

Environment Committee – 2 July 2015
Transcript of Item 5: Solar Energy from London's Homes

Darren Johnson AM (Chair): Our main item of business then, Item 5, solar energy from London's homes. Can we welcome all of our guests today? Thank you so much for coming along.

The first question that I will pull out to start things off: compared with other United Kingdom (UK) regions, why does London perform so poorly in terms of generating solar electricity from photovoltaic (PV) panels? Shall we start with City Hall at this end, Kore Mason?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): That is for James. He is going to answer that.

Darren Johnson AM (Chair): All right.

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): Yes. In respect of domestic dwellings, we know that London is not performing as well as we would hope, perhaps, in relation to other regions of Great Britain.

Murad Qureshi AM (Deputy Chair): It is last.

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): However, that is not the case for community solar. In fact, London has the fourth-highest capacity in relation to community solar in respect of 12 regions. That has just come out in the new feed-in tariff (FIT) Office of Gas and Electricity Markets (Ofgem) data. Equally, London is roughly in the middle of the ranking in relation to non-domestic - so industrial - solar installations as well. In respect of domestic, we have around 15,000 installations to date. That is the cumulative total so far since the introduction of the feed-in tariff in 2010.

It is worth also noting that London's solar PV deployment has increased significantly since then in relation to new developments as well. In particular, the London Plan targets are currently far more ambitious than the Government's. Around 230,000 square metres of PV panels, equating to around 22 megawatts, have come on-stream or are in the planning system, as it were, as a result.

In terms of some of the barriers that exist in London and the fact that London's performance is perhaps slightly less rosy than other areas, that comes down to some of the physical challenges here. We have a high volume of flats; 50% of homes in London are flats. We have half of all UK conservation areas here in the capital. This is compounded by overshadowing, adjacent high-rise developments and limited roof space.

Also, an important point to note here is the transient population of the capital and the fact that we have quite a high turnover of people. 26% of all homes are privately rented and a third of those [tenants] move within a year. That paints a picture around the sorts of complexities in relation to the freehold landlord-tenant incentive of PV panels.

Darren Johnson AM (Chair): I understand the complexities, but even if you discounted all of those homes, all of the rented homes, all of the multiple-occupancy and so on, given the size of London as a region in terms of the population and the number of homes, you are still left with an awful lot of homes. I do not think that can explain the whole picture, can it?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): If you look within London, by virtue of the physical makeup of the buildings, and if you look in more central London areas, you will see there is actually very little solar uptake. However, if you look at the outer areas - Bexley, Bromley, Croydon - there is a lot more. That really does come down to building physics, really. We have lots of tall, slender buildings with limited roof space. I am just highlighting here the physical challenges, not only the ones around tenure.

Darren Johnson AM (Chair): OK. Leonie Greene, is the Solar Trade Association (STA) disappointed that it is not getting more take-up in London compared to other regions?

Leonie Greene (Head of Public Affairs, Solar Trade Association): Yes, of course we are disappointed and we are very grateful to the Committee, to you and to Jenny [Jones AM] for the work you have been doing to spotlight this.

There are some legitimate reasons why there are barriers to deployment in London, not just on housing but in the commercial sector. We have very high rental values and very high labour costs, and the energy is relatively tiny. However, all of those reasons make it all the more important that London adopts soft measures, specific strategies and targets and gives real leadership. If you really present an inspiring vision, there is far more scope for London to really do a lot with solar.

Darren Johnson AM (Chair): Fine.

Afsheen Rashid (Chief Operating Officer, Repowering London): I would like to add to some of the points that James [Hardy] was making. People in London are really disengaged. There is a disbelief that the technology even works. Having door-knocked in Brixton and in Hackney, some of them do not think the sun will actually generate energy in London. We have to put away some of those --

Darren Johnson AM (Chair): If I can just come back to you on that, in so many other areas that we deal with at City Hall, we are always told that the London population is highly educated, is more engaged and is very knowledgeable about things. However, when it comes to solar, we do not have clue, basically. Is that right?

Afsheen Rashid (Chief Operating Officer, Repowering London): There is some of that and there is an element that a lot of the areas that we work in are social housing and deprived areas. It is not a top priority. They do not own their properties. They do not feel that they have a say in it. They are living in blocks and they do not have the roof space.

Darren Johnson AM (Chair): I will adjourn the meeting for a minute and we will resume as soon as we get the sound system sorted out.

(Adjournment)

Darren Johnson AM (Chair): Thank you. All right. We will resume the meeting.

Afsheen Rashid (Chief Operating Officer, Repowering London): While I have highlighted that there are those challenges and there are the technical challenges, community energy really offers an opportunity as well in terms of engaging with people and getting them excited about it.

Solar panels for us in Repowering London are a hook. They are a great way to get people engaged in the discussion not only of energy generation but energy efficiency, fuel poverty and other behaviours. We have seen communities come together around a collective common cause. While they understand that the solar panels at the moment cannot be plugged directly into their properties, they definitely see them as a first step to moving towards a more holistic and energy-resilient locality. There is a great opportunity here for communities to really come in and support the installation of more solar panels across London.

I would also say on the figures that James [Hardy] has quoted that we are the fourth-highest. 'Community solar' can also be defined as building owners putting solar panels on their schools or community centres, whereas the model that we are looking at is about community ownership when communities actually buy into the energy infrastructure in their local area. It is just taking it a bit further.

Darren Johnson AM (Chair): Thank you. Judith, you are head of Property Services with Ascham Homes and you have a significant solar installation. What do you think are the main barriers? Why do you think London is performing so poorly?

Judith Page (Director of Property Services, Ascham Homes): It is some of James's stuff about the physical elements of it. About 10% of our stock has solar PV panels, which was all the easy stuff to do. We did houses with big roofs, essentially, in the borough, whereas now when we are looking at other projects the viability of them becomes a lot more marginal. Smaller roofs are harder to deliver on, particularly on scattered street properties where you cannot get a block of them. Also, for us, one of the main drivers is about fuel poverty and reducing fuel poverty. When we do them on blocks, we do not get that benefit from doing them and it is marginal financially whether that is where you should invest your money. When we have done them on houses, obviously the residents get the benefit, whereas on blocks the only place we have found we can put the free electricity is through the communal service charge elements like lifts, emergency lighting and those kinds of things, which have marginal benefits to the tenants.

Darren Johnson AM (Chair): Thank you. Brian Horne, Energy Saving Trust, do you have some reflections on why London is performing so poorly?

Brian Horne (Knowledge Manager, Energy Saving Trust): Yes. I would agree that certainly in central London the physical constraints do not make it impossible but, if they are just going to make it more difficult and therefore more expensive, they are very real and should not be underestimated. Shading is a major issue for PV. The difference between a slightly shaded site and an unshaded site is very significant. It should not be underestimated as an issue. The height of the buildings means more scaffolding. The smallness of the roof makes it less cost-effective.

There are other things that I would add to that, though. In terms of tenure, yes, there is a lot of rented accommodation, which is an issue. However, there is also a bit of a barrier in terms of leasehold properties as well, not that it prevents it happening but it just makes it more complicated and is an additional barrier. Any house that has been divided into two, three or four will have several leaseholders and a freeholder and you will need a lot more signatures on everything.

The other thing is just that the cost of doing business in London is high. Replacing your gas boiler costs a lot more in London than it does in the rest of the country. The same thing applies to doing business generally.

Darren Johnson AM (Chair): Thank you. Finally, Seb Berry from Solarcentury, do you have any additional reflections on that?

Seb Berry (Head of Public Affairs, Solarcentury): Yes, I absolutely agree with all of the comments about physical and other barriers. They are very real.

One thing that no one has mentioned, however, is a really key barrier from where we sit and that is the issue of political leadership. That is one of the reasons that we welcomed very much Jenny Jones's report last year. It is a fact that the Greater London Authority (GLA) and the Mayor have been pretty slow, actually, to recognise the potential of solar and it is not just us saying that. We had the new Chairman of the London Sustainable Development Commission (LSDC) speaking at a very recent post-election STA event and he described London's record over the last five years across all scales of solar as, in his word, 'crap'. He also pledged that as the new Chairman of that organisation he would be working very closely with the Mayor to do something positive about that and we, obviously, very much welcome that.

However, to be honest, we will be looking very closely at, for example, the way in which the various GLA programmes are reconfigured this year to deliver on the very welcome headline commitments to solar. That applies both to domestic solar and also to non-domestic.

Murad Qureshi AM (Deputy Chair): It sounds as though this morning is going to be a Green Party Appreciation Society, but I have no problem with the Green Party on the solar issue.

Darren Johnson AM (Chair): I did not plan it.

Murad Qureshi AM (Deputy Chair): This is just coming back to James. You have just heard a range of views there. We have heard these issues being highlighted before and the energy efficiency programme delivery as well.

Are there some things we can learn from other regions at least? Looking at these figures, we are actually bottom of the league. The southwest, the southeast and every other region apart from Scotland and Wales is ahead of us in terms of total numbers of domestic PV panel installation. Regions like the northwest, which I did not think were terribly ahead on this front and which does not have any regional government of any sort, seem to be doing a lot better. Are there lessons to be learned from those other regions that we can replicate here?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority):

Absolutely, but what we find certainly with international comparators as well when we look at similar building archetypes in other cities globally as well as the UK, London is still different. Having said that, we work through the Core Cities Group in order to share best practice and try to see whether there are commonalities in terms of some of the obstacles we are facing and try to learn from them.

Murad Qureshi AM (Deputy Chair): You moved into international comparators and I do not think that is appropriate in this context. At least when we compare ourselves with other regions, the building forms of construction are much the same, although the densities may be different. Are there no ready things that you have learned already from the other regions, the Midlands, for example?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): As I said, so far, through our Core Cities work, we talk about a whole spectrum of technologies. We do try to single out certain ones - for example, solar - that perhaps should be accelerating more in terms of deployment than others. Of course, our focus is on the eight renewable energy technologies.

Also, we have a large focus on low-carbon heating and trying to decarbonise heat within buildings, which is a huge challenge as well. Whilst we are working very hard to understand the obstacles in relation to solar, we are also doing it across the board. I am not saying that we are technologically agnostic in that sense. What I am saying is that, if you look at an average home, 70% of its bill is down to heating. As a result, a lot of the time we do focus on how we decarbonise heat as well as power.

Only 29% of the energy we use here in London today is electricity. We also need to spread ourselves across a lot of other things with the limited resources we have.

Murad Qureshi AM (Deputy Chair): Sorry, Chair, the point I am trying to make is that there are lessons to be learned from other regions and we found that when we looked at home insulation and went up to Kirklees.

Darren Johnson AM (Chair): We certainly did, yes.

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): We would be more than happy to hear them. Any evidence that comes of this would be gratefully received.

Darren Johnson AM (Chair): Good.

