Decision No. E/05/002, Alleged excessive pricing by Greenstar Recycling Holdings Limited in the provision of household waste collection services in northeast Wicklow.*

d. Disposal, recovery, and recycling of waste.

Each of these elements is described in more detail below.

Waste Production

29. Waste, by its very nature, is an undesirable by-product of another activity in either a domestic or commercial setting. Consequently, while some waste may be stored or relocated at an adjacent location (e.g., composting organic material), other waste must be removed from the premises. Most waste is removed from domestic or commercial premises by way of a pre-arranged waste collection service. There is limited scope for waste producers to bring waste directly to civic amenity bring centres or landfills.

Waste Collection

30. The basic function of waste collection is to collect waste and transport it from one place – the domestic or commercial setting in which the waste has been produced – to another (e.g. a transfer station, processing facility, or incinerator/landfill). Waste collection involves two key elements: a collection method (e.g. bags, wheelie bins or skips) and transport (e.g. vans or trucks).

31. In practice, domestic household collection typically involves the removal, on a weekly or fortnightly basis, of wheelie bins or bags containing the waste created by a household (i.e., Municipal Solid Waste ("MSW"), organic waste and dry recyclable waste). In addition, domestic waste collection can involve the removal, on an ad hoc basis, of skips containing C&D waste. Commercial waste collection services are more varied, but in general similar streams of waste are collected from both commercial and domestic residences in Ireland. This means that the treatment/processing as well as disposal options are similar for waste streams collected from domestic and commercial premises.

Waste Transfer and Processing

32. Waste processing involves first the transfer of waste from waste collectors at transfer stations and second the sorting and categorising of waste prior to subsequent recycling or disposal/recovery. For example, a material recovery facility ("MRF") separates out

different waste material and prepares it for subsequent disposal, recovery or recycling. The manner in which waste is processed can affect how the waste is disposed of; for example, waste collected from skips and construction or demolition sites can be processed in such a way that a certain proportion of this waste qualifies for recovery as opposed to disposal at landfills. This means that it will not be subject to the landfill levy.

33. The transfer and processing of waste may take place at the same location or, alternatively, waste may be bulked up at transfer stations and transported to another location for further processing.

Waste Disposal/Recovery and Exporting

- 34. Most non-hazardous waste which is recycled and disposed of in the State is municipal waste which is collected from both commercial and domestic premises. According to the EPA,²⁰ in 2016 Ireland generated over 2.7 million tonnes of municipal waste, of which approximately 40% was recycled. Municipal waste is made up of the following waste streams:
 - Residual or MSW, i.e. waste that cannot be recycled;
 - Recyclable or green bin waste, e.g. glass, plastic, paper & board, metals;
 - Organic or brown bin waste, e.g. food and garden waste;
 - Bulky waste, e.g. waste that cannot fit in a wheelie bin such as broken furniture, carpets, toys, etc.; and
 - WEEE (Waste Electrical and Electronic Equipment.
- 35. Waste that cannot be recycled/composted is either disposed of at a landfill, recovered at a landfill (i.e., used as landfill cover or for engineering purposes such as road building), sent to cement kilns ("co-incineration"), or is sent for incineration at a Waste-to-Energy Facility ("WTE Facility") either in the State or abroad.²¹

²⁰ http://www.epa.ie/nationalwastestatistics/municipal/

 $^{^{21}}$ The Parties estimate that 20% of disposal waste was exported for incineration in 2017.



- 36. Disposal of waste at landfills is considered the least optimal option for environmental reasons. As a result, waste sent for disposal at landfills is subject to a landfill levy of €75 per tonne.²² The landfill levy does not apply to waste sent for recovery at landfills, waste collected from local authority areas (such as street bin waste and street sweepings), and waste sent for incineration (absent the landfill levy, incineration would be significantly more costly than disposal at landfill).
- 37. Waste sent for incineration is categorised as recovery waste; however, the streams of waste (mainly MSW) which are sent for incineration are the same as the streams of waste sent for disposal at landfills. Incineration is therefore considered a substitute for landfill disposal.
- 38. There are certain waste streams which can only be disposed of or recovered at landfill as they are not appropriate for incineration. These include certain categories of soil, stone and rubble, as well as bulky waste. In addition, for economic reasons²³ landfill levy exempt wastes such as street sweepings, C&D fines, and C&I fines are only sent to landfills in the State. These waste streams are typically produced by C&D commercial customers, but are also found in domestic skip collections.
- 39. The vast majority of waste that can be recycled (e.g. glass, paper, plastic, metal) is exported outside the State as there is limited capacity within the State to deal with these waste streams.

Waste Disposal/Recovery contracts

40. Market enquiries and contact with the Parties indicated that there is a wide variety of pricing and contracting arrangements for waste disposal and recovery services in the State. In general, smaller waste collectors/processors are not able to secure individual contracts with incinerators meaning they can only send waste for incineration through third parties (usually larger collectors/processors that have long term supply agreements with WTE Facilities).

²² https://www.epa.ie/media/Chapter6 Waste.pdf

²³ But for the landfill levy, landfill would generally be a cheaper alternative than incineration. For landfill levy-exempt material, therefore, landfill disposal is more economically attractive than incineration.

41. Contracts for the disposal and recovery of waste at landfills are usually negotiated on an annual basis where the price is set at the beginning of the year. Prices per tonne tend to be lower for larger customers. It is not uncommon for waste collectors/processors to have different agreements with landfills for each type of waste stream. Somewhat atypically, members of the Purchaser Group have long term supply agreements for the recovery and disposal of waste with both Ballynagran and Knockharley.

