

Environment Committee

23 June 2011

Transcript of Item 5: The Environmental Legacy of the Olympic Park

Murad Qureshi (Chair): Now we come to our main item of business, which is the Committee's investigation into the Olympic Park environmental legacy. We are going to start the session with a presentation.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Thank you, and thank you very much for inviting us to be here this morning. We understand how important the environmental element of the Olympic project is to the Assembly, to securing the long-term environmental benefits for Londoners and creating London as a sustainable city.

I am going to provide a brief update about how from the legacy perspective we are looking at the incredible inheritance that we are receiving from what the ODA has built and how to take that forward in terms of the master plan for the future of the site and what we are doing today in terms of moving really to operational readiness. I think it is important just to put in perspective that in terms of the Olympic Park Legacy Company focus right now, we are very much trying to get everything in place so there is a smooth transition from after games to the reopening of the Park. Everything we are gearing up to do right now are operators in place for each of the venues, that is very important and we will talk about that in terms of environmental standards, because how we incorporate into our procurements and our negotiations and partnerships with each of the operators, whether that is for the aquatics, for the stadium, for multi-use arena, International Broadcast Centre (IBC), Media Press Centre (MPC), the pod cast media centre, and our estates and facility management contracts are all part of how we make sure that environmental standards are put into those and take those forward. We are working on our master plan, which Niall McNevin heads up. The likes of the Community Scheme, we are looking to submit that in September, which would be for the build out of the Park going forward. Of course we are working on making sure that all of the infrastructure transition, in terms of what we inherit from Olympic Delivery Authority (ODA). We are in fairly advanced discussions about the transition from ODA responsibility to our responsibility in terms of building out infrastructure on the Park for its reopening.

Those are the elements of trying to get everything in place so there is an absolute clear transition from Games to reopening of the Park and legacy in getting all of those pieces - which will be the first time an Olympic host city has actually done this, this far in advance, and to be this far advance.

That is just by way of background in terms of what our focus is. Clearly sustainability, the environmental agenda, is top priority for us, which is why I wanted to be here today, because it has to be about everything that we do. It is really in that context that this is just a view for rendering of the Olympic Park in the future.

I think it is important to say that we have an incredible inheritance of assets. It is a unique regeneration project in terms of the scale of the infrastructure that has been built in a very, very short time. I think this is all predicated, I have to say, the entire project of the Olympic Park and bid was about sustainability, because the location of the site, the building of the site on transport, all of it being conceptualised as building a piece of the city is very, very important. I think if you look at many other Olympic host cities, where frankly big event, mega event projects they are often at outskirts of cities, they in green field sites. It is hoped that someday there will be regeneration. This is actually

embedded in part of the city as part of its transport infrastructure, taking a site - I will let Simon [Wright] talk about - the history which you know well. Taking a site that had brown field site, had very difficult issues and putting it into a position to maximise infrastructure for regeneration. That is really a fundamental tenet of what we are doing, which is building this piece of the city as a sustainable part of the city on transport and open space. With that also of course each of the venues, five highly energy resource efficient sporting venues, the new commercial space and the press and broadcast centres, built to supreme excellence.

The new urban Park interconnected network of cycling pedestrian routes. Last week ODA had a tremendous event at the opening of the north parklands. It just shows you the actual quality of the space that has been built - the quality of the trees, the landscape, the waterways, all being put back into reuse, absolutely incredible. The range of technical solutions that we inherit on the combined cooling, heat and power station, part of a water network, seven-year research and development black water treatment plant and the high speed telecommunications network. So all the basic platforms for sustainability from telecommunication to energy to water, the basic systems that we can now build on and take into legacy, and of course the public transport infrastructure, which from the openings of the Dockland Light Railway (DLR) most recently onto the site, to the upgrading of the northern over ground. You can see the transport infrastructure already starting to service the site, even better with over nine lines serving the site.

Our vision, this is the master plan for the site, we announced our plans and ambitions in October last year. The naming of the Park is the Queen Elizabeth Olympic Park. The idea of this, as you can see on this, would really be a very integrated park, in terms of building communities right into the fabric of it, sites that had been places for temporary venues become new neighbourhoods, five new residential neighbourhoods, all centred along the green space, all centred on transport. The idea of being able to make sure that the whole lifestyle, the way one lives and works on the site, uses the open spaces. Walking to different transport facilities, the standard of the housing, significant emphasis on family housing - for us that was the major thrust of what the master plan is about. If you look at the scale of the neighbourhoods very much like the scale of very typical London neighbourhoods, mixture of terrace housing, higher density housing where appropriate, and looking at how all those become a part of over 11,000 units of housing on the site, including the big Athletes' Village. You really are seeing a build out of a whole Park, but also the jobs balance being important. The Broadcast and Media Centre, the jobs that are brought there, so it really is about a comprehensive building of a city and it will be building on the work that ODA has done, the Olympic Athletes' Village, and looking at some of the first neighbourhoods just to the north of the Olympic Athletes' Village to start to create that whole sense of a neighbourhood and a place on the Park. Of course we have Westfield there, which will be opening next autumn, so you are really seeing a lot of the legacy elements in terms of the build down already taking place.

We are working very much on environmental sustainability policy. We have a suite of different corporate policies we are working on right now related to sport, healthy living, qualities, design, environmental sustainability. These are all very important in terms of getting our ambition right as a model for 21st century living. These form a basis for what will be submitted in our planning application in the autumn. We are putting in place policies that we are just working on, so we very much welcome the timing of this, because it is an opportunity for us to get your questions and input, because as we form this policy we can then come back to you with that policy in place. We are just working that through with the board and Niall McNevin is doing that on our behalf. But it is about enabling low-carbon, resource efficient lives, responding to the changing climate, the most of our green and blue assets, encouraging attitudinal change promotes sustainable lifestyles. That is in terms of the design of the housing, the quality of the housing and what we put in place to promote sustainability, committing to long-term management of our environmental resources, and of course all the procurements that we do, to be done sustainably.

A couple of points, one is you know we are also looking at how the Olympic Park Legacy Company will transition potentially to the Mayoral Development Corporation, which is in the Localism Bill and being heard now, but it means that sustainability does not stop at the edge. We are also looking at our relationship with the surrounding neighbourhoods and the boroughs. That includes working very closely right now with each of them on how to make sure that the energy and sustainability assets of the Park can be used in surrounding neighbourhoods. Whether that is how we service in terms of energy, whether it is water, whether it is a telecommunications infrastructure, there are any number of ways that we can make sure we export many of those benefits to the surrounding communities and we are working very closely with the boroughs on that.

As I said, all this is about ultimately, if you look at the A to Z from a few years ago you will see when I bought mine, when I moved to London, it had a big white spot in the middle where the Olympic Park is. Of course, this is ultimately we think how it will look as it is knit into a piece of the city. All that just becomes a very normal part of the city built around what will be an absolutely beautiful Park and very much a sustainable and healthy lifestyle.

I am going to close by just pointing out a few things that we have an advantage to be able to do in legacy because we have a longer term perspective. ODA did an exemplary job, an absolutely tremendous job, in terms of what they built. We have a little bit of time, I would not say luxury of time, but we can also test a number of things, so I am going to put them out, not as conclusions but as things we are exploring right now.

In energy generation we are very much looking to the energy centre which services the entire site to create opportunity for the site, how it services, not only it can service up to all the capacity on the site, it can probably service up to 20,000 homes. We are looking right now, working with Tower Hamlets and with Cofely who have the energy contract, to look at a long-term basis for the production of synthetic gas from waste as an alternative zero carbon fuel source for the Park. This is experimental technology, it is new, it has a lot of complications and difficulties in terms of how to actually create manually in the production of a synthetic gas to waste, but also in terms of how we have to build a different plan to transport, the pipes, the land acquisition, a whole number of things that have to be done. It really would be a tremendous contribution, I think, to the whole notion of taking an asset that we have in terms of an energy asset and using it to get to a zero carbon solution. It is an opportunity for us to test that and we are working very hard on that with Tower Hamlets, and as I said, with Cofely to see if we can make that work.

We are working on our water and waterways, as you know. That is very much a part of this. I think water is part of this site in terms of over 6kms of waterways that traverse the site. It is core to our thinking, both in terms of the environmental legacy, also in terms of lifestyle and usage of the waterways. We are very much of course monitoring the success of the black water research and development project with that aim, with Thames water. We hope that will be a success because we want to continue that in legacy. Also we will talk more about how we put waterways in terms of marinas, in terms of moorings, what we can do. We are working very much with British Waterways and other partners exploring that.

Telecoms and broadband, we are working now with EDF and London Organising Committee of the Olympic and Paralympic Games (LOCOG) taking the electrical vehicle charging points and looking how to maintain those potentially in legacy. There will be a number of electric vehicles obviously on site through the sponsorships with LOCOG. The infrastructure that is put in, how do we use that? Can we keep that and actually expand upon it for legacy in terms of electric vehicle charging points, electrical vehicle usage onsite?

Wi-fi on site, a number of things with BT we are looking at, so that you really have a very connected, so really maximising the resources, the telecommunication and energy infrastructure on the site. You hear a lot about smart cities, there is a lot that we can do, centres, other things on site that we are

exploring, so we can really use the systems that we have been bequeathed and maximise those to create the really intelligent networks. A lot of work to do, also partnerships with Cisco, exploring how we bring that technology into homes, whether that is the Athletes' Village or the housing we build, so we can bring that kind of state of the art technology. Again, all about reducing trips, all about having smart systems in place, getting the best so that we get to green carbon solutions.

On green and biodiversity we are committed to the 102 hectares of open space, the 45 hectares for bio diverse habitat. That is at the centre of our master plan, respecting that. That is a key component. Our design guidelines that we will be using for developers will look at biodiversity enhancement, green roofs, living walls, public ground vegetation, a dual aspect in terms of design, so a number of things to try and make the housing on the site as efficient and sustainable as possible.