Jennette Arnold OBE AM: I would like to stay with James for a while because I am interested in the international comparisons. I do hold a view that London comes off pretty badly when you try to compare it to regions in some respects because there are just some things that we should not be comparing because you cannot get a like-for-like base. However, when you have looked at what other cities are doing, say, the top 15 cities, where are we then in terms of generating electricity from solar power?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): I have to say that I do not know the figures in relation to that with me --

Jennette Arnold OBE AM: You do not even compare London to other cities?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): No, we do and in fact we are about to commence a feasibility study on something called *Energiesprong*, which stemmed from a recent study tour we had in Amsterdam earlier this year. It is in relation to a markedly new retrofitting approach, which includes a whole PV cassette roof being placed on homes, among other measures, in order to get a net [reduction] on the meter and a zero-carbon home at the end of it.

We are selective as to what we choose to focus on. As I said, we are fairly limited in the resources we have, but we are looking at other similar archetypal cities that have progressive approaches to doing things and we are learning from them.

Jennette Arnold OBE AM: You do not have that evidence? You have not done that comparison yet?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): Today I do not have the numbers that stack up against it, but I would say that we tend not to do that when it comes to types of technology that are variable and intermittent. When we are talking about things like solar, by virtue of different weather systems, it is very difficult to compare what you get by way of solar radiative heat.

Darren Johnson AM (Chair): Leonie, is this on international comparisons?

Leonie Greene (Head of Public Affairs, Solar Trade Association): The world comparison is appropriate because this is a world city and it is part of the C40 [Cities Climate Leadership Group] and its emissions reduction targets are phenomenal and incredibly ambitious. London should be looking at what is happening internationally and should be aspiring to be one of these world cities with a technology that UBS, the International Energy Agency (IEA) and Deutsche Bank say is going to dominate world power supply.

For example, New York how has 300 megawatts of solar power. That is a city that a lot of people would say was challenging with very tall buildings and an awful lot of flats. They have announced a \$1 billion programme for solar over the next ten years. What you see is incredibly active leadership from [Andrew] Cuomo [Governor of New York], I think it is now, and the former Mayor as well was very engaged.

I would just make a plea. You are absolutely right. Look at what the other regions have done. There have been some phenomenal examples, actually, whether it is Glasgow scoping out waste sites for large solar, Kirklees doing the social housing rollout or Bristol having a one-gigawatt target. I would just make a plea to you to be more ambitious than that and to look internationally.

Darren Johnson AM (Chair): Yes, that is a very good point because, presumably, those other world cities all have similar problems around shading issues with tall buildings, around multiple occupancy with flats, around high installation costs and all of those. They somehow have to overcome those obstacles, I suppose. Jennette?

Jennette Arnold OBE AM: I just wanted to say one thing you could apply here. One of the golden rules of epidemiology is that you do not ask the question because you do not want the answer sometimes and maybe that is at work here.

Can I just ask Seb? You quoted somebody in terms of the GLA and mayoral performance, whoever it was who said that the performance was crap, but I did not hear the name or the organisation.

Seb Berry (Head of Public Affairs, Solarcentury): I was going to come back to that point. The person who made that comment, which has been publicly reported and so I am not breaking confidences or anything, was Greg Barker [Rt Hon Greg Barker MP, Chair, LSDC]. He is a rather key figure in all of this and very welcome in that position.

The point he was making more generally - and some of this point is beginning to come out in this discussion - is that too many people in government, not just central Government but also local government, have what he calls a '2010 mind-set'. What he means by that is that there has been such an astonishing and rapid transformation of the solar sector in the UK generally. That is partly to do with the astonishing price falls that have been delivered, but it is more than that. We have built a really robust industry in the UK. For example, phrases appear in GLA documents dating from 2010 and 2011 that refer to solar as a 'new and emerging technology'. Four years on, that is the sort of language and approach to this technology that is not appropriate anymore, given where we are today.

Therefore, we are very pleased to see Greg Barker in that position and, as I said earlier, very encouraged by the public messaging that he has been giving - not just to the STA but elsewhere - about the significance of solar for London and the work that he is promising to do with the Mayor to take this agenda forward.

Darren Johnson AM (Chair): Thank you. If we can move on now, what are the key benefits of installing solar panels on London's homes, whether financial or otherwise? Could someone give me an idea of what a typical London home with a typically sized solar installation could expect to save in terms of the annual

electricity bill, how much it could earn from the FIT and how much it might reduce its carbon footprint? I do not know who is most likely to have those figures to kick off. Leonie, does the STA?

Leonie Greene (Head of Public Affairs, Solar Trade Association): I guess I can estimate. I have a small example. Actually, systems are getting bigger on average and so let us take a bigger four-kilowatt house in the suburbs, say. You would be looking at savings at the moment, based on current FIT rates and electricity prices, of around £280 a year on the energy bill. You would get about £520 from the FIT generation tariff and about £100 from your export bonus. That is the extra bonus surplus going into the grid.

Darren Johnson AM (Chair): In terms of the carbon footprint that they would be able to reduce?

Leonie Greene (Head of Public Affairs, Solar Trade Association): We estimated that a large four-kilowatt system would save 1,400 kilograms of carbon dioxide (CO₂) per year.

There is just a point I would make on the footprint. I hear what James [Hardy] was saying about heat and power, but obviously the carbon footprint is much bigger than gas, for example, just because it is so inefficient as a system.

Darren Johnson AM (Chair): Thank you. That is useful. Does anyone else want to add to that?

Brian Horne (Knowledge Manager, Energy Saving Trust): Yes, we have figures but they are slightly different. Our figures have slightly lower financial savings and slightly higher carbon savings for an identical system, but that is the nature of estimation.

One thing to bear in mind, though, when we are comparing this with other technologies is the public perception of it. This is not London-specific at all, but our experience is that solar PV is seen as a totally separate thing. People who are interested in solar PV are a certain type of people who are trying to achieve a certain type of thing and they are totally different from the people who are trying to reduce their energy bills, trying to keep warm, trying to get a grant to replace their boiler or whatever. No, solar is not being marketed to those people; solar is not being marketed to anyone. However, currently, the effective target audience for PV is different. We see this through the people calling us up every day. If they are worried about their electricity bills, we cannot sell them a PV system. If they are phoning up about PV, we cannot sell them insulation or a boiler. The perception of it is very high and everyone is aware of it, but they have an idea about what it is, who it is for and how you go about it. It is one of the nice-to-haves. That understanding has to underlie anything that you do to try to encourage uptake. Comparing it to the other technologies that you fit in homes like insulation, renewable heating, heating controls and all of that stuff, they all fit together in terms of what people need to do to improve their homes and solar is, rightly or wrongly, seen as an add-on.

Steve O'Connell AM: I didn't quite pick up on the savings, at all. If you range around my area in Sutton and Croydon, there is very little solar. I see the panels because they stand out. Many of our residents do not even like the visuals, but that is another thing. They find them quite offensive and intrusive to the neighbourhood, but that is an aesthetic, perhaps.

Going back to your point, you sometimes get calls from people saying, "The underlying thing I want to know about is saving on my electricity bills", which is in this day and age what people are concerned about. Your response to them is, "I hear what you have to say. There are other things that could help you, but solar energy is not necessarily the thing for you". Is that what you are saying? I thought that that was what you were saying.

Brian Horne (Knowledge Manager, Energy Saving Trust): No, it is not. If they are phoning up to say, "I want to reduce my electricity bill", we will tell them about using appliances more effectively, turning things off, switching supplier and all the things that you can do. If we mention solar, they are not going to be interested because they are a different audience. They are an audience that does not want to hear about solar because, I assume, if their prime concern is electricity bills, it is because they believe themselves to be financially hard-up and PV is seen as a luxury item. We can mention it and they will not be interested.

Steve O'Connell AM: Then they are questioning back and they say, "This solar business sounds interesting", and you will say, "That is fine but it will cost you - what are we saying - £2,000 or £3,000 to fit and you will probably get onto savings.

Brian Horne (Knowledge Manager, Energy Saving Trust): It is £5,000 to £8,000. That is the stumbling block for people who are worried about their electricity bills.

Steve O'Connell AM: Let me just finish. I am phoning you up saying, "I am really bothered about my bills", and you are going to give me a menu of things I can do. One will be solar and I will say, "I have heard about solar. I am interested". You will say, "Fantastic. It will cost you about £5,000 to £8,000", to which I will then fall off my chair and put the phone down, probably. You can see why - if you do not mind me leaping in - for the man out there and the normal guy on the street it may or may not be attractive. We will get on to that later.

Darren Johnson AM (Chair): Is that why you were talking about the benefits of the community solar schemes, which could particularly help people on social housing estates, for example, and could be done in a communal way. Do you want to say a bit more about that?

Afsheen Rashid (Chief Operating Officer, Repowering London): As you said, it is a financial barrier for people to fork out £5,000, whereas in a community scheme people living on the estate can put in a minimum of £50 in a one-off payment and be part of a co-operative or community benefit society and get a return, which will obviously be nominal for £50, but all the same --

Darren Johnson AM (Chair): People are less likely to fall off their chairs if the menu of advice includes signing up to a solar scheme for £50?

Afsheen Rashid (Chief Operating Officer, Repowering London): Yes.

Steve O'Connell AM: What sort of community? Are we talking about an affordable housing complex or are we talking about private housing as well?

Afsheen Rashid (Chief Operating Officer, Repowering London): We are talking about social housing. For instance, in Brixton on the Loughborough Estate we have run two of these schemes and on another estate further up the road, Roupell Park Estate, we have run a third scheme --

Steve O'Connell AM: It lends itself to social space, which is fine.

Afsheen Rashid (Chief Operating Officer, Repowering London): Yes. The key drawing point at this current stage is the community fund. The income that you are earning through the FITs gets ring-fenced towards paying a return to investors and then also keeping a pot of money that goes into the local area. That, again, helps with further engagement on energy efficiency, fuel poverty, training and work experience.

One of the key elements that none of us mentioned is around skills, employment and training that in the green economy the solar installation industry provides. That has been a major draw for us in getting people involved and engaged in our projects. We have been offering internships and work experience for young people and residents who are unemployed and who are looking for jobs on our schemes. We work with our contractors to make sure they have placements for the local people and that has been a really great way to get people involved in the scheme and then also on a journey, if you like, from solar panels, to talking about energy efficiency and fuel poverty, really reaching out to the heart of each population.

Darren Johnson AM (Chair): Thank you.

James Cleverly AM MP: We were discussing some of the hurdles to encouraging people to take up solar power and the significant upfront cost was obviously one of the things that we discussed. Has there been any work - and I suppose anyone can answer this - as to whether the societal mix in London is a limiting factor? I am very conscious that when they have an investment with a relatively long payback period, people who expect to move house in a shorter time than that payback period have a massive disincentive to install. Obviously, London has a much higher churn in terms of resident population than some of the areas that have been discussed in terms of geographical comparators. Has there been any work done around that?

Brian Horne (Knowledge Manager, Energy Saving Trust): It is something that I think we all on this side think is the case. I do not know if anyone is aware of actual studies to prove that. It just seems self-evident and so no one has bothered to establish it. However, the point has also been made that that only applies to a certain part of London. It is the case that the classic person who phones us up about PV is retired and is in their own detached property out in the country. That is the archetype.

