

Environment Committee – 13 October 2016**Transcript of Item 6 – Discussion with the Deputy Mayor for Environment and Energy**

Leonie Cooper AM (Chair): We now move to our discussion with Shirley Rodrigues, who is the fairly newly appointed Deputy Mayor for Environment and Energy -- five days in, I think?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): About eight or nine.

Leonie Cooper AM (Chair): Eight or nine; as many as that! As you know, we have split the discussion into two sections and, Shirley, we are hoping that you are going to be able to stay with us for both halves and, Patrick, you are going to be with us as well.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Yes.

Leonie Cooper AM (Chair): Great. Cassie Sutherland, who is the Policy and Programme Manager for Climate Change here at the Greater London Authority (GLA) and Andrew Jones [Policy and Programme Manager, GLA] are here just for the first part up until 11.00am. Thank you very much for agreeing to join us. Hopefully, you have been here for slightly longer than eight days. I know you have!

Without further ado, we would like to move into our discussion. The first thing that we would like to do is to ask you, Shirley, if there are a few things that you might wish to say in opening this first part on environmental priorities.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): First of all, thank you very much to the Committee for inviting me to come along. I did want to make it one of my priorities given that a lot of the work you have done has helped improve London's environment over the years and I definitely want to hear what suggestions you have for the Mayor's agenda.

I am very pleased to be back at City Hall. As some of you know, I worked here as the Head of Environment and Climate Change some years ago. Since then, I have moved on to work for a spell at the Sustainable Development Commission in the Government before the bonfire of the quangos ended that quite a bit more quickly than I thought. Then, after that, I moved on to work for a private philanthropic foundation, the Children's Investment Fund Foundation, where I have been working for the last five years to help to establish an urbanisation strategy, essentially helping to fund organisations around the world, particularly in China and Brazil, to develop their cities in a more sustainable way. Many of the examples that they were keen to follow were from London: the Congestion Charge and the Low Emission Zone (LEZ), for example, the way that we have planned our city to be more transit-oriented and more sustainable. I am very pleased to be back here and to be in London to help develop even more examples for other cities to follow.

As you know, I have had a few spells in local government. I started my career working in the London Boroughs of Waltham Forest and Hammersmith and Fulham. I then worked for the then Association of London Government - now London Councils' - Transport Committee for London. I feel that I am hoping to bring all of that experience to bear in this new role as Deputy Mayor for Environment and Energy.

In terms of the priorities that the Mayor has set out, you will be familiar that he said he wants to be the greenest Mayor ever and to seek to establish London as a leader on energy and environment issues.

Environment is not just a checklist or an add-on; it is absolutely integral to everything that we do in London and to all of the portfolios and so my job will be, with the team, helping to make sure that that happens.

My priorities will be, obviously, to deliver the Mayor's agenda, which is to clean up London's air. You will have seen that we already launched the statutory consultation on the T-charge on Monday and further consultations on the Ultra-Low Emission Zone (ULEZ). We want to protect and enhance our natural environment and make London a low-carbon leader with a commitment for London to be a zero-carbon city by 2050. Of course, a big issue is to make London more resource-efficient. Without tackling all of those issues, the growth in the population of London would mean that there will be very severe consequences for how we grow London, our quality of life and, very importantly, the health of Londoners, particularly the most vulnerable.

I want to make sure that we are a leader, as I said. Many cities around the world want to emulate cities like London. We have a very good track record, good examples and best practice to share. We have lessons to learn from other cities and we also have good examples and I want to make sure that we do that, too.

A key issue would be, for me, the signing of the Paris Agreement in December [2015]. Its very early ratification - one of the fastest ratifications of an international agreement - and it coming into force in November [2016] gives us an opportunity to transform London into a low-carbon economy and a new-climate economy. That does require quite a fundamental shift in how we look at how London develops and how we work in London. This is not a challenge that London faces on its own. With all countries signing up to those agreements, all other cities will have to do the same and I want London to be the exemplar for that.

In terms of my approach, just to finish off, as we have said, I have been in the job for only a few days now and so what I am doing very much and very fast is working with the team to understand what the current programmes are, what the state is, what the baseline is, essentially, and where we need to be so that we can start to work out what interventions are needed to implement the Mayor's priorities. That is quite a lot of work for the team and they have been absolutely brilliant. I just want to say that I have been flooded with information and it is a very good team.

Once we have those outcomes, then we will be establishing what we at the GLA can do as leaders, what we can do with our partners, the boroughs, businesses and so on, but seeking to work with Londoners, the community out in London, whom we know want to do a lot more on the environment and climate change. When we have those ideas, we will be enshrining them into a new London Environment Strategy, which we hope will be out in the spring of next year [2017].

I just wanted to leave that as an opening statement. I am very happy to take questions.

Leonie Cooper AM (Chair): Thanks very much for kicking us off today, Shirley, with that. Can I just ask you, then, how you think the new Mayor's administration is going to be different from the last one in terms of the approach to the environment?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I cannot speak for the whole administration; I can certainly tell you what I would want to do.

I want to build on some good work that has happened here since, certainly, I left and over the last two administrations, but what I am doing at the moment is just understanding how those have performed and, where they have not performed, how we can make them better. Part of that is about understanding where London needs to be in meeting its air quality targets and its very tough emissions targets that are already set

out in the London Plan, and understanding where we might accelerate action, where we need to be more ambitious and where we have to scale up the initiatives that we already have.

Some of that will need prioritisation. We have a very tough budget round that we are going through at the moment, but we need to understand what the priorities of Londoners are. With voting the Mayor in, they have made it very clear that air quality is one of the highest priorities.

Leonie Cooper AM (Chair): How will you measure success in all of those areas? How will we measure your success?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): As I said, we are trying to establish what the baselines are and what is possible in the next few years of the Mayor's term. Ultimately, it is about how much and how far and how quickly we have delivered the Mayor's priorities on air quality, implementing the Emissions Surcharge, implementing - subject to the outcome of consultation - the ULEZ, the areas that we have direct control over at the GLA and at Transport for London (TfL) and the family there, what we can do on our bus fleet and what we can do through the London Plan. I cannot tell you right now specifically but largely it is the Mayor's manifesto.

Leonie Cooper AM (Chair): Broadly, do you think we are going to be looking at something like moving on from the baselines, which you want to establish, to having a set of targets in terms of outputs and outcomes so that we can see something that we can specifically measure? One of the issues that some people find difficult about environmental issues is that some people see it as being rather amorphous. I am just wondering if we are going to be able to nail down quite precisely some outcomes to achieve over the next three-and-a-half years.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): That is very much my intention. That is the way that I have worked and the way that have worked in previous jobs has been to understand where we need to be, back-casting from there to where we are and then working out the pathway to get there. We need to take into account circumstances in London from economic to political circumstances like Brexit, which is causing uncertainty, and then work out what we can deliver reasonably in that timeline and pin down some interventions with which we hope you and Londoners can hold us to account.

Leonie Cooper AM (Chair): You talked a bit about London's position internationally and the first Mayor was involved in the setting up of the C40 Cities Group. Do you think we now still have that leadership position or do you think there is anything that you will be able to do to improve London's position internationally and improve our reputation?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): London, just by virtue of being London and a world-class city, will always be there with New York and Paris, but we have lost a bit of an edge internationally to New York. Mayor Hidalgo of Paris is now the chair of C40 or will be in November [2016] and Paris is certainly getting some headlines for what it is doing. However, when you examine what we have implemented and what we plan to implement, we can regain that mantle of being the greenest city ever.

For example, the zero-carbon homes policy that we have in the London Plan is the only policy in the United Kingdom (UK); the Government has abandoned that policy. That is a very big beacon that is not being done wholesale across the world. The other example I would point to, too, is our waste metric, which is looking at both emissions reductions as well as how we improve our performance on waste. That is unique, as far as I can tell, and is something that we want to be able to promote to other cities to say, especially post-Paris [Agreement], "These are things that you will need to take into account". We are piloting these approaches in London and it seems to be working. We are doing very well on that particular metric.

However, there are more things that we can be doing and, as I have said, there are things that we can learn. The whole point of C40 was to understand what is happening around the world and where the best practice is, to steal that best practice and to do it better, essentially. Yes, we are a leader in some areas. We could be a leader in a lot more areas and that is what we would want to do.

Leonie Cooper AM (Chair): It would be nice to see some metrics applied to where we are relative to other cities as well. I have absolutely no doubt that we are going to talk about waste in a bit.

I just wanted finally to ask you a bit about the work with other departments. You were talking about your team, but you also mentioned that a number of environmental issues do not lie just within the purview of your team and so there is going to be a need to work very closely with a number of the other Deputy Mayors. Val Shawcross [Valerie Shawcross CBE] is the Deputy Mayor for Transport and you cannot deliver on a lot of air quality issues without a lot of interface there. Of course, there is quite a crossover in terms of promoting the low-carbon economy and Skills for Londoners with the Deputy Mayor for Business.

I wondered if you could talk through a bit about how you are planning to build up those relationships and make sure that you drive through the environmental priorities elsewhere. Are you going to be having regular meetings with them? How is that going to work?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): That is absolutely my intention. I have already met most of the Deputy Mayors. I have met with Val [Shawcross CBE, Deputy Mayor for Transport], Rajesh [Agrawal, Deputy Mayor for Business], Jules [Pipe, Deputy Mayor for Planning, Regeneration and Skills], James [Murray, Deputy Mayor for Housing, Land and Residential Development] and others to talk about our priorities and I have tried to understand where there are opportunities that we can influence. As you know, environment does not have its own budget; we have to implement through others, through TfL, through the London Plan, through the Housing Strategy and the Economic Development Strategy, with the boroughs and so on.

I have already had - albeit very short - meetings where we have highlighted those issues and have established that we will work more closely together. As we go forward, Jules [Pipe], for example, is setting up a number of meetings to start discussing the forthcoming London Plan review and environment is part of that. It will be one of the chapters and it is clear that environment has to work its way through the various chapters and so I will be attending those meetings. With Rajesh [Agrawal], we are looking at the Economic Development Strategy. I have already talked to James [Murray] about the interplay between housing and our desire for zero-carbon buildings and so on. That is very much in our minds.

We have regular meetings as Deputy Mayors and the team has relationships with the teams that work with those Deputy Mayors and so, at both levels, we are starting to foster that. They are building on the good relationships they have and I am starting to establish those links now.

Leonie Cooper AM (Chair): That is good to hear. I do not know whether anyone else has any other introductory questions that they want to put at this point before we move on into some more detail.

Shaun Bailey AM: I just want to go back to this point about targets. As a Londoner, as one of the individuals who will be bearing any bills that come along, I need clear targets to be able to judge if there is progress or not. It is not the things that we can control, such as the implementation; that is not a target that is really in the Mayor's gift to do or not. We need targets around the actual effects of air quality, etc.

I would implore your team to do some work on providing us with a clear system so that Londoners can look at whatever paperwork is generated and see whether it has gone up or down in very simple terms. We will lose support for the environmental push if it is hard to understand.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I appreciate that and it has to be in terms that Londoners see in their daily lives. We have very good monitoring to look at, for example, how well our air quality performance is against the European Union (EU) limit values and our emissions performance.

Some of these things are long term and so they can be modelled only every year. For example, for greenhouse gas emissions, it relies on data coming in from energy companies and so on. However, where we can provide more real-time data, then we should try to have a look at that. It is not always possible and sometimes it is not economically feasible to do that.

On other areas, we know that there are good targets. We may not have been doing so well. For example, for some of the housing schemes where we have been looking at retrofit and so on, they are able to provide data on how many houses or buildings have been retrofitted and the greenhouse gas emissions performance that is likely from modelling that and waste as well.

We have some good indicators and maybe it is a matter of trying to pull all of that together better.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Just an observation, really, on the difference in approach between this administration and the previous. You have seen a much bigger focus on social justice and the relationship between the environment and social issues. Moving forward, as we develop the Environment Strategy, we will be looking at that interplay and Shirley will be talking to Matthew Ryder [Deputy Mayor for Social Integration, Social Mobility and Community Engagement] about those kinds of issues.

Just on this issue of targets, under the previous administration - and this might be inevitable with someone who has been in for two terms - we had become very focused on the delivery of our projects and not so much focused on why we were delivering the projects. What Shirley has brought already within her first eight days is very much a looking back on all of those longer-term outcomes that we are trying to achieve and then, playing back from that, seeing how our projects deliver against those outcomes. That is something that you will see through the Environment Strategy as we move forward quite quickly.