Waste Regulation

- 42. Waste collection and processing within the State is subject to regulation by the EPA, the National Waste Collection Permitting Office ("NWCPO"), and local authorities (including three nominated waste enforcement regional lead authorities). The EPA is responsible, under Irish and European legislation, for the licensing of waste facilities such as landfills, incinerators, cement kilns and waste transfer/processing facilities. As part of its regulatory role the EPA sets maximum capacity thresholds for these facilities.²⁴
- 43. The NWPCO is responsible, under the Waste Management (Collection Permit) Regulations 2007, as amended, for the licensing of waste collection operators. The NWCPO issues licenses on behalf of local authorities who have responsibility for the enforcement of license conditions. No individual or firm can collect waste, for gain or profit, without first obtaining a license from the NWCPO.

Landfill Gas utilisation

- 44. Landfill gas is extracted by drilling wells into the landfill site. The gas is drawn to a wellhead and then directed into a network of pipes. The landfill gas from the whole landfill is collected in a central area where moisture is removed. The landfill gas is then ultimately directed into gas engines which drive an alternator to generate electricity.
- 45. Landfill gas is a naturally occurring product of decomposing organic matter in landfill waste sites. Usable landfill gas begins to be generated after one year of landfill

²⁴ Local authority planning restrictions may dictate further reductions in the maximum capacity thresholds: for example, as mentioned earlier, Knockharley's EPA licenced capacity is above the local authority area planning capacity.

operation²⁵. The quality and yield of gas is related to the amount of biodegradable material in the landfill. Low biodegradable content leads to low gas production or poorquality gas that is not efficient to burn.

Market Definition

Overlap in the activities of the Parties and the Target Companies

- 46. There is a vertical relationship between Pandagreen and Knockharley in relation to the disposal and recovery of non-hazardous waste in the State. This arises as Pandagreen currently delivers non-hazardous waste for both disposal and recovery at Knockharley landfill. As a result of the Proposed Transaction, the Purchaser Group will be active in waste collection, processing and recycling in the State and, through acquiring Knockharley, in the acceptance of non-hazardous waste for both disposal and recovery from waste collectors and processors.
- 47. There is also a vertical relationship between Pandagreen and the Target Companies in relation to landfill gas utilisation. Pandagreen currently holds, through its wholly owned subsidiary Bioverda, the exclusive right to generate electricity from landfill gas at Knockharley landfill and Kilcullen landfill for the lifetime of those two landfills. As a result, the Proposed Transaction will have no impact on the pre-merger situation as regards the availability of Knockharley or Killcullen for the purposes of landfill gas utilisation. Therefore, the Commission considers that it is not necessary to further discuss this relationship for purposes of assessing the Proposed Transaction.
- 48. The Commission defines markets to the extent necessary depending on the circumstances of a given case. The Commission has assessed the likely impact of the Proposed Transaction in several potential upstream and downstream market

A. Upstream Relevant Product and Geographic Markets

²⁵ Landfill gas can be generated only from landfills containing MSW.

²⁶ This arrangement was examined in *M/17/013 PandaGreen/Bioverda Power Systems & Starrus LFG.*

Disposal of Waste in the State

- 49. In the 2016 Determination, the Commission outlined that there is a separate market for the sale of recyclable material; however, the Commission did not precisely define a market for the provision of waste disposal services.
- 50. Most of the residual waste disposed of in the State can be either disposed of at an EPA licenced non-hazardous landfill ("EPA Landfill"), incinerated at a WTE Facility or sent for co-incineration in cement kilns. With respect to the provision of disposal services in the State the Parties state that:

"There are, however, alternatives outlets to landfill for the disposal of residual waste. Consequently, the market for the disposal of residual waste is not confined to landfill"²⁷

- 51. The Commission considered the possibility that the relevant product market for the disposal of waste in the State could be defined more narrowly by types of waste that that for either regulatory economic, or physical reasons are not incinerated and so are disposed of at landfills ("Landfill Only Disposal Wastes").
- 52. The Commission's market enquiries indicated that there are certain streams of waste (such as street sweepings, certain categories of soil, stone and rubble, as well as bulky waste) which for either economic, regulatory or scientific/physical reasons are not disposed of at WTE Facilities or cement kilns and so are disposed of at non-hazardous landfills in the State. It is possible that these Landfill Only Disposal Wastes constitute a separate product market for the disposal of non-hazardous waste that cannot or are not incinerated/ co-incinerated. In this regard, the Commission notes that the European Commission in *AVR/Gansewinkel*²⁸ concluded that the incineration of non-hazardous waste in the Netherlands was a separate market from the market for landfill of non-

²⁷ Compecon Report p22.

²⁸ Case M.4576 AVR/Van Gansewinkel, Decision of 3 April 2007 under Article 6(1)(b) of Council Regulation 139/2004, available at:

hazardous waste. However, the European Commission's assessment was based on the specific licencing of landfill waste rather than the specific characteristics of the waste.

- 53. In this case, the Commission's analysis/market enquiries indicate that Landfill Only Disposal Wastes likely represent a subset of the product market for the disposal of waste that cannot be recycled, rather than a separate product market, for the following reasons:
 - Landfill Only Disposal Wastes accounted for a relatively small proportion of disposal capacity in the State (for example, Landfill Only Disposal Wastes accounted for only 5% of the total waste disposed of at Knockharley landfill in 2017), and
 - The EPA does not separately licence capacity for these types of waste. This implies that a change in incinerator capacity is likely to have an impact on the supply of disposal capacity for Landfill Only Disposal Wastes.
- 54. For the purpose of assessing the likely competitive impact of the Proposed Transaction, the Commission does not need to come to a definitive view on the precise relevant upstream product market(s). The proposals submitted by the Parties address the Commissions concerns in all possible markets. The Commission's conclusion on the competitive impact of the Proposed Transaction will be unaffected whether the precise relevant upstream product market is narrow (e.g., a separate market for the disposal of non-hazardous waste in landfill only) or broad (e.g., the disposal of non-hazardous waste in both landfill and incinerator). In order to determine, however, whether the Proposed Transaction might result in a substantial lessening of competition, and due to the reasons outlined in paragraph 53, above, the Commission analysed its impact by reference to the potential upstream market for the disposal of non-hazardous waste in both landfill and incinerator.
- 55. With respect to the view on the relevant geographic market, the Parties point out that a large proportion of residual waste is currently exported from the State meaning the geographic market could be international in scope. However, the Parties assess the impact of the transaction with reference to a geographic market limited to the GDA.

