148. Mrs Hall maintains that the fact that the person making the disposal can benefit from or make use of the material is irrelevant to the question whether there is an intention to discard the material, see s.64(2); all the material disposed of by Patersons during the claim period was disposed of as waste. There was no retention of the waste, and it was not put to any relevant use at the point of disposal. Further, at the point of disposal the potential for commercial exploitation was speculative. By way of example, Mrs Hall states that the methanogenic property of the material is in many instances significantly dependent upon the volume and profile of subsequent disposals to landfill, neither of which can be predicted with any certainty. She submits that the speculative possibility of extracting unquantifiable amounts of methane from a given tonnage of waste deposited at a particular moment is irrelevant to the question whether there is an intention to discard. The very process of discarding is a necessary pre-condition to methane extraction. Since the commercial exploitation of methane is the only obstacle to an adverse finding on intention, and since the mere possibility of a related financial benefit is irrelevant, Mrs Hall submits that that benefit cannot be relied upon by Patersons to justify the existence of an intention to discard, and the company is left with nothing to support its case on intention.

149. Mrs Hall then submits that any "so-called" intention in relation to waste that has been in landfill for some time can only be to await nature taking its course on the material: there can be no intention for biodegradable material to produce landfill gas; the process is inevitable. In this connection, Mrs Hall refers to two statements made in evidence by Mr Selvey : "Gas generation can be quite unpredictable; it is affected by lots of things", and "Atmospheric pressure can affect gas production". She also makes reference to statements made by Mr Paterson junior to the effect that Patersons business plans change with the regulatory, economic and commercial background, and that taxes are eroding its business model.

150. Mrs Hall next challenges Patersons' claim that its overarching intention was intact during the claim period, noting that *Parkwood* indicates that intention is determined not at the point of receipt of waste, but at the point of deposit. She claims there to be nothing to indicate Patersons' intention as being otherwise than as revealed by economic circumstances surrounding the Biffa contract. She submits that the very mechanism by which Patersons receives material from Biffa never changes: it is received in the company's capacity as a landfill site operator and, with regard to the balance remaining after recycling, is put into landfill. Consequently, Patersons' overarching intention is subsumed by, diverted or broken by, the Biffa contract: nowhere in that contract does Biffa say, "We will supply you with fuel as the raw material for your energy production site".

151. There is no authority for the claim by Patersons that the existence of its physical or commercial infrastructure is sufficient to demonstrate use, and certainly not in either *Parkwood* and *WRG*, which concerned the actual use of physical materials. In Mrs Hall's submission the profitability of a venture cannot determine whether it is within or without landfill tax, particularly where profitability shifts and changes with the environmental, physical, commercial and economic context.

152. Patersons has a regulatory duty to use the methane produced at the Site, and discharges its regulatory obligation in doing so. Mrs Hall contends that it cannot re-characterise that obligation as commercial exploitation. To claim, as Patersons does, that Parliament intended to exempt from landfill tax the very thing that the company is obliged to do because it expends money on it and makes profit out of it, is totally counter intuitive; it would defeat the very object of the tax which, as the Court of Appeal confirmed in *Parkwood*, is to encourage recycling and to discourage putting material into the ground. Putting material into the ground is the very thing Patersons does, and for which it is seeking credit. To allow the appeal would emasculate the tax.

153. The story of the re-use of material in regulatory legislation starts with the Council Directive 1999/31/EC on the landfill of waste, to which legislation Mrs Hall invites us to record that she does not refer thereto for the purpose of construing the words of Part III of the Finance Act 1996. She claims that the Directive goes to the question of whether, by converting methane into electricity Patersons is discharging a duty to do so or whether, as the company claims, it is doing so with the intention of commercially exploiting the methane. In Mrs Hall's submission, the present is a case where, in discharging its statutory obligations, Patersons' action is masquerading as commercial use.

154. As is stated in Patersons' gas management plan, the company is "committed to maximising the use of the gases generated by the degrading waste in line with the requirements of the Landfill Directive." Mrs Hall submits that a claim by Patersons that its commitment in that behalf goes directly to commercial intention should be rejected.

155. In the event of our being persuaded that Patersons intends not to discard the material, Mrs Hall submits that its intention is either diverted or not consummated. In so far as non-consummation is concerned, "the Biffa contract says it all". Had it really been consummated, a change in the terms and conditions of the Biffa contract would have been expected. There was no such change.

156. Mrs Hall then makes a number of points on s.70. First, she reminds us that "material" means "all forms of material". Then, she notes that article 1 of the IPPC Directive sets out the Directive's purpose and scope, in terms "To achieve integrated prevention and control of pollution arising from the activities listed in Annex 1", and at article 9 provides that: "Member states shall ensure that the permit includes all measures necessary for compliance with requirements of articles 3 and 10 for the granting of permits".

157. By reference to events at an incineration plant, where material goes into a machine and is burned to produce energy, Mrs Hall maintains that had Patersons been involved in energy production, the tribunal would have been provided with evidence of such production. No such evidence was adduced. Rather, all the evidence points to the company being a landfill business making a profit out of that which it is obliged to do for regulatory purposes.

158. Next, Mrs Hall deals with the Landfill Regulations 1996, implemented pursuant to powers contained in the Finance Act 1996. She observes that the Regulations deal with site operators, such as Patersons, who have already accounted for tax because there has been a taxable disposal; tax is payable even if the disposal was made with the intention of recycling the material concerned. Parliament decided that in those circumstances, notwithstanding a site operator's future plans for material disposed of, tax is payable because a taxable disposal has taken place. Only when material has been recycled or removed in accordance with an intention at the time the disposal was made may a credit be claimed. Mrs Hall observes that because material at the Site stays in the ground, Patersons must pay tax; it has done exactly that which Parliament intended should be captured by the tax. Patersons could not have made a claim under reg.21 because the material to which reference is there made has mass and substance, and a tangible, measurable existence. Further, removal of qualifying material must take place within one year of the date of disposal – an important point when viewed against a claim by Mr Cordara that material does not leave the Site; the biodegradable element transfigures itself into methane which leaves the Site, hence its settlement. Mrs Hall notes, and we accept, that it was the unchallenged evidence of Mr Bourn that the settlement would have been the same whether or not Patersons had flared or used the gas, settlement being an integral part of any landfill site taking biodegradable waste. She also notes that it can take more than one year for methane to be produced by waste, which would be too late for it to qualify for relief under reg.21. A second obstacle in the way of any claim for relief by Patersons under the Regulations is the fact that any notification must be given to the Commissioners in writing before the disposal is made.

159. Mrs Hall maintains that Parliament recognised that the sort of arguments being advanced should not be available to landfill site operators such as Patersons unless they had clearly articulated precisely what their intention was in relation to an identifiable quantity of material before they embarked on the actions which gave rise to their future plans. Parliament very sensibly made provision for apportionment of the tax paid in those circumstances, that arrangement fitting well with the overall scheme of the tax. Credit is available is in relation to material removed, and can readily be calculated.

160. Although we are not required to deal with the quantum of Patersons' claim in this decision, as Mrs Hall makes a number of submissions on the calculation thereof in dealing with the company's liability to tax, it is necessary for us to take account of them.

161. Mrs Hall's main submission in the present context is that the GasSim model is a risk assessment tool, and not designed to assist tribunals, courts, the Commissioners or, indeed, Patersons itself to make a good case based on an intention to dispose of an identifiable part of waste. As such she contends that it is inapt for the purpose of calculating Patersons' claim.

162. Secondly, Mrs Hall maintains that, when one looks at the data Patersons includes in the model, it is so far removed from the purpose for which the GasSim model was designed that it ceases to be that model in any recognisable form.

163. Next, she refers to para 5 of the claim where Patersons claims to identify a "waste stream category" applied to individual loads of waste material it receives. She observes that the EWC codes identifying the nature of that material are not fed into the company's computer model, but are completely ignored. Rather, Patersons feeds into the model waste categories labelled "domestic, commercial and industrial". Mrs Hall alleges those categories to be "as generic as the categories of domestic, commercial and industrial [waste] as are actually fed into the GasSim model by [Patersons]", and submits that they are incapable of informing anyone looking at a load of waste of its biodegradable profile.

164. As an example of assumptions made by Patersons in relation to categories of waste, Mrs Hall points to a claim by the company that a load of domestic waste will contain more newspapers and garden waste than an industrial load. One Alan Dunn, Patersons' financial accountant, is said to refer to the product code of each incoming load and, without inspection of the material, analyse it. Having done so, and been unable to determine whether certain loads consist of commercial or industrial material, he makes an "informed judgment" as to their constituency. Mrs Hall submits that that is "so far abstract", and far removed from what Parliament intended in the context of intention, as to be unworthy of consideration.

165. At para 8 of the claim Patersons says that "Each waste stream can be further broken down according to its waste composition. The waste composition identifies the different materials that make up that waste stream, the waste components and their relative proportions in the stream: 10% newspapers, 5% card, 40% garden waste". Reliance is placed upon the GasSim default waste compositions in that regard. Mrs Hall further observes that whatever the differing content of material received by Patersons, its calculation always adds up to 100%.