Shaun Bailey AM: The Environment Strategy is not a target, though. If I am a Londoner, I need to understand why you need that project and whether that project has made any progress.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Yes, I totally agree. The Environment Strategy will break it down into the outcomes that will be delivered for Londoners. That will include things like a reduction in carbon dioxide (CO₂) emissions and it will also include things like jobs and growth in the low-carbon economy that will come from being the first to achieve those carbon-efficiency measures, which will be meaningful for Londoners.

Shaun Bailey AM: I would just ask for a very digestible manner. It reminds me of food labelling. If you pick up a Mars Bar, you have no idea what is in it, even though the label is in front of you. I would like to avoid that.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): You want to know whether we are doing better or not, yes.

Leonie Cooper AM (Chair): That is something that we can note. I am going to move on to Jennette now, who wanted to come in.

Jennette Arnold OBE AM: Yes, it is back to Shirley and it is to pick up the point that Patrick made. It seems to me that at its best, over the years, the implementation of the Strategy has been alive and has been really dynamic when it has engaged Londoners and so when young Londoners, older Londoners and London's women have been able to understand the impact on them.

I was just wondering, Shirley. Given your recent experience, will you be bringing any examples of good practice from across global cities where the population has owned a particular issue and have been able to be supported to deliver it? I am just thinking as well about the other remit that exists, that of Matthew Ryder about community engagement and inclusion. I do not know how mobility sits with that but it is certainly inclusion and engagement. Have you come with any ideas about that area?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I would have to discuss some of this with the Deputy Mayors but, certainly from the work that I have done around the world, it is absolutely critical to have, as you say, citizens behind the Mayor in delivering and we need to be very attuned to what it is they want.

The use of digital media is something that has absolutely transformed. Certainly since I was here, the growth in that media means that there are definitely better ways of understanding what people want and responding to them - getting their views and listening to them. Beyond the normal, "Let us have a meeting", or, "Here is a consultation response", you can actually get out there.

One of the other lessons is co-designing some of these strategies and interventions and at a very early stage discussing with the community what it is that concerns them so that you are not designing something just to tackle a particular issue or outcome that we have identified here in City Hall but what is relevant at a local level.

There are very many examples of how other cities have done this in New York and Rio, for example. They have this very complicated term called "polisdigitocracy", which is essentially how we use digital media to engage people to, in almost real time, talk about their environmental issues, their concerns and so on so that we can start to understand how we might pivot a particular intervention into something that meets their needs but also addresses the bigger priorities that we want. That is one way of engaging the community, but then of course it is very important to make sure that we are addressing communities that maybe do not have access to digital media so that we are making sure we have mechanisms to consult and engage those people - making sure that their voices are heard. Again, this is something that I know C40 has been starting to look at, but many other networks have been looking at this and we want to reach out to them.

Then we are, as I understand it, appointing a Chief Digital Officer at some point at City Hall and one of the big areas is going to be how to use their expertise to help us engage more and building on the very good engagement practice from the team here at City Hall.

Jennette Arnold OBE AM: Thank you.

Leonie Cooper AM (Chair): We are going to have to move on now because we have some specific questions, as you know, about a number of different topic areas. Thank you very much for that and I am sure we are going to come back to outputs, outcomes and how we engage people in measuring success.

I want to kick off by asking the first group of questions, which is about adaptation and climate change preparedness. We do face changes. London is in a vulnerable but also in a strong position. We have been allowing people to do a number of things that have contributed to some of our own problems in terms of non-sustainable urban drainage, people concreting over their front gardens and that sort of thing.

How do you see the ability of the GLA to support the boroughs - perhaps through the London Plan - to approach sustainable urban drainage and also to stop all of this concreting over of gardens? There is also a loss of green space, too.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I hope that you are not going to get bored with this, but I have been in the job for only a few days and have had a very sketchy briefing and so I am hoping to rely on Patrick [Feehily] and Cassie [Sutherland] on this.

My understanding is that we have some policies in the London Plan but we should take the opportunity of the London Plan review to strengthen them. We have been, through Drain London, working on a Sustainable Drainage Action Plan, which we hope to publish next month and which will set out a number of actions that we at the GLA can help motivate and implement, working with, for example, the boroughs and other organisations. That is primarily what we are doing.

We are already in very good engagement with the Environment Agency on the Thames Barrier. In terms of the major flooding areas, we are - fingers crossed - pretty well covered but it is something that we keep under review. The major risk, as you point out, is surface water flooding, where sustainable drainage is absolutely critical.

I am not sure, Cassie, if you have anything more specific to add.

Cassie Sutherland (Policy and Programmes Manager, Greater London Authority): I could just flesh out maybe the London Sustainable Drainage Action Plan just a little bit and the groups and areas we will be planning to work on with that.

We are hoping to launch it pretty soon but, hopefully, you will have seen the draft that was out last year. We had some interesting feedback from that, mainly very supportive of the actions that were in there. There was a target within that to say that there would be a 25% reduction in surface water flows into the sewer network by 2040. That is something that we can monitor over time as well.

Particularly the good thing about the Action Plan is that it is looking at retrofitting sustainable drainage. I take your point that we have to be looking at new developments, but we have to tackle things like people paving over their front gardens.

Also, in other sectors where there has been more grey infrastructure around hospitals and schools and everything, how can we change the nature of that infrastructure so that it can benefit sustainable drainage as well or perform as a sustainable drainage mechanism? The Action Plan sets out how we will work with different sectors such as schools, hospitals, households and so on to say, "Let us look at retrofitting sustainable drainage while you are doing other works, rather than just seeing it as an additional cost. Maybe while you are looking at replacing the roof or upgrading the roof on a building, can we consider a green roof? When you are doing some repairs to playgrounds, can we look at incorporating sustainable drainage mechanisms or measures within that retrofit?"

It is important as well to look at the cost-effectiveness of installing those drainage systems so that it is not seen as just another environment-only burden and we can see the co-benefits. There is of course a co-benefit

in terms of increasing the green space and improving the public realm and the contribution to air quality and reducing the urban heat island effect. It is a matter of us promoting all of those co-benefits through that Action Plan as well.

Leonie Cooper AM (Chair): You would see that Action Plan as being enshrined into the London Plan in the fullness of time, but in the short-term is that going to be part of the Direction of Travel Supplementary Planning Guidance (SPGs) that we are imminently going to be seeing? Is that going to be something that is going to be acted on fairly quickly? There have been some significant flooding issues and we have talked a little bit about - and Shirley [Rodrigues] touched on - tidal river issues as well as the surface water. The Thames Barrier may be reaching the end of its natural life and so it would be interesting to know what the Environment Agency is saying about that as well. Are we going to be seeing that as something that is going to be enshrined fairly soon?

Cassie Sutherland (Policy and Programmes Manager, Greater London Authority): Certainly, we will look to enshrine it further. In the short term as well, we want to act on it really quickly. We are going to have a dedicated officer looking at implementing that plan and going out to our stakeholders to assist them in leveraging funding in order to deliver those projects and actually do some of that groundwork where often people do not have the time, resource or expertise to do it. We are looking at very quick action on that, yes, and making sure that it is implemented on the ground and happening, rather than waiting for it to become a stick. We are looking at proactively engaging with that.

I do not know. Do you want me to briefly touch on the Thames Estuary 2100 (TE2100) with the Environment Agency?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Yes.

Cassie Sutherland (Policy and Programmes Manager, Greater London Authority): We have worked closely with the Environment Agency on the TE2100 Plan, which is an adaptation pathway and so it is a flexible approach to managing the increase in the level rise of the Thames. They have this plan to end up coping with up to a five-metre rise in the Thames and they have various different trigger points to allow them to make sure the correct interventions are being managed. We work closely with them on that and they have a steering group that we sit on and we keep an eye on it. We are confident in the work that they are doing at the moment and that they are appreciating the triggers that are coming in and acting on the relevant flood defence improvements that are needed in response to that.

Leonie Cooper AM (Chair): Did you want to add something, Patrick?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Yes, just one thing on the sustainable urban drainage point. It is recognised by Thames [Water] that we can use green infrastructure to divert water away from the hard infrastructure and so, when we come on to the natural environment piece later, we have to remember that we can utilise that to pay for some of those green enhancements that we need in the natural environment. That is something that we have been working on with Thames [Water], which had the Twenty 4 Twenty project and invested £20 million in sustainable urban drainage projects, all in London?

Cassie Sutherland (Policy and Programmes Manager, Greater London Authority): Yes.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): We can utilise that to then help deliver some of the green infrastructure enhancements for our communities as we develop moving forward.

The other thing that I just wanted to touch on was the growth areas in London and the Opportunity Areas. We have been working quite hard to make sure through what we call integrated water management strategies for each of those growth areas that we do not have some of the same mistakes in terms of sustainable urban drainage, drainage and water supply that we have had in the past. It is a retrofit problem; it is also a problem with new development. With that new development, we are working with those Opportunity Areas right now and we have been to ensure that we do not have the problems that we have had in some of our other very famous growth areas recently.

Leonie Cooper AM (Chair): I shall be certainly interested to see what comes out with the plans for the Thames Reach area, which was originally constructed, as I understand it, to provide flood overflow. It is going to be interesting to see what Peabody decides to do in terms of renewing that whole area. If they get rid of that, it seems to me that was a particularly sustainable piece of urban drainage, as required.

Can I just move away from drainage and problems with flooding, river and tidal and talk a little bit about the other side of climate change and heat? We are a large city and also, of course, we are quite water-poor in terms of supply to individuals. I just wondered whether you can give us a heads-up at all on moving forward on issues relating to heatwaves and action that we can take as a city and also, particularly with all the new developments that we are talking about, London's growing water needs. Where are we on that?

Cassie Sutherland (Policy and Programmes Manager, Greater London Authority): In terms of managing heat risk in London, we have a piece of work that we are doing at the moment. It is a seven-point plan and it looks at addressing various different areas of heat risk within London. We have the risk of new-build development overheating, particularly with the tightening of energy efficiency standards and moving towards more airtight buildings, and so we are working closely with the London Plan team. There is some policy already in the London Plan, but we are looking to strengthen that even further to ensure that our new developments do not overheat. There is some new Chartered Institution of Building Services Engineers (CIBSE) guidance coming out soon and we are looking to make sure that that is incorporated so that it does become a well-recognised standard and something that is achievable as well and something we will see within developments.

Within existing buildings, we have done a lot of work on identifying where the "hotspots" are and ensuring that we identify not only where there is the highest risk of overheating but also which buildings are most susceptible to overheating and where the most vulnerable residents are. How can we address the residents themselves and ensure that they have the right kind of tools in order to manage the heat risk and their buildings are adapted?

We have worked closely with academia and public health professionals in order to try to overlay all of that data and then to be in a position where we can provide that to boroughs to allow them to more effectively target their actions and interventions in terms of ensuring that vulnerable residents, whether they are elderly or have pre-existing medical conditions, can receive in some cases quick portable cooling mechanisms, but we want to do something before that. It is more about preparedness rather than an emergency response technique. Can they have things altered in their homes or measures retrofitted - such as shading or new glazing - in order to reduce that risk of overheating during heatwaves? As the urban heat island effect intensifies, we need to deal with that as well.

You mentioned briefly emergency preparedness. We are looking at and we are working with Public Health England on ensuring that the National Heatwave Plan is applicable to London and is appropriate for London. London does have some particular characteristics in terms of heat and the intensity of heat within the central areas. We are looking at updating that and working with Public Health England and the London Resilience

Forum to ensure that that is appropriate for London. We hope that in the coming months that will be released and able to be put in place.

Leonie Cooper AM (Chair): It strikes me that that might be an area that could be susceptible to some milestones and targets in terms of a reduction in excess summer deaths. That would be something that will be pretty clear to most Londoners and that might speak to something that Shaun [Bailey AM] was talking about earlier.

I am going to bring in David, who wants to talk a bit more about the natural environment and green infrastructure.

David Kurten AM: Thanks. London's natural environment, parks and the green infrastructure is so important for biodiversity, for mental health and for many other things. You mentioned a little bit about it when we were talking about drainage and the water infrastructure, but are there any other things that you plan to do that will improve or enhance London's natural environment and green infrastructure?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): In terms of natural environment and green infrastructure, it is pretty much half of London's area, but we know that we could do more. The Mayor has said in his manifesto that he wants London to be a National Park City and, whilst that is not clearly defined, there is a desire to do more to green London. One of the things that I have asked the team to do is to examine how we might do that and where the areas are or where we can act, for example, on new developments to make sure that we have green spaces and incorporated green roofs and, very importantly, that these are accessible to local people and are not locked away in some high-rise somewhere.

