

Okay, everybody, it's uh, 10 to 12, so if we can resume, please.

Thank you. Uh, can I just check the live streams up and, and running? Thank you. So, Mr. Doan, um, when we adjourned, I said it'd come back to you. You had a question, I think.

Yes, I do. Thank you very much. We know from the ribbon horse scheme, for example, an Essex, that sometimes when developers propose mixed or integrated waste treatment schemes such as this one, they then subsequently decide that only some elements of that scheme, such as the incinerator element are commercially viable.

This gives rise to problems when the benefits of the development scheme assessed as a whole. Whether the development then proceeds or the applicant wants it to proceed on a piecemeal basis. Uh, so what I'm trying to understand is whether the applicant is applying for an, although nothing development consent where all elements have to be delivered, or if they're reserving the right to only deliver some of the proposed elements, uh, if they get the consent

claybrook for the applicant. Um, in order to respond to Mr. Dome's question, I think the most appropriate place to highlight that is by reference to the draft dco, um, and how that dealt with specifically as part of the requirements. Um, we also have, uh, an indicative phasing plan, which has been referenced already by Mr.

Pyle, but if I may. At this stage, just highlight a couple of the relevant requirements in, in that regard. In terms of the overall delivery of the authorized development. So schedule one to the draft dco, which I, I'm using the updated version as 0 0 6. I don't think there are any material changes, um, to deal with this particular point.

So schedule one of the draft DCO sets out the authorized development, so the main nsip as part of works number one. There are then, um, as Mr. Par is articulated, a number of other associated elements, um, that will form part of the overall project and development. In terms of the specific requirements in schedule two of the draft DCO in particular, I would highlight at this stage we have requirement two.

that provides that the authorized development must not be commenced until we've provided a written scheme setting out the proposed phasing for the entirety of the authorized development. And that needs to be signed off by the relevant planning authority. And then we need to comply with any phasing scheme that is then approved.

So that's the overarching requirement for how, how the project will be delivered in the relevant phases for that. In addition to that, we also have requirement 14, which relates to the access work,

so the new access, um, into the site. And in terms of the timing of delivery of that, the undertaken must not commence development until of the energy part works or the railway reinstatement works until that new access road has been constructed to base course level.

The intention being that obviously we then bring in construction materials and the like and only use the new road in order to then construct the erf. In addition to that. In terms of other conditionality within the draft DCO at requirement 18, we deal in particular with the timing of the delivery of the carbon capture element of the scheme, which is work number one B, and also the concrete block manufacturing facility that recycles the ASH products.

Um, in terms of the residues from the main erf, and requirement 18 two provides that the carbon capture element, the scheme of the scheme, must be constructed and commissioned within six months of the commissioning of the erf. And so in terms of the commitment to the timing of the delivery of that element, that is secured in recom 18 two.

Similarly, work number two B, the concrete block manufacturing facility must also be constructed and commissioned within 12 months of the commissioning of the carbon capture facility. So I think at this stage is, is that helpful? So in terms of how some of those elements are secured and how the phasing will be approved by the planning authority?

Uh, yes. Thank you. So, um, I just see if there are any other issues. Mr. Nicholson.

Simon Nicholson from rain and two things. One, you said that no construction would start before the base course of the road. The base course not being the finished surface. Is that correct?

Clara work on behalf of the applicant. So it's base course level, so it'll be fully constructed, but I may need to defer to, uh, one of my engineering colleagues who can perhaps better describe what that means. Mr. Jones I see is got his hand raised David Jones on behalf of the applicant. Yeah, the base course is, is the course below the wear course, the final finished road surface.

So during construction the final surface would get, um, damaged by the construction traffic. So it's normal practice to take it to base course, then repair that and then put the wearing course on at the end of the scheme. Simon Nicholson, um, from Rain. Yes, I know that. I wanted to get that from you. Um, the, the other point was, um, at.

The original public hearing in Burton upon Trent, uh, Burton upon Staver, um, in 2021. Um, the question was asked on three occasions, very specifically, um, what would be the timescale of opening all the facilities? Um, and it was assured by Mr. Bradley, um, over and over again that it

would either be all or nothing and nothing would, the incinerator wouldn't part of the, um, project, um, wouldn't be started until everything else was ready to go.

It sounds to me as though that timeframe is slipped. Um, I don't understand why such assurances were given at the time and have now, uh, come to variance. Perhaps somebody can explain that.

So, Claire, on behalf of the applicant, it, it may help at this point, Mr. Jones was going to outline the timing of the construction program and to take us through the relevant phases, the time within which it takes to deal with each element of those scheme and, and the timing of that phasing. So it, it may be useful if, if Mr.

Jones articulates that now. Yeah, that'd be helpful. Thank you.

Thank you sir. Thank you Claire. Afternoon all. David Jones on behalf of the applicants. Um, within this section I'll be referring to the following documents, um, 4.9 indicative phasing plan, if they can bring that up onto the screen now please.

So the other documents I'll be referring to is a P 0 6 1, traffic and transport. That's chapter 13. Within the chapter is Appendix D, which is the outline construction logistics plan. And within that document there is another further appendix D, sorry, there's a further appendix C, which is the preliminary phasing plan.

I'll also refer to a P 0 7 4 code of construction practice, a P 0 5 1, project description, section six, construction and commissioning. And the requirement two. Two on on phasing and four on sole management. In the draft dcl a S 0 0 6.

The indicative program that you can see on the screen. Um, and the, and the associated phasing plan have been split into six summary phases containing details of sub phases and in individual construction activities. For the initial sub submission, the program has been prepared time scaling, detailing, um, year numbers and months only.

Obviously, we don't have a start date yet or a consent date once that's in. Um, and at that stage we could have public holidays, um, into the program. At the moment, it's just straight through. The overall period is 1,520 days, which is circuit five years and 10 months, excluding the public holidays, I mention.

Phase one, shown under drawing has seven subsections, A to G, and these are broken down as follows. Phase one A, which is 350 days preparation of the contractors compounds main and secondary, including cow parks and welfare facilities, construction of the new perimeter road and B 1 2 16 road junction construction of the new gate.