166. Patersons sums up the way it calculates the quantum of its claim, saying at (vi):

> "Adding together the results of 1 to 5 above gives the total mass of material received by Patersons during the claim period and used in renewable emergy generation which is expected to actually decompose into landfill gas".

167. Mrs Hall maintains that the computational process so advanced is the wrong process. Even if that process may be used historically, how is it to be used in the future? She submits that the difficulties in identifying the material in respect of which an intention is said to be formed at the edge of the void must lead to the conclusion that Parliament had no intention of permitting such disposals to escape the tax.

168. In all the circumstances, Mrs Hall submits that the appeal should be dismissed

Submissions for Patersons

169. Mr Cordara divides his submissions into three separate parts: first, what might be described as Patersons' core case; second, his response to Mrs Hall's skeleton argument and, third, his response to the oral submissions she developed at the hearing. To some extent the various sections overlap but, in order to ensure that we omit nothing of relevance, we propose to leave them as presented to us.

(a) Patersons core case

170. Mr Cordara submits that a simple, plain reading of the legislation leads to the conclusion that no landfill tax is payable on biodegradable material which Patersons puts into landfill, and which material then decomposes to produce landfill gas. He contends that this approach is on all fours with binding authority in the form of the Court of Appeal decisions in *Parkwood* and *WRG*, and that objections raised by the Commissioners are not sustainable and, if accepted, will give rise to anomalies in the operation of the landfill tax provisions.

171. He emphasises that the instant appeal is a tax case: it is not concerned with a general survey of the relative merits of energy recovery from, respectively, material deposited on landfill sites and other means of energy recovery such as recovery from incineration, composting or anaerobic digestion plants.

172. Mr Cordara further submits that direct and substantial parallels are apparent between the instant case and those of *Parkwood* and *WRG*, both the latter concerning the same provisions as the instant one and both being decided by the Court of Appeal in favour of the landfill site operator on the basis of a purposive approach to the legislation: both throw a decisive light on the relevant issues.

173. In both *Parkwood* and *WRG*, the Court of Appeal held there to be no disposal of material "as waste" for the purpose of s.40(2)(a) if it was used in some way: the fact that the use was within a landfill site was irrelevant. Mr Cordara contends that the Court's conclusion in both cases was based solely on a simple, plain reading of the relevant legislation, which was undoubtedly the correct approach since any basis on which a tax can be levied must be clear, definitive and simple.

174. In Mr Cordara's further submission, all of the issues in the instant case have been posed before, and answered by, the Court of Appeal in *Parkwood* and *WRG*. The Court's answer was simple: if material on a landfill site is used or exploited in some way, there is no intention to discard it, and no landfill tax is payable on it. In the instant case, there is no reason to depart from those binding authorities.

175. He contends that the instant case is stronger than either *Parkwood* or *WRG*, given that neither involved any significant physical change in the relevant materials, nor the generation and export from the site of any product. He submits that the instant case is *a fortiori* the earlier cases, both in terms of what was actually decided, and the discussion therein of policy maters. As Aldous LJ set out in the *Parkwood* judgment

at [10], the "central purpose" of landfill tax is indicated in a Government White Paper of December 1995 entitled "Making Waste Work", which preceded the imposition of the tax, one such purpose being:

> ". . . to recover value from more of the waste that is produced; ". (emphasis added by Mr Cordara).

176. If one of the Government's stated central purposes of landfill tax is that of "encouraging business and consumers . . . to recover value from more of the waste that is produced", no landfill tax is chargeable on biodegradable material. If, in Mr Cordara's yet further submission, landfill tax is charged on the disposal of material at a landfill site indiscriminately of whether energy is recovered from the material or not, then the tax does nothing to encourage the recovery of value from the material. He says that the only way in which landfill tax can encourage recovery from more of the waste is if the tax is not charged on the material from which energy is recovered: that is precisely what the provision is seeking to achieve.

177. Mr Cordara also maintains that that conclusion is consistent with the decision in *Parkwood*, where the Court of Appeal held (at [23]) that "[t]he tax is a landfill tax, not a landfill and recycling tax". The anaerobic material on the Site has been recycled by Patersons into substrate for the anaerobic description that will eventually lead to renewable energy production. In those circumstances, he submits that to charge landfill tax on the disposal of the material will amount to the tax being a landfill and recycling tax and that, as the Court of Appeal said, is incorrect.

178. Notwithstanding his submissions thus far, Mr Cordara contends that what ultimately matters for present purposes is the words on the face of the statute. As to those words, he contends that it is conclusively set out in the judgments in *Parkwood* and *WRG* that landfill tax is chargeable only if all four conditions in s40(2) are met, and there is a taxable disposal.

179. The dispute in the instant case extends only to whether the condition in s.40(2)(a) is met, ie whether there has been a disposal of material "as waste" because "the person making the disposal [of the anaerobic material] does so with the intention of discarding the material", s.64(1)".

180. Mr Cordara adds that the power to tax created by s.39 and the sections which follow are not powers that stem from any European Directive, or were enacted to give effect to any European purposes, see *Parkwood* at [9]. As such, for the purpose of construing s.64, it is unnecessary to have recourse to any definition of "waste" that may be found in European legislation or case law outside the Finance Act 1996 itself, see the tribunal decision in *ICICP* at [25], [30(3)] and [31].

181. He then submits that Patersons does not dispose of anaerobic material with the intention of discarding it, relying for his submission on the following passages of the judgment of the Chancellor (with whom the rest of the Court of Appeal agreed) in *WRG*:

"33. ...The word 'discard' [in s.64(1)] appears to me to be used in its ordinary meaning of 'cast aside', 'reject' or 'abandon' and does not comprehend the retention and use of the material for the purposes of the owner of it . . ."

"34. . . ."

" 35. It may be that the economic circumstances surrounding the acquisition of the materials in question by the ultimate disposer of them will cast light on his intention at the relevant time. They cannot, as I see it, affect the decision on this appeal because the use of the relevant material by WRG is clear and such use is conclusive of its intention at the relevant time by whatever means and on whatever terms WRG acquired them."

182. Mr Cordara submits that, in the instant case, the clear actual use made by Patersons of the biodegradable material in generating renewable energy is conclusive evidence that the company has no intention of discarding the material at the time it is deposited in the landfill: there is simply no scope for any argument otherwise.

183. He further maintains that Patersons actively seeks to source from waste producers material containing biodegradable, preferably putrescible, matter, with the clear intention of managing it so as to maximise energy recovery therefrom. Moreover, since the use of such material in fact made by Patersons is clear, the Court of Appeal decision in *WRG* is binding authority that such use is conclusive of Patersons' intention at the relevant time "by whatever means and on whatever terms" Patersons has acquired the relevant material. Accordingly, Mr Cordara submits that there can be no doubt that Patersons' intention at the relevant time is to use the anaerobic material to produce renewable energy: it is not to abandon the material. He adds that any argument otherwise is simply unsustainable on the facts, and is unarguable in the face of binding authority to the contrary. Given those reasons, he claims that no landfill tax is chargeable on the anaerobic material since, at the time that it is deposited on the landfill, Patersons has no intention of discarding it.

(b) Mr Cordara's response to Mrs Hall's skeleton argument

184. In view of what he submits is the clear legislative wording and the binding precedents, Mr Cordara maintains that a number of the arguments put forward by the Commissioners in the amended statement of case are unsustainable and give rise to anomalies in the operation of the landfill tax provisions.

185. Of a claim by the Commissioners that Patersons does not dispose of the anaerobic material with the "primary intention of converting landfill into electricity" (see the amended statement of case, paras 29 and 30), Mr Cordara claims the argument to have no basis in either statute or case law. Section 64(1) requires only that "the person making the disposal does so with the intention of discarding the material". Since Patersons has no intention of discarding the biodegradable material, the test in s.64(1) is not met, and that is an end of the matter. Terms such as "primary intention", "primary objective" and "secondary objective", used in argument by Mrs

Hall, appear to have been plucked out of thin air, and are nowhere to be found in the statute or case law.

186. Viewed against the background of Patersons intended use of the material in generating renewable energy, Mr Cordara maintains that a contention by the Commissioners that the material must necessarily remain waste for the purpose of s.40(2)(a) runs directly counter to what the Court of Appeal said at [34] of *WRG*:

> ". . . the relevant intention may well not be that of the original producer of the materials. There is no principle that material once labelled as 'waste' is always 'waste' just because the original producer of it threw it away. That is not the relevant time at which the satisfaction of the conditions imposed by s.40(2) is to be considered."

As such, he consequently submits the Commissioners argument is not sustainable.