The other aspect of the green space that we have is making sure of, as I said, access but also quality of it. It is helpful for biodiversity. These are assets that are multifunctional. We have talked about the ability to deal with flooding and resilience. It is also a way of helping people to enjoy their city. It helps to purify the air and so on.

What we can do is, as ever, through the London Plan try to incorporate better planning guidance on what developers can do and what boroughs can do in terms of enhancing and protecting our natural environment. We can look at not building on the Green Belt, for example, so that we protect those areas. We can look at a number of other aspects. I do not know, Andrew, if you want to add anything.

Andrew Jones (Policy and Programme Manager, Greater London Authority): Yes, I will add to that. Shirley has mentioned the London Plan policy. There is fairly strong protection in the London Plan for designated green space. There are policies there going back to sustainable urban drainage things and good policies in there in terms of green roofs. There has been a substantive increase in green roofs over the last few years since that policy has been in place.

In the other work we do, which we plan to continue, we have been working with the Business Improvement Districts to outline the opportunities they have to green their areas because they are very keen on that green infrastructure making those areas attractive for the businesses that operate there.

One of the challenges with the green space agenda is that we have many parks and green spaces and the budgets are tight on that. One of the challenges we are looking at is that there is a range of functions that those green spaces provide, but that is not always valued and recognised. Therefore, we are doing some emerging work on natural capital accounting, where it is very much clear what those assets are and what they provide. Hopefully, that will then provide an opportunity to increase the resources going into managing those and will be very clear about what those benefits are. We sometimes undervalue the range of benefits they

provide. They have traditionally been very much providing amenity benefits in terms of helping to alleviate the heat island effect, but there may be opportunities to look at the way they are managed so that we maximise those opportunities and are squeezing what we get out of those spaces. That is very much what we are focusing on.

Plus, the Mayor is committed to doing a major programme on tree-planting. We are just working out the details of how we might implement that. We will be doing some very publicly focused stuff around that. We will be looking to update the All London Green Grid, which is the Mayor's infrastructure framework, so that we can prioritise where we think those interventions in London are best placed.

David Kurten AM: If I could just pick up on the Green Belt issue that you mentioned, I know from speaking to voters - particularly in boroughs in outer London like Havering, Enfield, Redbridge, Sutton or wherever - that there is immense pressure to build on Green Belt land. It is something that residents are very concerned about because the natural environment area is part of what people have grown up with and people love to go out walking and everything.

The Mayor has made noises about protecting the Green Belt, but how much are you going to protect the Green Belt given that there is this pressure to develop? What do you see as being the decisions you will make going forward? Is it total protection or will you be making some compromises on that?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): The Mayor has been very clear that he wants to protect the Green Belt. That is a manifesto commitment and so I am not sure what more I can say. That is the commitment, yes.

David Kurten AM: All right, fine. Are there any other tensions that you might see? I asked a question of the Mayor last month and I was given the answer that the population is increasing by 111,000 people per year at the moment and so that is a big pressure. How do you see that pressure trading off when balanced against protecting our green spaces in London?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): This is something that all cities are facing. There is increasing urbanisation across the world. London is not immune to that.

The key to that is looking at densities and looking at well-designed developments and housing. We can develop within the purview of London and London's footprint within the Green Belt by using brownfield land, by better designing our homes and, as I have said, by maximising our densities but without excessively damaging people's views and quality of life. People do not want what they think is the bad side of density.

A key part of our work going forward has to be looking at how we can explain how denser housing is attractive housing. We have, again, very good examples around the world that we can point to where high-density living also gives a good quality of life. The way that we are developing and proposing to develop in London around transport nodes means that we are reducing the need to use private cars and to use public transport, to walk more and to cycle more. These are all things that make a city very attractive and a place for businesses to locate in and also, as we know, improve people's health and wellbeing as well.

Andrew Jones (Policy and Programme Manager, Greater London Authority): Just to add to that, it is about making sure that we have quality green spaces from existing green spaces, that we are maximising the opportunities and that, even in dense development, there are green features within that. That comes down to green roofs and sustainable urban drainage - you can do those as rain gardens - so that there is a green integration into that built environment.

David Kurten AM: I welcome what you say about brownfield sites. It is something that makes sense. Since I have been here - four months - a couple of the words I have learned, which were new words, are "intensification" and "densification", which people are worried about, but you seem to have touched on some of that there.

What is the importance of green spaces in biodiversity, and for natural plants and animals? How do you see that being protected going forward?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): It is absolutely a key part of what we have to do here. As part of the review of the London Plan, we are assessing how things have changed since the last London Plan. We are commissioning an assessment of our performance against the Habitat Regulations to identify what we might need to do further in the next London Plan review. That study will be commissioned shortly.

Andrew Jones (Policy and Programme Manager, Greater London Authority): Just to add to that, London has a range of sites designated for their wildlife value ranging from internationally important sites through to locally important sites. In terms of locally important sites, there has been an increase in sites designated by their wildlife value and they have a level of protection in the London Plan. There is a good framework that has been in place for a number of years to recognise and safeguard - as far as it can, balancing the London Plan process and the local planning process - to protect and maintain wildlife.

David Kurten AM: Do you see any connection with the kinds of trees that are there? There has been some research to say that certain species of trees would take in CO₂, even nitrogen dioxide, and would also help to reduce other pollutants in the soil. Have you done any studies on that? Is that something that would form part of your strategy?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I was just going to say that I know that there is a "right tree, right place" framework. I do not know whether it has been updated, but it is not necessarily --

Andrew Jones (Policy and Programme Manager, Greater London Authority): We have done some work with the Forestry Commission and it continues to update that work about the right trees, for example, to plant in an urban area in a changing climate. As our climate changes, there are some suitable trees. We want to ensure that they have the survival rate, etc. That considers the benefits that some of those trees provide. That work is ongoing and it is an evolving process. It may mean that we are not always planting native trees in London but are trying to plant the trees that are going to give the best legacy in the long term.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Just in terms of our approach, the approach that Andrew is talking about is that we consider all of these things at the same time so that we can get the right green infrastructure in the right places that provide the most benefit to people, the climate, air quality and all of that. It is not either/or. We will be looking at that in its entirety to try to work out what is most valuable in different parts of London.

David Kurten AM: Thank you.

Leonie Cooper AM (Chair): We are going to move on now to Nicky, who is going to ask on a completely different area around waste and the circular economy.

Nicky Gavron AM: I am just starting with recycling but I want to say that I am just going to move on to ask some questions about the circular economy and the way that we design everything to be reused and

reassembled in the way as described by the circular economy. The Mayor has a section in his Infrastructure Plan on the circular economy, which is very welcome. I am just putting that as the overarching context.

Starting with what is part of that, if you like, the secondary materials economy - which is about how we are going to deal with our waste, how boroughs are going to deal with their waste and how industry is going to deal with its waste - could I just ask you, Shirley, what you think we can do? Our recycling levels are stagnating. They are at about 33%. They were at about 28% or 29% in 2008 and so they have gone up and then gone down a bit. Even some parts of London and some boroughs are at 50%; many other cities are at 50%. I know from the Zero Waste Conference that there are cities all over the world now that are going from 50% to 60% to 70%.

Having set that context, what is the Mayor going to do? We put a lot of emphasis here on targets and on outcomes. What are the Mayor's targets and what are the outcomes that you want to see through them?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I have been having a conversation with Andy Richmond [Policy and Programme Manager - Energy and Waste, GLA], who is leading our waste team, to understand, again, performance and what is possible in London. Although our waste performance has stagnated for households, it is better in other areas. We have to examine what is possible in London and whether it is ever possible to get to zero waste - and I am not sure that it is - and then what else we can do.

One of the big gaps that has been identified that we could do much more on is commercial waste and business waste, which often produces very high-value materials for recycling that would contribute to the circular economy, a discussion that we will have in a minute. That is one area.

On household recycling, these challenges are still the same as when I was here before. We have fragmented collection services. We have different types of housing. We have transient communities that, when they are moving around different parts of London, have to relearn what is possible to recycle. We have less garden space than most cities have, which also contributes to low recycling rates.

I am sorry that I cannot give you an answer right now, but those are the areas that we are going to be looking at to understand the strategy for recycling and where we need to put in more effort. I know that there have been some very good discussions with the London Waste and Recycling Board (LWARB) and Resource London and the boroughs on what might be possible and doable. I will be talking to them about the key interventions that we should be focusing on over the next few years to up that recycling rate to what is feasible and then identifying what else we can do to capture that other fraction of waste that is not going to be possible to tackle.

We have also powers that the Mayor has, as I have said, through the London Plan and through the powers of direction that we have. We want to start, firstly, working with boroughs and businesses in partnership, but that is always a tool to help increase ambition and performance as well.

Nicky Gavron AM: The Mayor's target is, what, recycling 50% by when?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): The Mayor's targets are to reduce the amount of household waste by 1% per annum to 2031 and my understanding is that that rate is being achieved at the moment; to recycle or compost at least 50% by 2020 and 60% by 2031 and in my understanding the performance is currently about 34%, which is not great. If you disaggregate household from commercial, we do better in one than the other. Putting those together means that it is slightly lower.

Nicky Gavron AM: Sorry. Those targets are not for household waste but for all?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): For all waste, yes.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): The 50% is household waste.

Nicky Gavron AM: Yes, I think it is household waste.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): The point that Shirley is making is that the target in the manifesto is based, as we understand it, on EU targets and that the EU definition is based on household waste or similar. Some work that we are doing at the moment is looking at what would constitute a 60% or 65% recycling rate that would meet that manifesto commitment.

Nicky Gavron AM: Shirley, you said about our waste collection being very fragmented. I know that when you were working here before, you worked very hard to help to get a single waste authority. It is very difficult, compared with any other major city in the world, with our collection processes. Not every borough is collecting differently but many boroughs have different collection systems. Some recycle organic waste but not that many. Some separate out card and dry recyclables from the cans and bottles and so on. It is very confusing when we have a very big transient population. It is also very confusing because there is a lot of churn, too, and people move from one borough to another for all sorts of reasons but mainly because of the renting situation. People find it very confusing to know.

Is there any way that we could have some sort of standardisation or some sort of common way of doing it and perhaps work with London Councils on this? I say that because the boroughs, by the way, that source-separate carefully are the boroughs that have the highest recycling rates.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): That is my intention. It is to work with the boroughs to understand if there is a way that we can start to harmonise some of these collection processes. The difficulty is that a lot of the collection contracts that boroughs have let are very long-term, over ten years, and so it is not easy to vary those without a cost. One of the things that I know that Resource London and LWARB have been looking at is whether there is a way of doing that and whether there is a way of bringing efficiencies so that we can recycle the finance back into doing more on waste management.

The context that London's waste authorities have been operating in has changed over the years. We have seen huge cuts in local authority budgets and so the pressures on budgets are tight and people are looking for efficiencies. This is one way of coming at the problem whilst retaining local control over the collection contracts.

There is guidance, as I understand it, in the strategies that we have and in the London Plan on the types of materials and so on. We have very good advice, again, from those agencies that I have mentioned already and from the team about what is best to recycle, to get higher-value materials recycled and to enhance recycling rates. One of the conversations that I want to have with the boroughs is about how we might make use of that guidance and act on it in a more accelerated manner.

Nicky Gavron AM: I was just listening to something you said earlier about commercial waste being one of the targets for us in terms of getting bigger recycling rates. I do not know if you said this but it is more homogeneous; it is paper, plastics, etc, and it is easier to recycle. Are there any plans at all to bring in recycling of much more commercial waste and stimulate that side?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): We are talking to the team about what plans there are and there have been some discussions about how we might look at that and so there are some ideas on what we might do to stimulate that. There are some boroughs that collect commercial waste but not every borough does and so there is a huge opportunity there that is not even being looked at, which would provide good jobs and help also to meet our targets. That is one of the areas that we want to investigate further and come up with some ideas to put into the Environment Strategy in the spring.

Nicky Gavron AM: The boroughs where recycling rates have gone down - some of them, anyway - are where new incinerators have come on stream, like Belvedere. Although it is great that the waste is being transported down the river from some of the western boroughs, it is then being incinerated and no heat is taken off and the recycling rates are going down. Of course, it is a 600,000-tonne incinerator and it has to have plastics; it has to have paper; it has to have organic and textiles; it has to go at full pelt. What is the Mayor's approach towards future incineration?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I have not talked to the Mayor specifically about the issue. We have been focusing very much on how to increase the recycling rates and so looking at the disposal methods that boroughs use will be a key part of that. We already have, within the London Plan policy, a presumption about making sure that heat is captured from incinerators and that there is a carbon intensity threshold that they have to meet. The team works very closely with any developments coming forward to make sure that they comply with that and we have powers of direction, as I understand, over that.