Finally, on waste, which is an important issue, because we are the land owner we are able to do a lot with how we work with developers on promoting behavioural change - incentives to promote those. We can go into those more.

I just wanted to point those out as a few of the areas that we are working on, that we are exploring at the early stages, because we really are committed to this. We are working with lots of our partners here. Thank you for the time.

Murad Qureshi (Chair): Thank you, Andrew, for the talk and presentation. We have a set of questions and we welcome this opportunity to influence the sustainability policy that you have on development, and I think we have got in at an early stage. Can I start with a question on carbon emissions, from the legacy development work, and the environmental standards you are expecting for the construction process build? Are you going to be building on those already established by the ODA? How much better will they be than what the ODA have achieved and we can expect from yourselves.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Yes, we will be building on those. We are looking at a number of areas in terms of our design guidelines, in terms of energy efficiency, to meet the minimum energy efficiency standards, the Government's zero carbon policy. We are looking at everything from passive design techniques, encouraging good day lighting, natural ventilation, a number of things in terms of the design that we can incorporate to promote better standards. Working with venue operators to continue the high performance environmental capability, as I said before, and Simon [Wright] may speak to this later, what has been built into those venues and taking that legacy forward.

All the buildings are required to connect into the district heating network, so that will ensure a low carbon heat supply. As I said before, one of our major initiatives is looking at this feasibility of the waste energy plant to see if that is a possibility to really reduce or really try to get to the deliverability of the zero carbon development.

Murad Qureshi (AM): OK. There are some facts we have been given about the extent of the reclaiming of demolition material to be used. Those kinds of standards are already set by the industry, to some extent. How much higher are you going to push this?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): In terms of the standards that the project is working to at the moment, the transformation construction targets, they have been issued as part of the planning permissions and the legal obligations and they are drawn through the programme. So there is no difference to the ODA construction levels to the transformation. It is the same commitment set in the section 106. So for instance to ensure 90% of material by weight, from demolition works, to be reused, recycled, where the material is suitable. Indeed that 50% of construction materials by weight are delivered to site by rail or water. So those matters are already embedded into the transformation project.

Murad Qureshi (AM): OK. You mentioned the planning process. Who is checking up, so to speak, or doing the enforcement?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): The Planning Authority, which is part of the ODA, has an annual monitoring report which is delivered currently by the ODA and the Olympic Park Legacy Company (OPLC) will pick up that obligation in the transformation and into legacy. It is an annual monitoring report which is in the public domain that monitors those targets and all other environmental matters to do with construction, transport, environmental, the biodiversity action species, the 45 hectares.

Murad Qureshi (AM): OK, well there is one particular one I am a bit informed about, it is the transportation of the construction materials and waste. The figures for water freight have been disappointing, even though Prescott Lock was built. Is there room for improvement on that front on the legacy?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Can I ask Simon to just put the position from the operational point for the ODA, so the challenge is in the issues, and then we will answer the question.

Simon Wright (ODA Director on Infrastructure and Utilities): Chair, we have the target to achieve 50% of freight by rail or water, ie not by road. We have exceeded that. The majority, which is true to say, is by rail, but the fact that it is taken off the road I think is the most important factor in that. We did build a wharf. We did use containers to remove waste. We did bring in material by water, where it was possible, feasible and practicable. So we have sought to maximise the use of water by providing the facilities for contractors to use. We did exceed the targets for the overall 50%.

Tony Arbour (AM): Niall [McNevin], just on that precise point, can you tell me the split between rail and water?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): I am afraid I do not have the data with me. I would be able to forward it to you.

Tony Arbour (AM): Would it be fair to say that water was a very, very tiny proportion of that 50%?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): The majority was by rail.

Tony Arbour (AM): The overwhelming majority?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): I do not have the data in front of me, but the majority was by rail.

Tony Arbour (AM): Does anybody else know what that figure might be? We have made great play of it here, as you all know.

Shaun McCarthy (Chair of the Commission for a Sustainable London 2012): I do not have the figures, but I would agree that the majority has been by rail, but for very good practical reasons. I think it is also important to say that the ODA committed to sustainable mean, rail or water, so they have achieved what they committed to achieve. The split was very much an operational and commercial decision between the two.

James Cleverly (AM): I am obviously looking at the map here and the projected dates for the various elements coming on stream. Obviously there is still a huge amount of construction work that is going

to be going on taking the Park into legacy mode. Technology has moved on and will continue to move on. What can we expect to see differentially between the sustainability, both in construction and overall design of the stuff that is being built, and has been built now, and the construction that we will be seeing going into legacy mode? I suppose, Andrew [Altman] I will put it to you first.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): We are inheriting many of the targets in terms of construction and in terms of how the ODA dealt with things, as we were just talking about: removal of materials, recycling of materials, re-use of materials. We will be taking forward many of those targets so we will have the same standards to take forward into transformation and into legacy, so we will be building on that inheritance, where we can learn. Obviously we are doing a lot of knowledge transfer now about what has been learned through limitations, issues, so that we can maximise those. What you will see, I guess, the short answer is a continuity of those standards into legacy.

James Cleverly (AM): OK, so we are not looking at pushing it further or ...?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): The issue is there is an inheritance of the current planning permissions, which is transformation. Those standards will be, as we have said, continued. The new planning permission which will be issued, which will fundamentally set the targets that the corporate body of the ODA incorporated, so they were planning plus and they looked at meeting those and reporting on them, as we explained. The planning permission which will be sought, which we hope to be programmed before Olympic Games and Paralympic Games next summer will set the target and the aspirations of the Planning Authority through the consultation process with many of the parties around the table here. So we will work very closely with the Environment Agency and British Waterways in terms of that point raised earlier about the waterways and the challenge of utilising commercial and practical, reasonable value for money, opportunities for moving material.

The opportunities, as I understand it, with LOCOG in terms of the Games and visitor management by water is another opportunity. In terms of construction, yes it is a possibility for bulk heavy waterway usage, similarly with the rail and the rail patronage, clearly the advantages of the rail infrastructure and its location. The work that we have done with all the entities around the table are actually identified in the section 106, the legal agreement, they are actually listed as the organisations we have to work with.

James Cleverly (AM): OK. I am going to take something as just an example. One of the other hats that I wear is Chairman of the London Waste Recycling Board, and we have been funding some work looking at waste recycling collection regimes from flats and buildings with multiple occupants. One of the things that have come out from that is we have the 'if only'. So 'if only' more thought had been given to the collection regimes in flats from the get-go, we would have a much, much higher recycling rate. The findings from that will be coming on stream soon. I am sure there are other things like that. Not just in terms of hard standards or statutory standard, but in terms of harvesting best practice and making use of that, whilst we have the opportunity to do it, rather than in five or ten years time kicking ourselves and saying, "Were there opportunities that we missed?" What are you doing to absorb that kind of learning from around the country and around the city?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): I think that is a very good example, because those are areas where we can obviously differ, but the nature of our development will be different. What we can incorporate, I just touched on before, in terms of waste management in new development we are going to be looking at best practices around the country, we are going to look at things like how household waste can be separated into different streams, how we build that into the design, minimal storage in residential areas, maximum recovery of recyclables through the location of different facilities. There is a whole number of things I think we can incorporate and learn

best practice into our design, and particularly our first phase of our development that we are very keen to do.

James Cleverly (AM): 'Can' and 'will' are ever so slightly different words, but they are very significant. Is that, "We can look at these things" or, "We will look at these things"?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): We are. How is that?

James Cleverly (AM): That is the best answer.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Yes.

Nicky Gavron (AM): How will the homes and the other buildings in the Olympic Park stand out from other developments of their time, in terms of environmental standards?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): As I said before, there is a whole number of ways in terms of design. We just talked about a number of ways in terms of waste. We also talked before a little bit about how we incorporate green roofs and technology that can be there as part of the design. The siting of the buildings in terms of the line of the buildings, how it lets natural light in, so that it reduces dependence on energy can be a part of that.

Nicky Gavron (AM): So passive solar gain.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Yes. We are looking at all aspects of how, if you take our first phases and future phases of development, how we take each of these pieces of waste, of maximising solar energy, maximising the whole issue. I think the very nature of the design, of the placing. If you look at the master plan itself, one of the things we are looking for in the big picture is how each of these neighbourhoods we build as complete neighbourhoods, that are systems that have their own internal parks, which are part of the open space, how we do the electric cars and the siting of the charging stations, so that we can reduce the reliance on vehicles. How we actually even do things throughout the site, in terms of a shuttle service, so that we can actually create systems of transport to reduce the reliance on automobiles. How we have the storage and other facilities within homes that can reduce obviously waste. So there is a whole number of ways we can look at that.

Nicky Gavron (AM): Can I ask you, Andrew, because you are very cosmopolitan and you have worked internationally, the UK cities are way behind other cities, if you pick out the best across the world, in terms of environmental innovation. There is no doubt about it there are other cities that are much better exemplars. What have you drawn from other places?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): I think it is an interesting question. The Olympic Park and what we are doing can draw on a lot of examples. One of the most important things that I see of what we are doing in the Olympic Park in terms of the master planning, as I said, is making sure that in the building of these neighbourhoods that we really are balancing the need for sustainable lifestyles, reducing the reliance on automobiles, building in everything we can to the design to make it as easy as possible to be sustainable again. Again, the examples that I have just talked about when I look internationally, if you look at people who go to Stockholm and other places, what they have done with waste and recycling are great examples.

Nicky Gavron (AM): Are you going to mirror that?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): I do not know that we can get to there, but I think we are looking at examples.

Nicky Gavron (AM): You are looking at it.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Yes. We are seriously exploring. Whether we can meet that I do not know, but our aspiration is try to get the best practice.

Nicky Gavron (AM): OK. So you are looking at Envac [proprietary vacuum waste collection system] so we can come back to you about that?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): We can come back to you. I do not promise that. We are looking at all of these examples right now to see what we can actually do.