187. Mr Cordara then turns to deal with paras 32 to 34 of the amended statement of case, where the Commissioners claimed as follows:

> "32. The material disposed of as waste does not undergo any special treatment before it is deposited on the landfill site. Landfill gas is created as an intrinsic and unwanted element of the decomposition process of the very material that was disposed of as waste. The material deposited at the landfill site therefore continued to be waste. As such, it fell within the scope of the tax.
>
> 33. It is the fact that biodegradable material has been deposited on or under the surface of the land that the putrification process can take place.
>
> 34. The putrification process and the production of landfill gases are both natural and inevitable consequences of allowing deposited biodegradable material to rot. The material remains in the same location and decomposes into the same state, whether landfill gases are used to generate electricity or not. The material itself is not used for any other purpose."

188. Mr Cordara observes that Patersons does not dispute that the anaerobic material deposited in landfill has in fact been deposited on or under the surface of land, or that the generation of methane is a "natural consequence" of the decomposition of such material under anaerobic conditions. He does, however, challenge as incorrect the Commissioners' assertion that methane is created "as an ... unwanted element of the decomposition process of" the material, submitting that methane, as the product of the chemical reaction involving the material, is certainly not "unwanted" by Patersons: to the company it is an extremely profitable asset. Nor, he further maintains, is it correct to say that methane is "created as an intrinsic ... element of the decomposition process", or that "the production of landfill gases is both the natural and inevitable consequence of allowing deposited biodegradable material to rot". Methane is produced only when the material undergoes anaerobic, as opposed to aerobic, decomposition: there is nothing "intrinsic" or "inevitable" about the specific environmental conditions required to generate the maximum amount of methane from biodegradable material.

189. In Mr Cordara's yet further submission, paragraphs 32 to 34 of the amended statement of case demonstrate "the extensive confusion" involved in the Commissioners' position. First, landfill tax is chargeable on disposals of "waste", as conclusively defined for the purpose in s.64(1). He notes that that definition contains no requirement that the material must "undergo any special treatment before it is deposited on the landfill site" to avoid being classified as waste: it is sufficient that the person disposing of the material does not intend to discard it. As Aldous LJ said at [27] of Parkwood; "There need be no change in chemical substance to convert waste into a useful product. It is the act of recycling which is important."

190. Mr Cordara claims it was clearly Parliament's intention to exempt from landfill tax material converted into a useful product. He maintains that the act of actively recovering energy from the degradable material converts it into something useful, and that is important: to charge landfill tax on material that is usefully engaged in renewable energy production is, as Aldous LJ said, "contrary to common sense". It also amounts to inconsistent treatment by the Commissioners since they have accepted that, where material is recycled, the intention of the original producer is no longer relevant in determining whether the material is "waste" for the purpose of s.40(2)(a). As for any argument by the Commissioners that material once "disposed of as waste" must "therefore continue to be waste", and as such necessarily falls within the scope of landfill tax, it simply has no place in view of the Court of Appeal decisions in *Parkwood* and *WRG*.

191. Further, Mr Cordara contends that the fact that in appropriate anaerobic conditions the degradable materials will decompose to generate methane, and that process is not dependent on the methane subsequently being used to generate renewable energy, is completely irrelevant: the only relevant consideration is whether Patersons has intended to discard the material when it deposits it into landfill or, by contract, made use of it for some further purpose. Patersons has every intention of using the material profitably in renewable energy production. He submits that that is sufficient, and there is no requirement for the material to be "used for any other purpose".

192. Mr Cordara rejects a claim by the Commissioners that landfill tax is chargeable on biodegradable material since "[t]he material deposited remains a disposal by way of landfill even though the material produces landfill gas. The material remains untouched and unprocessed long after it has degraded and stopped producing landfill gas", amended statement of case, para 35. He does so on the basis that landfill tax is chargeable only if, at the time Patersons puts the biodegradable material into landfill, it intends to discard it. Mr Cordara submits that that is not the case here: Patersons is not seeking to reclaim the landfill tax it has paid on so much of the materials as is incapable of being converted by way of landfill gas into renewable energy, and therefore remains in the residue after decomposition is complete. That part of the material does not form part of the biodegradable material, and Patersons' claim is made in relation to that material only.

193. It is plainly not the case, as the Commissioners' claim, that Parliament's intention will be defeated if landfill tax is not chargeable on a disposal of the

biodegradable material: Parliament's intention is to be gleaned from the words of the statute, as interpreted by the courts.

194. Of the Commissioners' final allegation in the statement of case, that "[I]t is irrelevant that the person making the disposal or any other person does or could benefit from or make use of the material or any of its constituents or naturally occurring by-products", amended statement of case, para 37(6), Mr Cordara considers the Commissioners to have baselessly sought to expand the ambit of their argument beyond that provided by statute (see s. 64(2)). He maintains that it is clear that the purpose of s.64(2) is to provide for "hypotheticals" to be ignored when applying the test for waste in s.64(1), i.e. where material is disposed of with the intention to discard. The fact that, hypothetically, the material *could* benefit or be of use to anyone is irrelevant: that is why the word "could" is used in s.64(2). By way of example, Mr Cordara cites someone who disposes of a roll of cloth with the intention of discarding it; the cloth is "waste" within the s. 64(1) definition, notwithstanding that someone else can use it to make a skirt to wear or sell.

195. In Mr Cordara's further submission, what s.64(2) does not do, and what the Commissioners need it to do to succeed on their argument, is apply to a situation where the disposer in fact has no intention of discarding the material disposed of. He maintains the only purpose of that subsection to be to avoid a "constructive" intention not to discard, precluding material from being waste under s.64(1) where the actual intention of the disposer is to discard the material. Where, as in the instant case, there is an actual intention not to discard the material, s.64(2) has no application.

196. Consequently, Mr Cordara contends that the Commissioners have no basis on which to argue that Patersons does not benefit from or make use of material it sends to landfill. The fact that it makes active use of the biodegradable material in generating renewable energy is, in Mr Cordara's submission, conclusive evidence that it has no intention of discarding that material at the time it is deposited into landfill; therefore, the material is not waste as defined in s.64(1).

197. He also submits that the absurdity of the Commissioners' position becomes apparent if one considers a parallel to that considered by Aldous LJ in *Parkwood*. On the Commissioners' case, no liability to landfill tax arises if Patersons purchases fresh materials (e.g. clean paper or fresh food) to use at the Site as the substrate for anaerobic decomposition and energy production, whereas a liability will arise if Patersons uses materials delivered by waste producers for the same purposes. As Aldous LJ said at [28] of *Parkwood*, "[t]hat cannot have been the intention of Parliament when they introduced the landfill tax."

198. Any argument that it may be too difficult to calculate quantum in the event of the appeal being resolved in favour of Patersons, should, in Mr Cordara's further contention, be rejected: one cannot tax people on the basis that it will be "too hard" not to do so. If the appeal were to be decided in favour of Patersons, tools are available for ascertaining the mass of the biodegradable material in the form of formulaic approaches such as the GasSim model, and should be used.

c) Mr Cordara's response to Mrs Hall's oral submissions

199. Mr Cordara maintains that the definition of material contained in s.70 could not be wider in extending to "objects, substances and products of all kinds". The tribunal should not gloss that by reference to adjectives suggested by Mrs Hall. There is no statutory bar to chemical changes taking place on material entering landfill to qualify as "material" for the purpose of s. 70. In the case of material mutating into methane through a natural process, it is not a case of some other material or other atomic particles "coming in"; the gas emerging is composed of atoms that were in the material from the beginning.

200. Secondly, he contends that the statutory definition of "material" is apt to include by-products emerging from material going into landfill: although gas cannot be seen, it is certainly a material. Biodegradation, ie the rearrangement over time of those elements of material with the help of microbes into its constituent parts which will become landfill gas, is a natural process; nothing has been added to the material deposited which is the origin of the gas that emerges.

201. However, the question for the tribunal is: does Patersons discard the material deposited into landfill as waste? What are its intentions on the day that disposal into landfill takes place? He submits that we must look at the moment the disposal occurs, and at that time degradation of the material has not even started; it is all in the future.

202. As interpreted by the Court of Appeal in *Parkwood*, the words "discarding the material" found in s. 64(1) mean that "if you have a further use for the material, then you will not have discarded it". Mr Cordara claims that what *Parkwood* and *WRG* show is that, even if material is used as daily cover for only one day to fulfil a regulatory obligation, that is enough to indicate that the material is not discarded.

203. It is common ground that extracting energy from, inter-alia, food waste, rather than simply leaving it to rot in the ground, is beneficial. Mr Cordara observes of Patersons' operation that it is a difficult one, is a long term project, requires money, exposes the company to commercial risk, and has uncertainties at its edges. Despite that, the Commissioners claim that it is outside the Parliamentary intent, material having been discarded as waste. In contrast, in *WRG* material used for daily cover was held to be within the Parliamentary intent. Mr Cordara maintains that to be a nonsense because if *WRG* was, in following its regulatory obligations, not discarding material, nor is Patersons; and it is Patersons' intention in respect of the material at the moment of disposal that matters – nothing else.