Nicky Gavron AM: I want to - and I will then move on to the circular economy - just say that the carbon intensity floor is going to be ratcheted up, as I understand it, in the London Plan.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): It is already in there, is it not?

Nicky Gavron AM: The carbon intensity floor is what every carbon-intensive service or facility has to meet, including incinerators. I just wondered whether any other member of the panel had any information about that.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): I was just looking through my notes - because I do not have it in my head - in terms of where we already have the carbon intensity floor and where it is set.

Just building on what Shirley said, in order for a waste authority to have its collection contract signed off, it would have to prove to us that it is going to an incineration facility that meets that carbon intensity floor. That is how we meet the requirements of that.

I might be shot down in flames for saying this because I am not sure if it is in the public domain, but what we think based on the analysis is that, if we do hit our recycling targets - the ones we have set ourselves - and our waste reduction targets, then there should not be any need for any additional incineration capacity in London beyond that which has been already approved.

Nicky Gavron AM: All right. I will just point out that the Edmonton incinerator is being enlarged, if it goes ahead. It is not just going to be 500,000 tonnes but 700,000 tonnes, which brings us up to 2 million tonnes of waste per annum being incinerated. A lot of what is being incinerated is commercial waste, exactly what we have just been talking about.?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): I was just about to say what I think you are going to say, which is that we have waste that we have to deal with and hence the approvals for those facilities, but the real focus needs to be on how we stop stuff getting into the waste stream in the first place. In that sense, our focus on the circular economy not only helps us to do that but also helps us to bring a number of potentially high-end jobs and economic value into London.

Leonie Cooper AM (Chair): Just to be clear, you do not foresee the need for any further incinerators beyond --

Patrick Feehily (Assistant Director - Environment, Greater London Authority): This is not policy. Based on our modelling, if we were to hit our recycling targets and if we were to hit our waste reduction targets, we are not predicting that we would need any additional incineration capacity beyond that which has already been approved.

Leonie Cooper AM (Chair): Belvedere, Beddington and Enfield?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Yes.

Leonie Cooper AM (Chair): You do not foresee that at the moment if the targets are met?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Yes.

Leonie Cooper AM (Chair): OK. That seems like a metric, coming back to Shaun's [Bailey AM] point again, that we will want to keep our eyes on, then, and is no doubt something that you are going to be looking at quite intensively as well.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Yes.

Nicky Gavron AM: On the circular economy, I just want to find out a little bit more about how you are thinking about making sure that London moves towards a more circular economy.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): It is a concept that is not well understood. We have done some very good work - world-leading work, actually - through the Sustainable Development Commission and others on the circular economy, but getting that implemented requires quite a fundamental transformation of how businesses work, let alone the waste infrastructure systems and waste management systems in London.

What we are looking at is how we might use the London Plan and the Economic Development Strategy to start to prepare the pathway for a circular economy. A lot of this will require, as I have said, quite a different way of businesses operating, moving from selling products to constructing them in a different way so that they can be disassembled easily, recycled and reused more easily and to becoming service companies as opposed to just pure sales companies. These are things that we have to start socialising with organisations, businesses, politicians and the public to get us to a point where we can start to implement.

In the meantime, whilst we are doing that work, we also have to focus on the more pressing need to recycle better and faster to hit those targets. The London Plan, the Environment Strategy and the Economic Development are one area. We would want to look at whether there is a way that we can start looking at the circular economy through GLA procurement, through working with small and medium enterprises (SMEs) and so on. It is quite a difficult subject to get across and so we are going to have to identify some of the steps that

we can measure that will help us on that way. That is a piece of work that LWARB is working on with the team and the Ellen MacArthur Foundation.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): The Ellen MacArthur Foundation, yes, and the London Sustainable Development Commission, which Nicky sits on, as well has been working on the economic benefits that it would bring.

Nicky Gavron AM: Yes. Between you, you brought out a jobs report, did you not, saying that there were going to be 12,000 new jobs?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Net new.

Nicky Gavron AM: Additional jobs?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Yes.

Nicky Gavron AM: That is very interesting. Does that mean, then, that you will have to have some influence on the London Plan in terms of making sure that the safeguarded wharves and the industrial sites take account of the fact that we will be developing new reassembly and new reuse industries?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): We would need to make sure that there is land available for that. Whether that where it is at the moment I do not know. I would need to have conversations with the London Plan team and the waste team to see where that is. If we are looking at new services and new waste management facilities, we need to make sure that there is enough land for that to happen within London. I am assuming. I do not know what the footprint would be for these new types of facilities. We would need to understand that.

Nicky Gavron AM: As we are in a very changing technological situation and we do not want to lock ourselves in for a very long time to the wrong kinds of infrastructure, would you be prepared as you do this work to look again at the amount of incineration we have in London or might be planning for that?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): As part of the modelling and as part of our review for the Environment Strategy, we need to look at everything again. Whether that translates into a change in policy I cannot tell you now and we have existing facilities that will operate unless something massively changes. However, it is definitely up for review so that I can understand what the situation is and how it fits into the bigger picture of implementing our new Waste Strategy.

Nicky Gavron AM: All right. A final question: when looking at the circular economy, will you be working very closely with the economic development people in the building? It is such a big, new sector, is it not?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): It is a big, new sector and, as I have said, it is a concept that is not well understood and people have different definitions of it as well. We are going to have to do a lot of awareness-raising both within City Hall and outside in London with many stakeholders. There are some good people out there who understand some of these things. Many businesses are already on the Circular Economy 100 (CE100) and can help to do that and can help to start piloting some of these concepts through initiatives that we hope to work with them on.

Nicky Gavron AM: Thank you.

Leonie Cooper AM (Chair): I do not think we can miss having a couple of words about air quality. You touched on that at the beginning and the formal consultation started just this week, but Jennette and Tony have a few things that they would like to touch on.

Jennette Arnold OBE AM: Yes. I do not apologise for it because, for me, air pollution is perhaps the most important part of your remit but it does concern me that your remit is so large. You have energy and you have waste and you have air pollution. How are you going to juggle those three balls given that for Londoners, this minute, mothers with their children with their inhalers is really what is at the forefront of their minds. How can they breathe in their city?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Absolutely. As I said, the Mayor has made it his top priority in the environment field and, no thanks to me but to the team and to Nick Bowes [Mayoral Director - Policy], we have worked very fast. We have had one non-statutory consultation and now a statutory consultation within five months of the Mayor starting. That really signals the pace and the urgency and the importance that the Mayor attributes to tackling air quality in London and we want to keep that pace up.

What we need is people responding to the consultation in a positive way so that we have an understanding that there is support for some of these tougher and stronger measures. We know that there have been a number of reports - before I started here - from various organisations talking about the air quality problem and how it needs to be tackled much more quickly.

We have, as I said, talked about the consultation, but the Mayor is already using TfL and other aspects of what we can do at the GLA to lead by example: retrofitting our buses and not procuring any more dirty buses; looking at what we might do - as we are starting to do - in the London Plan review about making our developments not contribute to poor air quality. It is absolutely one of my priorities and one of the Mayor's priorities.

I appreciate that there is a lot of areas to juggle, but we have a very good team here and we have very committed Deputy Mayors who understand that environment is not an add-on but is absolutely integrated into everything they do. The Mayor has made that very clear as well. I am not doing this alone.

Jennette Arnold OBE AM: Great. Just quickly, you talked about the appointment or the aim to recruit a [Chief] Digital Officer. I would urge you to meet up with that person as soon as possible because it seems to me that there is work there that can be done with our young children in primary schools who have their own computers.

I am going to speak to a primary school tomorrow morning and I looked in vain on our [the GLA] website for something that after I have spoken to them - and I am hoping they are going to say the environment is their most important thing, by the way - I could then leave them with or refer them to. I do not know that our site is helpful in that at all. I would ask you to check out how each of us can do our bit to say to the next generation of young people, "Just go to this link. There is the story. There is an action point that you can take". I was very disappointed that I am not going to be able to do that tomorrow morning.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Thank you. Thanks for that suggestion. We will look at that.

Tony Arbour AM: Yes. You have told us that it is your absolute top priority and you have told us that it is the Mayor's absolute top priority to deal with pollution. Of course, that is very much "motherhood and apple pie". Who on earth would disagree with you on that? Did you read the minutes of our previous meeting?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I did not, I am afraid. My apologies.

Tony Arbour AM: It is attached to your agenda here and you will see that there was a fair amount of scepticism about tackling pollution through the ULEZ. When it was suggested that there was overwhelming support for it and so on, it was pointed out that there had been only 15,000 responses to the consultation on this, definitely not an imprimatur.

The thing that I really want to drive at with this is this. Supposing some of your aims conflict with the Mayor's aims. The Mayor has said - and you have repeated it - that he wants to be the greenest Mayor ever. That is not a difficult target to beat, I would have thought. Attached to that, you have said that all of this is his major priority. He has been travelling the world recently saying that his top priority is to have London open for business. Do you not think that many of the policies that you are advocating and that the Mayor advocates actually militate against London being open for business?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I do not think so.

Tony Arbour AM: You do not? I know that there are some politicians in London who do not approve of the white-van man. The white-van man is the person who really is driving, to coin a phrase, the London economy. It is likely, of course, that the white-van man is a man who has an older vehicle. It is likely that he is going to be a person who will find the burden of paying the charge for the ULEZ on top of the Congestion Charge absolutely crippling.

Supposing that there is this conflict. You and the Mayor are there together having a bit of a head-to-head. You have told us that you do not have a department spending budget and all of this sort of stuff. Who wins: London being open for business or London being pollution-free?

Leonie Cooper AM (Chair): Without wishing to not give you the opportunity to answer Tony's point, he did join the Committee just after we had had our first session. I was very careful to invite - and I had also previously had a meeting with - the Federation of Small Businesses, which you might say is the federation for white-van people in many ways. That was, of course, one of the points that I privately discussed with them and they raised it in that first meeting.

Having commended our last set of minutes in September to you, Shirley, I am now going to commend our previous set of minutes from our very first meeting of this Committee to Tony for him to look at. There are a number of things that can be done to assist companies that have, perhaps, older white vans that there have been a lot of discussion about. There is a lot of positivity that moving forward in terms of greening London and tackling air pollution does not necessarily mean to say that London is closed for business.

Tony Arbour AM: I am very grateful to you, Chair. Let me pick another example. This is the first opportunity we have had to see the Deputy Mayor on this and it is right that we should probe her on these matters.

The Mayor has another target, one that has briefly been addressed by my colleague David Kurten here. It is the Mayor's tree-planting proposal. He is proposing to plant, if memory serves me, 2 million trees during his mayoralty. My maths is not terribly good but that is many thousands of trees a day, is it not? As far as we can tell, not a single tree has been planted yet. You have conceded - and most people in London, certainly people with my name, think - that trees are very important. How is this target going to be achieved?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Just to be clear, the Mayor's manifesto talked about a tree-planting programme with no number attached to it.

Tony Arbour AM: Are you sure?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Yes, I am.

Leonie Cooper AM (Chair): The manifesto that came out on 9 March 2016 talks about a tree-planting programme. If you would like me to give you a copy of the Mayor's manifesto, Tony, I think Andrew Boff [AM] may have one.

Tony Arbour AM: Actually, we can provide you with chapter and verse where the Mayor later expanded on that and suggested that his target is 2 million trees. Be that as it may, tell me how you are proceeding with this one.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I was just going to say that at the moment we have in the London Plan a target to expand tree cover by 5%. Yes?

Andrew Jones (Policy and Programme Manager, Greater London Authority): By 2025, yes.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): By 2025 and so that is what we are working on at the moment. This has been under the previous administration.

Tony Arbour AM: Yes, it was.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Under this administration, it is not tree-planting season until later this year and we are working with a number of organisations to expand on the current programmes we have and to see what more could be done to implement that target.

Tony Arbour AM: I am grateful to you for that. Just finally, there has been a lot of conversation already this morning on micromanagement things, which really ought not to be in the London Plan; for example, the paving over of front gardens and things of that sort. One could have some sort of general overarching thing saying that we want to keep as much green space as possible and we want sustainable urban drainage systems (SUDS) and all of that sort of stuff, but the truth of the matter is that those are borough matters, are they not?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): No, it is the setting of general policy. We have already talked about the importance of flooding to London. When we have surface water floods, they cost the economy a lot, they damage people's houses and they have terrible impacts on their lives. Therefore, it is quite right for the Mayor to take a view on what general policy should happen, but how it is implemented within that policy is for boroughs to apply. Things like paving over front gardens can be done in a way that deals with what the householder wants - which is presumably to have somewhere to park a vehicle - and can be done in a way that helps to alleviate that drainage problem. What Cassie [Sutherland] and her team and others are looking at is how we might reconcile those objectives in a way that those very important aspects can be dealt with.