James Cleverly AM MP: Out in the countryside, would you say?

Brian Horne (Knowledge Manager, Energy Saving Trust): Certainly, they have big houses and they have big gardens. They are not necessarily out in the country. They could be within the boundary of London but there is no particular reason that they would be. They have £5,000 to £8,000 or they are wondering what to do with their spare £20,000. They are not the only people buying into solar as owner-occupiers, but it is the archetype, I suppose.

James Cleverly AM MP: Obviously, London has been beaten up a little bit by some people for its failure in progress in this area. Has there been any kind of granularity to that assessment? For example, is outer London better than inner London? Again, that is demographically where you would expect empty-nesters in larger properties that fit that kind of model that you have discussed; You would expect to find a disproportionate number of them in inner London. Has there been an inner London/outer London split? What I am trying to --

Brian Horne (Knowledge Manager, Energy Saving Trust): We do not have that, certainly. It would be our assumption but we do not have any data to support that.

James Cleverly AM MP: What I am trying to figure out is where success is likely to come, because I always feel uncomfortable when we discuss London in totality. Frankly, it is not one homogenous city in terms of types of people, housing stock, etc. I think a level of granularity would be useful there.

Brian Horne (Knowledge Manager, Energy Saving Trust): Yes. We do not have the data to support that. Because of that, you are quite right that when you look at central London and the problems around buildings,

tenure and so forth, they cannot explain the figures because of the huge numbers of people in the suburbs that you would think are pretty similar to the suburbs of other cities.

Darren Johnson AM (Chair): There are a couple of other guests who want to come in now and I am going to throw this basic question at you. If the Mayor was going to have a real additional push on solar, would you recommend that he chooses one or more outer London boroughs - like Bromley or somewhere like that - as a more fruitful destination rather than simply trying to scatter it all over?

Brian Horne (Knowledge Manager, Energy Saving Trust): There is an argument for that, but anything that government at any level can do to tackle some of these barriers will be tackled through very local, area-based schemes to provide routes to overcoming some of these barriers. That is not concentrating on a borough; that is concentrating on a street or a handful of streets. You might want to pilot the project in the suburbs or you might want to do comparison projects in different parts of London to establish how successful you are at overcoming different barriers. That is a strategic question. I would be nervous about recommending that you ignore central London.

Leonie Greene (Head of Public Affairs, Solar Trade Association): That is why you need a strategic approach. It is horses for courses, is it not? You still have 1.5 million houses in London. We did a bit of analysis and 70% of those are privately owned. Therefore, they are ideal and, legally and financially, they are simpler. In terms of social housing, which is a quarter of London's housing, again, it needs a different approach to help overcome some of the barriers. The scope, though, is phenomenal. Research into social housing shows huge support for it.

Just on the point about people moving in and out of London, again, we looked at the movement figures and it is only 5.3% of the population and in the southeast 5%. It does not totally explain --

James Cleverly AM MP: Sorry, 5% of what?

Leonie Greene (Head of Public Affairs, Solar Trade Association): It is 5% in terms of transience and people moving out of London every year. It is not a huge number.

James Cleverly AM MP: Yes, I know, but that is not a relevant figure because it is the movement within London. If you are moving house within London, it would be a massive disincentive. Obviously, when we go canvassing, we get a pretty good idea of the amount of churn. Every five years, all of us on this side - with the exception of the officers - knock on doors and we get a list of how many of people are new behind those doors. Certainly when I was campaigning in Lewisham, often a good third of the names on that list were new names. The movement in and out of London is not the relevant figure. It is just the movement within --

Leonie Greene (Head of Public Affairs, Solar Trade Association): I see what you mean. It is how long they stay in a house?

James Cleverly AM MP: Yes, how long they stay in the house that they are about to put £10,000 into.

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): On the movement within London and just to go back, I alluded to this at the start about London's transient population. We have crunched some numbers and we think that around 12% of London households overall move within one year. Within the private rented sector, which is arguably the hardest nut to crack here - across all energy efficiency measures, that is - around a third move within a year as well. That really shows the level of movement within London.

In response to a point made about whether we are doing better in inner and outer London, as I said, again, if you look at the recent statistics coming out of Ofgem and the Department of Energy & Climate Change (DECC), the likes of Barking and Dagenham, Havering, Croydon and Bexley, the outer boroughs, are doing far better than the inner boroughs, from the City of London all the way down to the left. That paints a picture. When you start looking in London, in the real centre, because of the physics of the buildings, the limited roof space, the overshadowing and those other factors that we have touched on, it creates an obstacle in relation to the uptake.

James Cleverly AM MP: Thank you.

Jennette Arnold OBE AM: I hear what everybody is saying, but, if you were going to take a sensible approach, you would not be asking tenants to install; you would be asking the landlords. In terms of landlords selling their properties and stuff like that, that is not where the churn is. The churn is with people who are moving from rented accommodation. Students are involved in that churn as well. London has one of the highest student home populations within it. We can just get lost in all of these figures.

The central issue is going back to what Afsheen [Rashid] was saying. It is possible to introduce the average Londoner to this technology and to see initiatives develop. The question for me is about the constraints and problems around getting funding from the Government, which has put its hand up and said, "We are interested in enabling the average person to get involved in saving energy and using the best form of sustainable energy". I do not know whether we are going to go on to hear or can we ask you, Afsheen? What are people saying? You have those who are engaged, but for those who are saying, "Come back next time", why is it that they are not committing?

Afsheen Rashid (Chief Operating Officer, Repowering London): On our community schemes, most people are supportive of it. They might not feel that they want to invest in it at that point, but they are supportive of it happening in their local area. Very few people would say, "No, we do not want to have solar panels put on this roof". If they do say something like that, it is more along the lines of, "I do not own the property. It does not impact me". That is a bit of indifference there.

In terms of support, from a community perspective, a lot of community groups struggle to find willing building owners who would like to offer their roofs for such purposes. There is a reason for that as well. It is a 20-year lease agreement that you have because the FIT is tied to 20 years and you have a financial model that relies on that income stream for 20 years. That is one of the barriers in terms of brokering relationships and bringing partnerships forward, be it with a community group and its local authority or be it with a community group and a commercial building owner. It is bringing those together to enable that discussion to take place.

The other challenge we have is that London has a lot of small blocks of high-rise, medium-rise and low-rise and the cost of installation becomes quite high. There is a financial impact of installation costs being high and annual returns being low. On the blocks, not only do you find a block but then you also have chimney stacks, parapets and various different obstructions.

There is also the element of conservation. For instance, in Kensington and Chelsea there are a lot of conservation areas. You have to be mindful of the impacts in those areas and so the schemes tend to be smaller. For instance, we were looking at the Vauxhall Garden Estate in Lambeth. It has the potential for 600 [solar PV panels], but because it is a conservation area it is possibly going to be 300. Therefore, planning guidance and that kind of support would be really helpful for community groups.

Lastly, from a community perspective, there is quite a lot involved to develop a project and we do not want to keep reinventing the wheel. Local community groups should not have to reinvent the wheel. We would like to share our experience and support community groups to do that, but we have to have the capacity and the resources to expand to do that.

Jennette Arnold OBE AM: Thank you.

Murad Qureshi AM (Deputy Chair): Thank you, Afsheen, for bringing up the point about the planning system. To what extent is that a hurdle for people who want to put PV panels up on their homes?

Afsheen Rashid (Chief Operating Officer, Repowering London): It is more of a hurdle in conservation areas. There is a bit of a disconnect because you are allowed to put solar panels on pitched roofs and it is permitted development, but pitched roofs are the ones where you can visually see the solar panels. It should be fairly straightforward to put solar panels on flat roofs because you cannot see them but, strangely enough, you still need to go through planning applications and processes to be able to put solar panels on a flat roof. We should not have to be getting planning permission to put solar panels on a flat roof because it is really not having a visual impact on anybody. There is a bit of a flaw in the planning system there.

Darren Johnson AM (Chair): It needs to be a level playing field.

Murad Qureshi AM (Deputy Chair): Yes. I am sure that I have spent enough time on a town planning committee doing fiddly little things like this to know how much it puts people off. In my case, recently I put in an application for my mum and had to withdraw the solar element of it because it was not going to get through. That is a conservation area in the City of Westminster. Those are real, practical barriers.

When we had the site visit to a brand-new development on the King's Road, purpose-built for solar energy, there was still a lot of fiddly paperwork at the end required by the Royal Borough of Kensington and Chelsea. If it was not for the good nature of the architect dealing with it for the tenants, I am not sure they would have the benefits of PV panels installed directly into their homes.

Darren Johnson AM (Chair): All right. Anything else on the barriers before we move on, whether that is financial, planning or whatever?

Leonie Greene (Head of Public Affairs, Solar Trade Association): Just quickly on conservation areas, officially, it does have permitted development in conservation areas unless the council has taken out an Article 4 Direction or some-such. Obviously, you would have to take a lot of care about the visual impact.

Our experience is that there is quite a lot of confusion around the boroughs. Sometimes we get contacted by people who are having a very difficult time with their council over it. Maybe it is not really understood that legally it does have permitted development status. You cannot put it on a wall. It has to go on a roof. You have to take care of the visual impact. Clarifying that across London for people would probably be very helpful.

Darren Johnson AM (Chair): OK, clarity about the planning is an issue.

Seb Berry (Head of Public Affairs, Solarcentury): Just to come back to the earlier points that were being made on the issue of wanting to reduce your electricity bill, the argument was - and the STA's view is - that people are not interested in solar in those circumstances. The irony, of course, of that argument is that we have worked with any number of registered social landlords and local authorities on major schemes where one

of the reasons they are doing that is absolutely because fitting solar is part of an integrated policy approach to dealing with fuel poverty.

There is definite scope for much more of that in London. Indeed, I was talking about just that earlier with a colleague along here, whom I am sure would want to add to that point. We have been involved in a number of schemes in the London area in Brent, Lambeth, Haringey and elsewhere, but there is definitely scope to do a lot more of that and absolutely links into a much broader energy efficiency agenda.

Judith Page (Director of Property Services, Ascham Homes): From the social housing point of view, there is a real issue around the fact that the landscape changes so regularly. We have the type of governance that I am sure you are all used to, which means that to get a feasibility on a project that is of a large scale takes six months to a year, quite often not just on solar PV but on all the environmental and sustainability stuff. The landscape changes, which means that the viability changes and you have to restart the process. Social landlords are pretty committed to all the sustainability measures, particularly around anything that reduces fuel poverty, but there is a real issue about the fact that the landscape shifts so regularly.

I have just looked at doing some retrofitted solar PV and the FITs are going down again, which suddenly means I have to go through the whole process again, revisiting the modelling and getting approvals. That, for us, is probably the biggest barrier.

Darren Johnson AM (Chair): There is so much uncertainty. Yes.