The Commission agrees with the Parties' assessment that the potential to export material could act as a competitive constraint on waste disposal facilitates operating in the State. In addition, the Commission's market enquiries suggest that the export of residual waste (mainly MSW) to WTE Facilities in other countries is marginally cheaper than disposing of waste at landfills in the State. However, for the purposes of determining the likely competitive impact of the Proposed Transaction on the potential market for the disposal of residual waste that cannot be recycled, the Commission assessed its impact by reference to a narrow geographic market limited to the GDA, which is the narrowest market that is likely to be impacted by the Proposed Transaction.

Recovery of Waste at EPA Landfills

- 57. During the course of its investigation the Commission identified a number of reasons why the recovery of waste may represent a separate product market from the disposal of waste that cannot be recycled, as follows:
 - Recovery capacity is licenced separately to disposal capacity;
 - Wastes which are suitable for recovery at landfills do not incur a landfill levy. This means there is a significant cost difference between recovery and disposal of waste. Due to the higher costs associated with incineration, recovery wastes are generally not incinerated.²⁹
 - The process for recovering waste is different to disposal. Recovery materials are generally used for purposes such as landfill cover or road building. Disposal, on the other hand, involves burying waste at landfills or incinerating waste at WTE Facilities/cement kilns.

²⁹ Certain recovery wastes cannot be incinerated such as soil, stone and rubble, whereas others are not economic to incinerate such as C&D and C&I fines.



- Unlike wastes which are disposed of, recovery wastes are important for the effective operation of landfills as they are used for odour management³⁰ and engineering purposes.³¹
- There are several permitted non-hazardous landfills ("permitted landfills") quarries, and inert material landfills that can accept certain types of recovery materials in the State (mainly soil, stone and rubble). The Commission also considered the possibility that the recovery market includes permitted landfills, inert landfills and/or quarries. In their RFI response, the Parties maintained that these facilities represented a competitive constraint on Knockharley in the recovery market in the State.
- 59. The Commission is of the view that these facilities only provide a limited competitive constraint on Knockharley for the recovery of waste for the following reasons:
 - Recovery waste which is processed in an EPA licenced processing facility is defined under Chapter 19 of the European Waste Catalogue³² ("Section 19 Code Waste") and must be sent to an EPA Landfill in the State (i.e., Ballynagran landfill, Drehid landfill, Knockharley landfill, or East Galway landfill);
 - The Purchaser Group and their competitors mainly process Section 19 Code
 Waste in EPA licenced processing facilities;
 - Over 80% of the recovery waste accepted at Knockharley in 2017 was Section
 19 Code Waste, which may not be recovered in permitted landfills or quarries.
- 60. For the purposes of assessing the Proposed Transaction and for the reasons outlined in paragraph 61, above, the Commission assessed its likely impact by reference to the potential upstream product market for the recovery of waste at EPA Landfills in the State.
- 61. In relation to the Geographic market, the Parties outlined that recovery waste is not incinerated, as, it is in general not appropriate for export and so must be recovered at

³⁰ Recovery materials such as fines are used as landfill cover which assists in odour management.

³¹ Recovery wastes are used for road building and landfill constriction.

³² http://www.nwcpo.ie/forms/EWC code book.pdf

an EPA Landfill, permitted landfill, or a quarry in the State. The Parties also outlined that transportation costs are a significant determining factor in what recovery facility is used meaning that East Galway landfill for example was not a close substitute for Drehid landfill, Knockharley landfill and Ballynagran landfill. This would suggest the relevant geographic market for the recovery of waste is regional

- 62. The Commission agrees with the Parties' assessment that transport costs are likely to be a significant factor in what recovery facility is used by waste collectors/processors. In addition, the Commission notes that East Galway landfill, the only EPA Landfill outside the GDA, is expected to close in 2019.³³ This further reduces the probability that East Galway landfill will act as a competitive constraint on the merged entity post-transaction.
- 63. For the reasons outlined in paragraph 62, and in order to determine the likely competitive effect of the Proposed Transaction on the recovery of waste at EPA Landfills the Commission assessed their impact by reference to a narrow geographic market limited to the GDA.
- 64. In conclusion, the Commission has assessed the likely competitive impact of the Proposed Transaction by reference to the following upstream markets:
 - The disposal of residual waste that cannot be recycled in the GDA; and
 - The recovery of waste at EPA Landfills in the GDA.
- B: Downstream Relevant Product and Geographic Markets
- 65. In the 2016 Determination, the Commission defined the following three relevant product markets in the waste sector:
 - The market for the supply of domestic waste collection services;

Dara Bradley, 'Kilconnell superdump to stop accepting waste in 2019', *Connacht Tribune* (18 March 2017), available at: https://connachttribune.ie/kilconnell-superdump-stop-accepting-waste-2019/.



- The market for the supply of waste collection services to individual C&I customers;
- The market for the processing of waste collected from domestic and C&I customers; and
- The market for the supply (for sale) of recyclable materials.
- 66. In light of the recent decisional practice of the Commission and the absence of any evidence to the contrary obtained by the Commission pursuant to its market inquiries, the Commission considers that there is no reason to depart from the views expressed in the 2016 Determination on relevant product market definition.
- 67. In paragraph 3.24 of the 2016 Determination, the Commission expressed the following view in relation to the relevant geographic market for the supply of domestic waste collection services:
 - "...the Commission concludes that each of the local authority areas within the GDA constitutes a relevant geographic market for the supply of domestic waste collection services." 34
- 68. Pandagreen and Knockharley have a vertical relationship in the GDA. In light of the recent decisional practice of the Commission, the Commission considers that the local authority areas of the seven local authority areas in the GDA, namely Dublin City, Dún Laoghaire-Rathdown, Fingal, South Dublin, Kildare, Meath and Wicklow constitute potential relevant geographic markets for the supply of domestic waste collection services.
- 69. In paragraph 3.25 of the 2016 Determination, the Commission expressed the following view in relation to the relevant geographic market for the remaining relevant product markets:³⁵

³⁴ See paragraphs 3.9-3.25 of the 2016 Decision for a detailed discussion of relevant geographic market definition for the supply of domestic waste collection services.