House one B is 244 days, which is demolition works including the removal of the northern and eastern sheds. And Belvin house on C is 210 days, which is a stutterer old service. Diversions

on D is the construction of the new substation and the installation of the export cable to s Schor. Including modifications to the existing substation. That's 240 days. One E is 270 days, which is a services installation including district heating, pipe work, and construction of the new main access road from Junction three to Studer Road

one F is 300 days, which is the rail works, including alterations to the existing drug and deciding upgrades to the existing rail line and structures and construction of the connection to the ERF one G is 200 days flood alleviation. Measures to the northern and western flood bond along first avenue.

Phase one in its entirety will have a duration of 700 days with five of the six elements running concurrently. The exception being one D, the export cable to sku.

Phase two comprises two subsections, construction of the ERF and carbon capture uses in storage facility and construction of the visitor center. The ERF and CC US construction period is 1020 days with the visitor center running cons concurrently for a period of 175 days. The overall period for this phase is thus 1020 days in total.

Phase three is a single phase which involves a construction of the residue handling and treatment facility, and it has a duration of 340 days. Phase four is a dual phase comprising of the constructions of the hydrogen gas above ground installations and the battery storage facility, and this at period of 280.

Phase five is again a dual phase, which incorporates the construction of the concrete block manufacturing facility along with the plastics recycling plants total 325 days. Phase six is another single phase which covers the remainder of the district heating installation along the A 10 77 B 1430, B 1431, and that totals 570 days.

Key milestone on the program is Q is the UM, completion and commission of the erf, which has shown as Q2 in year five.

The majority of our program phases are currently primarily driven by the excavation process in each of the phased areas. This gives us the best opportunity to resource level horizons and manage any imported material volumes. Detailed designs are of course way off at this stage. But early assessment, they've given an indication volumes of five, 577,000 cubic meters of arising, most of which will be reused on the sites rather than reused or treated and reused.

To confirm our final strategy of soil management soil management plan will be prepared as part of the construction environmental management plan SE in accordance with the requirement four of the draft dcl. The outline SMP is currently detailed in Appendix J of the code of construction practice.

The final phasing of the scheme will be submitted to the local panel planning of authority for approval in accordance with requirement two of the draft dcl. I'll take any questions now. Thank you. Um, I understand that phasing program and the detail of. How each element follows one from the other where, and that you'll submit that phasing program to the local authority for approval.

But is that intended to be worded in such a way that commits you to delivery of each of the elements,

David Jones, on behalf of the applicant? Yes. It will commit us to delivery of each of the elements and they'll be phased in, um, with the natural progression as well. So the elements come online, I think. Sorry, so if I may add as, as as well, uh, just to add to the points I made in terms of what we currently have within the draft DCO and appreciating, we have a session on that tomorrow as well, but very happy to, to deal with, with your question, um, if I've understood it correctly.

So in terms of the main energy recovery facility that forms part of work, number one. The main nip and, um, I will defer to my calling Mr. Beza in terms of any technical, uh, responses as to why we are doing it in a particular sequence and why commissioning of the erf, for example, needs to take place in conjunction then with the delivery, the carbon capture facility.

But in terms of, um, the key elements we've, we've dealt with the timing of the delivery of the access road and how that is secured in the dco. Also carbon capture and the concrete block manufacturing facility in terms of the use of the wharf, which again will come to later on in today's session. Um, as you'll be aware, there are no physical works as such that are required in order for the applicant to utilize, um, the wharf for importing and exporting either, um, film material and or waste materials.

Clearly there needs to be an interaction with, um, ABP as Harbor Master in terms of. Contractual agreement for booking in relevant, um, transport vessels, uh, to utilize the wharf, but there's no physical development works that are required and, and that's made clear in, in the application. Then turning to the delivery of the railway reinstatement works again, if I may.

Um, Mr. Gallup will deal with that later on in today's session. And we've anticipated, um, the questions around that that then will leave the plastic recycling facility, um, which at this juncture we haven't committed to a precise set of timing for when that will be delivered in the sequencing save for the proposed, um, outline phasing that we have and the requirement to agree, um, that overall phasing with the relevant planning authority.

Clearly, in part, that is dependent on securing a technology provider. And relevant contracts. So there is a, there's an element of the commercial market drivers and Solar 20 one's ability to deliver that facility, but we again can address any further questions that may arise on that. And then finally, in terms of the district heating network and the private wire network, Mr.

Jones has referred to the proposed phasing and timing of that and the rationale for why. Um, as part of that phase one, we are delivering the access road, it will make sense to deliver the aspects associated with the district heating and the private y network at the same time. So that will happen in conjunction, but then in terms of the full extent of the grid connection, that takes us to schul North and that's part of the northern arm.

Um, also of the district heating and private wire network. We are in part dependent upon the. Timing of the works that Northern Power grid will need to do to that substation and any necessary upgrade works. But clearly we won't be in a position to operate the ERF lessen until that cable route has been provided and the works, um, given that they are, they're on the same corridor for the heating and the private wine network will also happen at the same time.

So if that helps as an overview in terms of commitments and dependencies, but we can take any further points away either in this session or, or during the course of tomorrow. I think, I think it is helpful in so far as it goes, but you'll recognize from what you said at the introductory element, the DCO makes specific commitments and timings for the concrete, uh, block manufacturing and the carbon capture, but it doesn't then go beyond that for the various other component parts.

So it's then. , understanding how your phasing plan will provide that degree of commitment, um, so that we can be confident that all of those elements are coming through and ultimately the Secretary of State can assess the scheme based on the confidence of those elements being delivered, um, as an overall package.

So it's, it's how that runs through when we won't have, I, I'm assuming, uh, because of the way it's worded for submission for approval by the local authority in due course, uh, that final document to present to the Secretary of State. Um, so it's about how you can give assurance, um, through either a, a draft document or something else that gives everyone the confidence that those mechanisms are in place for.