Tony Arbour AM: I am sure I am going to have lots of other opportunities to ask the Deputy Mayor on matters --

Leonie Cooper AM (Chair): I am absolutely certain that those opportunities are going to arise on future occasions. Thank you for that, Tony.

I am going to thank Cassie [Sutherland] and Andrew [Jones] for their contribution in this part of our session this morning and we are going to detain Shirley [Rodrigues] and Patrick [Feehily] into the second half, which is going to now focus on energy issues and I would also like to invite our additional guests to come and join us.

We have now been joined by Brooke Flanagan, who works here in the building and whom several of you may already have met, but we have also been joined by two external guests. I am very pleased to welcome both Emma Bridge, who is the Chief Executive of Community Energy England, and also Leonie Greene, who is the Head of External Affairs at the Solar Trade Association.

We are going to now move on to a discussion of the other half of the rather small Deputy Mayor brief! If all the aspects of environment were not diverse enough, it also includes energy as well. Shaun, you wanted to kick off with some questions about energy policy?

Shaun Bailey AM: The first one is a broad question. What are the Mayor's priorities in energy policy?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Starting with the very ambitious target of becoming a zero-carbon city by 2050, that requires a fundamental transformation in decarbonising our energy system. A lot of that is reliant on Government action because of the grid that needs to be decarbonised, but there is a lot we can do in London about reducing demand and making sure that we can roll out more decentralised energy systems and using biomass or waste to power that.

We can also do more demand-side management measures, such as energy efficiency and so on. We are working, as the Mayor has set out in the manifesto, under a programme called for Energy for Londoners, where we are going to be looking at decentralised energy and energy efficiency, rolling out smart meters and looking at behaviour change, which will reduce our call on energy, clean up our energy and also reduce fuel bills for the fuel poor in London.

We want to do more on renewable energy, such as solar, looking at our solar strategy, rolling out more solar panels and backing district heating systems that will take the waste heat off our Tube system, for example, and looking at other sources of waste heat, trying to capture the energy from waste, such as incinerators, and doing what we can at the GLA on our buildings to improve our performance.

Shaun Bailey AM: Just a small thing: it sounds to me that most of this stuff would have to be already planned because retrofitting of anything is hideously expensive. We talked about incinerators earlier on. When they were given planning permission, were any of these things included in that planning permission?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): There was a desire, as I understand it, when new incinerators were built that the heat would be captured from them. This has not always happened, but with some very good work over the years that is increasingly becoming possible and has been demonstrated.

For example, with South East London Combined Heat and Power (SELCHP), when I first started at the GLA, it was always a thorn in the then Mayor's side that we were not able to capture the waste heat from that and use that heat to power homes and buildings in the area. That is now happening and so it shows that it is possible. Patrick talked about the carbon intensity floor, which can really only be met by capturing waste heat from those incinerators and using them to power, as I said, local homes and buildings. That is something that we look at very closely.

Shaun Bailey AM: Thank you. Something that will be of increasing popularity if it is done right and of interest at this point to Londoners is about power generation and about the licensing. I understand under the previous Mayor a licence was sought and so these things become possible for Londoners, but we now hear of Licence Lite.

Where are we on these two concepts? Has the Mayor decided which way we are going to go one way or the other? Has the work been bottomed out on Licence Lite?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): On that, Patrick can deal with the detail, but very good progress has been made on Licence Lite. It has taken much longer than people first anticipated because it is a very complicated process, having to deal with the regulator, but my understanding is that we are nearly there on it.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Yes, and we have been asked the same question outside of the Committee in terms of whether it is Licence Lite. Licence Lite refers to us being able to procure energy from decentralised energy suppliers and sell it to the public sector. In order to do that, we have to partner with another energy supply company in order to provide the front and backend services.

In terms of where we are with that, we have six decentralised energy suppliers on our books now. They are good to go with a competition to basically compete for what price they would sell the electricity to us for, which means that we can on-sell it to organisations like TfL. When we have that price, then we can join up the dots and make that happen. It has taken three years under the previous administration to get it to this point and so we are pretty much there on that side of things. We cannot actually sign it off until we are granted what is called a Licence Lite and that is granted by the Office of Gas and Electricity Markets (Ofgem).

Ofgem gave notice of its intention to grant us a licence. It has 45 days to grant that licence but, basically, as with everything in terms of regulation, the clock stops when it asks questions. It came back to us with a number of questions. We have responded to those questions to its satisfaction and now the clock has restarted and so we are seeking assurances that it will grant us that licence in the next few weeks. Then it is an issue of getting the price from the decentralised energy suppliers and linking that up with organisations like TfL.

It is not an either/or, however, so the Mayor is also committed to procuring local energy and supplying it to organisations like TfL and he is also committed to establishing a not-for-profit energy supply company in London - or investigating that - which will supply energy at fairer tariffs and more lower-carbon energy to Londoners; hence it is called Energy for Londoners.

Shaun Bailey AM: Just a rookie supplementary: where would it be getting that energy from? Are we talking about generating our own here and selling it on?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): For Licence Lite, we know exactly who we are getting the energy from. It is decentralised energy suppliers within London and that can be local authorities or housing associations, for example, that have combined heat and power (CHP). The fact that we know who we are getting it from and the fact that we know who we are going to sell it to means that we can optimise the supply with the demand and that is why we can give the decentralised energy suppliers in London a better price than they would currently get off the big six, but we are able to sell that energy to TfL at a cheaper rate than it would actually pay for it and so it is good for everyone.

Leonie Cooper AM (Chair): This is the moment at which I want to hear from our external guests, who have very kindly joined us for this session on energy. I would like to hear from Emma to tell us a little bit about how community energy in London can contribute to Energy for Londoners and the vision that we have just heard set out and, as far as you understand it, the Mayor's proposals. Then I would also like to hear from Leonie [Greene] what the position of the Solar Trade Association is.

My first point would be, in your comments, can you say if you think the Mayor is being sufficiently ambitious in this area? I know you are sitting right next to Shirley [Rodrigues], but just pretend that Shirley is not there. We want to know. Do you think the Mayor and the Deputy are being sufficiently ambitious?

Emma Bridge (Chief Executive Officer, Community Energy England): It is a good start but, no, you could be more ambitious, definitely. The previous Mayor started to support community energy - I will speak from a community energy perspective - very, very late in the game and that was in terms of coming against the changes to feed-in tariffs (FITs) and was limited to that. There are lots of great examples from Bristol, Scotland and Oxford of mayors really starting to make commitments on this sort of thing.

There are things like within Licence Lite a commitment to purchase electricity from community energy groups, which would be great. At the moment, the community energy sector is a very exciting place. Community energy is about the generation, energy efficiency, behaviour change and everything to do with energy efficiency. It is fundamental to positive local change and there is so much possibility around community energy, but it is shifting sands at the moment and things are changing.

There is a lot that the London Assembly and the Mayor could do to support that and make sure that those benefits are coming in within the local area, like I said, things like purchasing electricity and opening up buildings as well. At the moment, FITs make things more difficult for groups, but by providing buildings that community groups can use with direct supply, it would make a huge difference. The GLA supported an event about a month or two months ago during Community Energy Fortnight to look at launching a Community Energy for London. That is going to be an overarching umbrella group, bringing together all the community energy organisations. There are lots of them in London, but they have had a tough time because London has its own challenges with the way the buildings are shading and various different things. A report will be coming very shortly on the potential around community energy that will build on this. Yes, a very long answer but probably, no, not ambitious enough.

Shaun Bailey AM: Could I just ask, when you say "providing buildings", what for?

Emma Bridge (Chief Executive Officer, Community Energy England): That would be mainly solar, basically roofs that are available for community groups. Do you understand how a community energy model works?

Shaun Bailey AM: No. I was going to get to that.

Emma Bridge (Chief Executive Officer, Community Energy England): OK, that is great. I will take a step back. Community energy is communities and local people owning and benefiting from managing their energy in a renewable energy model, generally a community group which is a social enterprise and an incorporated organisation, but for the benefit of the community or a co-operative. They raise money from the local community and so the community has a stake in a project. If we are talking about solar, the money will be used to put solar on to a building. In an ideal world, all that solar generation would go into that building. If it does not, then some of it would be going back on the grid. Any profits, the local investors will get a small return on their money and so they have that extra stake, but any other profits on top of that will go into a

community benefit fund, which goes into things from buying computers for low-income schools, environmental improvement works and lots of things.

Community Energy England did a survey last year and just from 38 groups, from £7.4 million FIT, they leveraged over £50 million of private investment and that equated as well to an additional £5 million of in-kind volunteering and 40% of spend from community energy projects was spent in the local area. For London that would be higher because you have the employment there. From only those 38 organisations, there was £23 million of projected donations to community benefit funds and so that goes into local good works. It is a similar model to renewable generation anyway, but it is having that community involvement and then there are similar things around community energy efficiency as well so that it is actually community-led changes.

Shaun Bailey AM: I like that idea. If you are saying to the GLA and to the Mayor that you would like a commitment to buy some of that energy - I am asking both of you this question - what level of energy, and is there a level, would you technically need to make that deal worthwhile or will any energy do at any megawatt?

Brooke Flanagan (Principal Policy and Programme Officer, Greater London Authority): That will vary on the customer because you have to line up the supply available with the demand profile of the customer. These are some of the issues that we would need to balance out around that.

Shaun Bailey AM: Is all of this possible?

Brooke Flanagan (Principal Policy and Programme Officer, Greater London Authority): Yes.

Shaun Bailey AM: I just wondered. If you have a community, communities are wonderful but are they reliable enough to develop a contract? That is the issue that is tasking me at this minute.

Brooke Flanagan (Principal Policy and Programme Officer, Greater London Authority): With one of the things we are doing, Licence Lite, they are supplying to TfL and the public sector in the shorter term as part of establishing the model and getting it up and running. In the longer term, it is able to look at some of the community energy excess supply.

Leonie Cooper AM (Chair): I can see that Patrick is keen to get in, but then I do want to bring in Leonie [Greene] as well from the Solar Trade Association angle because it is really important to make sure that we have the view from what is going on in the building, and from the community energy angle, but also from the solar trade and from the commercial side as well. Patrick, I will take you first and then Leonie.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): The only thing I was going to say very quickly is that what I have noticed is that we have made announcements on things like Licence Lite in the past, particularly under this administration, and then it has been perceived that that might be the only thing we are doing. Maybe that is down to the messaging that we put out there in terms of Energy for Londoners. Licence Lite at its stage of fruition was where it was and therefore we had to move with Ofgem for the benefits that I have talked about. It is part of Energy for Londoners and Energy for Londoners incorporates all of these other things you are talking in terms of community energy and solar power. We just have to work out exactly how we are going to deal with that through Energy for Londoners.

The good thing that was just mentioned just then was the fact that community energy is not just about generating energy; it is all the social capital and all the rest of it that you get from that. Then, as I talked about earlier, it is about how we are going to integrate social justice into what we are doing on the environment agenda. That is exactly the sort of thing that we need to be supporting. Thank you.

Leonie Cooper AM (Chair): We will imminently come on to some questions about fuel poverty and social justice and the work that some of the community energy groups do in terms of giving people advice about behaviour change and demand reduction, which is very important in terms of addressing fuel poverty, but I do want to bring Leonie in.

Leonie Greene (Head of External Affairs, Solar Trade Association): I was just going to come back on the Licence Lite point.

Leonie Cooper AM (Chair): Please do.

Leonie Greene (Head of External Affairs, Solar Trade Association): It is just that we do support it very much. It has been a painful process. That is because this area around local generation and local markets is incredibly complex. It is something that we are hoping the Government's new Smart Power consultation, which will be out very shortly, is going to shed some light on and make it easier to do these kinds of arrangements, but it is fiercely contested in terms of the costs of the networks that we are using. I understand why it has taken quite so long, but there are a lot of people and a lot of organisations that would be very keen to then take this off the peg and try to apply it elsewhere and there are limits to that model. What we would really like to see is a more liberalised market that does allow much easier local generation and the sale of it locally.