³⁵ Namely, the market for the supply of waste collection services to individual C&I customers; the market for the processing of waste collected from domestic and C&I customers; and the market for the supply (for sale) of recyclable materials.

"...the geographic scope of the relevant markets may be the GDA or possibly larger than the GDA."

- 70. For each of the relevant product markets listed in paragraph 65 above (other than the market for the supply of domestic waste collection services), the Commission will assess the competitive impact of the Proposed Transaction in the GDA as Pandagreen and Knockharley have a vertical relationship in the GDA. This is likely to be the narrowest downstream geographic market affected by the Proposed Transaction.
- 71. In conclusion, the Commission has assessed the likely competitive impact of the Proposed Transaction by reference to the following downstream markets:
 - The supply of domestic waste collection services in local authority areas in the GDA, namely the local authority areas of Dublin City, Dún Laoghaire-Rathdown, Fingal, South Dublin, Kildare, Meath and Wicklow;
 - > The supply of waste collection services to individual C&I customers in the GDA;
 - The processing of waste collected from domestic and C&I customers in the GDA.

Competitive Analysis

Vertical Relationship

- 72. There is a vertical relationship between Pandagreen and Knockharley in the State.

 Pandagreen is Knockharley's largest customer for both recovery and disposal services.

 Therefore, the Proposed Transaction represents a vertical merger.
- 73. Two theories of competitive harm were assessed by the Commission to establish whether the Proposed Transaction raises vertical competition concerns, namely: (a) input foreclosure; and (b) customer foreclosure.

Customer Foreclosure

74. The Commission considered whether the proposed transaction would provide Pandagreen with the ability and incentive to foreclose upstream disposal and recovery providers which compete with Knockharley.

- 75. Paragraph 5.17 of the Commission's Guidelines for Merger Analysis states that: "the full effects of customer foreclosure may take time to occur. For example, upstream competitors might exit the market as a result of lost sales revenue to the merged entity." 36
- 76. Paragraph 5.15 of the Commission's Guidelines for Merger Analysis further states the following:

"The ability of a merged entity to harm an upstream competitor through customer foreclosure depends on a number of factors. For example, harm to competitors is more likely if the merged entity is a significant customer and hence a significant source of sales revenue for the upstream competitor than if the merged entity is but one of many customers."

- 77. The Commission is of the view that Pandagreen is unlikely to have the ability or incentive to harm upstream disposal and recovery competitors through vertical customer foreclosure for the following reasons:
 - There are significant capacity shortages in the potential upstream markets for the recovery and disposal of waste in the State. This reduces the importance of Pandagreen as a customer of disposal/ recovery services;
 - Pandagreen is already the largest customer of Knockharley and additional available capacity at Knockharley is not sufficient to meet Pandagren's waste disposal/recovery needs. Hence, Pandagreen will continue to deliver waste, for both disposal and recovery, to Knockharley's competitors' post-transaction;
 - Diverting waste, which is currently disposed/recovered at competing outlets, -to
 Knockharley is likely to increase Pandagreen's transport costs as the proximity of
 waste processing facilities to disposal/recovery outlets is an important cost factor.

³⁶ Paragraphs 5.14-5.17 of the Guidelines for Merger Analysis provide a detailed description of customer foreclosure. See http://www.ccpc.ie/sites/default/files/CCPC%20Merger%20Guidelines 1.pdf



78. For the reasons outlined in paragraph 77 above, the Commission is of the view that the Proposed Transaction will not give rise to vertical customer foreclosure concerns.

Input Foreclosure

- 79. Competition concerns may arise from input foreclosure only when the merged entity has market power in the upstream market. Input foreclosure can take two forms as follows:
 - Total input foreclosure, such as when a merged entity in the upstream market refuses to supply a key product to a downstream competitor, i.e., if the Purchaser Group refused to allow waste processors and collectors access to Knockharley posttransaction; and
 - Partial input foreclosure, such as when a merged entity in the upstream market increases prices or offers less attractive terms to downstream competitors.
- 80. Paragraphs 81-90 discuss the Commission's assessment of input foreclosure in the potential relevant upstream markets.

Recovery of Waste at EPA licenced Non-hazardous landfills in the GDA

81. Table 1 below lists the market shares of the EPA Landfills in the recovery market in the GDA. Knockharley accounted for 53% of the total waste recovered at EPA Landfills in the GDA in 2018. In addition, the terms of Pandagreen's supply agreement with Ballynagran outline that it has the right to use [..] of Ballynagran's licenced recovery capacity. This means that post transaction the merged entity would control [..] of the EPA Landfills recovery capacity in the GDA. It is expected that East Galway landfill will close in 2019 meaning that the shares presented in Figure 1 will likely represent the national market from 2020 on. The Commission considers that these high market shares are indicative that the merged entity could have market power in the recovery of waste at EPA Landfills in the GDA.

Table 1: Recovery of Waste at Licenced Landfills in the GDA 2018³⁷

Facility	Recovery material accepted (tonnes)	Market share
Knockharley	112,000	53%
Drehid	48,000	23%
Ballynagran	53,000	25%

Source: Information from Parties & Market Enquiries

- 82. Current competitors of the Purchaser Group raised serious concerns that post transaction the merged entity would reserve the use of Knockharley for its exclusive use. Competitors outlined that if Knockharley was not available for third party use post transaction that they would have difficulty finding outlets for the recovery of waste in the State and that this would limit their ability to compete in the downstream collection and processing markets.³⁸
- 83. The European Commission's "Guidelines on Non-Horizontal Mergers" ("the EU Guidelines") outline that the ability of the merged entity to foreclose downstream competitors can be enhanced in situations where capacity is constrained upstream.³⁹ During its investigation, the Commission became aware of significant capacity shortages in the recovery market in the State. Paragraph 37 of the EU Guidelines states:

"When determining the extent to which input foreclosure may occur, it must be taken into account that the decision of the merged entity to rely on its upstream division's supply of inputs may also free up capacity on the part of the remaining input suppliers from which the downstream division used to purchase before."