Delivery and provide that certainty. Yes, uh, completely understood and, and very happy to address that further. Thank you. Okay. I think, um, there was a couple of questions I had from the earlier, uh, presentation. Um, I think I, if I've understood it correctly, you have suggested that the amount of plastic that would go through the energy recycling facility would be reduced, uh, if the plastic recycling facility is in place.

Have I understood that correctly?

Claire Brook for the applicant? I believe you have understood that correctly, sir. Yes. So, so where's, what evidence are you relying on that justifies that state? I, I can understand the sort of basic logic of it, but, uh, part of me slightly cynical perhaps suggests that, uh, there could be completely separate streams of, uh, product coming to the site.

And how do we know with certainty that what is going into the energy recycling facility would have a reduced plastic content? Do you wanna say anything about, uh, Simon and Monier for the applicant? Um, so mean, the honest answer to that is we don't know because we're dealing with, you know, what the response of waste producers is in the future and the commercial market that the facility will operate within.

However, when I was speaking earlier, I, I pointed out how significant is the change in recycling rates we need from where we are today to the 65% target for 2035? In order to achieve that sort of increase in recycling rate, we are going to need to see plastics separated from all sorts of wastes, almost all arising of mixed wastes, where currently plastics are not separated, we'll need to work hard to separate those wastes in order to achieve that very substantial target.

And therefore a customer of the facility who's sending their residual waste RDF to the facility is also then likely to have a separated plastic waste stream at the same time. Perhaps not universally, but one would expect the very significant proportion, uh, um, majority of sources to be needing to separate their plastics to some degree.

I, I can understand that, but it doesn't quite follow, does it, that having the plastic refi recycling facility actually creates that. Um, improved recycling, improved, uh, incineration content. Uh, hopefully I'm making myself clear, uh, because what you're saying to me is that if we're going to achieve these targets, they're gonna have to do that anyway,

so I'm in a money for the applicant. Um, yes sir, that's right. But one can expect there to be strong relationships between the waste producer, the waste handler, and the facility, which you would expect to make it likely, you know, we can't be certain about this, but to make it likely that they would take advantage of the sing that single relationship to, for the management of the variety of waste that then produce.

But, you know, there, there has to be a degree of speculation here. Because it, we, we are dealing with the future and those plastic wastes are not separated at the moment. That's helpful. That's understood. I think the other question, um, that comes to mind from what was said, uh, hydrogen injection not currently allowed into the gas system.

I think that was what was said. And so

right? So the first penalty,

Yeah. Uh, so, uh, where was the hydrogen injection? So at the moment, I think you're saying that that isn't allowed into the gas system, that's not a, a proven size and saw an adopted process as yet. So do you know what timeframe is being investigated to look at, uh, that as an option that could occur? And also following on from that, what weight can we attribute to this possibility in providing a report to the Secretary of State,

uh, Cal Beza on behalf of the applicant? So the moment, the limit of natural gas on a volume basis, so the limit of hydrogen, rather on a volume basis with the gas grid is 0.1%, primarily driven by the transition from coal gas to natural gas in the 1960s. There are targets from government to increase this to around 20%.

Um, I can't give exact dates at this moment, and we'll get back to you with those dates. Uh, the current issues are surrounding, uh, material science and, um, compatibility with hydrogen of end users within the gas grid.

But there are government programs that are investigating reuse of significant portions of the gas network as as built. or upgrading sections such that they could take hydrogen.



So if I may, um, have Claire Brook on behalf of the applicant, we do know that as part of the East Coast cluster that does incorporate, uh, a hydrogen pipeline as well. And secondly, um, in relation to the proposal for hydrogen refueling, that's one of the alternate uses for the hydrogen if it's not injected into the grid.

In the meantime, clearly that is also dependent upon hydrogen vehicles. And as part of our discussions in terms of how the project has evolved, north Lincolnshire Council, um, and I don't want to speak for them, uh, clearly in the longer term would be looking. Things like hydrogen buses and the like. So yes, this is looking to the future.

The intention is that this is an scheme that enables as part of a single application, which is encouraged by the government to deliver those elements, but clearly in than until, um, we have hydrogen vehicles and or the ability, um, to use the cluster pipeline, um, that, that is looking into the future.

Yes. Thank you council, back council. A mar coming back on what you said earlier about waste will be coming into this facility North links from many different stream. Surely, um, it has to be considered that that's flying in the face of treating waste as near as possible to its source. It, it, it just, it's contradictory, um, to say the least.

Um, so I'd like particular, um, concentration to, to be given on that. Um, but I mean, the residents of, of Bur and Winton borough, Winton, to be quite honest, have, have had their fill excused upon, uh, the fill of, of landfill sites. I mean, by all means, let's be self sufficient. That's, that's what we want to be in our waste strategy.

Um, but not accepting waste from other areas. That's all I've got to say. Thank you. Just making a point. Okay. Well, I don't think I would need the applicant to respond to that. I under, I'd send that position.

Yes. Mr. Nicholson. Simon Nicholson from rain. Um, two questions. One, you said waste materials going out via the wharf. Again, that goes back, flies in the face of an original statement that there would be, it would be an incoming, the only thing that would be leaving would be raw mater, uh, raw materials for construction or electricity or heat or, um, hydrogen.

I think if I can intervene, we're going to be dealing with the use of the wharf, uh, later agenda items. So if we, if we can cover that, then that would be helpful. No problem at all. Okay. Um, and the, the other one was, um, plastics and hydrogen now seem to be at this point in time. Seem to be hypotheticals rather than definites, depending on outside influences rather than existing

technologies that can be implemented directly along with the other elements of the, the, uh, proposal.

Uh, again, I think we've heard what the applicant said and, and you've heard it too. So again, I wouldn't invite the applicant to respond further. Uh, I, I think what we are going to need to do is, you obviously have lots and lots of questions and, um, I, my desire would be for you to be putting those in writing for the applicant to respond in writing rather than using examination time in doing that because I dunno how helpful it is in, in carrying on, in, in this vein.