Nicky Gavron (AM): Are you looking at a dual system of water - recycled water? You know we only drink 2% of all the water we purify, so we do not want to see purified water going into lavatories and so on.

Niall McNevin (Director of Planning for Olympic Park Legacy Company): We inherit the non-potable water system, which is already in place within the Park, the pipe work. The prototype structure that Thames Water is investigating, utilising the wastewater from the northern outfall sewer to have as irrigation water in the Park. But within the residential development, which I think is what your question was leading to in terms of the split systems, that is clearly a matter this being looked at throughout the UK.

Nicky Gavron (AM): To be looked at.

Niall McNevin (Director of Planning for Olympic Park Legacy Company): In terms of the delivery of the targets set with the expected planning permissions, I would be surprised if that area is not quite specified.

Nicky Gavron (AM): OK. So we can expect you to look at splitting those two - recycled water and the other water?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Yes.

Nicky Gavron (AM): Is that what you are saying?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): The position on the delivery of housing, in terms of the housing that the developers will come forward with, it cannot be anything different in terms of the cost profile of the economics. If the economics of that particular case is not sustainable the value for money position needs to be explored. So those will be explored as part of who comes forward with the products on the Park.

Nicky Gavron (AM): Right. Can I ask are you really looking at green roofs on the homes?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): On the homes?

Nicky Gavron (AM): Yes.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): There is a mix up. The answer is yes. In the first phase there are homes and then there are flats, multi-storey building and smaller buildings. We are looking at the green roofs and the design issues of that. Right now we are developing our design guidelines. The first phase of development will be going out late summer, early autumn, so it is something we are exploring.

Just to be clear, I think what we are modelling right now, if you take all of these different aspects, whether it is waste, whether it is the design of the housing in terms of light, whether it is green roofs, we are putting together all of these to say what is the first phase of housing development, the prototype of housing development. As Niall [McNevin] said we have to balance that because we are looking at what does that mean when you add it all up, how does it work economically in terms of development climate? We on the land; what does that mean for land values? We have to balance those but right now we are trying to build a model that looks at all of those different aspects of it, and then be able to make that judgement. We are at a good place, which is what I think when I started to say, is that we can now take all of those, explore them, test them and put those into our guidelines and make those decisions.

Nicky Gavron (AM): Sure. Can I just throw in, because it is so cheap this, that you might look at white roofs?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): What is that?

Nicky Gavron (AM): You might look at white roofs. I will send you all the stuff about it, but it is now being pushed as an alternative to green roofs. It is just paint but it makes a huge difference to the insulation and to the carbon emissions.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Yes.

Nicky Gavron (AM): If we could just go on. How soon will the Olympic Park homes be built to the zero carbon level of the code? Just take a through the phasing.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): The phasing? The first piece that comes on obviously is the Olympic Athletes' Village, which is ODA, not us. If you look to the north of that, that is what we are targeting as the first neighbourhood. We think that is between 600 to 800 homes. Our goal right now is we are, as I said before, putting in our legacy community scheme, our outline planning permission which would go in September. We hope to have that permission before the Games. The idea being that we could then have a developer start onsite in late 2013 to begin construction of that first phase for 2014. Then it would build out over, it would depend on the market, it could be a four or five year period, depending on the absorption. That would really be the first neighbourhood that we will start. Again, we are doing that because you have a lot of the infrastructure that is building on existing infrastructure there. The northern part which will go in is one of the first pieces of transformation work. You obviously have the Athletes' Village.

Nicky Gavron (AM): Is it 2013 to about 2017?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Yes.

Nicky Gavron (AM): Will it meet the zero carbon --

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Sorry, can I just clarify? I think it is 2016 on the basis of building regulations. We are advised that building regulations policy in terms of 2016, so we would be in line with regulation policy.

Nicky Gavron (AM): So you will be building at the 2013 level, or the 2016 level? Zero by 2016?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Zero by 2016.

Nicky Gavron (AM): Some other level at 2013. Which level are you building to?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): To achieve zero carbon energy by 2016 in line with building regulations.

Nicky Gavron (AM): You are doing that?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Yes.

Nicky Gavron (AM): So you will include some renewables?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): I do not want to be led on the renewables, because I think the position on the ODA has been complicated by setting a target which has actually changed over the course of time, which is something which was explained and sought as a challenge for all of use, as this policy and concepts change over time. In terms of carbon emissions we are saying it is the way people use buildings which cause the emissions. As a result of that we are looking at measures to encourage residents to use their homes differently. That includes installing smart metres, to provide residents with real-time energy use data, and all residents will be provided with a simple guide explaining the conditions under which the homes operate best. This is this point that Andy [Altman] was making about attitudinal change, as part of this that is what we are being led to believe will help meet those targets.

Nicky Gavron (AM): Yes, but it is not an either/or, is it? You have to get the fabric right. You have to get --

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Absolutely.

Nicky Gavron (AM): Although micro renewables are part of what is in code level 6, you do not know that you are going to involve --

Niall McNevin (Director of Planning for Olympic Park Legacy Company): With code levels, our Chair has said at this forum before, that we are code level 4, which meets other public body.

Nicky Gavron (AM): You are code level 4?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Yes.

Male Speaker: As a minimum.

Nicky Gavron (AM): That is not zero carbon.

Male Speaker: It is not zero carbon.

Nicky Gavron (AM): OK, you are code level 4.

Darren Johnson (AM): Could I just come in on this one, because I take your point about the behavioural changes and so on that you are working to encourage, but in terms of the fabric of the building you are not talking about doing anything more than complying with the new building regulations, are you?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Currently, this debate is worthy and absolutely right, because we have not treated with any developers who will be constructing the said houses. We are in advance of a planning permission. These will be matters which, as Andy [Altman] and I have said, will be considered by the company in terms of procuring with the said builder to build some of these houses. I suspect it probably will not be one builder, up to several thousand homes will be quite a number. We need to establish stringent targets, comply with

planning permission, comply with regulations and comply with the law. In terms of those developers that come through, as I said we will have a number, we need to explore the value for money and the type of issues from across the whole master plan, integrating in with the venues and infrastructure that exist, that we inherit from the ODA, as to the most effective use of resources.

Darren Johnson (AM): I am struggling to see what is particularly groundbreaking about what you are proposing. You are just saying that you are going to follow the regulations and follow the bog standard building regulations and planning regulations, which we would expect of any developers sitting around this table.

Nicky Gavron (AM): Now we would not expect it, not for the future, not for this trail blazing development. Do you want to come in?

Mike Tuffrey (AM): What we set out this morning to do was to drill down in the issues, but what this has revealed is the gap in terms of the overall approach. I would be interested actually to get a view from Shaun [McCarthy] in a moment, from the Commission.

The overall promise was the most sustainable gains ever, including legacy, and the written evidence you gave us in terms of your aspirations uses sustainability in every other word, which is great, but then we have this gap. If the decisions that you are actually taking today, tomorrow, over the next year or two are to meet existing standards, I am concerned that you have not set out what your sustainability policy is beyond words that we can all sign up to. Perhaps you can just take this a step back from the individual next decision to say what you are really trying to achieve here. When will we have that in writing?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): In fairness, as I said before, we are developing the policy now. So that is why we can come back when we have, because we are developing what our targets are, so these are minimums. I am not saying those are the end of our aspiration. We do have a high aspiration, which is why I said, for example, to get to a zero carbon solution, which may take some time, we are very much doing this exploratory with putting a lot of energy and effort in with Cofely and Tower Hamlets on how we use the energy plant and how we use the whole question of the conversion of waste to energy, which would then service the entire site, and all of the homes on the site, which would be a dramatic reduction, if we can pull it off.

I preface that by saying is it going to be completely feasible? Are there challenges? Sure, but I think it reflects the ambition and the aspiration that we have, which is to use the inherited infrastructure, which has been built to a high standard, and take it to the next level, which would then have a consequent benefit for the entire site. So all the housing and all the zero carbon that we are talking about, one of the main things that we can do that, will that happen in the first line with the first phase? Timing may be difficult but we are looking at that. Will we push on with more design standards, more environmental standards? That is everything that we are exploring now on the table, so we are not coming here today shying, "This is it. That is what it is". You are right we have this aspiration, we know what the minimum targets are. We know, for example, Athletes' Village is at, I think, code level 4. They have done well with that, I will let ODA speak to that. We understand where that is. Are there things we can push on? Yes on recyclables, yes on how we do design of the units, yes on separation of waste. All those things are very open to us. That is why when I say we are exploring, to be able to come back to you with a policy that sets that standard, because that is our aspiration.

Mike Tuffrey (AM): Can I know when we are going to get there? Because it seems to me if you were just an ordinary developer you would be dealing with the ordinary economics of today. This whole Park has been set up, and indeed your vision is 25 to 30 years, that is what Margaret [Baroness Ford, Chair of the Olympic Park Legacy Company] told us in terms and indeed you told us when you were here in the plenary. All the scenario planning tells us that energy costs are going to go up and up

and up, water costs are going to go up and up. Waste water disposal is going to go up and up. So if one takes a 25 to 30-year view in terms of construction, one would be constructing very high efficiency, very low cost models. You have been gifted all this land debt free, etc, etc, so this is an absolute prize opportunity to do things differently. In a sense you will get disappointment, to put it mildly, from this side of the table if you are saying, "The next development we are just going for code level 4, because that is what the economics of today tell us". I think Londoners are really looking for you to close this gap from today to where we all know we need to be. I think we just want to see that in writing, as a commitment, with the scrutiny from the Commission, and maybe we should get a take from the Commission, as to how you are going to close the gap between today and where we need to be. So that is what we are here to do this morning.

Nicky Gavron (AM): I just wonder, because a lot hangs on renewable energy. I talked about micro generation, but if you really are going to heat and cool are you going to heat, power and cool the site with renewable gas from synthesis gas (syngas) from residual waste? Is that the idea?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): That is the idea.