Kore Mason (RE:NEW Programme Manager, Greater London Authority): If I can comment on that, we are seeing similar experiences through the RE:NEW programme, which I will talk more about in detail later on. We are seeing that the typical size of the projects that have been identified is in the region of about £1 million or below. Part of the motivation for that is to ensure that those programmes can be more quickly developed to gain the benefits of higher FITs.

Darren Johnson AM (Chair): Excellent. That has led us nicely into our next area of questioning, which is on Government policy and the impact of that on things like FITs and so on.

Murad Qureshi AM (Deputy Chair): Obviously, Government policy is an important determinant of the successive of PV panels being installed. Is the Government's FIT the right vehicle to promote and deliver more domestic solar PV installation in London?

Seb Berry (Head of Public Affairs, Solarcentury): The short answer to that is yes. If you look at the astonishing growth in the take-up of solar under the FIT - and I am talking about UK-wide - it would tend to suggest that the FIT has been absolutely the successful policy that we and others, including the Energy Savings Trust, always said it would be. There are about 660,000 domestic PV installations now in the UK. I have been working at Solarcentury for a very long time and I recall that in 2008, the annual market for solar was four megawatts of which Solarcentury had a 50% share. Whoopee, but two megawatts per year was what we were installing. Fast-forward to today and the FIT has been hugely successful.

The problems that we have had with the FIT, funnily enough - and often this issue is misreported - have not been so much around reductions in the FIT level because that makes perfect sense. As the price of solar systems comes down, as it has done in a very dramatic way over the last five years, it makes sense that FIT rates of return and so on follow that trend or at least try to anticipate it.

The problem we run into - and one of the reasons that we and Friends of the Earth took the Government to court successfully back in 2011 on this very issue - is the way in which those changes are managed. There has been, sadly, too much - certainly in the last Government and we hope we are not going to get it with the new Government - of a lack of transparency and, frankly, a timeline for changing the FIT that enables businesses that have invested very significant sums now because we are talking now about a very significant UK industry, which we were not talking about even in 2011. In this forthcoming FIT review, which everybody knows is about to happen and which we think will be out by the time of the summer recess on 21 July, it is vital that whatever changes the Government proposes in that document give the industry time to adjust properly and to a sensible timescale so that we avoid some of the problems we have had in the past.

My final point on this, which is an important one, is that in 2011/12 there were something like 260,000 domestic PV installations. Then we had the period that involved our court case and a huge cut to the FIT in 2012 and so on. The annual market for domestic PV has been just over 100,000 per year ever since. It has been rising slightly year-on-year. Therefore, we have had a reasonable market, even after that very difficult period.

Some of us are concerned that, in going into the next FIT review, history does not repeat itself and that we actually build on the 120,000 or 130,000 domestic installs going in per year right now under the FIT and that that figure goes up rather than down come next year.

Murad Qureshi AM (Deputy Chair): The subsidies to PV panels via the FIT have helped the growth. Presumably the Solar Trade Association, Leonie, is of a similar view or not?

Leonie Greene (Head of Public Affairs, Solar Trade Association): Yes, I would echo what Seb says. It has been an excellent policy. To have 650,000 solar homes is world class.

Murad Qureshi AM (Deputy Chair): I heard what you said about Greg Barker's [Chair, LSDC] comments earlier and I presume they cover this area as well. I will just quote a comment from the Technical Director of Joju Solar, who argued:

"The main benefit of PV comes from protecting yourself against price rises right now. Those avoiding imports are now becoming the most popular benefit of a solar roof. The feed-in tariff? Well, it's just a bit of bonus on top, really."

He has a different perspective here. He is a technical director in the field, presumably one of your competitors. He does not think that the FIT is the be-all and end-all and that there are other motives for putting panels up. Brian, you were expressing yourself physically and so I will let you go before I come back to Seb [Berry].

Brian Horne (Knowledge Manager, Energy Saving Trust): Yes. In my view, it is in reality entirely the other way around. He is maybe assuming that the people buying these products believe that it is primarily saving them on their bills and that the FIT is a bonus. In reality, when you look at the numbers and how much people actually save on their bills compared to how much they get through the FIT, they definitely should be thinking about it the other way around. The FIT is fundamental to making PV economically viable, certainly on a domestic bill.

Seb Berry (Head of Public Affairs, Solarcentury): Just on the comparison, it is a big industry and different people market in different ways. That is a good thing. It is a healthy thing.

Murad Qureshi AM (Deputy Chair): Yes, you want competition.

Seb Berry (Head of Public Affairs, Solarcentury): It is a sign of a huge and growing sector and, as Leonie [Greene] has pointed out, a world-class sector, certainly, with the leading solar market in the continent of Europe right now. If you had said that even three or four years ago, no one would have believed it was possible. The suggestion that the STA is making is right. The proof of the profound difference that comes from a FIT policy is there in terms of the numbers that have been delivered.

The crucial point going forward is this. Nobody in the solar industry has ever argued that FITs should stay in place forever and a day for new installations. We are absolutely committed to working with the Government to get out of the need for FIT support for new installations as quickly as possible. That is why the STA's *Solar Independence Plan* is so important. It presents the new Government with a great opportunity, actually, to work with us to manage this transition out of FITs by the end of this Parliament, which is a very realistic plan. If we can do that in a sensible way, it will make us the first renewable technology to be able to stand alone, particularly for on-roof projects, with no need for additional FIT support at all in five years' time. However, it has to be done properly and transparently. I am sure Leonie will want to add to that point.

Leonie Greene (Head of Public Affairs, Solar Trade Association): I am very happy to send you all a copy. This is our *Solar Independence Plan*. We had our modelling verified by Imperial College London and so we are pretty confident of our maths on that.

What it really depends on or the cornerstone of this is getting the FIT review - which is imminent, probably in the next couple of weeks - right. That is so important and it will be absolutely critical to the outcome of London and your plans for solar, not just domestic but commercial rooftops as well, which are going to be incredibly important for London. I would love to send you all a copy and I just flag again that this FIT review is going to be absolutely critical.

Murad Qureshi AM (Deputy Chair): OK. I do not know if we may want to make representations about it. I am just playing devil's advocate here. I hope you understand that. On my travels in the developing world, I see more take-up of PV panels out there than I do in the developed world. That is twofold: because they are not getting subsidies and because the Chinese are selling it big-time. They are the people who are responsible for reducing the price of PV panels globally, anyway. Is there not something to be learned from that?

Seb Berry (Head of Public Affairs, Solarcentury): That is a good question. Coincidentally, one of the reasons for having a robust and thriving London solar industry - and we have been around a long time now - is absolutely that you then export your expertise around the world. We now have offices in three continents, Africa and Latin America being the other two. Absolutely, you are right. Yes, projects are viable already in many markets around the world without the need for a subsidy or state support at all. That is absolutely where a company like Solarcentury is targeting and increasingly focusing its resource. However, we can only do that because we have grown very successfully in the UK context. We are very proud of the fact that, for example, we have an award-winning product development team. We produce our own products, based right here in London. That is a great success story for the London sector, not just Solarcentury.

Murad Qureshi AM (Deputy Chair): That was useful.

Leonie Greene (Head of Public Affairs, Solar Trade Association): The point there is that the solar resource in some places in the world is phenomenal. The point at which you get off a subsidy is a function of the grid prices in that country and the amount of solar you can generate because you have a solar resource. However, I am pretty sure there are tariffs. China has a FIT, for example. I am pretty sure there is very significant support in India, actually, for its 100-gigawatt target.

Murad Qureshi AM (Deputy Chair): Most of the energy subsidies go into oil, gas and coal, not solar.

Leonie Greene (Head of Public Affairs, Solar Trade Association): Yes.

Afsheen Rashid (Chief Operating Officer, Repowering London): I just wanted to make the point that in India, the renewables industry is driven by a lack of security of supply and intermittent and unreliable supply.

Murad Qureshi AM (Deputy Chair): That is true.

Afsheen Rashid (Chief Operating Officer, Repowering London): It is all of that which drives the market there. Here, it is very different. The energy market system in Britain penalises renewable energy because it is unreliable and intermittent. We should flip it around, really. We should be looking at an energy market where renewables play an important role and making a political decision to have renewables rather than the other fossil fuel-based energy sources. That is the decision --

Murad Qureshi AM (Deputy Chair): That is a very useful point there about the perceived unreliability in terms of the British weather as well. That is something that needs to be tackled as much as the FIT review, possibly.

Can I just move on to another area of Government policy: the Green Deal and its assessments? We find that very few of the Green Deal assessments recommend solar PV panels as a preferred option for homeowners. What is that about? Can someone explain?

Brian Horne (Knowledge Manager, Energy Saving Trust): Yes. PV panels are the second-most common recommendation in Green Deal assessments after loft [insulation], in fact. They are commonly recommended.

However, the fact is that the Green Deal assessments use a standard assessment procedure. The process of producing them and for producing general Energy Performance Certificates (EPCs) is not very sophisticated when it comes to PVs or other microgeneration. They are designed around insulation and boilers, really. Getting a recommendation for PVs on your EPC or Green Deal assessment is not a particularly good guide unless you have a good assessor who knows about solar. It is not necessarily a particularly good guide as to whether your property is a good one for solar.

Alongside that is the fact that Green Deal assessments are used for two purposes. There are two things that you need a Green Deal assessment for. One is to get Green Deal finance for a loan towards the cost of what you are installing. Again, PV figures quite highly within that. It is the most popular measure supported through Green Deal finance, but that is for 4,000 schemes or something like that. It is a high proportion of a tiny amount. That is not having a huge impact upon the landscape. The other reason to get a Green Deal assessment is to get the Renewable Heat Incentive for a renewable heating system and so it has nothing to do with PV.

Therefore, if you look at the statistics for PV in Green Deal assessments and Green Deal finance, it tells you something but not very much because, although Green Deal finance can be used to help support PV, it is supporting a tiny proportion of the installation.

Murad Qureshi AM (Deputy Chair): All right. You mentioned finance a number of times. It sounds as though the interest rates being offered are unusually high in comparison to what interest rates are. Is that a deterrent to taking up that advice even if it is given?

Brian Horne (Knowledge Manager, Energy Saving Trust): There has been a lot of bad press around the Green Deal finance interest rate. I am not here to defend the Green Deal, but the base rate for Green Deal finance is 6.96% or something like that. Whether that is competitive depends on what you are comparing it with. If you compare it against putting something on your mortgage, it is not very competitive. If you compare it against getting a personal loan from a high-street bank, it can be quite attractive.

However, there are additional fees when you take out Green Deal finance. There is a setup fee and a daily fee on top of that, which means that the annual percentage rate (APR) you get quoted can be much higher because the fees get included when calculating the APR. You will hear stories of someone being quoted an APR of 22% or something to replace a boiler.

The upshot of all of that is that Green Deal finance makes more sense the more you are spending and borrowing. If you do your whole house, put PVs in, do solid-wall insulation, get a new boiler, replace your windows and insulate your floor, then Green Deal finance could be very competitive. If you just want to replace your boiler, it will not be. If you are just doing solar PV, it is quite an expensive thing and so it is quite competitive. It is a complicated matter when looking at interest rates.