I would just say on community schemes that the economics of solar have changed very drastically since I was last sitting here giving evidence and not for the better. It is all now about trying to find very clever ways to finance these schemes and to make the economics stack up. We have done very detailed analysis. We have just done a project that is part of a European Commission project on financing photovoltaics (PV) and so we have a pretty good idea about the kind of models that work. What you are looking for is where you can get tax breaks, where you can get investors who are willing to take a low rate of return - for example, the nice tax breaks you can get now on individual savings accounts (ISAs) - and where you can see a very nice join-up with local crowd-funding and people maybe getting a solar ISA. They are happy to take a return that is going to be anything like what they are going to get in a bank, but which for the developer is going to work.

To link these projects up with Licence Lite would be very sensible. There are all sorts of innovations that can happen, but it is difficult and the hope is that the overarching framework changes shortly, with the help of Government, will make all this much easier.

Leonie Cooper AM (Chair): Would you see yourselves as being able to work closely with the Solar Trade Association and Community Energy London, assuming that that umbrella group starts to form itself - it has only been a couple of weeks since that idea was floated - as taking Energy for Londoners further forward?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Absolutely. Before I started, there was already the hosting of the workshop that Emma [Bridge] referred to and we are talking about a solar action plan for London and so we will be taking advice and understanding where good ideas are coming from. We are very happy to do that.

Leonie Cooper AM (Chair): Great.

Shaun Bailey AM: Just one last question. We seem to be speaking about solar and my limited imagination imagines we can generate power from solar. Are there other ways that communities generate power?

Emma Bridge (Chief Executive Officer, Community Energy England): Yes, any technology -

Leonie Cooper AM (Chair): We might be poaching slightly into a future question, without wishing to cut Emma off.

Emma Bridge (Chief Executive Officer, Community Energy England): No, that is fine.

Caroline Russell AM (Deputy Chair): Following on really from the area that Shaun has been questioning you on, I am looking specifically at how London can generate more of its own particularly low-carbon energy. Maybe we could start by looking at the different scales of generation and the different commercial models that might be available. In particular we have heard a bit about community energy, but also district and big-scale, large-scale and very micro-scale. It would be good to hear from both of our external guests on this one and also, Shirley, any thoughts that you might have, unless you want to hand it to officers.

Leonie Greene (Head of External Affairs, Solar Trade Association): The great thing about solar is that it works on the very small-scale domestic right up to extremely large and so it is as big as you like it, really. You are bit more constrained somewhat with space in London, but you can do bridges, you can do railway sidings and you can do bits of wasteland. There have been some green space solar farms. I remember hearing that one was turned down, which I thought was unfortunate. There is huge potential. I did not manage to dig out the most recent analysis. I know it has been updated, the potential for solar in London, but I know that the previous analysis by Buro Happold [Engineering Firm] said we could get 20% of power from solar. That would be a massive underestimate because the criteria used in that analysis capped solar at a very small amount, something like 50 kilowatts, and so that will be a massive underestimate. You can do vast amounts, really.

We have just had an analysis done as well looking at the cost of balancing because solar is variable. What are the implications for the grid? It is one of the arguments that gets thrown against solar very often but our analysis by Aurora [Aurora Analytics, Chemistry Firm], which is very well-respected, independent analyst, shows that even backup costs are very modest and, with the cost of solar coming down so far, subject to stable support, which is another big issue. If solar was given stable support, then you are looking at solar being probably the cheapest source of energy of all in 2020. From an economic competitiveness perspective, this is a very good agenda to get behind.

Caroline Russell AM (Deputy Chair): Perhaps I could just pick up Shirley there. Do you have ambitious plans for solar in London if it potentially offers so much?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): We do. We are looking at developing a solar action plan. We are looking at how much we can use of the GLA group buildings and TfL buildings to retrofit solar on to them and so it is very much in our minds. Thank you very much for the modelling and the analysis that you have done, which I am sure Brooke [Flanagan] has used in developing and will do so, yes, looking at the opportunities there.

Caroline Russell AM (Deputy Chair): Do you know when you will have the solar action plan?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): It will probably be some way through next year, yes, probably mid next year, but I would not want to put a date on it.

Caroline Russell AM (Deputy Chair): Does that mean May/June-ish or --

Patrick Feehily (Assistant Director - Environment, Greater London Authority): What we said today is that it will form part of the Environment Strategy, which is due in spring next year.

Leonie Greene (Head of External Affairs, Solar Trade Association): Am I allowed to make a plea on that? It is just that the national framework now for solar is so difficult and, with the business rate threat rise as well for solar, you are not just talking about taking support away; you are talking about bizarre taxes and so the industry is really in quite a lot of peril. We did an analysis with PricewaterhouseCoopers (PwC), if anyone is interested in that, just to really pin the jellyfish to the wall on how much difficulty the industry is in. The role of regions and local government has become extremely important to the stability and the survival, really, in some ways, of this sector. Local government has been doing some fantastic stuff with new-build requirements and going above and beyond. The GLA's own requirements are fantastic as well for strategic developments. I would just make a plea that the sooner you could do an action plan that is going to give some confidence to the industry the better because this is something the industry really needs right now.

Caroline Russell AM (Deputy Chair): I have noted that. I am sure you will keep asking Shirley about that as time goes forward.

Emma, do you want to comment, just going back to the different scales and commercial models as well as community district?

Emma Bridge (Chief Executive Officer, Community Energy England): There are plenty of opportunities. The 10:10 climate change campaign group, which is based in London, has just launched a new app for people to go around and take pictures of buildings to see which have potential for PV. I have not heard how that is going, but it might be quite an interesting way to add to the research that is already out there.

Solar does have great potential, but we do also need to look at others. Heat has a huge impact on energy bills and energy impact. There is a great scheme, Kingston Heights, which is a block of flats that uses water heat pumps and is using the water from the Thames to heat the building. There is lots of innovation already happening here; it is just we need to get better at really spreading that learning and replicating it elsewhere, which an umbrella group like Community Energy London could really help with, and with garnering support for it as well.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): That is an area that we could look at through guidance in the London Plan through the energy assessments anyway. For the developments that come to the Mayor, the team will be looking at what potential there is for those decentralised energy and renewable energy opportunities. I know they work very hard to maximise the take-up of those types of technologies to get the biggest efficiency improvements that we can.

Caroline Russell AM (Deputy Chair): Then, with conventional decentralised energy, what can we do to decarbonise?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): The strategy for London is to use waste heat as much as possible. We are using it in CHP plants at the moment, but for us that is transitional technology in order to build the wide area heat networks that we can link up to the waste heat in London. Peter North [Senior Manager Programme Delivery - Sustainable Energy, GLA], who leads it, always tells me that we have enough waste heat to provide all our heat in London. We probably have, but whether it is in the right places - and I doubt it is - we can certainly provide a significant amount of our heat through heat networks in London.

Caroline Russell AM (Deputy Chair): Do you think it is possible to get that moved forward in this mayoral term?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): The Mayor is very much committed to that in the manifesto. When he launched Energy for Londoners, it was at Bunhill in Islington, which is basically utilising waste heat from the London Underground. The demolition on that starts on Monday but, yes, we will be looking at integrating that in the Environment Strategy in terms of how we are looking to achieve that. We also captured £3.5 million from Europe through the European Regional Development Fund (ERDF) funding just before the fateful Brexit vote. We will not be paying for decentralised energy and heat, but we will be providing the sort of technical support that enables those projects to come forward to market to make them market viable and so that will be very much something that we will be looking at accelerating.

Caroline Russell AM (Deputy Chair): That will all be published in the Environment Strategy?

Leonie Cooper AM (Chair): We are really looking forward to seeing that Strategy and I believe we are going to have the chance next spring.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Yes.

Leonie Cooper AM (Chair): Not before?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): I have to show Shirley the stakeholder engagement strategy, but we very much have opportunities for people to contribute prior to the public consultation on that.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): We have agreed absolutely on that without seeing the stakeholder engagement strategy. We are definitely looking for ideas and contributions from the Assembly Environment Committee, community groups, industry and so on to understand what we might be able to do in the Environment Strategy. We have some ideas; the team has some great ideas. They have been working on this for several years now. Some of it is not rocket science, but we just need to work out what exactly we can do in the time we will be putting this out.

Leonie Cooper AM (Chair): That would be very welcome. A formal meeting may not be the best method to undertake that - hopefully fruitful - discussion but I am sure other Members would be interested in being involved in the stakeholder engagement.

Caroline Russell AM (Deputy Chair): I would also like to hear your views on the potential role of Energy for Londoners, which we were told by the Mayor back in June was a fully-licensed energy company, in providing stable demand for London generators of power.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Brooke can talk about the more technical stuff, but the idea is that we collect or amass a number of households that will then provide that stable demand. I think that is right.

Brooke Flanagan (Principal Policy and Programme Officer, Greater London Authority): We are looking at different levels of demand and generation. Some of that will be at the larger-scale end where Licence Lite will initially be dealing with that side of the market and then, longer term, Energy for Londoners as an energy company would be looking at how it can be sourcing energy locally.

Caroline Russell AM (Deputy Chair): Thank you. Then a little bit about the business model, the timeframe and the resources that you require to get Energy for Londoners up and running.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): We are looking at that at the moment.

Caroline Russell AM (Deputy Chair): Is that going to be in the business plan or the environment plan as well in the spring?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): It is going to have to be in the business plan for the GLA. We are looking at it at the moment and reviewing with the team what is needed and what the options are and that is very uppermost in my mind at the moment of what that might be. I am afraid I cannot tell you what business model we are going down or the costs.

Caroline Russell AM (Deputy Chair): When will that be publicly available?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): My understanding is that the budget and business plan comes out to the [London] Assembly later this year and so it will be first thoughts on that, but my thinking at the moment is this is such a complicated area that we are going to have to look at the feasibility or look at the options and the different feasibilities of those options and so it might not be a specific figure, but a budget envelope is what I am thinking at the moment.

Leonie Greene (Head of External Affairs, Solar Trade Association): I just hope very much that the Strategy will also be about onsite self-supply; so that you are supplying yourself with your own solar energy. It is great to have, if you like, a bigger supply initiative to provide people who do not have that opportunity, but it is incredibly efficient to be consuming power at the point of use. The growth of battery storage as well means that you are seeing a lot of commercial companies now very interested in having very stable onsite self-supply with solar and battery storage. I would just hope that this will also be about onsite self-supply for domestic and commercial companies as well.

Caroline Russell AM (Deputy Chair): What can the Mayor do to boost onsite self-supply?

Leonie Greene (Head of External Affairs, Solar Trade Association): There is a lot he can do. Credit to the Mayor: we are delighted that he has been so strong and has set out so clearly what he wants to do in the solar strategy. Some of these were things that we were very much pushing for and we are delighted to see them. You probably all know that London is the lowest region for solar across the UK and not just the lowest but the lowest by a very long way. It was clear that something dedicated was needed to give solar a boost. We are very pleased that the Mayor seems to have recognised that and seems to be wanting to put some concentrated focus on that. As well, credit to the [London] Assembly because it was the Assembly scrutiny previously that really put this on the agenda and you saw the previous Mayor ratcheting up his interest in the solar on the back of that. Credit to the Assembly.

I could run you through a list of a range of things you could do. There is a huge amount that the Mayor could do to boost the take-up of solar here. You see regions that have been proactive, ones that you might not expect, because they have taken the initiative and have been very proactive in providing advice and communicating the value of solar with a massive take-up. I can give you some ideas if you would like.

Caroline Russell AM (Deputy Chair): If you can run through one or two very quickly?

Leonie Greene (Head of External Affairs, Solar Trade Association): Yes. We think it would be great to have a target and a communication strategy and some sense of a citywide endeavour about where we are trying to get to. The Mayor has a huge amount of soft power, he is a great communicator and you can use that soft power very effectively to persuade people to go solar. We thought it would be great to have a Solar Capital Forum, bringing together all the interested stakeholders. We could see a sub-forum for the major

landlords and the estate owners, building on what was the Better Building programme. To be honest, real estate in London is so valuable, but solar just does not even register and energy costs barely register. It is these soft initiatives around league tables and around kudos that really can make a difference.

There is a lot of commercial sector interest now in going solar and being seen to do that. You have some very big estate owners in London. You could have a forum for social housing providers and that is a quarter of the housing in London. There is a huge amount that I think can be done to help them specifically to target fuel poverty. We think that education is needed on just how far the solar industry has come. I have one of our publications here, *Stunning Solar*, which showcases just how attractive and how much the industry has moved on. It is not just blue modules on roofs anymore; these are really some pretty sexy rooftops. It is educating people on just the sheer range of choice now. Also, it has moved on so much that you need less roof space because it has become more efficient. Shading can be less of a problem because of inverters and because of some of the power control technologies. It is moving on.