Nicky Gavron (AM): Through gasification?

Mike Tuffrey (AM): Before we get into that detail, can we get a commitment in terms of the big vision and when we are going to see it and whether it is going to be open to scrutiny and so forth? Let us just get the commitment now. When are we going to see the pledges in writing that you are going to exceed current standards to get to these 20 to 25 year targets that we need?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): I think we will be able to come back in the autumn.

Murad Qureshi (Chair): OK. Can we get a take from Shaun [McCarthy]?

Shaun McCarthy (Chair of the Commission for a Sustainable London 2012): OK, thank you, Chair. Let me deal with two things, first of all the principles and then the practicalities. In principle I completely agree with the quality. Current planning regulation compliance is not good enough. That is not taking on the mantle of the ODA that actually set significantly higher standards than the current planning regulations require. The Park was promised as a blueprint for sustainable living and is not a blueprint for sustainable living if you just say you are going to comply with the regulations. So absolutely the Olympic Park Legacy Company (OPLC) need to better than that. We will expect them to do better.

The practicalities as far as zero carbon are concerned the equation is quite simple. In order to deliver zero carbon homes you need a zero carbon source of energy. Although the ODA has delivered great infrastructure, it does not deliver zero carbon energy. So the code level 6 is absolutely dependent on what you described, Nicky [Gavron], in the wasted gas solution. The current provision also constrains zero carbon, because Andrew [Altman] mentioned the requirement for any development to take heat from Cofely is great, because you get low carbon heat, but you cannot get zero carbon heat. What that means, on the converse, if you wanted to put solar thermal in, if you wanted to put brown source heat pumps or whatever you cannot, because Cofely have a contract - correct me if I am wrong - to supply all of the heat on the Park. That is an inherited contract, it was negotiated an awful long time ago, but that is the situation we are in. So the reality for zero carbon - and I do commend the efforts of OPLC with Cofely to deliver that solution - is absolutely critical to delivering zero carbon homes. So no, the current regulation is not good enough guys, you must do better than that. We will continue to provide scrutiny up until the end of March 2013, when the terms of reference of the Commission finish. We do not go beyond that. So we will continue to hold these guys' feet to the fire, but the solution is absolutely dependent on waste energy.

Nicky Gavron (AM): We were talking about homes there, but just talking about standards on the other build, is somebody going to talk about that?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): You are talking about the venues?

Nicky Gavron (AM): Yes.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Why don't we talk about the inherent things and then we can go from there?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): The existing sports facilities; we have developed primarily only sports facilities plus the commercial centre, the IBC and the MPC, the press centre. They are BREEAM [Building Research Establishment Environmental Assessment Method] excellent in design, they have 50% better than building relations on energy efficiency, on energy consumption and they meet a whole raft of other targets on reduced water consumption, 40% reduced water consumption, and so on. I think the figures are fairly well known now. In essence BREEAM excellent 50% reduced energy and 40% reduced water consumption.

Nicky Gavron (AM): OK. We have touched on this a little earlier in your response, which is when I left on you and said, "Well it is not an either/or", but I think it is very important how you structure the management and use of the buildings, so I just wonder what thinking is going into that. You talked about smart systems.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Yes. We are right not in the stage of procurement for operators of the different venues and the estate and facility management. What Simon [Wright] has been describing for the ODA in terms of the standards that have been built into the design of those and taking those forward into the management we will be able to put those into contractual obligations in terms of how they operate the facilities. That is what we are looking at doing now.

Mike Tuffrey (AM): Just to nail down the last point, because I think you said it but maybe the record did not put it up, in terms of when you are coming back with your detailed policy is the autumn of which year?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): This year.

Mike Tuffrey (AM): When does the autumn end, not seasonally but in calendar terms?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): I think I can just help with the clarification. We are submitting a very, very large planning application in national terms and London terms and we want to make certain that there is an absolutely consistency and understanding of that planning application, which delivers the legacy communities planned out to 2030 - as you can see from that. The policy which we are setting, we are discussing and we are offering to develop with yourselves, so it would be endorsed by our company, it would be good to have that debated formally, informally, with your officers and yourselves so that there was a comfort amongst Londoners that we are setting the right types of standards, and the balance of the issue of cost versus aspiration and reputation of London as a City, the Olympic Park as a place is understood. Because there will be ultimately, and it is quite acceptable, for balanced judgements to be made.

Mike Tuffrey (AM): So when is that planning? You are saying it is all going to be wrapped up in a big application, so what is date on that?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): I think we could come back in October, would be fair, because we are doing the work now over the summer, getting the planning application ready, going through exactly these kinds of questions that we are discussing here, and be able to come back and discuss that. We would be happy to present that.

Mike Tuffrey (AM): Certainly from my point of view what I am looking for is not traditional planning application, environmental impact studies, this is how it complies with existing regulations, but the sort of water footprinting, energy footprinting, waste footprinting, the whole stick, to use the jargon 'vision', not vision, reality, plan for all the key indicators which will fulfil the pledge that has been given about it.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): OK.

Mike Tuffrey (AM): Thank you. In which case then back to renewable energy generation and the question was: what are the prospects for increasing renewable energy generation. Shaun [McCarthy] has already kind of asserted that it has to be through the Energy Centre and switching the primary fuel source to syngas, or whatever. Surely it is not quite as simple as that, because there was the great turbine that has flown away, so there was an element for other energy sources, whether it is now voltaic on roofs, or whatever. Can you give us, as it were, a fuller answer on prospects for the renewable energy generation on site?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): It has to be said this is a challenging area. You have made mention of the position of the ODA with regard to the wind turbine. A number of alternative solutions have been investigated to look at the carbon savings. As said, the buildings obtaining their heat requirements from the district heating network is crucial and options that we talked about - solar heating.

There are three key elements to the energy strategy: the low carbon infrastructure, the use of fire mass boilers at the combined cooling, heat and power (CCHP). Simon [Wright] is the expert. He is the director who delivered that project, so on technical details I would prefer if Simon could answer the questions. It is a modular building, both the biomass boiler provision and actually the CCHP, which picks up this possibility of the synthetic gas.

The other exploration, and Thames Water are very interested in this in terms of exploratory work and working with offices in the GLA, is the use of hydrogen being produced from water, and introducing the hydrogen into the gas being used in the energy centre obviously reduces the carbon dioxide emission. These are leading edge technologies.

Male Speaker: And sewage?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): From the non-pot water, yes, which obviously it is an absolute cradle to grave use. So wastewater made into non-pot water, non-pot water fractured and the hydrogen used, hydrogen introduced into the natural gas and the proportion of carbon dioxide emissions reduces. That is what we would love to be having on the site, but I must manage expectations. This is industry at the very pinnacle of exploration, such that I think London as a world city, and the Queen Elizabeth Park as a world-leading location, could be one which we should be utilising, at least to explore now as to why can you not use that type of thing to introduce. We are looking at it. We are supported by Thames Water, we are supported by many of the parties around the table in these exploratory talks. We have been very open and transparent about these possibilities because these questions have been asked us by our colleagues around the table as well.

The Fabric Energy Efficiency Standards (FEES) is the other element. We have not talked about the photovoltaics (PV) on the homes and businesses. We are supporting the ODA's proposals for

photovoltaics on the Press Centre and the car park. I have to say in terms of the quantum of photovoltaics on the site that is perhaps a question that, again, Simon [Wright] can help articulate in terms of value for money and the decisions made by the ODA and what we inherit.

Mike Tuffrey (AM): The figure I have here is 9% of the Park's energy consumption comes from photovoltaic cells, presumably across the whole part.

Simon Wright (ODA Director on Infrastructure and Utilities): We are still on track to deliver the overall 50% carbon reduction, which was the original target, as I think everybody is aware was mentioned. Unfortunately the wind turbine could not happen - I think that has been described - for many good reasons. We have it reintroduced as a partial compensation for that, some photovoltaics on the Press Centre. I have to say PVs are still expensive. They have high embodied carbon in the manufacture of the equipment, so overall it is a proportional response. To cover the entire Park with PVs would not have been the right answer, but we certainly feel that a proportion of PVs is a good supplement. The total renewables, as we say is 9%. The overall 50% carbon saving has been achieved.

Mike Tuffrey (AM): I have got a note that there is a biomass boiler in waste wood being talked about or is it there already?

Simon Wright (ODA Director on Infrastructure and Utilities): That is part of the Energy Centre. That is there or will be very shortly; it is being installed right now. It is in the retained Edwardian building on the edge of the canal so it is going to be part of the Energy Centre at full Games time and after and it is run on bio fuel as you say.

Mike Tuffrey (AM): We are not going to have an air quality problem?

Simon Wright (ODA Director on Infrastructure and Utilities): Not at all, no. It has scrubbing and gas emission clean up and complies with very strict emission regulations. It has been thoroughly modelled.

Nicky Gavron (AM): At the moment the plan is bio mass and natural gas, is it?

Simon Wright (ODA Director on Infrastructure and Utilities): Correct.

Nicky Gavron (AM): You are trying to get the gas source transitioned into renewable gas, yes?

Simon Wright (ODA Director on Infrastructure and Utilities): We have entered into a deal with the private sector developer on a design build finance and operate basis - 40-year concession; that is completed other than the bio fuel boilers are still being installed but the rest of it and that is running on natural gas with the bio fuel boiler as part of the top-up so it has natural gas running the engines; electricity generation from which we take heat. Then we have boilers that are fired on natural gas and then we have boilers that are fired on bio fuel as well. So those components make up the current plan.

Nicky Gavron (AM): Not CCHP; CHP?

Simon Wright (ODA Director on Infrastructure and Utilities): No, it is CCHP: combined cooling heat and power. Some of the waste heat that creates cooling.

Nicky Gavron (AM): OK, so where is this synthetic gas and possibly the hydrogen going to go?