The Parties informed the Commission that the Purchaser Group was planning on diverting currently exported recovery material⁴⁰ to Knockharley landfill. The majority of recovery material that is currently presented at Knockharley landfill is unsuitable for

³⁷ Figures based on licenced capacity as well as actual tonnages (obtained from CCPC market enquiries).

³⁸ Particularly for the collection and processing on C&D waste streams.

³⁹ European Commission, *Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings* OJ 2008 C265/07, paragraph 36, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52008XC1018%2803%29.

 $^{^{\}rm 40}$ Specifically, incinerator bottom ash from Covanta's WTE facility.

export. This means that the increased usage of Knockharley landfill for the recovery of materials that are currently exported would not free up additional capacity in the market. As most of the displaced recovery material must be recovered at another EPA landfill. The Commission was concerned that this would exacerbate the current capacity shortages in the recovery market and could displace a number of the Purchaser Group's competitors in the downstream waste collection and processing markets.

84. For the reasons outlined in paragraph 81-83 above, the Commission considered that without binding commitments the merged entity may have the incentive and ability to foreclose downstream competitors in the collection and processing markets for the recovery of waste at EPA Landfills in the GDA.

Disposal of waste that cannot be recycled in the GDA

85. Table 2 below lists the licenced capacity and market shares of disposal facilities in the GDA in 2018. Knockharley has a 6% market share of the total disposal capacity in the GDA.

Table 2: Disposal of Waste in the GDA 2018

Facility	Licenced Capacity (Tonnes)	Market Share
Poolbeg	600,000	43%
Indaver	235,000	17%
Ballynagran	150,000	11%
Drehid	120,000	9%
Knockharley	88,000	6%
Irish Cement	120,000	9%
Lagan	95,000	7%

Source: EPA National Waste Infrastructure Data, 15 March 2018 (available at: http://www.epa.ie/nationalwastestatistics/infrastructure/)

86. Although the Purchaser Group is not directly involved in the disposal of residual waste, it does have significant long-term waste supply agreements with a number of disposal



facilities in the State. Taking account of these supply agreements the Purchaser Group will control [..] of the available disposal capacity in the GDA post-transaction.

- 87. The Commission's market enquiries, as well as its review of the Purchaser Group's internal documents, indicated that disposal of waste at landfills is costlier than coincineration and incineration. This is due to the landfill levy which in general accounts for [..] of the price of waste disposal at landfills. However, the current shortage in disposal capacity means that landfills are still an important disposal outlet for residual waste in the GDA and the State. In addition, incinerators have scheduled shut down periods during the year, which increases the importance of landfills as a disposal option during these periods.
- 88. Landfill Only Disposal Wastes in general need to be disposed of at landfills as they cannot be, or for economic reasons are unlikely to be, incinerated or exported. The volume of Landfill Only Disposal Waste is currently low; however, it is expected to increase as the construction sector continues to expand. This could increase the importance of Knockharley as an outlet for these waste streams post transaction.
- 89. For the reasons outlined in paragraphs 85-88 above, the Commission considered that without binding commitments the merged entity may have the incentive and ability to foreclose downstream competitors in the collection and processing markets for the disposal that cannot be recycled in the GDA.
- 90. In order to address the identified competition concerns, the Parties, on behalf of the Purchaser Group, submitted proposals to the Commission.

Proposals Submitted by the Purchaser Group

91. On 17 January 2019 the Purchaser Group submitted proposals (the "Proposals") to the Commission under section 20(3) of the Act for the purpose of ameliorating any effects of the Proposed Transaction on competition in markets for goods or services in the State. In particular, to address the Commission's competition concerns, the Parties, on behalf of the Purchaser Group, committed to:



- reserve [..] of Knockharley's recovery capacity for third party use;⁴¹
- reserve [..] of Knockharley's disposal capacity for third party use;
- cap its annual usage of Ballynagran for disposal to [..];⁴²
- cap its annual usage of Ballynagran for recovery to [..];⁴³ and
- not in the next [..] years acquire Ballynagran landfill without first making a notification under either section 18(1) or 18(3) of the Act to the Commission.

Proposals address potential concerns identified by the Commission

- 92. In essence the Proposals limit the Purchaser Group's usage of both Ballynagran landfill and Knockharley landfill for both the disposal and recovery of waste in the GDA. In addition, the Proposals ensure that third parties will have access to Knockharley landfill for both the disposal and recovery of waste post-transaction. Therefore, the Purchaser Group will not have the ability to foreclose its downstream processing/collection competitors in either of the potential markets for the disposal and the recovery of waste in the GDA.
- 93. For the reasons outlined in paragraph 92, above, the Commission is of the view that the Proposals address its concerns in relation to input foreclosure in all the potentially affected markets in the State.
- 94. The Commission considers that the Proposals submitted by the Purchaser Group also address the concerns raised by competitors/third parties, as mentioned in paragraphs 19-23, above.
- 95. The Commission has, therefore, taken the Proposals into account and, in light of the Proposals (which form part of the basis of the Commission's determination) has determined, in accordance with section 21(2)(a) of the Act, that the result of the proposed acquisitions whereby (i) Sretaw 2, through its wholly owned subsidiary

^{41 &}lt;sub>[]</sub>

⁴² The Purchaser Group presented this amount to Ballynagran for disposal in 2018.