Green Deal finance is available in principle to a large proportion of the population in terms of credit ratings. The idea is that it should be attractive to people who otherwise find it quite difficult to borrow. In practice, the people who are taking it out are people who could borrow from anywhere. They could put it on their mortgage and get it at a lower interest rate, but they are choosing to use Green Deal finance instead.

Darren Johnson AM (Chair): Can I just welcome our visitors from Dorothy Barley Junior Academy in Dagenham? Welcome, all of you. We are discussing today solar panels on London's homes. Have you all seen solar panels on roofs when you have been out and about? Yes? We are discussing what we can do to make sure London gets more of those installed. That is what we are dealing with this morning. Welcome to City Hall.

Murad Qureshi AM (Deputy Chair): I will come back to the question. Is anyone prepared to defend the Green Deal?

Leonie Greene (Head of Public Affairs, Solar Trade Association): I am not an expert on the Green Deal, but we were approached by a Green Deal finance company because solar is so popular. My understanding is that it has 15,000 plans now and 43% of all its applications for the last four months were for solar. It has done 5,000 solar plans now.

You were right to raise the point about interest rates on loans. That is a very long-term criticism of the whole Green Deal. It was quite obvious in Germany when they had 2% and that really helped. All I would say is just that it clearly is forming quite a sizeable chunk now of Green Deal finance plans.

Murad Qureshi AM (Deputy Chair): OK. Are there any other views or comments on the Green Deal? No? OK.

Darren Johnson AM (Chair): Thank you. We will then move on in terms of mayoral and GLA policy and James and Steve [O'Connell AM] are going to lead off on this.

James Cleverly AM MP: Can you just give us an overview of the current programmes that the Mayor has in the pipeline?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): Yes. The primary delivery programme that we have, which covers retrofitting including solar, is the RE:NEW programme. This is now in its third phase of delivery. It has been established since 2009. The first two phases were primarily focused on thermal efficiency and the rollout of those measures and we successfully retrofitted around 100,000 homes through those first two phases. Despite that, we also supported the retrofitting of around 4,300 homes through the previous RE:NEW framework as part of that programme.

We are now in the third phase and through that phase we have put in a support team, which has been in place since August last year. The support team has a pipeline of projects that cover a whole range of retrofit measures. Around 40% of the projects within our pipeline have solar projects and opportunities identified within them.

James Cleverly AM MP: Kore, in that regard, how proactive is that team? Do project proposals come to the team that they then assess and support or not, depending, or do they go looking for opportunities?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): Yes. We actively seek opportunities. We have a solar-specific workstream in place and that has been in place since October last year. It is the only technology-specific workstream that we have to focus on driving uptake specifically in that area. We have a dedicated solar project manager and that person is backed up by a team of retrofit specialists, whom we call our engagement managers. There are six of those. We have wider resources within the team including technical, procurement and marketing support, which support that resource.

The workstream works in three main ways. The first thing it does is to raise awareness around the opportunity for solar. We actively engage with organisations, identifying those organisations and going out and speaking to them. Every time we meet with a new organisation, solar is a specific agenda item that we speak to them about in terms of what the opportunity could be for that organisation. Where opportunities are identified, we follow up on those with the various different resources that I have outlined. We also regularly review the projects that we have within the pipeline and, where they may not previously have identified solar as an opportunity, we regularly look at whether or not things have changed and, therefore, we can go back and speak to them again. We also target finance directors specifically to make sure that they are aware of the opportunity that is in the market at the moment. We have a range of marketing initiatives, including speaking at events, arranging marketing materials, monthly newsletters, for example.

The second key thing that we do is to assist organisations to both develop and secure buy-in for really robust PV projects. We do that through high-level feasibility assessments around the financial payback, the technical capability including desktop studies on specific properties to identify the technical capability.

Darren Johnson AM (Chair): Can you just say what you mean by 'organisations'? Is that mainly local authorities or housing associations or community bodies?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): Yes. It is mainly local authorities and housing associations that we are working with, but we are starting to look at the private sector and community-based projects as well.

James Cleverly AM MP: You discussed in percentage terms the proportion that has a solar element. Where are you in absolute terms, in terms of numbers?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): That percentage equates to 17 organisations.

James Cleverly AM MP: In terms of how many properties? One of the things that is difficult is that we are moving between different metrics. In some instances we are talking about absolute numbers of properties. In some instances we are talking about programmes. In some instances we are talking about percentages. I am trying to get some idea of the universe of potential installations that we might be talking about here.

Kore Mason (RE:NEW Programme Manager, Greater London Authority): Of that pipeline of 17 organisations, 13 of those have projects identified. I must stress that they do not necessarily have the finance in place yet and so these numbers are subject to change. Of those 13, they could cover a total of about 6,700 homes across a number of different schemes.

James Cleverly AM MP: Just going back to a point I was making earlier on, are there patterns within the schemes that you are supporting geographically? Where are they?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): We are seeing a spread across London but, in line with the data that James [Hardy] quoted, we are seeing more of those schemes in the outer boroughs.

James Cleverly AM MP: I know I caught you midstream, but I would not mind just opening up for comment from some of the other guests. How do you feel the programmes are doing? How effective or otherwise are they, Judith?

Judith Page (Director of Property Services, Ascham Homes): We are signed up to RE:NEW and we find it really helpful to have the support there that we get from RE:NEW, particularly in terms of being able to reference the market and where we are getting value. I know it is looking at a supplier arrangement for PVs, which would be really helpful for us.

One of the problems in mobilising projects quickly is that we are all tied into the whole Official Journal of the European Union (OJEU) process and getting value. As we were saying, in the changing market of FITs, you have to act quickly. If you have to go through an OJEU process, it slows you down considerably.

I am a big fan of the RE:NEW programme and the support we get from it. Certainly since we have signed up, it has made a real difference to us as an organisation.

James Cleverly AM MP: Good. Others?

Brian Horne (Knowledge Manager, Energy Saving Trust): There is a gap - and we are probably getting ahead of ourselves here - in terms of what we are here to try to solve. You have to look at all feasible markets out there for solar and the individual householders and individual owner-occupies make up a large chunk of that. I know that you are not excluding them, but clearly it is much easier to start with the housing associations and the existing large-scale schemes.

However, if we are going to tackle the barriers we were talking about earlier and move London up the ladder compared to other regions, there is a huge area that schemes like RE:NEW need to tackle and look at what can be done for individual private owners to help them benefit from the FIT, which, as we know, is not designed to support the more difficult situations. It is a cost-driven exercise to make it more suitable for those places

where it is easiest, in effect. I am not aware of much work in London to help those more difficult-to-tackle situations.

Kore Mason (RE:NEW Programme Manager, Greater London Authority): If I may come in on that, in the RE:NEW support team that is in place, we have a mechanism that we call our Innovation Unit, which is to effectively look at different ways in which we can increase the uptake of retrofit more generally. One of the elements that we are looking at through that is solar PV, particularly for the private sector because we identified that as a significant gap area as well.

Some of the areas that we are investigating are around other funding mechanisms like the potential for crowdsourced funding. Are there things that we could be doing to market the existing offers and raise awareness of the existing offers more broadly across London through a trusted organisation? We are looking into that area because we clearly understand that that is a significant area that we need to tackle.

James Cleverly AM MP: Kore, within the mix of options that you put forward, how aggressively do you prioritise one above the other? One of the points that Brian [Horne] made in terms of conversations with individuals is that depending on what their perceived or desired change is - whether it is reduced bills, reduced carbon or whatever it might be - PV would not necessarily in all cases be the obvious recommendation. Is that mirrored in the work that you do at a more organisational level?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): To some degree. What we are tending to see is that PV projects typically are not developed exclusively and are being identified as part of overall retrofit projects. That is a good thing because there are significant savings and economies that can be gained through doing that. Typically we will have multiple team members, so a solar project manager and other technical people will be working together with organisations to develop those projects together.

James Cleverly AM MP: Coming back to the point that Judith [Page] was making about ease, speed and cost, one of the reasons PV proposals might not necessarily be prioritised is that cost-benefit analysis or certainly the perceived cost-benefit analysis. What are you doing, what more could you do and what could others do to help you reduce the cost, lead time and hassle factor to make sure that cost-benefit analysis stacked up more on the benefit and less on the dis-benefit side?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): The high-level PV assessment that we do is backed up by tooling that we have to assess the financial and technical aspects of a particular project. We provide to organisations an output report that helps them to then inform decision-makers within their organisations around the cost-benefit analysis and the business case for investing in solar PV. There are other areas, particularly around procurement, that we can help as well. I can talk in detail, now or later, around the new framework that we are putting into place that should really help to smooth things along and speed up the procurement process for solar.

James Cleverly AM MP: Once again I throw it open to the rest of you. What more could or should City Hall in its various forms do to help drive this agenda forward? You mentioned right at the top of the programme a lack of political will. While I cannot remember the exact phrase you used, that was the kind of tone you were taking.

Seb Berry (Head of Public Affairs, Solarcentury): It was the tone I was taking. I was merely paraphrasing the new Chairman of the LSDC's assessment of the last five years.

James Cleverly AM MP: I assume you agree with that?

Seb Berry (Head of Public Affairs, Solarcentury): I do. There is no getting away from the fact that if you go back four or five years to really key policies, which then set the agenda for all that follows, the GLA and the Mayor did prioritise heating and did prioritise combined heat and power (CHP). That is very clear in the Energy Strategy and so on. I am not suggesting you would not want to do those things but, clearly, if you do that, certain things flow from that in terms of prioritising or being serious about a technology like solar. That then takes me back to my earlier point - which is again Greg Barker's [Chair, LSDC] point - which is that things have changed remarkably in five years. It would be rather astonishing if GLA policy did not catch up with that.

James Cleverly AM MP: That was the history. What from here?

Seb Berry (Head of Public Affairs, Solarcentury): Picking up this point about framework supplier agreements, for example, it is certainly my view if the GLA gets this right for RE:NEW and RE:FIT - and I am sure it will - there is a huge potential to put in place a really excellent framework supply agreement for solar that will deliver very competitive pricing for the sorts of clients that officers are dealing with. That will be big step forward. I think the GLA itself accepts it has a current framework agreement that is not as competitive as it might be. Certainly, if you look at the list of current framework suppliers, there are very few of them that would be in a position to deliver a London-wide solar programme. Getting that process right this year is absolutely the key.

Afsheen Rashid (Chief Operating Officer, Repowering London): I would like to answer that as well. I would be interested, from a community energy perspective, to work with the RE:NEW programme. While we are talking to local authorities, there are ways that we could work together. The Mayor had set up RE:CONNECT, which was part of RE:NEW, RE:FIT, RE:CONNECT which started early on. Brixton Energy is actually a product of RE:CONNECT where local authorities were providing resources and facilitating the programme in a local-based area and allowing for communities to get involved and to develop. While we have seen RE:NEW and RE:FIT and we have seen a programme specifically for district heating, we would welcome a programme that would look at community and solar within the GLA and that has dedicated resources to support such an ambition. It was a great way of collaborative working in a local area. There were ten low-carbon zones that were part of that scheme. There is learning from that that can be replicated.