I think that, um, You know, it, it isn't a sort of a cross examination exercise. It's not like a public inquiry under the Town and Country Planning Act. What we are trying to do is to have a constructive dialogue in, in an inquisitorial way, rather than a sort of conflict of questions and answers. So, um, I don't want to cut you off, but it's just about understanding the process and getting the best out of it as far as we can.

Okay? Okay. Thank you.

Okay. Um, I just, uh, I don't believe there's any other hands up or any other parties. I'll just clarify. Are there any other parties wishing to say anything in addition at this point, on this topic?

Yeah. Thank you sir. Andrew Law Council, um, maybe a point that's already been covered, but just sort of to clarify, um, the proposal is for so separation of, of the plastic. Um, just trying to understand then, I suppose why the, why the plastic recycling facility is actually required on, on the site. Would that plastic be able to go elsewhere?

I suppose just trying to understand the actual link between the plastic recycling facility and the, the principle development.

I'll ask the applicant to respond. Thank you, Ty Brooke, on behalf of the applicant. We, we can certainly provide more information in relation to that. Um, what it might be helpful, uh, to, to say is that in terms of, I guess the benefits of co-location, certainly waste management policy, Supports co-location of facilities and that is generally promoted.

We've clearly had regards, uh, to the guidance on associated development, um, in defining the, the relative elements of the scheme. And paragraph nine in particular does encourage applicants so far as possible to make a single application where there is some connection between those

components in particular as well for the plastic recycling facility, we can give further information on, on the source of that material and why, uh, the same suppliers may be able to provide source segregated plastics as Mr.

Oman has already referred. But also, um, paragraph six again, of, of the guidance on associated developments does refer to similar types of development. That may well be located within the same scheme. I also have, um, made reference to e n three in particular, and note, for example, 2.5 point 15 of e n three does refer to the potential for a waste transfer station, for example, as being something that could sit alongside an energy from waste facility.

So the drivers for colocation and the benefits derived from that are relevant Also in terms of the number of plastic recycling facilities that we currently have in the UK are in standards fairly limited. We can provide detail if required, sir. And one of the other benefits of co-location here is that the energy, um, and the, the energy required to operate the plastic recycling facility is taken from the erf.

So that synergy and that ability to make that more efficient and viable is clearly an additional factor for that colocation and the rationale for it. Uh,

thank you.

Okay. So if I move on to, um,

to, so our, our next question is just in terms of the components, um, that you've got within the energy part. Um,

you've obviously set out a phasing arrangement for each of those, and we've talked about that already. Um,

is there a, within the documentation now, um, an explanation of that phasing arrangement that you can point us? If you can't just now, that's fine. But if in the written summary that would be helpful. So we can certainly point to the best references, but it may be that Mr. Jones can reference those now.

Yeah. David Jones on behalf of the a on behalf of the applicants, the reference documents at the start of my presentation cover, the phasing works, the construction of all of the elements. So I can repeat those if you want. That's fine. I've got a note of those. Thank you. But most of the script is in there around how it's going to be constructed and, and when.

Okay. Thank you very much.

Uh, okay. Well, I'll, I'll just transfer to Dr. Brewer who can continue, I think on the next item, which is item five.

Right. Thank you. Um, Mr. Moore, um, as you'll see from item five, um, the wish was to explore in a bit more detail, um, the composition of the waste, um, to view as fuel, um, where it's being sourced from, um, how you control it, how, how you tend to control it, and, um, how things might change over time. Now, I'm quite conscious that we, I think it's fair to say there was some discussion on some of this earlier.

So I think if I can, I, I imagine you have prepared some additional material for this, so I just, just like to make sure that we concentrate on new information or information we haven't already heard today, um, in, in, um, your responses. Um, and, and take, take those items in, in the, the order they are if we can.

Yes. So cla on behalf of the applicant, um, Mr. Amani will deal with the first item. I will provide some information in relation to the second item, and we may speak together on that. And then the third item, again, I will defer back to Mr. Oman. So, um, I'll now pass Mr. Moe to deal with the composition point.

Simon Imani on behalf of the, um, applicant. I, I will try, sir. Not to repeat the, the points that we've covered before, but one worth of stating is, is the inevitable uncertainty about was arisings in the future that will become, um, the, um, the fuel for, for the facility. Um, we know, um, from waste composition analyses in the past that there is an inherent variability, um, in the competition of waste.

But we also know that we can quite reliably understand what are its main material components and their typical ranges. In residual waste at the micro level, if you sample, um, my household bin residual bin, uh, from one week to the next, or one fortnight to the next, since I have fortnightly collections, there will be, uh, variation.

But over the long term, um, there's a lot of similarity in the materials that we find there. Uh, and the relative composition of the whole. And that's true as we bulk up by waste management round, uh, by commercial and industrial premises and the way they produce wastes, um, and the aggregated waste for, um, a district authority and indeed, um, larger aggregations of municipal wastes.

Um, so what we've done, um, in our assessment of, um, uh, the greenhouse gas or carbon balance for the facility, which is where we needed to have an assumed waste composition for the future. Is to draw upon, uh, reported composition analysis, uh, re uh, recent, uh, reports for both household, uh, residual waste and commercial and industrial, uh, residual waste.

Uh, we've taken those compositions assumed of 50 50 split in the waste, uh, received by the plant. Um, and then also assumed that because there will be processing to produce an rdf, uh, there is some, um, removals from that combined waste stream. And we can provide the, the compositional breakdown that we used in this analysis for those who are interested.

And the manipulation of the reported data, um, focuses on what, uh, are the key policy measures we can see being implemented now that will affect. , the composition of waste in the coming years, albeit perhaps not through to 2035 and beyond. And those are, um, an increase in, um, um, dealing with the food waste issue.

I, there's less food waste in both commercial wastes and household wastes. And also, um, the implementation of kitchen waste collections, which is a key policy measure. So the overall effect, uh, of that will be to reduce, um, the amount of residual food waste, um, that we see in the, the fuel delivered to the plant.