We thought another thing that would be extremely valuable would be to educate the housebuilders because your housing targets in London are big and very ambitious. We are finding that it is such a no-brainer to do solar in new build; it is very affordable. We have a presentation now that we do to the big housing developers that shows just how cheap it is now to install solar on roofs. In a city like London, where the value of homes is colossal, this is negligible. You could start to do very much the same with commercial buildings as well. I could carry on: you could do more under the London Plan, you could try to optimise solar on a strategically significant share of the Cabinet Office --

Caroline Russell AM (Deputy Chair): I have written lots of notes here.

Leonie Cooper AM (Chair): It sounds to me as though we have identified quite a long list of further metrics that would be very useful in terms of measuring our progress in this area. London lags woefully behind the rest of the country not just in terms of solar but also in terms of community energy. We are also very well behind on that as well, unfortunately.

Nicky Gavron AM: I heard you talk about household solar and it is important that we really encourage existing households if they can to put solar on their roofs, but do you see any kind of clash - I could ask Patrick [Feelihy] and Shirley [Rodrigues] this, too - between our prioritisation of green roofs and our prioritisation of solar in terms of roof cover? That is one question.

The second is: this month the Mayor's zero-carbon homes target, which we are all very pleased about, comes into effect for new build. What do you see as the role of solar in terms of that? Also, another conflict: does solar conflict with putting in CHP?

Leonie Greene (Head of External Affairs, Solar Trade Association): On the green roofs, it is quite interesting that in France they have brought in a regulation now that all new buildings have to be either solar or green roofs. Happily, you can even do a combination.

Nicky Gavron AM: That is useful.

Leonie Greene (Head of External Affairs, Solar Trade Association): You can actually do a combination and so solar can work pretty well. It is a whole other area, there is agri-solar and growing crops and plants under and around solar, and so I do not think there --

Leonie Cooper AM (Chair): In terms of domestic dwellings, though, you could, if you wanted to, have a green roof and then install some form of solar elsewhere in the building because of the improvements in technology. There are some very nice - they look like glass - small tiles and things like that.

Leonie Greene (Head of External Affairs, Solar Trade Association): Yes. As well, my understanding - and I am not a green roof expert - is that the roof angle is very advantageous for solar.

Nicky Gavron AM: Not for green roofs?

Leonie Greene (Head of External Affairs, Solar Trade Association): Someone tell me if I am wrong, but I cannot see green roofs on your traditional roof space. It is a flat-roof thing, maybe, and so I cannot really see much conflict there.

On new build, was that the role of solar in new build? Sorry, Nicky, did you say the Mayor's new requirements for strategic developments in your question on new builds.

Nicky Gavron AM: Zero-carbon homes and the target in the London Plan.

Leonie Greene (Head of External Affairs, Solar Trade Association): We would be absolutely delighted if they went for zero-carbon homes. We have been very disappointed with the roll-back. You can have some very innovative designs now for prefabs and what-have-you. I have certainly seen designs that are cheaper than conventional building but which are fully zero-carbon and so, with a bit of creativity, you can do this. What we are finding is that the big homebuilders are more and more interested in talking to us because they are recognising that they can do solar affordably. The case for not including solar becomes harder and harder to justify, really.

In relation to CHP, is there a conflict there? It would just depend on your load and what you were trying to do, what your power and load was and whether that was all being met through your CHP side or if you wanted some extra solar as well.

Leonie Cooper AM (Chair): Talking of load, we do need to move on to the next section and I would like to talk therefore about energy efficiency and load reduction.

Caroline Russell AM (Deputy Chair): Yes. Broadly what we are looking at is how the Mayor will revitalise the process of bringing London's existing housing stock up to adequate energy efficiency standards. Just broadly, Shirley, would you like to --

Shirley Rodrigues (Deputy Mayor for Environment and Energy): We have two programmes, as you know, one slightly more successful than the other, but both need to be ramped up considerably if we are going to meet the zero-carbon target by 2050, tackle fuel poverty and just deal generally with our energy targets. There is an evaluation of both schemes to understand how well they fared and what more could be done to learn some lessons, whether area-based approaches work or whether we need to go down a more targeted approach, looking at international best practice as well. Once we have that data, then we will be reviewing the design of those schemes to see how we can accelerate them. Again, it will be figuring in the London Energy Strategy and so the team has a lot of work to do over the next few months.

Caroline Russell AM (Deputy Chair): We are really looking forward to this Energy Strategy. Will the Mayor be revising the retrofit targets in the previous Mayor's Climate Change Mitigation and Energy Strategy and, if so, how and why?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): We will definitely be reviewing them to see whether they are still fit for purpose. We now have a new policy for London with a manifesto commitment from the Mayor for a zero-carbon city by 2050. The current greenhouse gas emissions target is an 80% reduction by 2050 and so there is a considerable amount more to be done.

Caroline Russell AM (Deputy Chair): It is a lot more ambitious, yes.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Yes, and so we need to understand what needs to be done and what can be done within the powers and resources that London has. As I have noted before, some of those, like the ability to control those emissions in London, do not lie within London but rely on the national Government to decarbonise the grid and so on. We have already written and we will continue to advocate to the Government to devolve powers and resources to London to be able to deal with those issues within its region, but we are going to have to look at everything, not just our buildings and transport but our waste, how we operate in London, how we design London and so on. These are very fundamental questions that we are going to have to look at.

Caroline Russell AM (Deputy Chair): Thank you. You have mentioned street-by-street retrofitting-type programmes. Is that a place where community energy might have a role?

Emma Bridge (Chief Executive Officer, Community Energy England): Yes, definitely. Even more effective than street-by-street is community-by-community and this is where community energy groups really do come into their own. There is lots of evidence out there about how much more effective they are at identifying which households are in fuel poverty, working with businesses, energy advice and behaviour change. There is a huge community role within Energy for Londoners, particularly in terms of getting energy advice out and certainly if you get to the stage of needing Energy Company Obligations (ECOs).

I can provide examples of other places. I was down in Plymouth recently and they were doing a side-by-side street-by-street type of approach where British Gas was targeting so many properties and the Plymouth Energy Community was targeting so many and there was four-and-a-half times the take-up of retrofit and energy advice and that sort of thing. It is about getting that from people they know and people they recognise. It is not just the knowledge that they bring, but it is that trust as well, and so it really does make a difference.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): That is what we are hoping the evaluation is going to highlight. In the best practice review, as we know, the conversion rate from previous area-based schemes has not been great and so, whilst there is interest, it never converts. There are a whole host of reasons for that but, as Emma [Bridge] has pointed out, the discussion of these possibilities by a trusted neighbour or community person is more likely to get the message heard and understood. If you are working community-by-community, it does seem a much more attractive and more implementable way. There are economies of scale around that that we need to look at. We need to understand how the economics of this works to be able to ramp up its scale, but we are absolutely going to look at that. That is a really interesting statistic.

Leonie Cooper AM (Chair): Without wishing to cut in on Caroline, there have also been some really interesting contributions by community energy organisations on the more targeted approach. For example, South East London Community Energy (SELCE), which is in southeast London, has used the funding from its community energy schemes to do that added value, working in Citizens Advice Bureaux, where people are going in literally - and I am coming on in a bit to the fuel poverty area - saying, "I need help", and have been offering targeted advice to people as well. It strikes me that there is potentially a role here working with the GLA for Community Energy London in a number of different ways, both on the area base to improve take-up and also maybe on the targeted as well.

Caroline Russell AM (Deputy Chair): The Green Deal has not had huge take-up, probably because of the sort of funding model that it had. Certainly I know as a councillor in Islington that we have a huge backlog of social housing properties that need to be retrofitted and I understand that some of the builders who might even be doing that work do not like working in London because it is expensive, the parking is expensive and all of those other sorts of problems of working in London for building firms.

Do you think that there is some scope for a London-specific equivalent of the Green Deal offering some kind of loan funding for retrofit and is there a possible role for that in Energy for Londoners?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Absolutely. We have been talking in the team about what we could do in terms of financing of new infrastructure and retrofitted infrastructure. The financing models that we have at the moment are not working. That is certainly one of the areas that we are looking at exploring. Alongside lobbying the Government for devolving resources to London to act on these things, we will be looking at pension funds, what other infrastructure financing options there are and how might we capitalise on that. The team has done some good work in working with ERDF and others to secure funding for London, but we need a lot more to meet the targets that will be needed for a zero-carbon city by 2050. The very uncertain political context that we face means that we absolutely have to start thinking about how we might fund that, given that source of funding is likely to dry up.

Caroline Russell AM (Deputy Chair): Emma, you were looking excited at the question. Do you have anything you want to add?

Emma Bridge (Chief Executive Officer, Community Energy England): No, other than that it would be a great idea for a London-specific Green Deal, obviously borrowing at a slightly more reasonable rate than there was before. That would be fantastic. As you rightly say, there are a lot more challenges with London, bringing that sort of thing in and so any extra encouragement is very much needed.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Just to say that we are looking at it. It is not a commitment yet. We have to understand how that all works, but the idea of something like that seems reasonable.

We know that the community groups have done a lot in crowd-sourcing funding. Is there a way of trying to capture that and use that to leverage more money in? There are lots of different options that the team is starting to think about how we might maximise that because financing is obviously a big issue.

Caroline Russell AM (Deputy Chair): Are you also thinking about how you might be able to help the private rented sector? That is a huge area where cold homes and the need for retrofitting is high, but you have lots of very different kinds of properties and so it makes it very difficult. Will that be included in your Energy Strategy --

Shirley Rodrigues (Deputy Mayor for Environment and Energy): It has to be. It is such a big sector in London - and growing - that we need to understand what we can do and how we can do that.

Then we know that there are a lot of fuel poor people out there. We do not know exactly where they are and so one of the issues is about how we map the locations and then how we might target interventions on them. Some of those might be easier to do than others, for example, through working with housing associations and the G15, but others, like the private rented sector, are going to be much more complicated. We need to think about how we might target things. It might be that we do a community-by-community approach or we might do it in a different way. It is all on the table, essentially.

Brooke Flanagan (Principal Policy and Programme Officer, Greater London Authority): Can I just come in on that one? The other thing around that is the importance of working with the boroughs, which do still have some statutory powers in regards to the private rented sector and the enforcement powers around the health and safety rating system, which currently requires by proxy that you should not be renting out an F- or G-rated home. We have also the private rented sector Minimum Energy Efficiency standards regulations coming in in terms of what tenants themselves can request for cost-effective energy efficiency improvements and hopefully a recast of the 2018 regulations - which as they were initially drafted were linked to the Green Deal, which will not work so well at the moment - and looking at how they are being recast by the Government to ensure that no one can let an F- or G-rated home from 2018.

Caroline Russell AM (Deputy Chair): Then, on the EU funding, I gather the RE:NEW programme was 90% funded by the EU. Do you have views on where that shortfall is going to be made up from?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): The RE:NEW programme funding is committed through to July 2017 and we need to see whether we can do another ERDF bid for the next phase of whatever we decide to do on building energy efficiency, an enhanced RE:NEW or whether it is something different. At the moment, it is likely to come from ERDF funding.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): That is still open, as we understand it, and so we will be making a bid, but the exact programme and what it consists of we are still reviewing.

Emma Bridge (Chief Executive Officer, Community Energy England): Can I just make a quick plea? RE:NEW and RE:FIT have both been very successful and the Heat Networks Delivery Unit project for heat. If you are reconsidering how the funding is, could I make a plea for a specific community programme as well to be considered as part of that? Thank you.

Caroline Russell AM (Deputy Chair): Thank you. Then a final question in this section is: what approaches will the Mayor explore to ensure that private sector workplaces are made more energy efficient? Having visited people in south London in some rather cold warehouses recently, it is definitely a factor, particularly for people working in some of the SMEs.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Again, this is an area that we need to look at. I know in previous times we have done a business energy challenge, but it is not going to be sufficient for the scale of improvements that we need in London on emissions reductions and so on. Again, it is an area that we are looking at. I am sorry that I cannot say anything more than that at the moment, but you will appreciate I am only just getting to grips with it.

Caroline Russell AM (Deputy Chair): No, we are looking forward to that plan.

Jennette Arnold OBE AM: Can I ask if we can just get a sense of the scale of funding that is linked from the ERDF? I understand the current ERDF goes to 2018, which would fit in nicely, I suppose, with the Brexit dates.

I do not understand the statement you made, Patrick, about applying for a new bid. Are you talking about getting a slice out of the pot that London currently has to distribute? Is that what you are talking about?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): It is exactly that. RE:NEW ends in July 2017. London currently has a slice of cash that has not been fully allocated in this area that RE:NEW occupies and so we will be looking to see whether we can access that funding.