In terms of frameworks, we have been putting out various tenders to look at installations. There are different companies coming in and giving really good competitive prices for installing solar. It would be good to work with you and find out who you have on your list and whether it is truly competitive. The market is really dynamic at the moment. Due to the challenges we face in London because of the multiple small blocks and little multiple installations, the cost needs to be really lean so that we can make it financially viable and it stacks up.

Kore Mason (RE:NEW Programme Manager, Greater London Authority): If I may come back on the point around the framework, we are putting in place a new framework of suppliers and we will soon be announcing who those suppliers are. The framework we have procured, we believe, is incredibly robust in terms of the vast array of services and work that can be procured from it. It has been procured on the basis of being able to deliver a whole range of retrofit services and works, including solar. It is going to be available throughout the UK. It is going to be a managed framework. Within London the support team that is in place is going to be both driving the pipeline and also working with suppliers to ensure the framework is providing really good value for money.

James Cleverly AM MP: Leonie, you were going to come in?

Leonie Greene (Head of Public Affairs, Solar Trade Association): I was just going to say that the extension of these programmes into solar is very welcome. We do feel you need a dedicated London solar strategy that looks at all the different submarkets. The very difficult one to crack is the big commercial sector where there is huge potential but it is the sort of classic landlord-tenant split. You have these colossal estate owners in London that we think the Mayor could convene very effectively. It is like when we had the Better Buildings partnership. These networks do exist. Because the finances are so miniscule compared to big real estate transactions in London, it is about having leadership, it is about having clear targets and it may be about having league tables. It is about engaging with the different submarkets in the appropriate way. That is what you need to do all the way across London. In our submission, we have set out a full range of proposals that we would like to see.

One point I would flag - which I do not think the Committee was looking at and which I did not see on this agenda - is the issue around new-build policies for the London boroughs, and Merton Rule-type approaches. You have huge scope if you could get the London boroughs to come in behind a strategy for them to use the levers they have to deliver much more solar as well.

James Cleverly AM MP: You are a representation of the STA?

Leonie Greene (Head of Public Affairs, Solar Trade Association): Yes.

James Cleverly AM MP: A cynical observer - not me, but others - might say to demanding a dedicated solar strategy, "She would say that, would she not?" Do you not think there is a potential danger about having too much segmentation within the various strategies? My slight concern with that is that if solar is not interwoven within things like the decentralisation of energy production more widely, decarbonisation more widely and more broad planning policy, there is a danger that it could be left on the periphery.

Leonie Greene (Head of Public Affairs, Solar Trade Association): They need very different approaches. Sitting next to Afsheen [Rashid], the community energy sector demands such a different approach from the big estate owners and the big commercial buildings. Again, with the public sector, it is quite a clear route in to make a difference there. Due to the difference with the social housing and the variation of those, it would be beneficial to break it down.

James Cleverly AM MP: All programmes have differentials across those different tenure types, different scales and that kind of thing. That is not unique to solar. Genuinely, my worry is that you can always make a very credible case for any particular field of work within London to have a dedicated strategy, but ultimately having a plethora of micro-strategies generates the potential danger that they will drift to the periphery. Brian?

Brian Horne (Knowledge Manager, Energy Saving Trust): From our perspective, we would strongly support the idea of a solar specific strategy. An issue that is specific to solar has been identified. That is why we are here. The purpose of that strategy is to incorporate solar into everything else, to normalise it, in effect. I was talking earlier about people calling us up when they want solar or a boiler or insulation. That is a problem across the board and one that needs to be addressed. The stuff you are delivering on the ground - like through the RE:NEW project - is doing what it can to bring those things together into one package. Energy-based refurbishment essentially is what you are looking at, rather than saying, "Let us get lots of solar", a solar strategy to make sure that solar is included effectively - not just in those projects, but in people's mind-sets when they are refurbishing their homes so that it is not seen as an add-on but is seen as part of their strategy as well as your strategy. That is what is required.

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): It is worth pointing out here that our approach to that strategic level is that diversification of energy is good. PV is one of those eight renewable technologies that we would want to see deployed. Allowing for that competition in the market is extremely important and not to put undue prominence to one over another so that you are not dependent on one over another, for example. That will also drive innovation and it will drive cost reduction.

Part of the work we are doing on the London Energy Plan at the moment, which will report later in the year, is about building our robust evidence base to show what the optimal pathway is for deploying technologies commensurate with our targets in relation to climate change and energy more generally. That will then feed into a new strategy, potentially, into next year. Clearly, we would be passing through the window of a new mayoral appointment and that would then obviously inform whatever we want to do in relation to our promotion of technologies.

Leonie Greene (Head of Public Affairs, Solar Trade Association): Solar is quite exceptional in terms of public outreach. There are very few technologies that everyone can roll in and get involved in.

James Cleverly AM MP: I have to say that you are in the worst position to say that because, as I say, you are paid to say that.

Leonie Greene (Head of Public Affairs, Solar Trade Association): As Afsheen [Rashid] said, it is a hook. People get very excited about this technology. For the last X years it has been top of the DECC's public opinion poll for most favoured technology at over 80%. It does excite people. It is extraordinary technology. Ultimately it is up to the GLA if it wants to --

James Cleverly AM MP: I spent a lot of time as Chairman of the London Waste Recycling Board looking at decentralised energy from waste. That is never going to be the most exciting technology. However, the fact that it is less 'sexy' than solar panels does not inherently mean it is the wrong option. The fact that solar panels are more visible is both an opportunity and a threat. The visibility perhaps means they are better known publicly.

Leonie Greene (Head of Public Affairs, Solar Trade Association): It is about accessibility. It is the fact that you can invest in it even as an individual, as a householder. A lot of these technologies are fantastic. You need as much as you can get of all of them. I would not dispute that for a minute. There is something unique about solar in terms of its accessibility and getting potentially the widest number of people involved.

Seb Berry (Head of Public Affairs, Solarcentury): The other important point there is ease of rollout. It is good to hear that the energy plan will be based around some more robust evidence. Even if you go back four years to the last plan, one of the reasons we are all sitting here is because the performance of solar in London has been so woefully bad in terms of even some of the lower-end projections that then emerged through that energy strategy of four years ago. To that extent it would make sense to have a more dedicated resource here looking at solar.

The point about that is that, of course, the solutions themselves do not need to be necessarily solar-specific. If you look at planning policy, for example, which Leonie has touched on, a robust Merton Rule approach would inevitably increase the uptake of solar for fairly obvious reasons. In most cases it is only the practicable onsite option. The difference now is that we are talking about a technology that is very considerably cheaper than it was certainly when the Merton Rule was addressed all those many years ago when, of course, arguments about the feasibility of the technology and so on were very real. I am not suggesting that they are no longer real, but

technology has reduced 70% to 80% in price since the Merton Rule was introduced. That should definitely feed in very much as a key factor in terms of the new energy plan.

Darren Johnson AM (Chair): Thank you.

Steve O'Connell AM: I am going to come back to you, Afsheen [Rashid], on the community scheme.

One last question I want to lob in to Seb and Leonie is on the private rented landlords in London, of which there are many. This might be the answer to why we are so low. Why would a private rental landlord spend £8,000 or £9,000 of their own capital, unless they are very altruistic, to reduce the bills their tenants pay anyway? I do not want to extend that but yhat, to me, leapt out. James [Hardy] obviously thought about this and it is his idea. How does that work? Why should they spend £8,000, £9,000 or £10,000 when they are not going to get the benefit? Seb, what would you say?

Seb Berry (Head of Public Affairs, Solarcentury): The short answer is that I agree with you. I do not think anybody at Solarcentury or any of our installers would argue with the general proposition that London is tough in terms of domestic installation. This is where we do agree with the Mayor, for example, who has drawn attention to these various barriers. They are very real. It would be silly to pretend that they are not real. I agree with you.

Steve O'Connell AM: It did not seem to come out earlier. I just thought I would flush that one out.

Leonie Greene (Head of Public Affairs, Solar Trade Association): That is the trickiest area. It would not be as much as you say. It is about £6,500 for a large installation. It is why you have to find creative solutions. The Mayor, as I understand it, has something called the London Rental Standard (LRS). It is about being creative.: could you come up with some kind of mark, a 'solar landlord' or something like that? You have to find some way to engage it. That is going to be the trickiest sector.

Steve O'Connell AM: Yes. You have to make it attractive to that very large market in London. I am sorry to extend this, Chair. I did not hear that earlier.

Judith Page (Director of Property Services, Ascham Homes): Can I just comment on that? It is hard enough as a social landlord to sell it as a product because you do not get any of the benefit. Apart from the FIT, at the moment you are doing it for more altruistic reasons. To the private sector, that is probably very hard to sell.

Steve O'Connell AM: You would be a better person, would you not? You would be such a good person.

Darren Johnson AM (Chair): The Energy Saving Trust (EST) may have a solution for it.

Steve O'Connell AM: I am sorry because I did not do the visit to you.

Darren Johnson AM (Chair): Brian, did you want to comment finally on that?

Brian Horne (Knowledge Manager, Energy Saving Trust): To answer the question about why a private landlord would do it, the private landlord would do it because the vast majority of the money would go to that landlord. The FIT, the generation tariff and the export tariff would, under most models, go to the landlord.

Darren Johnson AM (Chair): The tenant would make the savings and the landlord would get the FIT back?

Brian Horne (Knowledge Manager, Energy Saving Trust): They get most of the money, they get a better EPC, which they may need in the near future, and they get a property that is easier to rent.

Steve O'Connell AM: OK, I have that.

Brian Horne (Knowledge Manager, Energy Saving Trust): Of the tenants we interviewed, 76% said they would choose a property with a solar system over one without for preference.

Steve O'Connell AM: Yes, possibly because their bills would be lower, obviously. All right, back to Afsheen. We have already talked about the community schemes. How can we expand on the Lambeth model throughout London? What more support is needed? It sounds such a great idea.

Afsheen Rashid (Chief Operating Officer, Repowering London): It is mainly for local authorities to be supportive and to come forward with schemes or work with community groups. At the moment it is being driven by local authorities that have been willing to replicate the model. We are working with Lambeth Council and Hackney Council and we are doing some feasibilities for Harrow Council as well. There are 33 London boroughs. What are the others doing? Are they thinking about it? We need support in terms of getting local authorities to think about it, to drive the agenda as well and to think of a community-led approach.

The other element is feasibilities. They have a large housing portfolio. Local authorities do not really know what the solar potential is of their housing portfolios. That might help bring community groups forward and say, "There is a scheme in an area. There is an estate. We would like to take ownership of it". It can bring that dialogue together.

Steve O'Connell AM: How do the figures work? You mentioned a lease from the council. How do the sums work for a new scheme, broadly?