Simon Wright (ODA Director on Infrastructure and Utilities): It was always understood that the technology at the time was not sufficiently advanced to install it in 2005/06 when the contract was entered into so that was very high risk and not a deliverable solution. It was always envisaged that the plant could be converted to run on an alternative fuel supply and that is what OPLC have mentioned they are exploring.

Nicky Gavron (AM): In 40 years' time?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): No. Cofely are the concessionaire inherited from the London Development Agency (LDA) so the energy provider for the Park and they have a "reasonable endeavours" clause in their contract to look at the future. Clearly our aim, and in order to meet the questions you are asking, is to displace the natural gas usage as a fuel source to an alternative.

Simon Wright (ODA Director on Infrastructure and Utilities): With synthetic gas..

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Synthetic gas is one option, which is a waste that has the benefit so that waste does not go to landfill and incur costs.

Nicky Gavron (AM): Gasification?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): It is gasification and we are working with the London Borough Tower Hamlets. It is important to add that there are three waste authorities that we are dealing with: Hackney and Waltham Forest form the North London Waste Authority; Newham fall into East London Authority and Tower Hamlets currently deal with their own waste. An opportunity has arisen to work with the London Borough Tower Hamlets whose waste contract is up for renewal and they need to procure a new contract any time between now and 2017. They are working with us because it has to be looked at in terms of the land points that Andy [Altman] mentioned so there are a number of issues relating to the delivery of this. In managing everybody's expectations there were a number of hurdles to jump through but we can be on the record that we are currently working with Tower Hamlets and Cofely, and I believe the ODA, to look at this as an opportunity for the future.

Murad Qureshi (Chair): Is that across the whole Olympic Park site or just the Tower Hamlets part?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): Currently we are looking at that with the Tower Hamlets because of the contractual arrangements for North London Waste Authority and East London.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): It would serve the whole site.

Simon Wright (ODA Director on Infrastructure and Utilities): There is one Energy Centre on the Park that serves the whole site including the Athletes' Village. Sorry, there is another Energy Centre that serves mainly the Westfield development. There are two Energy Centres in total interconnected. The pipe work is interconnected. The one on our site serves the Park and the village and the one on the Westfield site primarily serves the retail development.

Nicky Gavron (AM): The steam gas would come from residual waste presumably and then how would this hydrogen derived from sewage cope?

Niall McNevin (Director of Planning for Olympic Park Legacy Company): That would need a plant to deal with the fracture of the water and in terms of the suitability of the non-pot water, whether the clarity of the type of gas and gas handling in terms of then whether that is piped into the CCHP or whether that is bottled in, there are exploratory discussions on that; whether that is a reasonable methodology. I was giving an example of the methodologies in terms of displacing natural gas as a fuel source. Bio mass has been talked about which is the wood chip. Bio gas, which is organic waste gas so the fact the Mayor was making that comment at the Base London Conference yesterday in terms of last night's biryani that is not used into potential waste gas and using that gas, again that is exploratory. We have not entertained anything in that detail currently but it is looking at the fuel sources and the types of natural organic or renewable.

Darren Johnson (AM): The Olympic Park Biodiversity Action Plan's target to create 45 hectares of site of importance for nature conservation grade 1 habitat: can I ask the ODA first, Simon, what have you done towards meeting those habitat targets?

Simon Wright (ODA Director on Infrastructure and Utilities): Certainly. As you know in Games time there is a design that incorporates parks and public realms but it is only a proportion of the 45 hectares because there is an element that is required for concourses in Olympics. The totality of that was always designed to be delivered post-Games but a significant proportion is delivered pre-Games: around 25 or 26 hectares. The remainder has always been deemed to be delivered and as you remove the Olympic concourses that gets converted into the parkland post-Games as part of the transformation.

Darren Johnson (AM): So it is 20 now and then 25 later?

Simon Wright (ODA Director on Infrastructure and Utilities): I would have to check the number exactly but it is of that order.

Darren Johnson (AM): Can I ask Shaun first to comment?

Shaun McCarthy (Chair of the Commission for a Sustainable London 2012): OK, thank you. Our latest annual review has recommended that the OPLC commit to that 102 and 45 hectares of biodiverse space and I am very pleased to hear Andrew [Altman] and Niall [McNevin] committing to that today. It will be very challenging and I think it is something that we want to observe very closely.

Darren Johnson (AM): As challenging as everything else we have heard of so far in terms of building design and energy requirement?

Shaun McCarthy (Chair of the Commission for a Sustainable London 2012): Yes, I think so.

Darren Johnson (AM): So this is not going to be an easy one to tick off?

Shaun McCarthy (Chair of the Commission for a Sustainable London 2012): I do not think it is an easy commitment for these guys to make and I am very pleased to hear them make the commitment but I think underneath that it will be hard because there will be pressures on land use. Things have

already changed in terms of the size of the stadium so it is really pleasing to hear the commitment but I think we need to understand that that is not an easy commitment to make.

Darren Johnson (AM): That is a really useful perspective. From the Commission perspective Shaun [McCarthy] is pleased with the commitment but believes it will be challenging. Carlo,, what is your take on this?

Carlo Laurenzi (Chief Executive of London Wildlife Trust): Firstly, thank you for inviting us here today. The commitments in terms of hectares is not an ideal target we should be working towards; it is an absolute minimum that we need to be working towards and it could be argued that perhaps we were not robust enough in trying to negotiate more hectares. However we are where we are and I think the ODA have done a good job at committing themselves to delivering that but also appearing to be on target to do that.

It is not simply a matter of the 25 hectares that we are working towards achieving for Games time but also what is going to happen to that 25 hectares during Games time? There is going to be a lot of pressure on it so we need to take care of that because otherwise the minute we move into the transform phase we may well be dealing with 25 hectares of potentially fairly damaged space. We want to see - the ODA having done a reasonable job at delivering the Biodiversity Action Plan (BAP) and the commitment to the 45 hectares - that the OPLC take this on board and take it with goodwill, enthusiasm and with a high measure of creativity and really seek to deliver this; not just during the transform phase, which we are pleased the OPLC are now taking lead responsibility on, but during the legacy phase and do not try to back-end the delivery of this. It really needs to be front-ended and in particular addressing some of the issue of damage during Games time, and a real commitment to delivering the BAP. It is not just about the number of hectares; it is also about the quality of it and how it connects with the broader green spaces.

Darren Johnson (AM): Do you see an important role for third sector organisations like yourselves in terms of achieving that so it is not just something for the ODA and OPLC, etc, to deliver? What sort of role do you envisage for the third sector?

Carlo Laurenzi (Chief Executive of London Wildlife Trust): The agencies down this end of the table have been central in working in partnership with the ODA in constructing the BAP. Let us be honest, it is not something you guys conjured up out of nowhere. We have been central to that. One of the things that the third sector has done reasonably well to date is bringing the community along with the whole process. It is perhaps one of the criticisms of the overall Olympic project that many of the local communities have not been quite as engaged. The third sector will ensure delivery of that and I think that is going to be the key to it. I think the third sector is the very people that have those characteristics, values, networks and skills. It is not about the Wildlife Trust pitching to manage the whole of the Olympic Park; that is clearly not what we are here to do, however I think the third sector does have a central role in the long-term management of the Olympic Park.

Darren Johnson (AM): Thank you. Adam, do you feel the additional 25 are achievable and are you happy with the progress?

Adam Wallace (Area Manager for London, Natural England): We are happy with the progress. I think it is achievable and we are working well with our colleagues around the table here. The issue from Natural England's perspective is that we have heard a lot of technical detail this morning around

energy and carbon issues. Equally complicated in terms of maintenance of site and the importance of maintenance and the continuity of maintenance into the future and ensure that that maintenance and the expertise required to maintain the site is embedded and core to the management aspirations going forward. That is a particular issue for us in terms of building ownership with local communities. There are apprenticeships on site that have been celebrated. Can we retain some of those apprentices in management? All those sorts of issues that are easy in the heat of development to perhaps lose sight of. I think Natural England would be fully behind OPLC in helping to ensure the maintenance and the green infrastructure vision that is there is maintained.

Darren Johnson (AM): So there is a long term plan to deliver not just something wonderful but --

Adam Wallace (Area Manager for London, Natural England): Absolutely.

Darren Johnson (AM): Have you looked at issues around the actual Games time period itself? If we have this 20 hectares all nicely planted out before the Games, what are the dangers of it being trampled to death and not having anything reasonable immediately after the Games because of the impact of crowd numbers and so on?

Adam Wallace (Area Manager for London, Natural England): We have not specifically looked at that issue and I do not know what the modelling around numbers looks like in the context of it but I am sure there is information and evidence that can be drawn on to inform how that site is managed during Games time.

Simon Wright (ODA Director on Infrastructure and Utilities): Just to clarify if I may: ODA remain responsible for the management and maintenance of the parkland through to post-Games. We have a detailed plan that has been discussed widely and has been incorporated into the contracts for the management of those areas from the time they are finished to the time of the handover to OPLC post-Games. We remain responsible for that activity.

Darren Johnson (AM): You would be responsible for remedying any damage that occurred during Games time?

Simon Wright (ODA Director on Infrastructure and Utilities): Yes, we remain responsible for the maintenance and management of the parklands and public realm right through from the time of contract completion, which is around now, right through to post-Games. Of course there will be pressure on these areas. We have 180,000 people in the Park.

Darren Johnson (AM): It is unrealistic to assume that everything will be beautifully pristine after the Games.

Simon Wright (ODA Director on Infrastructure and Utilities): It is there to run a Games but of course it is also there, importantly, as the legacy so of course we want it to be a successful Games and it is designed to do so. Crowd modelling is complete. We know what it will look like in Games time and of course it then has to be restored to a condition --

Darren Johnson (AM): So we will not have the buck passing with OPLC to ODA and LOCOG or whatever?

Simon Wright (ODA Director on Infrastructure and Utilities): No.