Um, the other policy area that we've, um, uh, made some assumptions about in uh, coming up with a residual composition for the waste, uh, are measures that address. The plastic waste component. We've already talked about that. I won't go back over that point, but we would expect both a reduction in the use in the economy of single use plastics.

I think we're all aware of, uh, those sorts of measures. And also an increase in separation of end of life plastics for recycling, the net effect of which will be to reduce the plastic, uh, component that we see in the waste as well. Um, so that's how we came up with our, um, residual composition. Um, in practice, um, the facility will have the opportunity to some degree, um, to select waste the, the comp, uh, by source waste with particular compositions.

It will have an enthusiasm, if you like, an an ambition, uh, for waste with certain compositions over waste, with other compositions. And that may affect how. It does business in the future. You know, ultimately if there's a very low quality rdf, uh, that a waste provider wishes to have managed at the facility, that will be less attractive to the applicant than one that is reliable in its composition, has a suitable calorific value and so on.

Um, but further to that point, um, the facility will also be able to blend, um, the waste that it receives in order to, uh, smooth out variations in composition. So typically energy from waste facilities mix the waste they receive from one load to another, and indeed from one day to another in order to try and achieve, uh, a relatively, um, constant composition.

And in particular, um, calorific value. Um, the, um, the calorific value that the facility has, has, it's the. Um, the sort of base case for its design is 14 mega joles per kilogram. And the waste composition assumption that I was talking about before for the purposes of the greenhouse gas analysis has also had as an outcome of that manipulation, the, the ideal of coming up with the same calif value.

So we have, um, realistic a composition that delivers the calorific value. That's the base case for the design of the facility. Uh, as, as well in practice, as I'm sure you know, the facility can deal with a range of calorific value of the fuel it receives. So in practice, the waste does not have to be homogenous.

It can vary from day to day, week to week, month to month, and so on. With the calorific value going up and down, it can still handle that. . The effect of that though may be that the amount of waste that the facility has as its throughput may also vary from the base case. Um, so in terms of the variation, um, in composition, um, I mentioned the expectation that kitchen wastes will fall.

I mentioned the expectation that plastic wastes will also fall because we are, um, using less, um, single use plastics, and we are also separating more plastics for recycling because of their value and fossil carbon content. A couple of other issues we expect to see, uh, is a, uh, increasing use of biomaterials.

So we saw this through, uh, the covid pandemic increase in, um, cardboard packaging. . Um, and also an interest, albeit at a small level, uh, at the moment in Biopolymers. So these are plastics produced from biomass resources like sugar cane residues, um, and, um, um, various biomass crops as well. So there will be an increase in the proportion of those wastes, sorry, the proportion of plastics produced from biomaterials over time.

And then lastly, in terms of composition, um, and you probably had enough by now already, is the focus on metal separation. So metals are valuable. Um, we separate quite a reasonable proportion of metals at the moment in commercial premises and in households, but there is still, um, a residual level of metals.

Um, and um, it is likely that. As recycling rates increase, there's going to be a disproportionate focus on those metals because of their value. Um, and there are various other sort of policy measures around the rarity of some of those metals and their price that we can seem to be expressed as well. Thank you for that very comprehensive, detailed answer.

Um, can I invite others to, um, to, to any, ask any questions, comments on, on what you've heard,

Simon Nicholson from Rain. Um, I'm conscious that I'm asking a lot of questions. Um, you mentioned biomass and biomass based plastics in the future. Um, will it not be the case that as time goes on all biomass, whether it be food waste or whatever, will not. Go to landfill, but will be digested to produce methane and generate electricity.

In other words, taking it what, sorry? Taking it away from, um, from the need for incineration, uh, Simon and Mane for the applicant. Um, what I'm talking about here is largely, um, the use of biomass as a replacement source of material for, um, a conventional plastic or, um, other packaging type of, of, um, product.

So, I know this is glass bottle, but if it was a plastic bottle, it will still be a p e t bottle. But rather than produced from oil as its fundamental resource, it'll be produced from biomass. So, so it will still be recyclable and separable. It wouldn't be appropriate to send it to a digester. So, so we're not talking about biomass in terms of a degradable product.

We're talking about biomaterials as in a replacement for some other solid and largely non biodegradable product.

Anybody online? Yes. I can see a hand up there. I can see a hand up. Um, Mr. Devon, would you like to ask your question? Yes. Uh, this is Josh. Do from UK win this time. I have several questions about the post V dot composition. Would it be okay for me to ask these questions once at a time, or you prefer me to ask them all in one go and then repeat if necessary?

I, I, I think I'm gonna suggest one at a time, um, Mr. Dunn. Um, hopefully then they're quite short and we can understand them easier and, and the applicant can respond. Um, is that, will that be okay with you? Yep. Okay. . Excellent. So the first question is just to follow up from what, uh, was just said by Mr. Mane, uh, which is, he was, he was talking about, uh, recyclable bioplastic, if I'm right, what he's, what previously I thought he was talking about what would be the potential fee stop for the incinerator?

So, I, I would like to take it is, is saying that the their auditor would be burning recycle bioplastics or that there would be less vock available cause plastics would be converted into recycled bioplastics and then wouldn't be available Simon and Moe for the applicant. I, I was using the bioplastic bottle as an example of the use of bioplastics.

It wasn't in any way intended to be reflecting on the composition of the waste fuel.

Okay, thanks. Uh, my second question is, you said that you would provide compositional breakdowns. Uh, we would be interested in those breakdowns. Am I correct that you, that the applicant has not provided V dot composition data to date the examination? Uh, and we don't currently have information on each waste fraction, including the anticipated proportion.

That would be dense plastic, plastic, film, textiles, et cetera, and the carbon content for each of those fractions, uh, and the b content and the ddoc or the grade wall decom both organic content. But that is something that we can expect, uh, to be able to better understand your carbon assessment and the, the basis for it, Simon and Mone on behalf of the applicant.