204. Mr Cordara claims the Government to have two different policies - one of reducing landfill, and the other of encouraging recycling, recovery and re-use of material. He maintains that its policy is to reduce the quantity of material going to landfill from 20 million tonnes in 2005 to 5 million tonnes in 2020. Patersons is delivering energy recovery – a matter which the Government is under an obligation to encourage. The Commissioners have adopted scaremongering tactics in place of

reasoned argument in claiming that if the tribunal were to allow the appeal, it would emasculate the tax. Mr Cordara claims that if Patersons were to succeed in its appeal, the blended rate (i.e. the rate it calculates it would pay taking a full quarter's input, gross tax, and subtracting the saving it estimates it would make) it would have to pay would be about £8 per tonne less than the full rate; at the present rate of tax of £64 per tonne, it would be reduced to £56 per tonne.

205. On the basis of the decisions in *Parkwood* and *WRG*, Mr Cordara asks: was it likely to have been the Government's intention to give Patersons a tax break in relation to the non-application of the tax to the element of material it is able to recycle? If the Court of Appeal was right in deciding that Parliament intended to give a tax break to someone providing daily cover or by building a road, it is inexorable that it also intended to give such a break to those who receive landfill and embark on difficult, complicated and multi-year commercial ventures to use that landfill to generate electricity which (a) gets rid of methane, (b) obeys the various requirements of the EU, and (c) replaces fossil fuels.

206. Every disposal of material attracts the higher rate of landfill tax unless it is one of inert material. But Mr Cordara adds, there are three tiers: inert material, chemically active material, and material to which *Parkwood* and *WRG* apply so that if a suitable use can be made of it, it is not discarded and no landfill tax is payable on it.

207. As far as Regulation 21 is concerned, it is impermissible to construe an Act of Parliament by reference to a statutory instrument made under it. The Regulation was in existence when both *Parkwood* and *WRG* were decided and, had the point Mrs Hall seeks to make on it been relevant in either case, it would have been taken. Mr Cordara contends that those cases show that material which was, or most probably was left on, and disposed of, on a site is not discarded. Consequently, Mrs Hall's premise on the regulation can not survive. The provision is not an error correcting one, but rather one based on the assumption that you can pay the tax properly on material which has been disposed of on site, notwithstanding an intention to recycle or incinerate it. *Parkwood* and *WRG* say such material is not within the tax at all. The provision has been superseded, given the *Parkwood* and *WRG* cases. It has also been superseded because it operates on the assumption that material has to be removed for the tax to be refunded. *Parkwood* and *WRG* show that if a taxpayer does not have the requisite intention, it matters not where the material is located; the twin assumptions of intent and the need for removal were both falsified by *Parkwood* and *WRG*.

208. Mr Cordara then turns to deal specifically with the *Parkwood* and *WRG* cases, opening by claiming that the suggestion repeatedly made by Mrs Hall that the two cases were about diversion from landfill was wrong: and any claim by the Commissioners that they can be distinguished from the instant one on that basis should be treated very cautiously; the landfill is the whole site.

209. If the Commissioners' case is that the landfill includes the tipping face, it is wrong. Both the daily cover and the fluff, and any other materials used for engineering purposes, are within the void. Again, the suggestion that either *Parkwood* or *WRG* can be explained on the basis of diversion is incorrect.

210. Once it is borne in mind that everything in those two cases went to landfill the relevance of them becomes very plain. It is Patersons' intention towards the material of which it disposes that is relevant. The material disposed of may disappear forever in the new land form, but it remains there and does not disappear.

211. The Commissioners suggest that Patersons' use of the materials is too indirect to escape the tax. The word "discard" is a negative; there is no presumption as to what a taxpayer is going to do with material, so long as it can be said that he has not truly discarded it.

212. Mr Cordara next observes that, in the *Parkwood* case, the company paid for the material used for road building etc but says that that is neither here nor there. Section 64(1) contains no enquiry as to how the taxpayer came to be in possession of the material. Rather, the Court of Appeal focused on the promotion of recycling, and the reduction of the amount going to landfill. And, in looking at the promotion of recycling, it laid down no restriction on the shape or manner of the recycling: it certainly did not exclude a change in chemical substance from recycling, Aldous LJ saying at [27] "there need be no change in chemical substance to convert waste into a useful product. It is the act of recycling which is important. That was recognised by Parliament in its drive to promote recycling rather than disposal and was recognised by the cumulative effect of s.40(2)." In Mr Cordara's submission, the Court appeared to be totally open to whatever form of recycling was involved.

213. The words "to convert waste into a useful product" in the first of those sentences cited from the judgment at [27] show the Court recognising conversion of waste as the underlying policy of the Government, indeed of s.40(2). The only matter for consideration by the tribunal is the construction of s.40(2). All Patersons seeks to do is to have the concept of recycling, rather than disposal, applied.

214. The Court of Appeal indicated the extent to which the wider environmental campaign is to be taken into account in the administration of landfill tax; the policy battle is not one to be fought in the instant case. As was said by Aldous LJ in the final sentence of [28] in *Parkwood*:

> "The purpose of the legislation was to tax waste material deposited at landfill sites, and not to tax deposits at landfill sites of useful material produced from waste material."

In Mr Cordara's further submission, that is the answer to the Commissioners' suggestion that landfill tax can cope only with a non-discarding situation where immediate use is made of something. The useful material produced in Patersons' case is landfill gas; the waste is converted into that useful material using the language of *Parkwood* at [28] and then that of [27]. The Commissioners seem to be saying that *Parkwood* was a case of material being diverted away in a straightforward fashion. Mr Cordara's response is that there was no diversion away, and it might have been straightforward, but the Court had its eye on a wider horizon.

215. Mr Cordara accepts that *Parkwood* was concerned with the use of material, but maintains that *WRG* focused on the different concept of retention. He submits that the Commissioners failed to grapple with the fact that there was a regulatory requirement to put a barrier, daily cover, over newly deposited waste was well in mind of the Court, see [16] of *WRG* where the Chancellor cited [12] of the judgment of Barling J at first instance.

216. The tribunal was being invited, very discreetly, to say that the Court of Appeal "missed a trick and/or they were wrong". The Commissioners were saying that the fact that it was a regulatory requirement to make use of the material in point in *WRG* should have led the Court of Appeal to conclude that no use recognised by Parliament was in fact taking place. The Commissioners' argument was that the material should be deemed to have been discarded because what *WRG* did was a required action, and was therefore effectively always to be treated as an act of discarding. In Mr Cordara's submission, that is a "shocking argument".

217. He further contends that the whole of the regulatory argument put before the tribunal in the instant case is very seriously damaged by:

a) the *WRG* decision, and
b) the very proper actions of the Commissioners in accepting fluff and/or similar claims as outside the scope of the tax.

218. At [33] of *WRG* the Chancellor explained what he considered the synonyms of discard: cast aside, reject or abandon; and in the same paragraph he gave the antonyms:

> "And does not comprehend the retention and use of the material for the purposes of the owner of it".

Mr Cordara maintains that statement to be very helpful to Patersons since the company falls within it for if it did not retain material and use it, it would not have electricity for sale.

219. What the Commissioners are inviting the tribunal to do, in essence, is to conclude that where material is used for regulatory purposes it is not used in the sense recognised by Parliament. In *WRG*, the Court of Appeal knew that the use of the material there in point was a regulatory requirement, and had no problem in dealing with it. On the Commissioners' case, assuming there to be a policy to promote recycling, recycling takes the matter outside the scope of the tax; but that policy does not extend to recycling required by any form of regulatory obligation. Mr Cordara submits that it does not make sense to read into s.64(1) the caveat that the intention must not have been formed with reference to any statutory obligation.

220. If the existence of a regulatory requirement were to be material, the tax regime would expand and contract under environmental, pollution and waste management control. If the taxpayer has been dealing with material just for commercial reasons up

to that point *WRG* is fine. From that moment on the tax has to be paid – a change that makes no sense.

221. Even were Patersons giving away the electricity it generates, the Commissioners say the position would be no different, it would still be using material it intended to discard because it was using the biomass to generate electricity via the landfill gas. Mr Cordara rejects that claim saying that it is Patersons' objective conduct in the real world that matters.

222. Mr Cordara notes that, in evidence, Mr Bourn eventually accepted that Patersons uses the biodegradable material indirectly to generate electricity. He maintains that that is sufficient because the indirectness is on what Mr Bourn was required to focus: the opposite of discard is not to make full and final use of the material on the same day as its disposal takes place. The second point Mr Cordara makes on the indirect point is that s.64(2) requires not merely use of material, but also a benefit therefrom. Thirdly, he observes that landfill gas is waste converted into a useful product, and the fact that conversion is over a long period does no harm to Patersons' case. Fourthly, he submits that multistep processes are common, and should not be penalised. Incineration producing electricity takes place on one day; it may produce more electricity than decomposition, but it also releases heavy metals into the air. In contrast, decomposition is a much slower, gentler process, but releases no dioxins, leaves carbon dioxide in the ground and produces methane which is destroyed and converted into electricity. Energy recovery is what Patersons is about: it makes use of a process, the use of biodegradable material. It does not discard that material as waste.