Darren Johnson (AM): It is your responsibility in terms of bringing the Park up to scratch after the Games?

Simon Wright (ODA Director on Infrastructure and Utilities): We continue to maintain the Park until post-Games when we handover over to OPLC.

Andrew Altman (Chief Executive for Olympic Park Legacy Company): I want to make a brief point because I thought the point you made is absolutely right and something that we take as probably one of the most important things that we do. There is a lot about the capital put in; in other words the building of the Park; the maintenance and operation of those very high quality parklands, biodiversity habitats and wetlands. We are focused on the high quality maintenance and operation and continued operational funding of that to ensure that infrastructure is not degraded but is maintained. In some ways with parks people concentrate on the capital number. In fact the operating number of the Park in terms of present value is greater than the capital.

We are also working very closely with partners from the Lee Valley Regional Park Authority from Hackney - because Hackney has a land ownership of 10.1 acres on site - to have a coordinated land management strategy that OPLC would be taking on the Park management function so that even if Lee Valley Regional Park Authority, for example, is operating the VeloPark facility, all of the public spaces of the Park are managed under one system so you get that quality standard that we need.

Darren Johnson (AM): I am going to bring in Rob Cairns from Lee Valley and then I would like you, Andrew [Altman], to pick up on any of the issues that have been raised by the other panellists.

Rob Cairns (Head of Environmental Design at Lee Valley Regional Park): From our point of view we are possibly more enthusiastic. We think it is important to recognise the transformation that has happened; it has been a fantastic change from what was a low-value site. We have worked closely with the ODA during that process and the short-term impacts, in terms of biodiversity, have been well managed. We have relocated species, we have habitat enhancements off-site, so the process to date has been really good and we should all recognise that.

Looking ahead there are some things to guard against; one is clearly any future erosion of those targets in terms of area and quality. It is important we ensure that the Park is not an isolated island of biodiversity surrounded by low value urban development and we ensure that urban development incorporates good quality structure through various greening ways. I think really importantly is to understand that when we are working with OPLC that the Olympic Park stuff is really just a small part of a much bigger story that is the Lee Valley and there are well-established partnerships there and, along with the OPLC, we should be working within those partnerships. The Olympic BAP is part of a Lee Valley BAP and is part of a London Regional BAP.

Darren Johnson (AM): You seem confident that the targets can be achieved. Do you think they could be exceeded then?

Rob Cairns (Head of Environmental Design at Lee Valley Regional Park): It depends how you measure it. If you measure it by pure area then an area measurement is a challenge. If you measure it by biodiversity value and ecological value and looking at the whole picture beyond the redline

boundary of Olympic Park then I think there is no question that the benefits to biodiversity through the work of Olympic Park have been immense and we can continue to build on that together. Ideally you would get 45 hectares out of it, and we all hope that will happen, but the quality of that 45 hectares is what is really important.

Darren Johnson (AM): Andrew [Altman], are there any points you would like to pick up on from issues that the others have raised? I am pleased that you have made that commitment to meeting the target. How confident are you?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): We have committed to meet it. Everyone realises it is a challenge but that is what we are committed to doing and we do have to look at those trade-offs within the Park. If we have to use a bit more for development then we have to find the space elsewhere so that is what we are going through and working to.

The only point I want to emphasise is the quality point. I think that quantity we are committing to but it is the quality of those spaces, of the biodiversity, of the ecological value, the parklands; these are very high quality spaces the public has invested in. For me it is a major priority and for us, as a company, corporately as the land steward and manager is to manage that to the highest standards. We cannot underestimate that as a challenge. It is a financial challenge and it is something we, as a company, are very much balancing to ensure we keep that quality and do everything we can to sustain it.

Darren Johnson (AM): During the discussion over the stadium tenant and the football bids and so on, there were real concerns about how contractible they were with the future biodiversity targets. Are you confident that the stadium tenant will not impact negatively on achieving the biodiversity targets?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): We are going to have to meet those targets. That is part of how we are going to balance with the development of the site to ensure there is a 45-hectare commitment on the BAP. 102: that is all part of what we are going to meet so on-site we need to look at how we meet those commitments and keep them.

Darren Johnson (AM): Is it simply the land use and trying to achieve so many different things with a certain amount of land?

Andrew Altman (Chief Executive for Olympic Park Legacy Company): Right. We have X amount of land and any time something moves a little bit something else has to give within the site. The good thing, for us, we all recognise those are challenges as development comes on or we look at different venues is that we have the whole site to be able to look at. What we have done, for example, is we have had to find open spaces in other parts of the Park where previously there might have been housing scheduled, so we meet the number of 102 hectares over all. We make those trade offs and we try to balance them out.

James Cleverly (AM): Carlo and Adam, I am perhaps aiming this towards you but if anyone else feels they can answer. I am very conscious that, as we look at the plan at the moment, there seems to be a real fluidity between the built and natural environment and I think that is one of the real great opportunities for this Park. I am also very conscious that that physical integration is all well and good if the people living on the Park do not have a psychological integration between the buildings that they live in and the Park that those buildings are located in and maybe we have really missed an opportunity. Are there plans for creating a real sense of ownership and getting the people who are

ultimately going to be living on this site, within this Park, to physically be involved with the development and the upkeep and the maturing of this land?

Carlo Laurenzi (Chief Executive, London Wildlife Trust): I would say two or three things. One of the things that I think the ODA has done very well is perhaps not to pull a thick black line between the internal aspects of the building and the external aspects of the building. That is a credit to the whole design of the Olympic Park. In other words we have got use of living walls, green roofs etc. That starts to begin to have an impact on how people identify with the natural space around them.

The mistake in the analysis will be to look at the Olympic Park in isolation because nobody lives there at the moment. We have got an opportunity to create a new cultural identity for that Park, but to see it in isolation is a mistake. There are lots of people living in and around it.

One of the things that we have done over the last six years is a whole series of community engagement programmes. It is not as if we are starting from scratch in and around the area. If you imagine the doughnut around the Olympic Park that has had a lot of activity.

The key to the long term management of the legacy elements of the Olympic Park site is creating the sense of engagement and you have got to do it right at the very beginning. People who come to live there, if they are renting a flat, they need to be really encouraged to engage in voluntary activity of one sort or another. We have got an opportunity to create a really meaningful cultural and bio diverse experience for people living in there. We are not starting from scratch and to look at it in isolation, I think, is a mistake.

Adam Wallace (Area Manager, London, Surrey & Bucks, Natural England): To add to that, you are going from a ticketed site to a community park and there are plans in place to open the physical access into the Park in a way that will be very helpful and constructive.

The bigger issue for me is the wider picture beyond using the Park as a springboard for other sites up and down the valley. There is Walthamstow Wetlands, for example, where there are real opportunities to engage communities in development of green space in London in a way that does build that ownership. We will have to work hard to ensure that communities do draw on the Park and feel that they own it, because we are coming from a place, as Carlo says, where nobody lives there currently and there is a step change that is required there. There is lots of evidence and projects out there that do that but we need to make sure that funding is in place and activities are in place to make that happen over the coming years, but set it in the context of the wider picture of let's take the opportunity of the Park to springboard into development of green space in the vicinity and, at the same time, you build the community engagement with all of that activity and the linkages between it. That is the real opportunity in terms of sustainability.

Andrew Altman (Chief Executive, OPLC): One very quick point. It is a small example. It may be a little bit different. We have a partnership with Field Studies to set up a Field Studies Centre and a Fields Study Council which is to create on the Park a Field Studies Centre which would be around environmental learning and environmental education. This would be taking kids from the surrounding area, inner city communities, frankly from throughout the country, who could come to the Park for environmental education and stay for programmes - whether that is a week or a day. Really using the Park and what has been created also as an opportunity for learning and an opportunity for engagement. A small example but I think it is one of many things of how we can connect the Park.

James Cleverly (AM): Is there a game plan? Is there a plan? Is there a lead organisation that is going to be tasked with encouraging the residents on and around the Park to not just see it as some manicured green space and really make best use - I genuinely believe this is going to be an amazing space but I think we will have missed a huge opportunity if people view it as some grass and some trees where flats and sporting venues are. I want to make sure that someone has been identified as whose

job is it to drag the people kicking and screaming away from their widescreen televisions and getting their sleeves rolled up and getting their knees muddy and looking at the butterflies and protecting the newts? Who is going to do it? Otherwise it might not happen.

Murad Qureshi (Chair): James, I think Carlo is going to make a pitch for it now!

James Cleverly (AM): Carlo knows that I rate him highly.

Carlo Laurenzi (Chief Executive, London Wildlife Trust): I am not going to make a pitch for it! I wanted to reassure you, James, just to give you an example about the engagement that has happened already. The View Tube classroom that we share with the Field Studies Council. In less than two years we have had 80,000 children through there. The bulk of that have been primary schools which we have been working with. That means they have already been exposed to the animal Olympics curriculum. A lot of them are local schools. Not all of them. They come from around the country. There is a real appetite and enthusiasm for us to do something different and better with the Olympic Park. I think it is there.

In terms of there being a lead body that will deliver a vision - and the vision needs to have a bit more detail. Clearly that needs to rest with the OPLC because that is its statutory duty. We need to be working with it to do that.

My advice to it is to really be as creative as you can in terms of what that actually looks like. My request to that end of the Chamber would be to ensure that, whenever it can, OPLC does add the resources that it needs to actually deliver that and is free from levels of interference that might prevent it from achieving its broader vision. We would love to be part of that.

Andrew Altman (Chief Executive, OPLC): We do that as a responsibility. Not that we have to be the ones who necessarily deliver it. There are huge partnerships with the boroughs and others. We have a Youth Legacy Panel that engages the youth of the community in the Park. It is a responsibility we take and we will do that in partnerships. Absolutely. I agree with you completely.

Murad Qureshi (Chair): That is reassuring. Can I, at this moment, welcome Westhill Primary School from Wandsworth? If you are wondering what we are talking about we are talking about the future of the Olympic Park after the Games.