⁴³ The Purchaser Group presented this amount to Ballynagran for recovery in 2018

Pandagreen, would acquire the entire issued share capital of Knockharley, and (ii) subject to the completion of that transaction, Sretaw, through its wholly owned subsidiary ST Cloud would acquire the entire issued share capital of Natureford will not be to substantially lessen competition in any market for goods or services in the State, and, accordingly, that the acquisition may be put into effect.

Ancillary Restraints

96. No ancillary restraints were notified.

Coimisiún um lomaíocht agus Cosaint Tomhaltóirí

Competition and Consumer Protection Commission

Determination

Pursuant to section 20(3) of the Competition Act 2002, as amended ("the Act"), Pandagreen Limited ("Pandagreen") and ST Cloud Limited ("ST Cloud") have submitted to the Competition and Consumer Protection Commission (the "Commission") the proposals set out below relating to the proposed acquisition for the purpose of ameliorating any effects on competition in markets for goods or services, with a view to the proposals becoming binding on Pandagreen, ST Cloud, their respective parents and their parents' subsidiaries (together the "Purchaser Group").

The Commission has taken the proposals into account and, in light of the said proposals (which form part of the basis of its determination), has determined, in accordance with section 21(2)(a) of the Act, that the result of the proposed acquisition whereby (i) Sretaw 2 Limited ("Sretaw 2"), through its wholly owned subsidiary Pandagreen, would acquire the entire issued share capital of Knockharley Landfill Limited, and (ii) subject to the completion of that transaction, Sretaw Unlimited Company ("Sretaw"), through its wholly owned subsidiary ST Cloud would acquire the entire issued share capital of Natureford Limited⁴⁴ will not be to substantially lessen competition in any market for goods or services in the State, and, accordingly, that the acquisition may be put into effect.

For the Competition and Consumer Protection Commission

Brian McHugh Member Competition and Consumer Protection Commission

_

⁴⁴ Sretaw and Sretaw 2 are both owned and controlled by two individuals, Mr Eamon Waters (99% of each) and Mr Robert Waters (1% of each), and as such are both members of the Purchaser Group

PROPOSALS BY PANDAGREEN LIMITED AND ST CLOUD LIMITED TO THE COMPETITION AND CONSUMER PROTECTION COMMISSION RELATING TO THE PROPOSED ACQUISITION OF KNOCKHARLEY LANDFILL LIMITED AND NATUREFORD LIMITED ("Proposals")

A. Recitals

- a) On 9 July 2018, the Commission received a notification of a proposed acquisition whereby (i) Sretaw 2, through its wholly owned subsidiary Pandagreen, would acquire the entire issued share capital of Knockharley Landfill Limited, and (ii) subject to the completion of that transaction, Sretaw, through its wholly owned subsidiary ST Cloud would acquire the entire issued share capital of Natureford Limited. Sretaw 2 and Sretaw are both ultimately owned and controlled by Eamon Waters and Robert Waters.
- b) In the State, Knockharley Landfill Limited has activities upstream of Pandagreen as it is active in the supply of disposal and recovery services of non-hazardous waste materials to waste collectors and waste treaters/processors, while Pandagreen is active in the collection, transfer, and treatment/processing of waste taken from commercial and domestic premises. Pandagreen is currently Knockharley Landfill Limited's largest customer.
- c) Pursuant to Section 20(3) of the Act, the Parties have submitted these Proposals to the Commission relating to the Proposed Transaction for the purpose of ameliorating any possible effect of the Proposed Transaction on competition in markets for goods or services, with a view to the Proposals becoming binding on the Parties.
- d) The Proposals submitted by the Parties are intended to alleviate the Commission's concerns in relation to the potential foreclosure of Pandagreen's competitors from access to Knockharley Landfill and Ballynagran Landfill following completion of the Proposed Transaction.
- e) The Proposals are also intended to ensure that, following completion of the Proposed Transaction, the Purchaser Group will not in the next [●] acquire Ballynagran Landfill without first making a notification under either section 18(1) or 18(3) of the Act to the Commission.

B. Definitions

In these Proposals, unless the context otherwise requires, the following terms shall have the following meanings:

"Act" means the Competition Act 2002, as amended;

- "Ballynagran Landfill" means the landfill site owned by Ballynagran Landfill Limited located at Ballynagran, Coolbeg and Kilcandra, County Wicklow;
- "Calendar Month" means the period from a specified day in one month to the day numerically corresponding to that day in the following month, less one (for example: 4 April to 3 May (inclusive));
- "Commencement Date" means the date of completion of the Proposed Transaction;
- "Commission" means the Competition and Consumer Protection Commission and its successors;
- "Knockharley" means Knockharley Landfill Limited, a private company limited by shares and incorporated in Ireland under registered number 529325;
- "Knockharley Landfill" means the landfill site owned by Knockharley located at Knockharley, Navan, County Meath;
- "Pandagreen" means Pandagreen Limited, a private company limited by shares and incorporated in Ireland under registered number 550340;
- "Parties" means Pandagreen and ST Cloud;
- "Proposed Transaction" means the proposed acquisition whereby (i) Sretaw 2, through its wholly owned subsidiary Pandagreen, would acquire the entire issued share capital of Knockharley, and (ii) subject to the completion of that transaction, Sretaw, through its wholly owned subsidiary ST Cloud would acquire the entire issued share capital of Natureford Limited, as notified to the Commission on 9 July 2018;
- "Purchaser Group" means Pandagreen, its parent Sretaw 2 and Sretaw 2's subsidiaries, and ST Cloud, its parent Sretaw and Sretaw's subsidiaries;
- "Sretaw" means Sretaw Unlimited Company, a private unlimited company incorporated in Ireland under registered number 513910;
- "Sretaw 2" means Sretaw 2 Limited, a private company limited by shares and incorporated in Ireland under registered number 611261;
- "State" means Ireland;
- "ST Cloud" means ST Cloud Limited, a private company limited by shares and incorporated in Ireland under registered number 623673, which is ultimately owned and controlled by Sretaw;
- "Third Party Operators" means persons involved in waste management activities in the State and disposing of Waste within the State, excluding members of the Purchaser Group;
- "Year" means a period of 12 consecutive Calendar Months;
- "Waste" means residual non-hazardous household, commercial and industrial waste sent to landfill for disposal or recovery, including but not limited to: incinerator bottom ash, soils and stones and other construction and demolition wastes, residual municipal solid waste