Um, I think that's, um, a set of topics and data that's best dealt with when we come to the. Greenhouse gas assessment and carbon balance is part of climate change rather than in relation to the composition of, uh, waste and, and its sources that we're dealing with today. But yes, those data, um, will be available.

Is the expectation that they'll be available at deadline one

in terms of compositional waste sources, in terms of what assumptions have been made at this stage. For the purposes of the EIA assessment, clearly what will happen, um, and I should say there will also be a permit for the facility and there will be a requirement to provide full details and analysis on a, an annual basis of actual wastes accepted, and the mechanism for controlling waste types will also be dealt with in the permit.



I can come onto that under the controlled point shortly. I'm not quite sure in terms of what composition waste information we would need to provide in addition to the assessments and the assumptions already made as part of the eia. Unless I've misunderstood apologies. No, I think he's, sorry Mr. Doe, I think he's just seeking clarification really is to what information has been provided to date and what additional information might be expected.

Uh, cuz there's an indication that more information's going to be made available and so I was just seeking clarification of when we might expect to see that. Um, and hopefully that will help Mr. Doe and, and other interested parties in understanding the various component parts of the waste and as he says, the various fractions,

Simon. Yeah. Simon Amani on behalf of the applicant. We, we, we would we'll check, um, within the team in the lunch breaks, uh, uh, to establish what, um, hasn't been provided that would be helpful to that discussion. I don't see any reason why it couldn't be provided by deadline one if there's any gap. Thank you, Mr.

Doe. Yeah. To buy some more context on what I was referring to on table five, on page 31 of the applicants environmental statement chapter climate is e P oh five four. We refer to various waste fractions within the, the context of the waste characteristics as received at the er rare, and the preceding paragraph.

Explain how those were derived, but there's no actual explanation of the end result of that process of after they followed that, where did they end up with in terms of the percentages of each fraction. That is then fed into the rest of the modeling process. For example, dense plastic. Yes. For example, the percentage of dense plastic and the percentage of food waste and so on.

Yeah. Claybrook on behalf of the applicant. Certainly, I think perhaps to cut through this, clearly there's certain amount of information that is provided. If Mr Down has a specific question, then it's perhaps better if he raises that as part of his written rep or out. With this process, we're very happy to signpost or provide whatever information is required to demonstrate how we have assessed the project at this point in terms of the composition of the waste and the assumptions that have been made.

Yeah. And I, I think that that's, that's fine, but may also be helpful because um, you'll have the opportunity to engage with each other in looking at a statement of common ground. And it may well be that this detailed questioning of. Content and fractions could be something that's covered within that so that we can understand both parties positions with regard to that precise detail, um, whether it ends up being agreed or not.

Um, but ultimately that I think that could be a helpful, uh, line of, uh, conversation between, between you. Mr. Do, uh, thank, thank you very much, sir. Um, there's, there's kind of two more questions that we can either hopefully be answered now or, or I save for the processes, but it's good to kind of flag them now for everyone's benefit.

Uh, Mr. Mane said that metals were valuable, uh, in the process of converting waste. Tofu, deriv fuel, far metals can be removed using magnets and non-ferrous metals can be removed using s those are kind of the industry terms for it. In the applicant's environmental statement chapter on climate, ADP oh five four, uh, paragraphs 5.4, 0.2 point 13 states that the RDF production process involves a removal of Farris metal, but no explicit references made to the removal of non-ferrous metal.

And so I'm, it would be useful to understand in the context of composition where the applicant assumes that no non-fat metal would be removed during the RDF production process. And if so, the basis of that assumption, uh, or if there was an assumption that it just wasn't clearly stated. Um, and that's kind of relevant to the kind of end process with, in terms of how much metal can be recycled at the end of the process is relevant cause that that's dictated by how much be removed, how be removed at the end of the process if it's already been removed prior to it being received at the site.

And so we've kind of got some concerns that they. Applicant is expecting to be extracting around 62% more metals at the end of the process than an equivalent facility in North Lincoln here, sorry, equivalent at the Infinium Ferry site. And we're kind of trying to understand why they're expecting so much metal in the, in, in the bottom arch compared to other RDA Iterators as it were.

You can then impact on the Climate King benefits of it, 30 Simon on the, on behalf of the applicant. Um, it's probably best to wait until you have any other information we need to provide you with Mr. Doon before we try to go into that in too much detail. Um, RDF will be sourced from a number of, um, uh, providers, um, some of whom we know of, others we probably don't know of.

Um, we're also dealing with a waste composition in the future, which is inherently difficult to predict. What I can assure you of is that we haven't double counted the methods. Uh, I think that would be creative accountancy that would be fairly clear to all if we had done that.

Okay. I look forward to seeing that more detail. Uh, and then just as a, as a last question, you mentioned the plastics protest facility facility before. Are you expect, are you expecting any rejects from this protest to be incinerated on site? In which, so if so, kind of what scale are we expecting

Simon and Mone on behalf of the applicant? Um, yes. One would expect there to be a reject rate from plastic source separated plastics received at the site, uh, in the plastics recycling. as is the case with any, uh, material recycling facility, um, no matter what material it's handling, there'll be a reject rate for paper that's recycled glass, that's recycled kitchen waste, that's recycled or composted and, and, and so on.

Um, we haven't taken into account, uh, that material in the greenhouse gas balance or factored it back into the composition. Um, there is only, uh, a maximum of 25,000 tons of plastics, um, uh, uh, expected to be managed at the site. The reject rate from that might be a small number of percentage points one would expect from experience elsewhere.

So it will be, um, a pretty insignificant amount of plastic to put back into the RDF stream for combustion. Uh, and wouldn't materially affect the, the, the composition assumptions that we've made. And so CLE book on behalf of the applicant, I can provide a, a direct reference, um, within a p p 51, which is chapter six of the environmental statement, where we deal with the throughput for the plastic recycling facility.

Paragraph 3.2, 0.3 0.9 confirms that the assumptions are that approximately 24,000 tons of the 25 would be clean and reusable plastics that could be produced on a per annum basis. Approximately 500 tons per annum of metals would be produced for recycling. And then as Mr. Omani has highlighted a very small amount, approximately 500 tons would be unsuitable, oversized material that would then be redirected to the energy recovery facility.