On this section can I sweep up by something that is often not mentioned and has not been mentioned up until now; the rivers. We have got the River Lee going through. We have got an extensive network of canals. One of the things that has radically changed has been the transformation in the rivers and the canals. I am concerned about how that is going to be managed in the future. I know how hard pressed British Waterways is with its resources. I want to be sure that that is not going to be left to decline whilst the focus is on other aspects of the biodiversity of the location. Rob, you probably have some experience of managing the River Lee.

Rob Cairns (Head of Environmental Design, Lee Valley Regional Park Authority): Yes, although our responsibility does not directly revolve around the river and in this case the Environment Agency is in charge of the River Lee itself and British Waterways are in charge of the waterways that are the navigation and the back rivers. Those direct responsibilities I assume will rest with those bodies. Again, it is important - and I believe British Waterways is doing quite a lot of work at the moment with the ODA identifying how those will come forward into the future. It is very much about a partnership approach to what is happening in the water and on the water and it is properly plugged in to what is happening around the banks and on the sides.

Simon Wright (Director of Infrastructure and Utilities, ODA): To give you a snapshot of where we are now, we have carried out, with British Waterways and the Environment Agency, an extensive

programme to improve those waterways. That is not only ecological but also in flood defence terms. Part of the wetlands is actually a flood storage area to reduce flooding elsewhere in the boroughs. We are carrying out dredging to remove material which is, in itself, contaminated but also improves water depth for navigation and we are planting reeds and creating a water quality improvement online.

We are also going to work with British Waterways in surface water quality pre and during Games so that we are managing those watercourses with British Waterways right through the Games.

What none of us can control is what happens upstream and what happens in the catchments but the Environment Agency and others are working on that separately. Within the water bodies that exist within the Park the partnerships with British Waterways and the Environment Agency have been very, very strong and we have worked closely with them over many years. We will hand them over in as good a condition as can be achieved but always subject to what you receive from the neighbours upstream.

Murad Qureshi (Chair): Thank you. That is reasonably reassuring. I know one or two people have to leave. Thank you for all your contributions and your presentation earlier, Andrew [Altman].

Andrew Altman (Chief Executive, OPLC): Thank you. I want to confirm to the Committee that the waterways that come to the site are what makes it absolutely special. The Park is terrific; the waterways are amazing. We are working with British Waterways and we are looking at everything from the permanent work and what we need for the ongoing construction, to visitor moorings and to the public access to the waterways. This is going to be a fundamental core of what we are doing on the site. We are totally committed to it.

Murad Qureshi (Chair): Thank you, Andrew, for reiterating that. Can we now move to soil and ground water questions?

Andrew Boff (AM): I would like to ask has the ODA provided the OPLC with the location, volume and composition of the onsite disposal cell for contaminated waste?

Simon Wright (Director of Infrastructure and Utilities, ODA): Yes.

Andrew Boff (AM): Great. What are the intentions of the OPLC with regard to that cell? Does it intend to keep that onsite or remove the contents off site?

Simon Wright (Director of Infrastructure and Utilities, ODA): When we say cell this is very low level material. This is exempt from regulation. The reason it is there is because we were extremely cautious about how we dealt with this. The low level material which was very low in volume was a number of aircraft dials which had luminescent paint on it. That low level material was stored in barrels and has been taken off site to a suitable waste disposal venue. This material, which is below this abutment in LO3 - there is a bridge called LO3 in the middle of the site - has been deposited in there, covered and protected and, as far as we are concerned, it is an area that is a permanent piece of infrastructure and there is no reason, from our understanding of the master plan, to ever touch it or go need it. It is, in itself, very low level material, as I said, exempt from regulation. It could have actually been left exactly where it was. My understanding is, under the current master plan, there is no need to revisit that area.

Andrew Boff (AM): Was not the reason for the strategy of mixing up contaminated material with less contaminated material in order to reduce it below the level that would stop it being exempt?

Simon Wright (Director of Infrastructure and Utilities, ODA): It would take quite a long discussion to explain the detail of this and we have done so on many occasions in Freedom of Information (FOIs) requests and other places. The material is discovered. It is very low level material.

There are some components within it that are low level, which are identifiable generally. The material was then discussed with the Environment Agency and other regulatory bodies and the treatment of it was agreed with those regulatory bodies. The material was considered to be of a condition that it was not caught by the regulations and we placed it within this abutment on LO3. Further material was later on exported and deposited off site.

Andrew Boff (AM): Did some of those processes receive approval after the material had been dealt with?

Simon Wright (Director of Infrastructure and Utilities, ODA): My previous Chief Executive, David Higgins, wrote to you on 26 January 2011 with the explanation in some detail of what took place. The unexpected material which we find we have to advise the planning authority. We did so. We proceeded in one area in advance of receiving the remediation change notice of those zones. However, the planning authority was fully aware of what went on and it was happy with what was going on. It did not believe there was any further action that needed to be taken and no further action was taken. Clearly that was not something we do willy nilly. It was an error at the time. There was no increase in risk to any party.

Andrew Boff (AM): Will there be any future checks on the status and condition of that disposal cell and, if so, how frequently will such checks take place?

Simon Wright (Director of Infrastructure and Utilities, ODA): There is continuing monitoring of the entire site which we are obligated to continue for our duration. We monitor primarily ground water because, as you will understand, remediation contamination is primarily concerned about protecting human health firstly and ground water secondly. There is monitoring continuing by ODA, through our tenure, and we provide a report to the Planning Decisions Team (PDT) on an annual basis.

Andrew Boff (AM): You are doing monitoring on ground water but are you doing any monitoring specifically on that cell?

Simon Wright (Director of Infrastructure and Utilities, ODA): Of ground water, yes.

Andrew Boff (AM): But not of that cell?

Simon Wright (Director of Infrastructure and Utilities, ODA): It is a static earth embankment. There is nothing that can be monitored within it. It is not an active area. Ground water is the area that was monitored --

Andrew Boff (AM): So has nothing been put in place in that disposal cell to allow future monitoring to take place?

Simon Wright (Director of Infrastructure and Utilities, ODA): As I said, it is not an active process so I am not sure what monitoring could --

Andrew Boff (AM): One of the monitorings that could take place, bearing in mind we know that Thorium was found on the site and whilst thorium itself is not very dangerous to human beings, a concentration of thorium would result in the building up of radon gas and that is very damaging to human beings. Unless you put monitoring in place that can confirm that that radon is not present in the disposal cell I am wondering how one can convince oneself that that is not a future threat?

Simon Wright (Director of Infrastructure and Utilities, ODA): This material is buried beneath the highway and has no buildings over it. It is radon gas if it is should be developed and I think it is highly unlikely it would ever be developed. It is not going to be contained in a building. In places like Cornwall where natural granite rock does emit radon the concern there is always about buildings and

about making sure that you have ventilated substructures of buildings. We do not have any structures over this cell so any radon, if it were to be generated and I think it is highly unlikely it will ever be generated, would be emitted to air and be of no risk.

Andrew Boff (AM): The cell is permeable?

Simon Wright (Director of Infrastructure and Utilities, ODA): It is earth. It is not an impermeable material. It is covered in soil.

Andrew Boff (AM): OK. Has the ODA provided the OPLC with a profile of the mix of contaminants below the one metre deep membrane?

Simon Wright (Director of Infrastructure and Utilities, ODA): Yes. I must stress the OPLC has been intimately involved in every step of the way. The contaminated treatment plan was actually carried out on behalf, originally, of the London Development Agency (LDA). The original agreement we entered into with the land owner at that time, the LDA - since inherited by the OPLC - was that we should carry out the work on its behalf. Therefore, it is carried out in accordance with a legal agreement which is signed between us which requires us to have absolute clarity and transparency between the parties. OPLC, LDA as was, has been intimately involved at every step of the way. It signs off documents - design justification statements they are called - prior to the work taking place. It attends the monthly forum, along with a number of other agencies, EA and the boroughs and the PDT, and it receives details of all the activity prior to it taking place. My view is - of course Niall may wish to comment - is OPLC is absolutely sighted to every single element in it.

Niall McNevin (Director of Planning, OPLC): Chair, for the record I can confirm that.

Andrew Boff (AM): When did the OPLC come into operation?

Niall McNevin (Director of Planning, OPLC): January 2009 I think it was.

Andrew Boff (AM): When did the works on the remediation of the land commence?

Simon Wright (Director of Infrastructure and Utilities, ODA): There was a site investigation so, if you include that, that commenced in 2006. The actual excavation and treatment started in 2007.

Andrew Boff (AM): Wouldn't it have been a little difficult to consult with the OPLC in 2006 when it had another three years before it was going to be --

Simon Wright (Director of Infrastructure and Utilities, ODA): No. As I said, I believe, Chair, that we consulted with LDA who was the predecessor to OPLC. Indeed, it is the same individuals in the two organisations who have been consistently involved in this activity from day one.

Andrew Boff (AM): One of the concerns I have got is that the OPLC was not around earlier and that much of the remediation was delivered in order to deliver a Games that was safe for the Games to take away. It did not seem there were many people focusing on post-Games legacy.

Simon Wright (Director of Infrastructure and Utilities, ODA): I disagree with that entirely. The remediation plan, as agreed with the LDA, who became the OPLC, was --

Andrew Boff (AM): That is not quite true. It did not become the OPLC. It provided staff to the OPLC.

Simon Wright (Director of Infrastructure and Utilities, ODA): Many of the assets of the LDA were inherited by the OPLC, including some people and the land.

Andrew Boff (AM): Yes, but it did not become the OPLC.

Simon Wright (Director of Infrastructure and Utilities, ODA): The design of the remediation was carried out with two priorities. The first was, as you say, the operation of the Games, and the second was the legacy master plan. The design of the remediation has been carried out in accordance with the master plan strategy and the land use that existed at the time of the signing of the agreement and the design of the remediation. It is in accordance with the 2007 master plan and it is fit for purpose for that land use that was defined at that time. That is clearly all one could have done because one cannot foresee the future beyond that.