223. Mr Cordara then turns to deal with the European legislative material. He claims the obligations thereunder to be a "two-way street": one of obligations on countries, the other on people. Of the former, Mr Cordara notes that there is an obligation on the United Kingdom to encourage energy recovery. When *Parkwood* was decided in 2003 the agenda in this regard was still forming, but enough of it existed for the Court to link landfill tax to the United Kingdom's wider environmental agenda in [9] of Aldous LJ's judgment: by community law the UK is under an obligation to take appropriate steps to encourage the prevention, recycling and processing of waste. Mr Cordara claims that he is saying nothing more than the Court of Appeal said.

224. The real question before the tribunal, in Mr Cordara's submission, is: does Patersons use the biodegradable material remaining after extracting fluff or material used for daily cover; does it, or does it not, discard that material? It is Patersons' intention in that regard that matters, not its regulatory or other obligations; its objective conduct on site is that in point. Is Patersons' intention to discard or not? Mr Cordara maintains that Patersons should be dealt with on the basis of what it does, rather than what someone says it does. The company obtains biodegradable material and uses it to generate electricity. That is its intention; it matters not why. It recycles or recovers energy from biodegradable materials. The tribunal should not be deflected into considering matters other than its simple and obvious intention at the moment of disposal.

225. Mr Cordara also maintains that the fact that some landfill gas results from the decomposition of material in older, pre-landfill tax, cells is immaterial to Patersons' claim; its claim is restricted to the appropriate limitation period and is made on the basis of carefully structured parameters, the elements of what was delivered over the claim period which Patersons can, with a high degree of certainty, be sure will decompose into gas.

226. Mr Paterson senior gave evidence, which the tribunal should accept, that Patersons decided to go into the electricity generation venture for purely commercial reasons, and not because it was legally obliged to do so; and it did so with the intention of making as much money as possible from the operation.

227. Mr Cordara submits that the Crown's submission that because Patersons does not receive material from Biffa as fuel, it is receiving the material as waste, somehow dilutes or cancels out any intention the company may have not to discard it, is fallacious: it is Patersons' intention, objectively ascertained, that answers the statutory question. For that reason, there is nothing in the Biffa point. Mr Cordara advances what he maintains is a related point which is that by the time Patersons forms its intention it has accepted material Biffa has sent and thus performed its obligations to that company, so that again there is nothing in the Biffa point.

228. Mr Cordara also accepts that in any long-term technical, generating project there will always be uncertainties such as the quantity of electricity a site operator will be able to generate, but maintains that he will not be discarding the material. The important point of intention is that a site operator knows that there will be a substantial landfill gas output.

229. He submits that in calculating the amount of its claim using the GasSim model Patersons has taken into account all relevant factors including imponderables and losses; the calculation makes a very conservative assumption as to the elements unlikely to produce anything useful. That is why the blended rate of tax will be reduced only by the order of £8 per tonne of material.

230. In relation to quantum Mr Cordara submits that Patersons' repayment claim has been put together in what he describes as a very conservative manner. He maintains that the claimed sum starts from the proposition that there is clearly substantial biodegradable material producing landfill gas, and then proceeds on the basis that only so much of the material the company disposes of at the Site as is capable (as predicted by the GasSim model) of actually decomposing into landfill gas and thus generating renewable energy. Whilst the amount of the claim is based on a series of assumptions, the original figure produced is constantly reduced until a figure is reached on which Patersons may "confidently" rely: the GasSim model has been found to be very reliable in predicting the amount of material settled into landfill as a consequence of loss through landfill gas. The appeal should be allowed.

Discussion and conclusion

231. After the most detailed consideration of the submissions of both parties, we find ourselves unable to accept a number of those advanced by Mr Cordara. As our reasons for so saying lead to our conclusion, it is appropriate for us to give them, and we now proceed to do so.

232. We refer first to the cases of *Parkwood* and *WRG*, they being at the heart of the core case presented by Mr Cordara. We are unable to accept his submission that the two cases constitute "binding authority" for the proposition that the use Patersons makes of biodegradable material it puts into landfill is conclusive evidence of its intention at the relevant time. The factual differences between *Parkwood* and *WRG* on the one hand and the instant case on the other could not be greater. In both the former, inert material capable of immediate identification and quantification was set aside and shortly afterwards used for a specific purpose, whereas in the instant case material said to be capable of producing landfill gas, but which is mixed with other identical material said to be incapable of so doing, is put into the void to await anaerobic decay, and physical and chemical changes at some later date. There is no method of distinguishing between the two types of material disposed of by Patersons. As Mrs Hall observes, the purposive reading of the cases Mr Cordara suggests "is one of the most flawed features of the appeal ". She adds, quite correctly in our judgment, that the assumptions on which the Court of Appeal based its statements of principle differed substantially from those of the instant case. She further observes that neither judgment addressed the key issue in the instant case; that only something which physically exists can be put on or under land. We agree that the tribunal can deduce nothing of any real value from the Court of Appeal judgments because the assumed premise of the Court's reasoning was that the material in point had mass, occupied space, and was diverted from landfill.

233. We particularly note Mr Cordara's claim that the instant case is *a fortiori* the earlier ones as the "central purpose" of landfill tax, as set out in the government White Paper of 1995, being to recover value from more of the waste that is produced. The purpose he identifies is but one of three, the other two being the production of less waste and the disposal of less waste in landfill sites, the former, in our judgment, being the most important. Far from Patersons wanting less waste to be produced, and less waste to be disposed of in landfill sites, it seeks just the opposite; it needs more waste, and hopes that it will be sent to landfill in order that all eight of its gas engines can again be brought into use to generate electricity. In those circumstances, we are unable to accept that Patersons' case is stronger than the earlier ones, and agree with Mrs Hall that the reasoning of the Court of Appeal in the two cases cannot be transposed on to the facts of the instant case.

234. Mr Cordara further claims the Court of Appeal judgments to indicate that, if material on a landfill site is used or exploited in some way, there is no intention to discard it, and in the instant case Patersons use of it to generate electricity amounts to its recycling. Mrs Hall's answer to that claim, on which we again rely, is that material sent to landfill is not recycled; it is merely put into the ground. Although it was not argued before us, we take the view that to recycle means 'to return to a previous stage

of a cyclic process' (see Shorter Oxford English Dictionary), which would exclude the creation of methane from the process. We also agree with Mrs Hall that methane produced as a by-product of the degradation of material in landfill is not the sort of recycling to which the Court of Appeal was referring in Parkwood.

235. Landfill of waste material can create the conditions that give rise to methane production, but without certainty. Only if the necessary conditions exist in the ground, and they may have to be created, e.g by the addition of leachate, will the anaerobic process occur. That, in our judgment, cannot be described as recycling the material.

236. We decline to give 'material' in s.70 the broad meaning Mr Cordara would have us give it, much preferring Mrs Hall's contention that 'material' "must have mass, must occupy space, must be something capable of disposal, and must be physical and perceptible to the senses as a tangible substance". Our preference is based in reliance on the statutory provisions to which Mrs Hall makes reference at [115] above.

237. Central to Patersons' case is Mr Cordara's submission that the clear, actual use made by the company of the biodegradable material in generating renewable energy is conclusive evidence that it has no intention of discarding material at the time it deposits it into landfill. Once more we agree with Mrs Hall that the instant case is not one in which use can be described as conclusive of Patersons' intention, and Mr Cordara's claim that its case is analogous to that of *WRG* is, to quote Mrs Hall, "a perversion of the Court of Appeal's reasoning in WRG".

238. Mr Cordara further submits that, since Patersons intends to use material sent to landfill for the purpose of generating electricity, a claim by the Commissioners that such material is waste cannot be sustained. He relies on [34] of *WRG* for the purpose. Having observed that case law indicates that material is waste if the person disposing of it intends to cast it aside, reject or abandon it, Mrs Hall correctly adds that in WRG the Court of Appeal did not address a situation in which credit was sought for material sent to landfill and the material concerned was not physically used.

239. He also challenges the Commissioners' claim in para 32 of the amended statement of case, that methane is created as an unwanted element of the decomposition process, maintaining that it is certainly not unwanted by Patersons, being an extremely profitable asset to the company. Mrs Hall responds, quite correctly, by observing that the company has a regulatory obligation to use the methane produced at the Site, and contending that it cannot recharacterise its obligation as commercial exploitation. We agree with Mrs Hall that all the evidence points to Patersons being a landfill business making profit out of that it is obliged to do for regulatory purposes, and we so find.

240. Next Mr Cordara claims that the act of actively recovering energy from degradable material converts it into something useful, and Parliament intended to exempt from the tax material converted into useful products. Once more, we rely on the response of Mrs Hall to that submission. She maintains that Patersons' claim should be rejected for it is simply doing the very thing it is obliged to do for regulatory purposes; the claim is "totally counter intuitive". Were it to succeed, it

would defeat the very object of the tax, that object being to encourage recycling and to discourage putting material into the ground.