So those are the current assumptions within the eia.

Right? Thank you so far. Any more questions? Any other interested parties? No. Shall we move on to the um, the second point of the sea, which I think you offered to, uh, you would. Oh, site, site, sorry, Simon And money on behalf of the applicant. Um, you're not done with me yet, I'm afraid cuz I was gonna say something about the source of the waste at this stage, if that's alright.

And I'd already made the point that we don't know precisely where the RDF fuel is going to come from and one would expect it to vary. However, again, as you would probably expect, um, the applicant has been in discussion with, uh, a number of providers of waste locally, um, and, um, has made good progress.

With, uh, draft memoranda of understanding, uh, to the tune of approximately half a million tons of waste, uh, fuel as I understand it, um, with early discussions concerning, uh, a total of approximately another 300,000 tons of waste per Anna. Um, so those sources, uh, we have some sight of, albeit of course, it's much too early for there to be a contract in place or to rely on all of those, uh, discussions to, to yield fuel.

Um, however, it's pretty encouraging in terms of knowing that we have access to the fuel we need, um, that we have some understanding of what the RDF looks like. Albeit there won't be composition analyses to back that up, just to jump in before somebody asks the question. Um, and, um, the, the waste is, um, , uh, provided by, in most cases, a somebody who, uh, is comparatively local to the site.

Um, oh. So yes. Okay. Any, any responses to that Yes. Aspect? Yes. If, if I may, please. Uh, council Marper. Um, yeah, again, we get back to the, the source. Now you are saying it will be comparatively local. What is your idea of comparatively local with regard to this area and North Lincolnshire? Because I did know on one of your original documents, um, every reference to this area was, uh, referring to it as Northeast Lincolnshire.

We are not Northeast Lincolnshire has been corrected now, um, and, and East has been taken out of it and in the revised draft tracks draft. Um, but I think our. Um, impression of local and your impression of local are two different things. So just like that clarified. Thank you. I'm, I'm, I'm, I think I'm anticipating that, that this revised amended RDF or we have fuel assessment report will, will address all a number of these points, all of these points that, or these recurring points if I can call 'em that.

Uh, thank you sir. Simon Amm on behalf of the applicant. I, I mean, I'll need to talk to the rest of the team and, and my client about what they are able to reveal in terms of the discussions around memoranda of understanding. So this is pre contractual and is clearly public domain and therefore risks commercial sensitivity in terms of what can be revealed.

So we will do our best to provide some sort of envelope within which those waste providers can be, um, pegged geographically, if I can put it that way.

Um, yeah. Mr. Nicholson. Yeah. Um, I understand there's some variance on the, the, uh, volume of RDF that you are planning to, uh, consume. Um, the initial proposal was 750,000 tons in your latest proposal, it's 650. Um, you've just stated that there's now 800,000 in me, Inre in memorandums. Can you clarify a bit on what the actual capacity required will be, Simon Amani on behalf of the applicant?

I, I'll, I'll take the last bit of your question if, if that's right Mr. Holson first and then pass over to, to colleagues on this side of the room. Um, the 800 is a total, um, amount of waste, um, with which my client is talking to waste providers about, it's not an amount of waste that will be received at the site.

It's access to fuel from a market. At the moment, that's 800,000 tons of waste a year. Maybe I haven't explained that very well. Um, it's like going into a supermarket and not buying all the crisps, but just buying the one packet that you want and that, maybe that's not a very good analogy. Uh, but we have discussions with potential providers a long time before we establish contracts for the fuel that will actually be received by the facility.

So some of those potential memoranda, understanding, as I said, they're in development, they're not in place. Some of those one would expect to fall by the wayside. And in other cases, there may be a relationship with a provider only for a proportion of what they have access to. So let's say we have a provider who is dealing with a hundred thousand tons of, of waste.

They may not provide fuel to the site in due course. They may provide a hundred thousand tons of waste to the site. Or we may say we want to take 80,000 tons or whatever the figure might be. So there's a lot of flexibility about that sourcing discussion in relation to the design and throughput of the site, I, I need to hand over to other members of the team, Claire Brook, on behalf of the applicant.

Um, again, if it assists, I can signpost the reference again within the EIA chapter six, a P 51. I dunno if this is a sole reference, but there is a reference at, um, in section 3.2, 0.2 0.3. that confirms that the overall capacity of the facility in, in waste tonnage terms, uh, it has the ability to convert up to 760,000 turns.

That figure is, is not itself specified within the dco. That's not a requirement given it's a generating station. We're obliged to refer to the megawatt capacity in terms of energy generated. I think if there are any further questions on the range that we might seek to have in terms of the blend and the composition and the actual turn is that clearly will be dependent on the actual operation of the facility, but certainly in terms of overall capacity, that that's the position.

Thank you. That's helpful. I think, um, have we any more questions or, I, I can clearly see we will return to this topic in, in more detail in due course and we will. I think I felt that we look forward to receiving as much information as you are able to provide us with in terms of sourcing and location and that type.

Um, I realize we've still got the second part of this, so, but I think if we perhaps draw a line then move on to the next component of this question because, um, I'm conscious of those of the time a bit. So press on for now. Yeah.

Thank you sir. Um, Clara, on behalf of the applicant, I was only proposing to deal with the second element, um, fairly briefly that relates to what controls will be in place to manage the content of the fuel. And I, I think by reference to controls, again, it's reference to what may be contained within the draft dco, um, and perhaps any other controls that are relevant.

So firstly, I wanted to. Make the point that the waste that can be taken at the energy recovery facility will be primarily regulated pursuant to an environmental permit to be granted by the environment Agency for the facility. In addition to requiring a DCO permit, we will also require that permit in order to commission and operate the facility.

We can address again questions I think as part of um, the examination in terms of where we are currently at in applying for that permit. But I think it's important to recognize that that will be a significant control mechanism for dealing with the waste that can be taken at the facility. In particular, the permit will require a precise list of every single waste code that can be accepted at the facility and that is ordinarily specified by reference to what are called.