Andrew Boff (AM): It has been established there was insufficient remediation to allow food growing on the Olympic site. Is this something that the OPLC is intending to address?

Niall McNevin (Director of Planning, OPLC): We will address the issue of food growing and the matter you raised. Yes, of course.

Andrew Boff (AM): Sorry, you are going to enable food growing to happen?

Niall McNevin (Director of Planning, OPLC): I think that is a different question, Chair. Could you repeat the question please?

Andrew Boff (AM): Sorry. We know that one of the things that would not be recommended is to grow food on the Olympic site because there would be some safety concerns with food on the site. I am wondering whether the OPLC wishes to address that? There are other parts of London where you cannot grow food. I am not saying it is the only place in London you cannot grow food. I am saying do you intend to address that or not?

Simon Wright (Director of Infrastructure and Utilities, ODA): If I may just kick off? The remediation has been designed for relatively high density development. The parklands that are already there have already been remediated. They are what they are and they are complete. They will not be disturbed. The remediation on the development zones has been designed for relatively high level high density development which is the master plan at the time. The London Plan focuses at that time on higher density development.

It is not, at the moment, designed for food growing *per se*. It has a deepish layer, 600 millimetres, of clean material above what we call the marker layer which is the horizon marked with a membrane to demonstrate that anything above that layer is clean material. 600 millimetres exists across the entire site. Sometimes more; up to 800 millimetres or 900 millimetres. If there was food growing, as you say, then it would have to be reviewed. It is not designed specifically for that.

Andrew Boff (AM): Thank you.

Niall McNevin (Director of Planning, OPLC): The only thing I would say is the statutory regulatory process for this would need to be considered. It is unfortunate Dave Wardle has left the Committee. The Environment Agency, as I understand it, has the statutory regulatory role.

Simon Wright (Director of Infrastructure and Utilities, ODA): As well as the boroughs, the environmental health officers.

Andrew Boff (AM): Thank you.

Murad Qureshi (Chair): Our final question will come from Mike [Tuffrey].

Mike Tuffrey (AM): The issue is we heard earlier about the improved public transport infrastructure into the site. In terms of getting on and off the site into the rest of London that is a positive. We have built the city by having people living in one part of the city and travelling to another part of the city, driving the kids to school, going to the supermarkets by car and so forth. All this scenario planning is saying that that is not a sustainable way of continuing to grow the city. The question is whether, in terms of what the ODA and the OPLC are doing, in partnership with you, is enough to build a new way of running things with information and communications technology (ICT) at the heart, allegedly. The solution to all these problems. Tell us what you are doing to solve all the problems we have just been talking about. I was looking at Andrew [Campling] but Johanna [Hegarty], if that is your remit, then whatever.

Andrew Campling (General Manager, London, BT): Maybe I will start. Johanna has got the expertise on the site. When the OPLC was formed Margaret Ford, at the outset, quite explicitly asked us to make sure that the Park was not a technology island. A lot of the work we have been doing is not just on the site itself but also all around the Park. We have been upgrading all of the Broadband infrastructure in the host boroughs and across the rest of London, and will continue to do so. All of the broadband capability in the areas around the Park is currently being upgraded.

By 2012, about the time of the Games, you should see capabilities of Broadband of up to 80 megabits for the vast majority of residents in that whole area. Very high speed Broadband for residents and SMEs. Much higher speeds, again, for other large organisations, should they need to use it. That is outside of the Park.

Johanna Hegarty (Director, London 2012 Programme, BT): Within the Park itself, as I am sure you are aware, we are the communication services partner for the Olympic Games and we are also a sustainability partner for London 2012 as well, so we have got a strong interest in delivering a communication service as infrastructure which is not just works during Games time but is also done in a sustainable way. On the Park itself there is fibre and copper that is being delivered as infrastructure into the Park which we fully intend to leave there after the Games itself. That will be available, hopefully, for BT to use afterwards but also to other communication providers to use afterwards.

If I can take a step back from that and talk a little bit more about the way in which we have approached the programme from a sustainability perspective because we are interested specifically in the legacy afterwards. Even in delivering the infrastructure we have tried to bring sustainability into the way that we have delivered the infrastructure. For example, on the Park itself, we are implementing what is called a converged network and that is bringing together data and voice for the first time in a summer Games. That, in itself, will significantly reduce the energy consumption during Games time, potentially in legacy, and also the waste that could be incurred if we had to change that and move that afterwards.

The other thing that we have done that I know Shaun [McCarthy] is aware of to develop a methodology to calculate the carbon footprint of complex ICT solutions. We have done that for the first time with the solution that we are actually putting in to the Park for the Olympic Games. The benefit of that is, once we understand the footprint of that solution, it allows us to look at ways of reducing that, and we are seeing demand now for that from other customers and from future Olympic Games as well, so there is a legacy element to that that is quite important and quite beneficial.

In terms of what we are putting on to the Park itself, obviously there are communication services going into the venues and the buildings. We are putting Wi-Fi into the Park. Again, after the Games, the intention is very much to leave the infrastructure there and to make that available.

The important point to draw out is that we are in consultation with the OPLC to really ensure that, as the plans for the Park firm up, we are there to support, from the communications perspective, to make sure that what we are actually putting in for the venues at the moment can be used in legacy. A really

important part of this is to not have to take stuff out afterwards but to be able to reuse it afterwards in the most effective way. The fibre that we are putting in to the Park and the Wi-Fi that we are putting in to the Park will go a long way to addressing how we ensure that people cannot just get to the Park from a transport perspective but once they are there, after the Games, have got the capabilities to communicate outwards.

Mike Tuffrey (AM): That all sounds good but going back to the issue that I was raising earlier, the gap between today and where we should be - I do not know whether Shaun [McCarthy] has done any work on this in terms of the commission. I am very conscious you are in the private sector, you have owners, you have profit targets to meet, you have a regulator and you cannot actually go very much beyond today's regulatory and economic framework to do the things that we need doing. Question mark. How can we be satisfied that you are doing what is needed for the future, rather than for today.

Andrew Campling (General Manager, London, BT): It is worth bearing in mind that we have had a Chief Sustainability Officer since the early 1990s so well before it was fashionable to have one, and have been reducing our carbon footprint since the 1990s. For our network power consumption 98% of the power for that is from renewable sources - green energy if you like - and has been, I think, since the early part of the last decade. At the time it was the world's biggest green energy contract. It probably is not now but it was when we started. By 2016 we are targeting that roughly 25% of our energy consumption in the UK will be generated from renewable sources, mainly wind, that we are putting in place.

Mike Tuffrey (AM): That is how you operate as a business.

Andrew Campling (General Manager, London, BT): That is not how we are regulated. That is part of how we are choosing to operate as a business, going beyond what we are obliged to do. Broadening the sustainability question well beyond just the green bits you will also see that we are pushing a lot of obligations down our supply chain in terms of things like ethical sourcing and so on. There are a lot of things that go significantly beyond what Ofcom or other regulations would require us to do, looking at sustainability in the very broadest sense of the word.

Mike Tuffrey (AM): OK. In which case, just to get a view from the Commission, is what they are currently doing enough or are you expecting, in terms of the sustainability goals, for them to be doing more?

Shaun McCarthy (Chair, Commission for a Sustainable London 2012): It is something that we have not explored so far, Mike, but we do plan to. We are just starting off our review of legacy arrangements right now so this session is very timely for us as well. There are issues that we have expressed already with regard to the energy infrastructure and the future proofing of that. We have not looked at the technology infrastructure yet so I cannot really comment on that question at the moment, but we do plan to look at it over the next three months.

Simon Wright (Director of Infrastructure and Utilities, ODA): Can I add a quick point? ODA has provided the containment in the Park - holes in the ground. That is the expensive bit, frankly. BT is installing fibre now. There are three separate clusters of ducts of containment. BT is installing in one of them which will be the public network for the Games, pre-Games and post-Games. The middle network is a Games time network which could remain if it was decided it should remain. The third bank we are providing a private network - which BT is installing for us but it will be inherited by OPLC. The expensive stuff, the difficult stuff, is all going to be there. How you light these cables and how you put information data down them is an easier thing to swap around and change and keep up to speed with. The important thing is to get the containment in and the fibre. In the Village the fibres goes right to the apartment. It is not copper. It is high speed right to the apartment in the Village in the first housing development. We think that it is as future proof as you could possibly be in terms of infrastructure.

Johanna Hegarty (Director, London 2012 Programme, BT): The point that Simon makes is correct in the sense that the Village is the very first place in the UK that has had this put into apartments. We cannot get much more advanced than that in terms of what we are actually putting in.

I completely agree that the fundamental thing is having the infrastructure there in the first place. As long as you have got it there there are lots of opportunities for what you can do with it afterwards.

Mike Tuffrey (AM): My last question. In terms of BT, will you agree to work with the Commission - when it gets round to looking at that - and fully cooperate to meet these big sustainability goals?

Johanna Hegarty (Director, London 2012 Programme, BT): Yes, absolutely. As I said, we are already working with the OPLC as well to --

Mike Tuffrey (AM): The Commission is different.

Johanna Hegarty (Director, London 2012 Programme, BT): We do talk to each other.

Shaun McCarthy (Chair, Commission for a Sustainable London 2012): We have a very good relationship with BT and it has been a great sustainability partner.

Murad Qureshi (Chair): Thank you very much. That is the last of our questions this morning. Thank you very much for participating and coming along. It has been quite intensive because there has been a lot of ground covered. We intend to put out a report towards the end of the year and will initially make a response to OPLC's sustainability consultation, some of our thoughts, to give you a flavour of what we have thought about subsequent to the meeting. Thank you again for your contributions and we wish you a good day.