Afsheen Rashid (Chief Operating Officer, Repowering London): Our schemes have been really small-scale, 100 kilowatts. The earlier schemes were less than 50 kilowatts and up to 50 kilowatts. We have offered them as peppercorn rents, so the lease agreement is with a peppercorn rent, really, to the local authority. The local authority then benefits from a reduction on its energy prices. It gets a 20% reduction on its energy prices for the communal areas. The solar panels are connected to the communal supplies like lifts, corridor lighting, office spaces and community centres, which are often paid by the local authority.

Steve O'Connell AM: I am sorry I did not go. Is this for non-residential as well, for the whole piece?

Afsheen Rashid (Chief Operating Officer, Repowering London): Yes. At this point we are not able to supply the energy and the electricity generated onsite to individual residents living in that block. We have 50 or 40 flats in a block. To do that, you need to be set up as a supplier. Local supply has not developed enough and we do not know whether the financial model works. I know DECC is doing a lot of work within that area. Until that happens, we can supply only the communal spaces.

That is the way our models work. People who choose to invest opt into the scheme, invest and become a member of the co-operative. They get a return on their investment. While there are many others living on the estate who might not be willing to invest but who support the scheme in general and would also like to see a benefit, we make sure the income that comes through the FIT is ring-fenced for the community so that there can be a wider community benefit.

Steve O'Connell AM: Yes. Some, perhaps, would not buy in. They get the benefit but they do not buy into the whole thing. It is natural, is it not?

Afsheen Rashid (Chief Operating Officer, Repowering London): Yes, you are going to get a mix. We have made the model in such a way that it is as open and inclusive as it can be. Also, as I said, we are offering work experience and training to people through the programmes.

Steve O'Connell AM: You have a model, even though the scheme is kind of complex. That model could be transferrable to other London boroughs, perhaps with the encouragement of the Mayor and that kind of stuff. That is what you are saying?

Afsheen Rashid (Chief Operating Officer, Repowering London): Yes, definitely. Just thinking about the street-based approach, while we are doing social housing blocks it is definitely worth investigating pilots. That is an area where the Mayor can support pilots that could look at how individual privately owned properties in a particular street can look at a community scheme and could look at coming together collectively to purchase and get a better price on your install. It is led by your peers and your neighbours. It could be an approach that might work for outer boroughs as well, to just encourage more take-up. Likewise, it might even happen in more inner-city areas where you have lots of streets of individual properties lined up together. Looking at a street-based approach is a different way.

Steve O'Connell AM: That is very interesting.

Kore Mason (RE:NEW Programme Manager, Greater London Authority): If I may just say in terms of the community schemes, we are actively looking at the model that you have described, and others, and how we can make more London boroughs aware of those schemes. We are aware anecdotally of other barriers for those schemes over and above what you have described around technical services and also a lack of available revenue for other professional services - legal services, for example - to set up organisations to get the right leasing agreements reviewed and in place.

Steve O'Connell AM: The principle sounds perfect but a borough with financial difficulties would find some objections to it along those lines and the things you are talking about.

Kore Mason (RE:NEW Programme Manager, Greater London Authority): Yes.

Steve O'Connell AM: Leonie, you wanted to say something?

Leonie Greene (Head of Public Affairs, Solar Trade Association): A recommendation of ours was that you could get an existing decentralised energy unit, potentially, to provide advice and support for these kinds of projects; technical, legal, practical. There are loads of different structures on community schemes. I have a breakdown there if that is of interest. An interesting development is that later this year there will be some investment instruments that are very appropriate for crowdfunding and community schemes that will be eligible for individual savings accounts (ISAs). That is something that has very wide, popular confidence and interest. We are expecting, if that kind of model takes off, much wider public engagement and it is quite a good opportunity.

Steve O'Connell AM: Thank you. Thank you, Chair.

Kore Mason (RE:NEW Programme Manager, Greater London Authority): That is something again that we are really interested in and have started looking to and we are having conversations around personal spending and how that can be used for community projects.

Darren Johnson AM (Chair): Good. Thank you. This leads us nicely into our last area of questioning, which is on next steps.

Jennette Arnold OBE AM: I have a number of questions for this next step for domestic solar in London. Can I start with James [Hardy]? From the responses to the Committee's calls for evidence and from what we have heard from two witnesses particularly - Afsheen [Rashid] and Judith [Page] - today, both social housing providers and community energy schemes feel they lack the expertise or resources to facilitate the planning process for large PV projects and that they would deliver more PV more quickly if centralised or project-based support became available. Do you think this is an approach that the Mayor and the GLA could support?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): If I may chip in on that one, in terms of support around planning, it is something that the existing RE:NEW support team is offering as a service out to organisations within London.

Jennette Arnold OBE AM: Does RE:NEW currently offer that support?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): Yes.

Jennette Arnold OBE AM: What is the uptake?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): It is available to all of the organisations that we have support plans in place with, regardless of whether it is solar or retrofit, and so we could offer it to all organisations.

Jennette Arnold OBE AM: When did you start offering that support?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): The RE:NEW support team has been in place since August of last year.

Jennette Arnold OBE AM: August last year and so you have not had time yet really to evaluate how you are doing?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): We have not done a formal evaluation of how we are doing. I do not have specific numbers around which organisations have taken up the planning support we have. I do not have that with me today.

Jennette Arnold OBE AM: Is it something you are actively pursuing or is it something you have just thrown out there?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): No. Where we identify that projects are in need of planning support, we actively target the resource that we have in the team.

Jennette Arnold OBE AM: OK, thank you. Can I move on then and just pick up some more responses to the Committee's call for evidence? Some stakeholders have suggested a pan-London 'one-stop shop' for

information, advice, funding and installation to address getting advice. Any nods to that? Do you think that is feasible?

Leonie Greene (Head of Public Affairs, Solar Trade Association): Good advice is always very welcome, especially from trusted sources. That is what people sometimes struggle with. We developed our own website because we felt that a lot of the advice out there was very out of date. To provide a trusted source of advice for people who want to invest would be very helpful.

Jennette Arnold OBE AM: It can then, as you say, make up-to-date best practice available. That is the other thing. Somebody posts something or produces something and then it is immediately out of date. Is that how fast-moving your industry is?

Leonie Greene (Head of Public Affairs, Solar Trade Association): The cost moves very quickly. The tariffs change very quickly. These websites need to be kept very up to date. There is also confidence about the supplier, picking your supplier, what you need to look out for and what qualifications they need to have and what certifications. I would be very happy to show you the website we developed because we were so spread on other policies that we have not had the resource to put more effort in ourselves. We felt there was not a good enough online place to go anywhere, actually. There is still a gap to fill. If it had the GLA behind it, it would get a lot of public confidence.

Darren Johnson AM (Chair): Seb Berry, you wanted to come in on this?

Seb Berry (Head of Public Affairs, Solarcentury): To reinforce that, the key to it is independent advice, of course. Anything that can be done to increase the visibility of that across the capital would be extremely welcome.

I am reminded of when the FIT was introduced back in 2010. Those of us who had survived the barren years in the UK industry welcomed this with open arms, of course. We were rather surprised to discover that the Government had put in place no plan at all for promoting the new scheme. Indeed, we talked to the EST at great length about what it might be able to do as an independent organisation. Of course, there was no funding available to do that. Five years on - given where London is in terms of a poor uptake, frankly, over five years - it would make perfect sense for you to think very carefully about this type of independent 'one-stop shop'.

Darren Johnson AM (Chair): Brian, you are a trusted independent source. You wanted to come in?

Brian Horne (Knowledge Manager, Energy Saving Trust): I am a trusted independent source currently paid by the Government to provide information on the FIT.

Yes, we are there with a role to give independent impartial advice on solar technology, on the FIT and on all the other related issues. Putting stuff on a website or creating a phone number does not solve the problem. It does not get people reading the right advice. What London could be doing is saying, "What Londoners need in terms of solar is this", and then either, "The national advice line is fine and we will signpost them there", or, "We need something more London-specific". The 'one-stop shop' thing is crucial. Do not reinvent the wheel but do make it obvious where people need to go.

Jennette Arnold OBE AM: Can I just come back to GLA? I do not mind if it is Kore or James [Hardy], but somebody who is in charge of this area. The GLA does this very well. From an area of work that I lead, education, the education portal is now one of the most used areas and sites and it is loved by Londoners

because it gives them up-to-date information about school places, which is something dear to their heart in most homes. The GLA has a record of being able to deliver that sort of information immediately. Why are you not doing that?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): I would agree with what you are saying in terms of how we have a good record. Through our Innovation Unit that I spoke about earlier and the RE:NEW support team, we are actively looking at options to promote the opportunity, particularly for the private sector. Now there is a resource and a team that is looking at what we could be doing. There are good examples of how the Mayor has been able to do that. The LRS was mentioned earlier. The marketing campaign for that was fantastic. We are looking at best practice within the GLA and are there things that we could do through the existing resource we have in the support team to better market what is out there to the private sector. There are some good opportunities out there already.

Jennette Arnold OBE AM: I love that the officers look because that is great. Without political leadership to say to you, "Move from the 'look' to the 'do'", it is not going to happen, is it? How do you move from your evidence and what it is you, as officers, know from the data is needed, to a mayoral action on doing?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): The RE:NEW programme is a delivery programme. That is what we are focused on doing: delivering actual outcomes. The resource that is looking into this now is focused on what we can practically be doing in this area.

Jennette Arnold OBE AM: So it is coming soon?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): I hope so.

Jennette Arnold OBE AM: The other suggestions - and we are so blessed with people feeding in information to us - includes the development of a solar power strategy and delivery plan for London. We touched on that but I cannot remember what the problems were with that. Does anybody have a problem against a solar power strategy and a delivery plan for London from the Mayor of London?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): I commented earlier on the fact that within the political cycle we are building on the evidence base that we already have through the London Energy Plan. That is going to inform a new strategy next year, which is all very exciting stuff. This is going to be the best evidence base we have ever had in terms of how we might decarbonise our buildings in London. Indeed, it is pretty much economy-wide as well as through other areas for the other sectors that will play a very big part in creating a resilient, low-carbon and sustainable city.

As part of that work we have been looking at solar PV and trying to revise some of the numbers we have had given that the economics have changed over the past few years as well. We are going to be coming out with those soon. We also want a dialogue with this. This London Energy Plan is perhaps the first in the world of its kind. It is going to be a long-term spatial plan out to 2050. It is going to allow for a real dialogue with the public and organisations alike on the nature and the scale of the challenge that we have in London, and provide a number of different ways of achieving what we want to achieve in our targets.

Jennette Arnold OBE AM: That is lovely. When you talk about 'next year', that is post the mayoral election and so that will be there for the next Mayor?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): It is difficult for me to comment on how long it takes.

Jennette Arnold OBE AM: What is your timeline? You said 'next year'. What is the timeline?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): In terms of when a Mayor is elected, I am assuming probably what everyone else is assuming, which is that a new Mayor will come into power in around May next year.