(including municipal bulky waste), street sweepings and cleansing wastes, non-hazardous industrial wastes, and stable non-reactive waste;

"Waste for Disposal" means any Waste which is disposed of at EPA-licenced non-hazardous landfills in the State;

"Waste for Recovery" means any Waste which is used for recovery or engineering purposes at EPA-licenced non-hazardous landfills in the State; and

"working days" means a day on which banks are generally open for business in Dublin, Ireland, excluding Saturdays, Sundays and public holidays in Ireland.

C. Ballynagran Usage Undertaking

- 1. Pandagreen, on behalf of the Purchaser Group, undertakes to restrict the quantity of Waste the Purchaser Group delivers for landfill to Ballynagran Landfill, subject to the provisions herein (the "Ballynagran Usage Undertaking").
- 2. The Ballynagran Usage Undertaking will come into effect on the Commencement Date and is subject to the following terms and conditions:
 - a. subject to paragraphs 5, 6 and 18, the Purchaser Group will [●] (the "Ballynagran Restriction").
 - b. subject to paragraphs 3, 4 and 18, the Ballynagran Usage Undertaking will come into force on the Commencement Date for a period of [●] from the Commencement Date.
- 3. Notwithstanding paragraph 2.b, the Commission may, at its sole discretion, by notice in writing to Pandagreen, on behalf of the Purchaser Group, served prior to [●], extend the period of the Ballynagran Usage Undertaking for an additional period of no more than [●], having regard to the prevailing market conditions and any written submission made by Pandagreen, on behalf of the Purchaser Group, pursuant to paragraph 4 below. In any event, the Ballynagran Usage Undertaking shall cease not more than [●] from the Commencement Date.
- 4. If the Commission proposes to extend the period of the Ballynagran Usage Undertaking pursuant to paragraph 3 above then the Commission will, at least twenty (20) working days prior to [●] of the Commencement Date advise Pandagreen, on behalf of the Purchaser Group, of this in writing (a "Proposed Ballynagran Extension Notice"). Within ten (10) working days following its receipt of a Proposed Ballynagran Extension Notice, Pandagreen, on behalf of the Purchaser Group, will be entitled to make a written submission to the Commission on whether the term of the Ballynagran Usage Undertaking should be extended. If Pandagreen makes such a written submission, Pandagreen, on behalf of the Purchaser Group, may also request a meeting with the Commission in advance of [●].
- 5. The Ballynagran Restriction shall not include any Waste delivered to Ballynagran Landfill by the Purchaser Group as a result of a short-term capacity increase which may arise following the decision of a local authority to adopt a measure pursuant to section 56(1) of the Waste

Management Act 1996. Any such additional capacity is excluded from the Ballynagran Usage Undertaking.

6. Notwithstanding paragraph 4, the Commission may, at its sole discretion, at any time in response to a reasoned request from Pandagreen, (on behalf of the Purchaser Group) waive, modify or substitute any provision of these Proposals, provided always that any such waiver, modification or substitution is necessary, proportionate and objectively justifiable having regard to the prevailing market conditions. In particular, the Commission may, at its sole discretion, in response to a reasoned request from Pandagreen (on behalf of the Purchaser Group), waive or modify the Ballynagran Restriction having regard to the prevailing market conditions.

D. Knockharley Access Undertaking

- 7. Pandagreen, on behalf of the Purchaser Group, shall procure that Knockharley undertakes to accept waste delivered by Third Party Operators to Knockharley Landfill, subject to the provisions herein (the "Knockharley Access Undertaking").
- 8. The Knockharley Access Undertaking will come into effect on the Commencement Date and is subject to the following terms and conditions:
 - a. subject to paragraphs 11, 12 and 18, no less than [●]% of the licensed capacity
 of Knockharley Landfill will be reserved for Waste delivered by Third Party
 Operators ("Third Party Reserved Capacity");
 - b. subject to paragraphs 11, 12 and 18, [●]% of the Third Party Reserved Capacity will be reserved for Waste for Recovery;
 - c. subject to paragraphs 11, 12 and 18, [●]% of the Third Party Reserved Capacity will be reserved for Waste for Disposal; and
 - d. subject to paragraphs 9, 10 and 18, the Knockharley Access Undertaking will come into force on the Commencement Date for a period of [●] from the Commencement Date.
- 9. Notwithstanding paragraph 8.d, the Commission may, at its sole discretion, by notice in writing to Pandagreen, on behalf of the Purchaser Group, served prior to [●], extend the period of the Knockharley Access Undertaking for an additional period of no more than [●], having regard to the prevailing market conditions and any written submission made by Pandagreen, on behalf of the Purchaser Group, pursuant to paragraph 10 below. In any event, the Knockharley Access Undertaking shall cease not more than [●] from the Commencement Date.
- 10. If the Commission proposes to extend the period of the Knockharley Access Undertaking pursuant to paragraph 9 above then the Commission will, at least twenty (20) working days prior to [●] advise Pandagreen, on behalf of the Purchaser Group, of this in writing (a "Proposed Knockharley Extension Notice"). Within ten (10) working days following its receipt of a Proposed Knockharley Extension Notice, Pandagreen, on behalf of the Purchaser Group, will be entitled to make a written submission to the Commission on whether the

- term of the Knockharley Access Undertaking should be extended. If Pandagreen makes such a written submission, Pandagreen, on behalf of the Purchaser Group, may also request a meeting with the Commission in advance of [•].
- 11. Any additional short-term capacity increase granted in respect of Knockharley Landfill as a result of a decision of a local authority to adopt a measure pursuant to section 56(1) of the Waste Management Act 1996 is excluded from the Knockharley Access Undertaking.
- 12. Notwithstanding paragraph 10, the Commission may, at its sole discretion, at any time in response to a reasoned request from Pandagreen, on behalf of the Purchaser Group, waive, modify or substitute any provision of these Proposals, provided always that any such waiver, modification or substitution is necessary, proportionate and objectively justifiable having regard to the prevailing market conditions. In particular, the Commission may, at its sole discretion, in response to a reasoned request from Pandagreen, on behalf of the Purchaser Group, waive or modify the Third Party Reserved Capacity having regard to the prevailing market conditions.