E wc European Waste Code references. There will also be a number of controls and requirements on the permit of itself that will deal with the waste hierarchy and compliance with that, but also, um, ensuring that wastes are not taken at the facility that are otherwise capable of being recycled. So I think it's important to recognize that those mechanisms for control will exist alongside, um, the dco.

Currently, I've already referenced, I believe, I think requirement 15, which deals with the fuel type and, and the control proposed currently in our draft dco. I think the only the points that are perhaps worth referencing, uh, for your notes says are additional legal requirements and policy requirements as well.

So there is, um, within the Waste Management Regulations 2011, you'll be familiar, I suspect, with the duty in relation to the waste hierarchy that's Regulation 12. And in essence, that places a duty on any establishment or undertaking that is dealing with waste right from its production all the way through to any ultimate disposal, recycling, or recovery.

So that obligation as a matter of law will fall on the applicant, but also fall on all of the waste producers that we will be dealing with. And that's as, as a consequence of that why it tends to be referenced in particular, as well as a legal requirement in the permit itself.

And then just to reference a couple of paragraphs, which you may find helpful to refer to, says in e n one, just to draw your attention to paragraphs four point 10.3. and four point 10.5 in particular. And within those paragraphs, it outlines the respective processes that are relevant to the DCO in terms of determining the use of land and the relevant process for the permit in terms of, in particular, controlling emissions, waste inputs, uh, and the likes.

So I, I merely draw those two attention at this stage. So that was all I was proposing to say at this juncture is that is sufficient and assisted. That's, that's helpful. Thank you. Um, I, I do see we have a hand, um, um, Mr. Doen, do you want to, um, ask the question? Yes. This is Josh doin from uk. W uh, if I'm right, you were referring to, was it, uh, 12 of the waste regulations 2011.

In which case the, you're talking about applying relation to production in, in every stage of the process. But if I'm correct, it only applies on the transfer of waste. So it, it relates to how you transfer the waste rather than, for example, how you collect it in the first place or, and, and so on.

Want to respond to that point? I think we can provide a, a copy of Regulation 12, um, as part of our response in terms of the extent of that obligation and who it relates to. But it does relate to any undertaking that imports, produces, collects, transports, recovers or disposes. So, and this links in also with the duty of care that, um, is outlined in section 34 of the environmental protection at 1990.

So again, that duty of care is a, effectively a cradle to. Duty that is imposed on anybody that produces the waste right through to anybody that then disposes, recovers, or recycles the waste. So both the waste hierarchy, legal requirement and the duty of care are ongoing looking forwards, looking back in terms of ensuring that everybody that deals with waste to every point complies with both of those aspects.

Thank you. Um, Mr. Dun, your hands still up is a supplementary question. You know, it just a supplementary question. I suppose what you were referring to there was who it applies to, what I was talking about is when it applies and in my understanding, uh, 12 only. On the transfer of waste, so only refers to a very small subsection of the activities of those, uh, organizations, and therefore doesn't actually ensure that they do everything they can in relation to every decision they make to prioritize the waste hierarchy.

And therefore it doesn't ensure that the waste hierarchy will be followed in all cases. All it means is that when you're transferring waste, you can't, for example, mix separately collected material and, and, and, and mix material when you're transferring it, but it doesn't require place of duty, for example, for you to collect it separately in the first place.

Just trying to clarify that, that, that our understandings are the same in relation to the actual duty. I'm, I'm inclined not to ask for a response on it. I think, I think this is on those areas. There might be some difference of interpretation here and, and I would hope you'll be able to reach out to UK win and, and agree on what you can agree on and, and we have clarity on what you don't agree on in, in due course.

Yes, uh, cloud Rock on behalf of the applicant. We can certainly add that to the statement of common ground and our discussions directly with the UK when, and happily cover that off. Thank you. Is, is there anything else before we move on? I think to the final component of this, um, which I think we have touched on quite a bit, frankly, in terms of how these things might all change.

Um, looking ahead, um, I think I'd invite the applicant to, to, if you like, summarize perhaps almost, um, uh, what they've said in this, under this section and, and look ahead best they can. Um, thank you sir. Um, Simon and money on behalf of the applicant? Yes, I, I don't think I need to say anymore about how we might expect composition to change reasonably marginally over time.

It's worth reflecting that there have been very substantial changes in waste infrastructure in the last 20 years or so. Very substantial investment behind that. And residual waste composition hasn't changed that much. Um, so, um, as some of these policy measures bite, um, and, uh, the sorts of initiative that I mentioned before, um, take effect, we can still expect the waste composition we've used to be reasonably representative of the fuel.

Um, I'll move on to how sources of waste might be expected to change in the future. Um, we are, um, um, um, applying for permission for a merchant facility, um, in a competitive waste market. And of course one of the objectives of the National Planning policy framework is a, a competitive economy. So we expect to compete with others in the waste market.

Um, and in doing so to make the most of the. Significant advantages that our facility has. We'll come back to some of these when we talk about climate change, but we are, uh, water and rail linked. And so we have the opportunity for low impact transport. Um, we have, uh, carbon capture, use and storage, which a significant proportion of the rest of the E F W fleet could not be expected to retrofit.

And we will therefore represent a very low impact and indeed carbon negative end of life solution for waste providers. And that will make us attractive. And as businesses seek, um, such attractive end of life, uh, environmental impacts, we can expect to play that in this competitive market. So there will be some change, but of course, in running a facility, we need to have in mind.



The need for the throughput that the facility will best run on and therefore there will be, um, longer term contracts to mix with those potentially shorter term ones that might be more commercially attractive. Thank you for that. Yeah, I suggest as the time I make it about 10 plus ones, it would seem like a good place to, to break, um, and reconvene at to 2:00 PM then we'll carry on on.

Thank you very much ju Just remind those watching on the live stream. You will need to refresh your browser when we return at two. Thank you.