Jennette Arnold OBE AM: You are preparing the ground for the next mayoralty?

James Hardy (Principal Policy and Programme Officer (Energy), Greater London Authority): There will be a strategy for the next mayoral term or during the next mayoral term, I should say.

Jennette Arnold OBE AM: There is also - and you have touched on it - a very strong case for influencing the Government and improving lending practices for the future. Have any organisations started lobbying this new Government on any new programmes? I saw Seb's eyebrows go up.

Seb Berry (Head of Public Affairs, Solarcentury): I can answer that by answering the previous point, if you forgive me. I understand this is a very large organisation and wheels turn quite slowly with good reason. On the other hand, we do have a new Government that says it is committed to roof-top and domestic solar and wants to see more of that. We do have a newish Chairman of the LSDC who assures the industry and everyone else publicly that the Mayor 'gets it' and wants to see a lot more solar in London. We have an immediate opportunity. We are starting from a very low base.

The slight concern I have is that as robust, thorough and so on as the Energy Plan needs to be for obvious reasons, perhaps we are going to miss an opportunity over the next 12 to 18 months to get on with it, which is what we are told very senior people in and around the Mayor want to see happening.

Jennette Arnold OBE AM: Judith, I know from my constituency - which covers Hackney, Islington and Waltham Forest - that Ascham Homes manages the whole of the borough's social housing portfolio, do you not?

Judith Page (Director of Property Services, Ascham Homes): Yes.

Jennette Arnold OBE AM: That gives you and other organisations like you an enormous lobbying clout. Are you lobbying the Government, either directly as an organisation or through your associations, to really look to provide specific incentives for landlords for the rental sector?

Judith Page (Director of Property Services, Ascham Homes): We will be lobbying through our federations rather than directly.

Jennette Arnold OBE AM: It really does need some work, does it not?

Judith Page (Director of Property Services, Ascham Homes): It does. Landlords specifically need some work as well. We manage the private sector leasing within our borough. That is a real untapped market, getting hold of the private sector as well as the social housing sector.

Jennette Arnold OBE AM: Can I just go back to the STA? The current market for developing this form is showing falling prices and the development in technology. Is this not a prime moment for us all to be on the same page and to be able to move forward?

Leonie Greene (Head of Public Affairs, Solar Trade Association): Really, yes, it is a prime moment. Absolutely.

Jennette Arnold OBE AM: Everything is set. If you were given a wish, what sort of trigger would you set off?

Leonie Greene (Head of Public Affairs, Solar Trade Association): My wish would be for a dedicated strategy. The Energy Plan is incredibly important and that kind of evidence, but it is complex. If you are trying to engage Londoners, how many are really going to read an Energy Plan? There is a simplicity about solar that is very, very accessible. I would love to see a dedicated strategy. What I would really like to see is a really ambitious target, as I say, on a world city level. If New York can have a three-gigawatt target, why can we not?

I would echo Seb [Berry's] point too about cracking on with it, especially with this FIT review imminent and being so critical. If London were to say, "Hey, look, we really want to be ambitious about solar", then your lock-in with central Government about what you are trying to achieve around that FIT review would become very important. If you delay and wait to see what comes out, you may find it does not actually help what you are trying to achieve. As well as the technology and the moment being ripe, as Seb was saying, there are some really critical things happening in Westminster right now which, if you do want to see good outcomes for solar, you need to engage pretty quickly.

Brian Horne (Knowledge Manager, Energy Saving Trust): There might be an argument for two strategies here. There are two timescales.

Jennette Arnold OBE AM: We cannot even get one you want through. Why do we not just get one?

Brian Horne (Knowledge Manager, Energy Saving Trust): The shorter one, which you need to write this afternoon so that we can start working on it tomorrow.

To my mind, there are two fundamental things about solar here. It does in some sense stand on its own. It is a relatively easy technology to parachute in. You can do solar without thinking about the rest of the house. It is either appropriate for that property or not. On the other hand, we would like to see the UK as a whole moving towards more comprehensive energy refurbishment of its housing stock, including solar, but that is a much bigger ask. Projects like RE:NEW and others around the country are working on that in practical terms.

This is why I am thinking of two strategies. One is what we can do now to get more solar in London, because the FIT is there, the technology is there, the suppliers are there and the houses are there. Here are some barriers. We need to tackle enough of those so that we can kick-start that straight away. The longer term strategy is how we integrate that into the long-term refurbishment of the housing stock of the whole city.

Seb Berry (Head of Public Affairs, Solarcentury): Just on what can be done immediately, you do not have to wait around for the Energy Plan to be getting on with, for example, working very hard now to maximise as many London installations as possible under the Government's confirmed one-gigawatt Government estate solar programme. It is one of the few things that has been confirmed for our sector post-election. That is a scheme that is there. It will be the same issue that we have talked about all morning. Other regions will be dipping into that and getting on with it whilst we produce a new plan. I would urge the GLA - and, through you, the Mayor - to think carefully about the opportunities that are there, particularly for the non-domestic sector as well.

The other thing you can be doing - and clearly we are lobbying the new Government - is that there is an opportunity with this FIT review to reset the FIT so that it really does deliver for the urban environment in a way that it clearly has not done to date. That is a slightly wider point about buildings in general. Since London's performance on buildings in general is pretty dire, as well as its performance at the domestic level, it is something else that you might like to consider actively promoting with your own contacts within DECC in the coming weeks.

Jennette Arnold OBE AM: Thank you. Can I just go back to Kore? How will market changes be reflected in the GLA's RE:NEW programme and new housing schemes?

Kore Mason (RE:NEW Programme Manager, Greater London Authority): We believe that with the support team we have in place, combined with the framework of suppliers we will be announcing soon, we have both the capability and the capacity to reflect changes in the market. As we see the price of the panels and the installation of those reduce, for example, we will have a range of suppliers that will be able to deliver against those. This is combined with the action from the RE:NEW support team to drive pipelines of projects and help with the specification of those projects so that, as they are brought to the market, they reflect the existing market position. We believe that with those two key mechanisms we will be able to adapt to the changes within the market. The RE:NEW support team is in place until the end of July 2017 and the framework will be in place for the next four years, so we have a level of certainty around those two areas.

Jennette Arnold OBE AM: Lovely. I am very encouraged by what you have to say, Kore. Thank you.

Murad Qureshi AM (Deputy Chair): If I could take a different tack, Chair, just for a second, the figures of the take-up of domestic PV installation are woeful and London has the lowest take-up in the whole of England. It suggests to me that we have to maybe rely on other kind of vehicles.

The one that has come to my attention recently has been solar farms. A lot of people do not want to do the fiddly stuff and want the reassurance that the supply is there and stored and what-have-you. What scope do you think there is for that in London? Can I just remind people that London is a region as much as a city? There places like the London Borough of Bromley, where we have probably more farms than high-storey buildings. Is there not scope for that somewhere?

Leonie Greene (Head of Public Affairs, Solar Trade Association): Yes, absolutely there is scope. We were disappointed to hear of solar farm planning applications being turned down by some London boroughs. That is a real shame. They can be done very well. Glasgow did a specific scoping about where it could find derelict land and where it could find places to put solar as well. You can proactively go out and look. Maybe get Londoners crowdfunding it. It is about being creative, too. Solarcentury has done a bridge. There are very few structures that you cannot embed solar in in some shape or form, whether roadway sidings or railways.

Murad Qureshi AM (Deputy Chair): Can I come back to the planning issue about solar farms? We had one, interestingly, rejected in the London Borough of Havering by the council. Unfortunately, it was too small for the Mayor to intervene. It does show the possibilities clearly.

I mentioned town planning restrictions that people find when they are dealing with single applications for individual residences. Here we are talking about a bigger scale. Even there, on a strategic level, they are not being given the scope that they should be. Are there things that the Mayor could do planning-wise from here, apart from delivering the programme, to give the green light that that is something that needs to happen? If people are not taking up domestic PV installation, maybe this is another way to get the supply figures up.

Leonie Greene (Head of Public Affairs, Solar Trade Association): The Mayor's strategic planning powers have been fantastic for driving some really iconic solar schemes across London. Those are the big strategic developments. Where there is more scope, is for the Mayor to engage the London boroughs and the powers they have. Seb [Berry] was talking about the Merton Rule. We were very interested in Hackney. There was a report recently that Hackney was introducing new planning laws so that, if you wanted to retrofit properties, then you would be expected to look at the potential to install solar or other technologies as well.

Seb Berry (Head of Public Affairs, Solarcentury): Thanks to Leonie for mentioning our Blackfriars Bridge installation, which I am sure you are familiar with. That is an exceptional installation funded through the Department for Transport. It is an example of the kind of iconic urban architectural statement you can make with PV, apart from its functionality. There is plenty of scope to do more of that. These are deeply complex projects. They take years to deliver, actually, and that is another issue.

On the issue of solar farms, this is where possibly we have a slightly different view to the STA. Our assumption commercially is that Ministers mean it when they say they would rather not see any more large-scale solar farms.

Murad Qureshi AM (Deputy Chair): They have said that, have they?

Seb Berry (Head of Public Affairs, Solarcentury): They have said that and, more importantly, they have already closed down the Renewables Obligation for large-scale solar above five megawatts. That was done last year. They have done that to large-scale solar and are doing it to onshore wind, as we know now.

There is still plenty of solar farm activity at the sub-five-megawatt level. In terms of processes and how long it would take you to deliver a meaningful 'solar farm' approach, I suspect that events might overtake you and the new Government might well act before March 2017 to address what is left of the solar farm market.

Our advice, for what it is worth, is to focus on the on-roof and on-building domestic. That is what the new Ministers tell us they want to see.

Darren Johnson AM (Chair): That is a very helpful point because that is what the investigation is focused on in the terms of reference of the investigation. I know that lots of people want to come in to discuss solar farms now but we are actually discussing domestic solar installations, not farms.

Jennette Arnold OBE AM: Chair, just coming back to domestic solar, in the new world - especially in my constituency - of both domestic and commercial buildings and how a solar installation can be so helpful, I refer colleagues to what is still the largest solar installation of its kind: The Print House in Hackney. I was there at its opening in 2007. It is not that it cannot be done and cannot be done creatively and with will.

Leonie Greene (Head of Public Affairs, Solar Trade Association): Also ambitiously. There is one over two megawatts going in around Old Street. You can do some big schemes.

Jennette Arnold OBE AM: I do not know that we have to be looking at solar farms. We should just be looking at the good practice we have and see how we can replicate that.

Darren Johnson AM (Chair): Thank you. We certainly saw two inspiring schemes on our site visit in terms of the community scheme in Lambeth and how that developed and had people on board and engaged and so on. Also from an aesthetic as well as a functional point of view, when we visited the social housing

development in the King's Road, we saw how PV panels were used as part of the aesthetics of the building and looked extremely good. They were not plonked on the top but designed as part of the building from the very word 'go', which in terms of new build has real potential.

We will end the discussion there. Thank you to all of our guests today for your input. It has given us lots to think about as we put our recommendations together. Thank you.