Jennette Arnold OBE AM: OK. Through you, Chair, we could maybe pick up that information if that is reported to budget because it is important that we actually see the size of that because, if it is a huge piece, then you are going to be stretched to be able to replace that amount of money.

Moving on to fuel poverty, Chair, we should just be clear about the definition that we are using. The traditional definition of fuel poverty is spending over 10% of household income on energy. Let us all agree on that. By this measure, I am informed that in 2009 13% of Londoners' homes were fuel poor. The Committee recently heard that from a London perspective that could be one in ten. The Mayor has spoken about his ambitions for Energy for Londoners and selling directly to households. That is all good and well if households can afford it.

If you can clarify, would the Mayor be able to go under the market so that we would be looking at less than 10% of household income on energy?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): My understanding is that when we set up the new energy company that we would be able to set more affordable tariffs, which then should be able to help people pay their bills and be less fuel poor. Obviously, we do not have control over their incomes, but through the tariff system and then through the rollout of smart meters as well there will be a way of helping people to change or manage their energy use better. That combined with more affordable tariffs should help reduce that number, but that is aside from just generally how you raise people's incomes in London.

Jennette Arnold OBE AM: That is laudable and it is a great thing to have in a manifesto, but this winter is arriving shortly. Londoners who are fuel poor will not have access to this. Will they have access to it next winter, the winter of 2017, or will it be the winter of 2018 or will we see it at all in this four-year period?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): It will happen in this four year period. Assuming that Ofgem issues its licence next month, within those 45 days, then we can start the process, I would hope, well before next year but I would need to check on the timetable.

Brooke Flanagan (Principal Policy and Programme Officer, Greater London Authority): That is tied up with the previous response around looking at the options and feasibility and so we will have to come back once we have done that work with a better understanding of the timing.

Jennette Arnold OBE AM: With that the timeline, whatever tariffs can be introduced by the Mayor of London could not possibly kick in before next winter, the winter of 2017.

Patrick Feehily (Assistant Director for Environment): It depends on the model, does it not?

Jennette Arnold OBE AM: It is important that we can give this information and have clarity. What do you say?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): We need to take this away. We do not know enough about it yet or I certainly do not know enough about it to give you a firm deadline. Rest assured that we are looking at it and we want to introduce this as soon as possible. We anticipate this happening before the end of the mayoral term.

Leonie Cooper AM (Chair): The Committee would appreciate it if you are going to take this one away because this is so important. I referred to excess summer deaths earlier on, but excess winter deaths are a serious issue. We know that a lot of houses in London are Victorian or Edwardian and very under-insulated.

There are high levels of fuel poverty. It would be really good for us to know which winter this is going to be kicking in by. That is really important. Would you be able to write to us subsequently and let us know not the direction of travel but the time of arrival on this one?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): I am happy to do that.

Jennette Arnold OBE AM: Let us just look at what the Government is doing. In 2015 the Government published a fuel poverty strategy and that focused on improving efficiency for fuel poor households in hard to heat homes. Do any of the guests have any responses to this national fuel poverty strategy?

Leonie Greene (Head of External Affairs, Solar Trade Association): I would stress that solar does seem to be used by a lot of housing associations to tackle fuel poverty because you see an immediate impact on your bills.

Jennette Arnold OBE AM: Solar does not help an elderly 70-year-old living on a pension who can hardly pay a bill or buy food. How does solar help that individual?

Leonie Greene (Head of External Affairs, Solar Trade Association): Their electricity bill can be significantly reduced or, if they have solar thermal, it can take a nice chunk off their heating bill.

Jennette Arnold OBE AM: They would have to find the money for the start-up costs, would they not?

Leonie Greene (Head of External Affairs, Solar Trade Association): Yes. Social housing providers have been quite good at trying to retrofit social housing with these technologies to ensure that their tenants are insulated as much as possible from stringent energy bills or even the volatility of what happens with energy bills. I have one survey here that was done by the National House Building Council that showed that housing associations were very pleased with solar thermal and 79% said that they would use it again. That is the highest of any sustainably technology. Social housing providers have been one of the big ambassadors in domestic solar, precisely for this reason. I would also stress that they are very interested in solar thermal as well.

Jennette Arnold OBE AM: Are you saying that the Government is working, say, more with boroughs because that is where you would find the greatest stock of social housing or is it working with housing associations in terms of the Government's plans? What do you know about that in terms of moving towards implementation and assisting fuel poor households?

Leonie Greene (Head of External Affairs, Solar Trade Association): Under the previous FIT, it was very cost-effective for social housing providers to do this. The economics has changed with a very extreme cut to FITs. To be honest, it was quite frustrating because there was an aggregation rule. Social housing providers in a way were penalised. They were paid less by virtue of trying to do a lot of homes at once.

There is a case for Government policy doing more to support targeting these technologies on fuel poor homes and we are all on tenterhooks for the renewable heat decision on supporting renewable heat technologies. It had been stated previously that their intention was to try to target fuel poor homes better. We are still waiting for it. When it comes out, then hopefully there might be more resources available to enable social housing providers to make use of that to bring more people out of fuel poverty.

Emma Bridge (Chief Executive Officer, Community Energy England): My concern around the national fuel poverty strategy is the fact that it has changed the target, reducing them to adequate levels, the number of people not in band C by 2030. That acknowledges how difficult it is. I understand that, but these are

people's lives. These are affecting actual people's lives in terms of deaths, health and education. The impacts are so wide-ranging.

For me it is about making people integrate their approaches more because we are still not very effective at that. Local authorities are key, housing associations are key, communities are key and businesses. It is the whole cross-spectrum. We are too siloed. There are still people falling through the cracks. It is that identification. You know about the people on benefits, but what about those who are not very good at collecting the benefits or have not registered because they are too proud, maybe? It is that identification and integration that we need to work on more effectively.

Jennette Arnold OBE AM: I recently met up with a group of members of the London Older People's Forum and they were very cross because they hear messages, like from you, spoken and then find out to get access to them that it is online.

Emma Bridge (Chief Executive Officer, Community Energy England): I know.

Jennette Arnold OBE AM: You can say all the nice things and have all the views and what-have-you, but this is an active group of people in a network and they are having difficulty accessing online information.

Emma Bridge (Chief Executive Officer, Community Energy England): Sorry to sound like a stuck record, but this is where community groups come in. It is that trust of visiting people in their house, someone that they trust knocking on the door or knowing where to target with letters and things like that. It is not harassing them, but it is being able to engage them in a way that is suitable for individual purposes.

Brooke Flanagan (Principal Policy and Programme Officer, Greater London Authority): Just on the fuel poverty strategy, if I may, the focus on trying to improve the energy efficiency of homes is a sound one. The problem is that when that strategy was published, it was around the same time that the Government was consistently reducing the support for fuel poverty, particularly through the ECO. Whilst it was a sound approach, there are very limited resources there to back that up. That is a particular problem in London because we have historically gone under what would be a fair proportion of eco-investment. It is a bit of a struggle in that regard and we do need to look at the support nationally for fuel poverty programmes and then ensure that London is getting its fair share.

The other issue related to Emma's [Bridge] point is around the definition. The definition you were using around the 10% is not the one that the fuel poverty strategy actually employs. With the low-income high-cost definition, whilst it is positive that it takes housing costs into effect, particularly in London, the methodology, without going into all the complicated details behind it, does bias against smaller properties and those with fewer number of occupants. That, once again, does not work so well for London where we have a lot of single person households and a lot of flats. It is a step in the right direction, but it does not have the support behind it in terms of the funding required and there are certainly some improvements that can be made to that.

With the target, there is also once again that very big out clause of "where practicable" and the funding. Funding is a reason why that allegedly is not practicable, according to the strategy.

Jennette Arnold OBE AM: Coming back to the Mayor's pledge to help tackle fuel poverty in London, what current steps are being taken? Patrick, who are you talking with or liaising with or meeting with to identify these challenges that Brooke has just outlined?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): We brought the boroughs in to talk to them about the consultation on ECOs. The thing about fuel poverty is that it stretches

across everything we are doing: all the work on energy efficiency, all the work on providing heat, all the work on supply and, as we talked about, all the work on solar; and also the work on financing because ultimately all of this energy efficiency problem comes down to an issue of having the right money to be able to afford energy efficiency measures and the provision of energy in London. It is more about integrating fuel poverty into everything we are doing on energy. We have been given a very clear steer on that from the Mayor in terms of the two objectives for energy for Londoners by reducing CO₂ omissions but also doing so in a way that tackles fuel poverty.

Jennette Arnold OBE AM: Thank you. We all have our fingers crossed that not one person is going to die from the cold this winter?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Fingers crossed, yes, but I am not sure that we have any influence over that at the moment.

Leonie Cooper AM (Chair): Will be there a section on fuel poverty in the Energy Strategy part of the Environment Strategy? That is becoming slightly complicated, but I am sure you see what I mean.

Shirley Rodrigues (Deputy Mayor for Environment and Energy): Yes. We have not quite worked out the structure, but fuel poverty will be addressed as a key issue in terms of how the Environment and Energy Strategy can contribute to that.

Leonie Cooper AM (Chair): Again, we will have some sort of metrics when you have done your analysis of RE:NEW and RE:FIT as to whether or not you are going to try and address it through area-based targeted behaviour change, demand reduction, installation of solar in terms of demand reduction and solar thermal, as well as PV? Something will be in there with some metrics to address fuel poverty?

Shirley Rodrigues (Deputy Mayor for Environment and Energy): There will be something in there that talks about what kinds of approaches we want to do. It is a consultation document and so we are looking for people to come back to us to say, "Is this the right approach? Here are some metrics that you might want to consider". We will put some metrics in that we will suggest and then, if people think these are not the right metrics, we want to have a conversation about that.

These are hugely complicated issues that all interrelate, as Patrick [Feehily] talked about. We are trying to deal with climate change, security of supply, fuel poverty, affordability within the context of trying to build more houses in London, keep London open and so on. We have a lot of things to balance, but we have some very good ideas coming forward. We are looking forward to some good debate on how we can improve them.

Shaun Bailey AM: Just to go back to this Licence Lite, you say it is not either/or, but I wonder how fuel poverty plays into that conversation? It strikes me that at some point Licence Lite means you are just bulk-buying power and you may be able to secure slightly cheaper power because of the nature of bulk purchases and also will be able to guarantee some of the small suppliers demand. Will it be easier if we were generating our own power in all the separate ways you could do, more effective, more targeted to deal with fuel poverty? I worry that at some point the market will win, as it generally does, and they will be buying power at slightly less than it costs and will not make a real dent in fuel poverty.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): I am going to try to answer that question. We are buying the energy from decentralised energy powers so that we can make a better market for decentralised energy suppliers. Those decentralised energy suppliers are largely producing heat for houses in London. What we would want to do is, through intervening in that market place, have more

decentralised energy suppliers providing more heat who are providing more affordable heat to tackle fuel poverty in London.

Shaun Bailey AM: Does that have any kind of physical barrier? Who is producing this heat? Can I get it in Stockwell or if I am in Hanwell or Havering? Do I need a local provider or a physically close provider?

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Through the Licence Lite scheme, the heat that would be produced through CHP would be servicing locally. This goes back to the utilisation of waste heat in London. The aim is when we are putting new housing estates in to build out the heat networks in London so that we can use that CHP as a stimulus to create that heat network and in the future then we can connect that heat network into the big sources of heat in London. At the moment, whilst it might be local, the aim is to make that wider across London.

Shaun Bailey AM: I will make a plea because I live in one of the outer boroughs and I am not sure we have that level of activity to achieve anything from that, but I understand that it is a tapestry.

Patrick Feehily (Assistant Director - Environment, Greater London Authority): Yes, exactly.

Leonie Cooper AM (Chair): We have gone off into something very specific, but we had just got to the point where in one sense Shirley [Rodrigues] had just drawn together from the beginning of the meeting where we started with the environmental challenges and the priorities and we have gone through a number of quite complicated different areas on climate resilience and adaptation, flooding and overheating. We talked about the natural environment and biodiversity, we had moved on to talking in detail about waste and the circular economy and we have now had a very good session on a number of aspects of energy. There are a number of threads that have come out of this that we will want to pick up with you again in the future, but we do need to draw the discussion with you to a close.

On behalf of the Committee I would like to thank particularly Patrick [Feehily] and Shirley [Rodrigues], who have been here for the whole session, and also the guests in the second session, Brooke [Flanagan], Emma [Bridge] and Leonie [Greene], for joining us and delving into the energy side of the discussion in a lot of detail.