241. He further rejects the claim by the Commissioners at para.35 of the amended statement of case that the material Patersons deposits at the Site remains a disposal by way of landfill even though the material produces landfill gas, contending that it does not intend to discard the material. We shall deal with that submission shortly.

242. We are totally unable to accept Mr Cordara's claim that it cannot be too difficult to calculate quantum in the event of Patersons' appeal proving successful, and that the formulaic approach proposed should be used. The reasons for our non-acceptance are numerous, and may be explained as follows:

a) As we observed at [2] above, Patersons' original tax repayment claim was in a sum of over £17.5 million, but was reduced as late as February of this year to one of just over £3.5 million, i.e. by 80%. No explanation was offered for that reduction. Quite how it relates to Mr Cordara's claim that if the company's appeal were to be successful the "blended rate" (see [204] above) would be some £8 per tonne less than the current full rate of £64, i.e. reduced by 12.5%, we are unable to say. Clearly, the original claim was not reduced from one for the whole of the material Patersons sends to landfill to one for the material said to be subject to the blended rate for had it been the reduction would have been even greater. (From the approach taken by Mrs Hall at the beginning of the hearing, we were left in no doubt that the Commissioners believed the original claim to have been made in respect of all the material sent to landfill);
b) The GasSim model suggested for use is a risk assessment tool, and therefore completely unsuited to the calculation of a liability to tax;
c) The reliability of the model is, according to the evidence of Mr Grantham, the subject of serious scientific debate;
d) Comparison of the estimated production of landfill gas at an unidentified site in 2009 using the GasSim model with actual production revealed a discrepancy of 10%, whether up or down we were not told;
e) As Mrs Hall observes, when one looks at the data Patersons uses in the adapted GasSim model to calculate its liability to tax, that model is so far removed from the original (and from its purpose) that it ceases to be the original model in any recognisable form;
f) Patersons does not use the information on the waste transfer notes to identify the waste stream category applied to individual loads of waste material received, but rather feeds into its computer information used to calculate the liability waste categories labelled "Domestic, commercial and industrial" which, as Mrs Hall observes, are "as generic as the categories of domestic, commercial and industrial [waste] as are fed into the GasSim model by [Patersons]".
g) Further, it is left to an employee of Patersons, its financial accountant, to determine the content of certain loads of waste, and he does so without examining it. His analysis of the situation is said to be an "informed judgment".

243. Mrs Hall submits the last of those considerations to be so far abstract and far removed from what Parliament intended in the context of intention as to be "unworthy of consideration". We would apply that description to the whole calculation.

244. As we understand him, Mr Cordara claims that, whilst Patersons receives waste material from Biffa (and its other customers) for disposal into landfill as a landfill site operator for tipping it into the void in that capacity, it does not discard it as waste as it intends to use it to generate electricity. It would seem that at the very moment the material is tipped into the void, as Patersons has by then, indeed at that very moment, become its owner, its intention as expressed to its customers is changed from discarding to one of not discarding, so that it cannot then be said to discard it as waste. As Mrs Hall observes, the use of the definite article in s.64(1) indicates that there should be one intention in relation to the disposal of waste and, in our judgment, Patersons' intention in the instant case is that of acquiring the Biffa waste for landfilling purposes. It follows that we hold Patersons to dispose of material put into the void at the Site as the discarding of it as waste.

245. Our finding in that behalf is reinforced by our acceptance of a submission by Mrs Hall in relation to the requirement that material must be measured "by the tonne". What she correctly describes as a necessary corollary to Patersons' case is that it has an intention to discard an unascertainable proportion of material at the time it is deposited into landfill (meaning that is can properly be described as waste), whilst having no such intention with regard to the equally unascertained balance (which means that is cannot be so classified). As Mrs Hall claims, the proposition is absurd having regard to what happens at the Site, and is not one that fits the overall scheme of the legislation.

246. We need add nothing more by way of explanation for concluding the case in favour of the Commissioners, except to say that we have considered and rejected the remaining submissions of Mr Cordara but accept the correctness of those of Mrs Hall. We adopt the latter as our other reasons for dismissing the appeal.

247. This document contains full findings of fact and reasons for the decision. Any party dissatisfied with this decision has a right to apply for permission to appeal against it pursuant to Rule 39 of the Tribunal Procedure (First-tier Tribunal) (Tax Chamber) Rules 2009. The application must be received by this Tribunal not later than 56 days after this decision is sent to that party. The parties are referred to "Guidance to accompany a Decision from the First-tier Tribunal (Tax Chamber)" which accompanies and forms part of this decision notice.

J. D. Demack

TRIBUNAL JUDGE
RELEASE DATE: 2nd August 2012.

Schedule 1

Basis for computing the Reclaim Amount

4. The reclaim amount is the amount of landfill tax paid by Patersons which relates to so much of the material disposed of at the Site as is capable (as predicted by the GasSim computer model) of actually decomposing into landfill gas and thus generating renewable energy (i.e. the putrescibles).

5. For each incoming load of material which arrived at the Site during the claim period and was used by Patersons to produce energy, the starting point was to identify a "waste stream" category that applied to the load. Three main waste stream categories were used: "domestic", "commercial" and industrial". Each waste stream category is defined by reference to the general nature of the material it contains. For example, a domestic load would contain more newspapers and garden waste than an industrial load.

6. The mass of each load was also recorded.

7. The task of determining which waste stream category to apply to each incoming load was carried out by Alan Dunn, Patersons' financial accountant. In doing so, Mr Dunn referred to the "product code" for each incoming load, e.g. "tyres", "muck", "clinical waste", and also identified the customer who delivered the load. Of the 160 or so loads that Mr Dunn analysed, he was able to categorise all but 25 loads as being from a domestic, commercial or industrial waste stream. Of the remaining 25 loads, where it was not possible to determine whether the waste was commercial or industrial, Mr Dunn made an informed judgment call and categorised each as being from either a "50% Commercial / 50% Industrial" ("50/50") waste stream or a "60% Commercial / 40% Industrial" ("60/40") waste stream.

8. Each waste stream can be further broken down according to its "waste composition". The waste composition identifies the different materials that make up that waste stream (i.e., the waste components) and their relative proportions in the stream (e.g. 10% newspapers, 5% card, 40% garden waste, etc). GasSim includes default waste compositions for certain waste streams, including the domestic and commercial streams. These defaults are derived from published data. (see Development of a landfill gas risk assessment model: GasSim, Table 1: [3/1288]). GasSim also allows the user to make adjustments to the default waste composition.

9. In the present case, the waste compositions used by Patersons for each of the domestic, commercial and industrial waste streams are shown in columns B, C and D of Tab 5. Patersons applied GasSim's default waste composition for the domestic waste stream, but made adjustments to the default waste composition for the commercial stream. GasSim does not include a default waste composition for the industrial waste stream, and the composition used by Patersons was determined on the basis of site-specific information.

10. For each component in a waste stream, GasSim provides default values for "water content", "cellulose" and "hemi-cellulose". Taking row 2 in Tab 5, labelled "newspapers", as an example, these values indicate that 30% of newspapers is water, 48.5% of the dry mass is cellulose and 9% of the dry mass is hemi-cellulose. Default values from GasSim were used for each of the listed waste components in Table 5 (in columns F, G and H).

11. In addition, for each waste component, GasSim provides a default value for "decomposition". This is column E in Tab 5. The decomposition figure for each waste component is the percentage of the cellulose and hemi-cellulose content in that component that is expected to actually decompose into landfill gas. So, again taking row 2 of Tab 5 (newspapers) as an example, the decomposition figure of 35% indicates that 35% of the cellulose and hemi-cellulose content of newspapers is expected to actually decompose into landfill gas.

12. The values for "water content", "cellulose", "hemi-cellulose" and "decomposition" then allow, for each waste component, a computation of the percentage of the total wet mass of that component that is expected to actually decompose into landfill gas. Again taking newspapers as an example, 100 tones of newspapers will contain 30 tonnes of water. Of the remaining 70 tonnes, a total of 57.5% (i.e. 48.5% plus 9%) will be cellulose and hemi-cellulose. This will be 40.25 tonnes. The decomposition figure for newspapers is 35%, so approximately 14.09 tonnes of newspapers are expected to actually decompose into landfill gas. This is what the figure in column I of Tab 5 ("revised decomposition") represents. So, moving away from newspapers and looking at magazines (row 3) and other papers (row 4), the revised decomposition figures show that, of 100 tonnes of either magazines or other papers, 16.55 tonnes or 65.72 tonnes respectively, are expected to actually decompose into landfill gas.

13. The revised decomposition figures (Tab 5, row I) are then used to compute, for each component of each waste stream, the percentage of that waste stream that will actually decompose into landfill gas by reason of that component.