E. Notification of future acquisition of Ballynagran Landfill

13. The Parties agree that if at any time within [●] from the Commencement Date any member of the Purchaser Group at that time seeks to acquire the Ballynagran Landfill, such a transaction will (in the event that the relevant mandatory notification thresholds are not met at that time) be notified to the Commission on a voluntary basis pursuant to section 18(3) of the Act (or its successor provision, if applicable).

F. Reporting and compliance obligations

14. Pandagreen shall submit to the Commission within three (3) Calendar Months from the Commencement Date, and at intervals of three (3) Calendar Months thereafter, quarterly reports for information purposes. Such reports will set out, for the preceding three (3) Calendar Months:

[●].

- 15. The Parties shall submit to the Commission within twelve (12) Calendar Months of the Commencement Date, and at intervals of one Year thereafter for the duration of the Proposals, written certificates in the form set out in Schedule A and Schedule B hereto (each a "Compliance Certificate"). Each Compliance Certificate shall be signed by an executive director from each of the Parties and will confirm that the Purchaser Group has complied with the obligations set out in these Proposals in the preceding period.
- 16. The Commission reserves the right to require the Parties to provide to the Commission, at any time and on reasonable notice, such additional information as the Commission reasonably requires in order for the Commission to verify compliance with the obligations set out in these Proposals. The Parties shall promptly comply with any written direction issued by the Commission pursuant to these Proposals.
- 17. The Parties shall each nominate an executive who will have responsibility for monitoring compliance with these Proposals and for responding to any request for information received

from the Commission in connection with these Proposals. The Parties shall provide the name and contact details of such executive(s) to the Commission, and shall promptly inform the Commission of any change of executive(s) so nominated, including the name and contact details of the new executive(s).

- 18. These Proposals are subject to the completion of the Proposed Transaction and shall be deemed to be discharged if either of the Parties announces, and/or informs the Commission in writing, that the Proposed Transaction has been irrevocably abandoned. For the avoidance of doubt, the Proposals will have no retrospective effect.
- 19. The Parties shall, within two (2) working days of completion of the Proposed Transaction having occurred, notify the CCPC in writing of the date of completion.



SCHEDULE A

[To be drafted on Pandagreen headed paper]

[Date]

[Ibrahim Bah]
Director
Competition Enforcement and Mergers
Competition and Consumer Protection Commission
[Bloom House
Railway Street
Dublin 1]

Merger Notification M/18/053 Pandagreen/Knockharley Landfill and Natureford

Dear [Sir],

We refer to Merger Notification M/18/053 in relation to the proposed acquisition by Sretaw 2 Limited, through Pandagreen Limited ("Pandagreen"), of sole control of Knockharley Landfill Limited, and the proposed acquisition by Sretaw Unlimited Company, through ST Cloud Limited ("ST Cloud"), of sole control of Natureford Limited which was notified to the Competition and Consumer Protection Commission (the "Commission") on 9 July 2018 (the "Proposed Transaction").

The Commission issued its Determination approving the Proposed Transaction on 6 February 2019.

In accordance with the terms of the proposals given by Pandagreen and ST Cloud to the Commission on 6 February 2019 in relation to the Proposed Transaction which, in accordance with Section 20(3), Section 26(1) and Section 26(4) of the Competition Act 2002, as amended, have become commitments binding upon Pandagreen (the "Commitments"), Pandagreen hereby confirms, on behalf of the Purchaser Group, compliance with the terms of the Commitments during the period commencing on [the date of the Determination]/[the date of the previous certificate issued by Pandagreen] and ending on the date hereof.

Yours faithfully,	
[Name]	
Executive Director	
Duly authorised for and on behalf of Pandagreen Lim [Date]	ited



SCHEDULE B

[To be drafted on ST Cloud headed paper]

[Date]

[Ibrahim Bah]
Director
Competition Enforcement and Mergers
Competition and Consumer Protection Commission
[Bloom House
Railway Street
Dublin 1]

Merger Notification M/18/053 Pandagreen/Knockharley Landfill and Natureford

Dear [Sir],

We refer to Merger Notification M/18/053 in relation to the proposed acquisition by Sretaw 2 Limited, through Pandagreen Limited ("Pandagreen"), of sole control of Knockharley Landfill Limited, and the proposed acquisition by Sretaw Unlimited Company, through ST Cloud Limited ("ST Cloud"), of sole control of Natureford Limited which was notified to the Competition and Consumer Protection Commission (the "Commission") on 9 July 2018 (the "Proposed Transaction").

The Commission issued its Determination approving the Proposed Transaction on 6 February 2019.

In accordance with the terms of the proposals given by Pandagreen and ST Cloud to the Commission on 6 February 2019 in relation to the Proposed Transaction which, in accordance with Section 20(3), Section 26(1) and Section 26(4) of the Competition Act 2002, as amended, have become commitments binding upon ST Cloud (the "Commitments"), ST Cloud hereby confirms, on behalf of the Purchaser Group, compliance with the terms of the Commitments during the period commencing on [the date of the Determination]/[the date of the previous certificate issued by ST Cloud] and ending on the date hereof.

Yours faithfully,
[Name]
Executive Director
Duly authorised for and on behalf of ST Cloud Limited
[Date]