14. For example, newspapers make up 11% of the domestic waste stream (Tab 5 column B row 2), and the revised decomposition for newspapers is 14.09% (Column I row 2). This means that, of 100 tonnes of domestic waste, 11 tonnes are newspapers and of those 11 tonnes, 14.09% will actually decompose into landfill gas. 14.09% of 11 tonnes is about 1.6 tonnes. So, where a load of material from the domestic waste stream is delivered to the Site, 1.6% of that load is expected to actually decompose into landfill gas by reason of the newspapers in that load. The figure of 1.6% is referred to in Tab 5 as "revised domestic", and is shown in column M.

15. The same computations are carried out for each of the other components in the domestic waste stream, and also for each of the components in each of the commercial and industrial waste streams. The resulting "revised domestic", "revised

commercial" and "revised industrial" figures are shown in columns M, N and O of Tab 5.

16. The next step is, for each waste stream, to add up all the numbers in column M, N or O (depending on the waste stream). The sum is the total percentage of material in that waste stream which is expected to actually decompose into landfill gas.

17. So, taking column M (domestic waste stream) as an example of a 100 tonne load from the domestic waste stream, 1.6 tonnes is expected to decompose into landfill gas by reason of newspapers in the load, 0.81 tonnes is expected to turn into gas by reason of magazines in the load, 6.62 tonnes by reason of other papers in the load, and so on. The total amount (after normalisation) of that 100 tonne load that is expected to actually decompose into landfill gas is 17.37 tonnes, or 17.37% which is the figure shown in column M row 20 of Tab 5.

18. Going through the same summing up process for the commercial waste stream and the industrial waste stream gives normalised "revised commercial" and "revised industrial" figures of, respectively, 35.58% and 4.67%, which are shown in columns N and O of row 20 in Tab 5.

19. As to the 50/50 and 60/40 waste streams, the corresponding percentages of material in those waste streams that will actually decompose into landfill gas are given in column C, rows 22 and 23 (respectively) of Tab 5 (i.e. 20.12% and 23.21%). These have been computed as follows.

20. For the 50/50 waste stream, 100 tonnes of material will contain 50 tonnes of material from the commercial waste stream and 50 tonnes of material from the industrial waste stream. We know that 35.58% of material in the commercial waste stream will actually decompose into landfill gas (Tab 5, column N row 20), and 4.67% of material in the industrial waste stream will actually decompose into landfill gas (Tab 5; column o row 20). So, of the 100 tonnes of material from the 50/50 stream, the total material that will actually decompose into landfill gas is expected to be 35.58% x 50 tonnes+ 4.67% x 50 tonnes) = 20.12 tonnes. This is 20.12% of the total material, and is the figure given in column C row 22 of Tab 5.

21. The same computation was carried out in relation to the 60/40 stream. Of 100 tonnes of material from that stream, the amount that is expected to actually decompose into landfill gas is (35.58% x 60 tones + 4.67% x 40 tonnes) = 23.21 tonnes. This is 23.21% of the total material, and is the figure given in column C row 23 of Tab 5.

22. The final step in the computations is to multiply:

(1) the "revised domestic" figure of 17.37% in the total mass of so much of the material received by Patersons during the claim period and used in renewable electricity generation ("the Total Material"), as came from the domestic waste stream;

(2) the "revised commercial" figure of 35.58% to the total mass of so much of the Total Material as came from the commercial waste stream;
(3) the "revised industrial" figure of 4.67% to the total mass of so much of the Total Material as came from the industrial waste stream;
(4) the "revised" figure for the 50/50 stream of 20.12% to the total mass of so much of the Total Material as came from the 50/50 waste stream; and
(5) the "revised" figure for the 60/40 stream of 23.21% to the total mass of so much of the Total Material as came from the 60/40 waste stream.

Adding together the results of (1) to (5) above gives the total mass of material, received by Patersons during the claim period and used in renewable electricity generation, which is expected to actually decompose into landfill gas ("the decomposing mass"). This is the material that Patersons had no intention of discarding when it disposed of it on the landfill (i.e. this is the Putrescibles). Clearly landfill tax is not chargeable on the decomposing Mass.

See 56A and 56B.

Schedule 2

Since landfill tax is a domestic initiative aimed at protecting the environment and securing the ambitions of EU Council Directives on waste (see paragraph 9 of the Court of Appeal judgment in *Parkwood Landfill*) Mrs Hall submits that it is necessary to have regard to the broader EU context. Her submissions in that behalf take the following form.

(a) An overview of the relevant Directives

8. The original Directive 75/442/EC on waste was amended in 1991 by Council Directive 91/156/EC, and was repealed and replaced by Directive 2006/12/EC. The Waste Framework Directive provides the definitions of waste and of terms such as disposal and recovery.

(b) Directive 75/442/EC

9. Article 1 (a) of Council Directive 75/442 defined waste as follows, *' "waste" means any substance or object which the holder disposes of or is required to dispose of pursuant to the provisions of national law'.*

10. Article 1(b) defines "disposal" as *the collection, sorting, transport and treatment of waste as well as its storage and tipping above or under ground"*

11. Article 3 sets out the action member states were required to take in relation to waste. Under Article 3.1. *"Member states shall take appropriate steps to encourage the prevention, recycling and processing of waste, the extraction of raw materials and possibly of energy therefrom and any other process for the re-use of waste'.*

	Original	Revised
Asbestos	0.00%	0.00%
Domestic	44.61%	17.37%
Commercia	67.89%	35.58%
Industrial	32.60%	4.67%
Inert	0.00%	0.00%
50% Indus	50.25%	20.12%
60% Comr	53.77%	23.21%

Summary of variation to decomposition percentages

1. The original 'decomposition percentages' were taken directly from data which backs up GasSim
2. Those decomposition percentages in Gas Sim were not expressed as a percentage of the wet-weight of material (which is how material is received by Patersons)
3. The decomposition percentages taken from Gas Sim have been adjusted so they are expessed as a percentage of wet material.
4. The decomposition percentage used in GasSim are expressed as a percentage of the dry mass of cellulose/hemi-cellulose
5. The recalculation should be clear from the terms of the tab 'Gas %s' to this spreadsheet - the revision is E(1-F)*(G+H) based on the key below:

Key

E	**The original decomposition percentage**
F	**Percentage of water in the material**
G	**Percentage of cellulose in the material**
H	**Percentage of hemi-cellulose in the material**

	Domestic	Commercial	Industrial	Decomposition	Water Content	Cellulose	Hemi-cellulose	Revised Decomposition	Domestic Decomp	Commercial	Industrial	Revised Domestic	Revised Commercial	Revised Industrial
Newspapers	11%	10%	0%	35%	30.00%	48.50%	9.00%	14.09%	3.98%	3.50%	0.00%	1.60%	1.41%	0.00%
Magazines	5%	0%	0%	46%	30.00%	42.30%	9.40%	16.65%	2.24%	0.00%	0.00%	0.81%	0.00%	0.00%
Other papers	10%	50%	0%	98%	30.00%	87.40%	8.40%	65.72%	9.87%	49.10%	0.00%	6.62%	32.93%	0.00%
Liquid Cartons	1%	0%	0%	64%	30.00%	57.30%	9.90%	30.11%	0.33%	0.00%	0.00%	0.15%	0.00%	0.00%
Card Packaging	4%	0%	0%	64%	30.00%	57.30%	9.90%	30.11%	2.46%	0.00%	0.00%	1.16%	0.00%	0.00%
Other Card	3%	5%	0%	64%	30.00%	57.30%	9.90%	30.11%	1.81%	3.20%	0.00%	0.85%	1.51%	0.00%
Wood	0%	5%	20%	75%	0.00%	0.00%	0.00%	0.00%	0.00%	3.75%	15.00%	0.00%	0.00%	0.00%
Textiles	2%	0%	0%	50%	24.00%	20.00%	20.00%	15.20%	1.18%	0.00%	0.00%	0.36%	0.00%	0.00%
Disposable Nappies	4%	0%	0%	50%	20.00%	25.00%	25.00%	20.00%	2.18%	0.00%	0.00%	0.87%	0.00%	0.00%
Other misc. combustibles	4%	0%	0%	50%	20.00%	25.00%	25.00%	20.00%	1.80%	0.00%	0.00%	0.72%	0.00%	0.00%
Garden Waste	2%	0%	0%	62%	65.00%	25.70%	13.00%	8.40%	1.49%	0.00%	0.00%	0.20%	0.00%	0.00%
Other Putrescible	18%	20%	10%	76%	65.00%	55.40%	7.20%	16.65%	13.97%	15.20%	7.60%	3.06%	3.33%	1.67%
10mm fine	7%	0%	20%	50%	40.00%	25.00%	25.00%	15.00%	3.56%	0.00%	10.00%	1.07%	0.00%	3.00%
Sewage Sludge	0%	0%	0%	75%	70.00%	14.00%	14.00%	6.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Composted Organic Material	0%	0%	0%	57%	30.00%	8.53%	8.53%	6.81%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Incinerator Ash	0%	0%	0%	57%	30.00%	0.70%	0.70%	0.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Non Degradable	29%	20%	50%	0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	101%	110%	100%						44.86%	74.75%	32.60%	17.47%	39.17%	4.67%
Normalised percentages									**44.61%**	**67.89%**	**32.60%**	**17.37%**	**35.58%**	**4.67%**

	Original	Revised
50% Industrial/50% Commercial	50.25%	20.12%
60% Commercial/ 40% Industrial	53.77%	23.21%

12. Article 3(2) obliges member states to, *"... inform the Commission in good time of any draft rules to such effect and in particular any draft rule concerning: ... (b) the encouragement of:*

- *reduction in the quantities of certain waste*
- *the treatment of waste for its recycling and re-use*
- *the recovery of raw materials and/or the production of energy from certain waste"*

13. Under Article 4 *"Member states shall take the necessary measures to ensure that waste is disposed of without endangering human health and without harming the environment".*

(c) Directive 91/156/EC

14. Directive 75/442 was amended by Council Directive 91/156/EC and the definition of waste in Article 1 9a) was altered to read: *'waste shall mean any substance or object in the categories set out in Annex 1 which the holder discards or intends or is required to discard'*. Annex 1 lists sixteen categories of waste. See for example Q14 *'Products for which the holder has no further use e.g. agricultural, household, office, commercial and shop discards etc'.*

15. Both Directives inform the scope of UK waste legislation:

a. The Environmental Protection Act 1990 for example defines household, commercial and industrial waste; and in particular relies heavily on the 91/156/EEC when it defines waste as: *'Any thing which is discarded or otherwise dealt with as if it were waste shall be presumed to be waste unless the contrary is proved'.* See section 75(3).

b. The definition of what is a taxable disposal under landfill tax was clearly informed by the above Directives. For example, the references in section 40(2) of the Finance Act 1996 to *"a disposal of material as waste"* and in section 64 to *"A disposal of material is a disposal of it as waste if the person making the disposal dies so with the intention of discarding the material'* so closely follow the definitions outlined in the Directives that those sections cannot sensibly be interpreted without reference to them.

(d) The Landfill Directive 1999/31/EC and its domestic implementation

16. The Landfill Directive (Council Directive 1999/31/EC on the landfill of waste) aims to reduce the production of methane gas from landfills and to reduce global warming, through the reduction of the landfill of biodegradable waste. The overall objective of the Directive, as set out in Article 1, makes specific reference to the global environment including the greenhouse effect as well as the risk to human health from landfilling.

17. This Directive also lays down requirements to introduce landfill gas controls.

18. Article 2(g) defines as landfill as *"a waste disposal site for the deposit of waste into or onto land (i.e. underground)"*.

19. The Landfill Directive sets out operational and technical requirements on the waste to be landfilled and in relation to landfills themselves. The purpose of these requirements is to prevent or reduce as far as possible the negative environmental impact of landfilling. See Article1.

20. The Landfill Directive sets a series of targets for Member States to reduce the amount of biodegradable municipal waste going to landfill. The final target is to reduce by 2020, the amount of Biodegradable Municipal Waste (BMW) landfilled to 35% of the quality of BMW produced in 1995. See Article 5.

21. The UK has met its landfill diversion targets for 2010; it is well on the way to meeting its target for 2013 and is confident of meeting the 2020 target. This is being achieved through a range of measures such as the landfill tax, driving up the cost of disposal to landfill and the adoption of policy measures to encourage alternative forms of treatment such as anaerobic digestion. The material which is the subject matter of this appeal has and will contribute to those targets. Paragraph 23 of the Executive Summary of Defra's Review of Waste Policy 2011 states *"The Landfill tax – with increases maintained towards a floor of £80 per tonne in 2014/15 – will remain the key driver to divert waste from landfill and remains necessary to ensure we meet key EU targets in 2013 and 2020."*

22. In addition to the diversion of BMW from landfill, the Landfill Directive requires that waste must be treated prior to landfill (see Article 6(a)) in order to reduce the amount of waste landfilled and enhance recovery (recital 8). The definition of treatment includes the sorting of waste (Article 2(h)).

23. Recital 17 of the Landfill Directive states that the measures taken to reduce the landfill of biodegradable waste should also aim at encouraging the separate collection of biodegradable waste, sorting in general, recovery and recycling.

24. One of the clear objectives of the Landfill Directive is to reduce the landfilling of biodegradable waste. One of the reasons for this is to reduce the impact on the global environment from the greenhouse gases emitted from the landfill.

25. The Landfill Directive requires that landfill gas shall be collected from all landfills receiving biodegradable waste and the landfill gas must be treated and used. If the gas collected cannot be used to produce energy it must be flared. See Annex 1 paragraph 4.

26. The requirement to collect the gas reflects the fact that the production of methane is an integral part of the landfilling of biodegradable waste. The requirement

t use the landfill gas reflects the fact that energy can be obtained from the methane fraction and that this energy should be recovered wherever possible.

27. If the landfill gas cannot be used it must be flared. Flaring means that the landfill gas is burnt at a high temperature (for example 1000°C) under controlled conditions. Methane in the landfill gas is thermally oxidised to carbon dioxide in the flare.

28. Since methane is considered to have a global warming potential of approximately 25 times that of carbon dioxide (the most recent estimate from the Intergovernmental Panel on Climate Change (IPCC): 21 times is still used for methane emission reporting purposes) the oxidation of the methane to carbon dioxide is more significant in the reduction of greenhouse gas emissions than the replacement of fossil fuel though the generation of electricity from the landfill gas.

29. For the purposes of reporting greenhouse gas emissions, the carbon dioxide emissions from landfills are not included, only the methane emissions. This is because the carbon dioxide emissions come from biogenic wastes such as food and paper and so are considered to be part of the natural carbon cycle.

30. The collection of landfill gas is a clear requirement of the Landfill Directive. This means that investment in a landfill gas extraction infrastructure at a landfill is an integral part of the operation of a biodegradable waste landfill. Article 10 of the Landfill Directive requires that these and other costs of operating a landfill should be reflected in the prices charged by the operator. Collecting the landfill gas is an essential part of operating a landfill for biodegradable waste.

31. The Landfill Directive's aims and requirements make it clear that the production of methane is an inevitable and undesirable consequence of landfilling biodegradable waste. The generated gas must be collected and treated to minimise the effect of the environment, including the greenhouse effect. The first preference is for the energy in the landfill gas to be recovered and the utilisation of the methane is part of how a modern landfill should be operated.

32. The Landfill Directive is implemented in England by the Environmental Permitting Regulations and in Scotland by the Landfill (Scotland) Regulations 2003.

(e) The revised Waste Framework Directive 2008/98/EC and landfill tax

33. The Landfill Directive sets out specific rules for waste that is landfilled and for landfills themselves. However, the Waste Framework Directive is the overarching legislation for waste, including waste that is landfilled.

34. The current Waste Framework Directive (commonly referred to as the revised Waste Framework Directive) is Directive 2008/98/EC. This Directive sets out a "waste hierarchy" which ranks waste management options according to what is best for the environment. It gives top priority to preventing waste in the first place. When

waste is created, it gives priority to preparing it for re-use, then recycling, then recovery and last of all disposal. Landfill is at the bottom of the waste hierarchy.

35. Other options for dealing with biodegradable waste capable of generating gas, which are further up the hierarchy, include composting and anaerobic digestion, incineration meeting the energy recovery formula and a variety of other recovery options. These other options are favoured in preference to landfill because more waste materials are recycled or recovered and there is a greater reduction in the emission of greenhouse gases though more efficient technologies.

36. The Government Review of Waste Policy in England was published in June 2011. This states at paragraph 240 that it is clearly wrong to landfill waste that is a potential resource and goes on to say that landfill should be the waste management option of last resort and only for wastes where there is no better use.

37. The review states at paragraph 248 that reducing the amount of biodegradable waste to landfill is one important way of reducing greenhouse gas emissions.

38. Scotland's zero waste plan was launched in June 2010. The vision in the plan '*describes a Scotland where all waste is seen as a resource; Waste is minimised; valuable resources are not disposed of in landfills, and most waste is sorted, leaving only limited amounts to be treated'*. It also states that the *'Scottish Government will aspire to achieve an overall recycling and composting level of 70% and 5% (maximum) landfill for the total Scottish waste arisings by 2025'.*

39. Both governments' policies are clear in setting out that landfill is seen as the least effective means of utilising resources.

(f) The IPPC Directive

40. Directive 2008/1/EC on Integrated Pollution Prevention and Control (the IPPC Directive) applies to those landfills which are neither inert nor very small. The IPCC Directive applies to the Appellants' landfill site. Article 1(2) of the Landfill Directive provides that the relevant technical requirements of the IPPC Directive shall be considered to be met by meeting the requirements of the Landfill Directive.

41. The IPPC Directive is implemented in England by the Environmental Permitting Regulations and in Scotland by The Pollution Prevention and Control (Scotland) Regulations 2000.