

# MINUTES

**Meeting: Environment Committee**  
**Date: Thursday 10 November 2016**  
**Time: 10.00 am**  
**Place: Chamber, City Hall, The Queen's Walk, London, SE1 2AA**

Copies of the minutes may be found at:

[www.london.gov.uk/mayor-assembly/london-assembly/environment](http://www.london.gov.uk/mayor-assembly/london-assembly/environment)

**Present:**

Leonie Cooper AM (Chair)  
Caroline Russell AM (Deputy Chair)  
Tony Arbour AM  
Jennette Arnold OBE AM  
Shaun Bailey AM  
Nicky Gavron AM  
David Kurten AM

**1 Apologies for Absence and Chair's Announcements (Item 1)**

1.1 There were no apologies for absence.

**2 Declarations of Interests (Item 2)**

2.1 The Committee received the report of the Executive Director of Secretariat.

**2.2 Resolved:**

**That the list of offices held by Assembly Members, as set out in the table at Agenda Item 2, be noted as disclosable pecuniary interests.**

### **3 Minutes (Item 3)**

#### **3.1 Resolved:**

**That the minutes of the meeting held on 13 October 2016 be signed by the Chair as a correct record.**

### **4 Summary List of Actions (Item 4)**

4.1 The Committee received the report of the Executive Director of Secretariat.

#### **4.2 Resolved:**

**That the completed and outstanding actions arising from previous meetings of the Committee be noted.**

### **5 Action Taken under Delegated Authority (Item 5)**

5.1 The Committee received the report of the Executive Director of Secretariat.

#### **5.2 Resolved:**

**That the recent action taken under delegated authority by the Chair, in consultation with party Group Lead Members, namely to agree the scope and terms of reference for the Committee's investigation into domestic energy and fuel poverty, be noted.**

### **6 Domestic Energy and Fuel Poverty in London (Item 6)**

6.1 The Committee received the report of the Executive Director of Secretariat as background to putting questions on domestic energy and fuel poverty in London to the following invited guests:

- Philip Sellwood, Chief Executive, Energy Saving Trust;
- Peter Smith, Director of Policy & Research, National Energy Action (NEA);
- Sophie Neuburg, London Campaigns Lead, Friends of the Earth;
- Afsheen Kabir Rasheed, Chief Operating Officer, Repowering London;
- Claire Maugham, Director of Policy and Communications, Smart Energy GB;
- Giovanna Speciale, Co-Founder and CEO, South East London Community Energy; and

- Bevan Jones, Managing Director, Sustainable Homes.

6.2 A transcript of the discussion is attached at **Appendix 1**.

6.3 During the course of the discussion, the Director of Policy and Research, NEA undertook to provide the following additional information:

- The rationale and workings behind NEA's calculation that 69% of the national increase in fuel poverty had been driven through increases in London; and
- Further information in relation to the technical trials undertaken with the Technical Innovation Fund in the London Borough of Camden, particularly the cost savings delivered through bulk purchase of battery units for domestic energy storage.

6.4 **Resolved:**

- (a) That the report and discussion be noted; and**
- (b) That authority be delegated to the Chair, in consultation with party Group Lead Members, to agree any output from the discussion.**

## **7 Environmental Implications of the Expansion of Heathrow Airport (Item 7)**

7.1 The Committee received the report of the Executive Director of Secretariat as background to putting questions on domestic energy and fuel poverty in London to the following invited guests:

- Simon Birkett, Director, Clean Air in London;
- Simon Alcock, Communications and Public Affairs Manager, Client Earth;
- Sophie Neuburg, London Campaigns Lead, Friends of the Earth; and
- Colin Stanbury, Director, Local Authorities Aircraft Noise Council.

7.2 A transcript of the discussion is attached at **Appendix 2**.

7.3 **Resolved:**

- (a) That the report and discussion be noted; and**
- (b) That authority be delegated to the Chair, in consultation with party Group Lead Members, to agree any output arising from the discussion.**

## **8 Environment Committee Work Programme (Item 8)**

8.1 The Committee received the report of the Executive Director of Secretariat.

8.2 **Resolved:**

**(a) That the updated work programme for 2016/17, including the schedule of meeting topics set out at paragraph 4.3 of the report, be agreed; and**

**(b) That authority be delegated to the Chair, in consultation with party Group Lead Members, to agree the scope and terms of reference for the Committee's investigation into green spaces.**

## **9 Date of Next Meeting (Item 9)**

9.1 The next meeting of the Committee was scheduled for Thursday, 8 December at 2.00pm in the Chamber, City Hall.

## **10 Any Other Business the Chair Considers Urgent (Item 10)**

10.1 There were no items of business that the Chair considered to be urgent.

## **11 Close of Meeting**

11.1 The meeting ended at 1.00pm.

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Chair

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Date

**Contact Officer:** Rachel Greenwood, Committee Officer; Telephone: 020 7983 4285;  
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**Environment Committee – 10 November 2016****Transcript of Items 6 – Domestic Energy & Fuel Poverty in London**

**Leonie Cooper AM (Chair):** It is at this point when we will now formally welcome the guests because this is the item that we have invited you in as experts to share your knowledge of domestic energy and how to alleviate fuel poverty with us.

Moving from left to right around the room, we have Philip Sellwood, who is the Chief Executive of the Energy Saving Trust. Welcome. Peter Smith is the Director of Policy & Research from National Energy Action (NEA). We have Sophie Neuburg, who is the London Campaigns Lead from Friends of the Earth. We have Afsheen Rashid, who is the Chief Operating Officer of Repowering London and, wearing another hat, has also been elected as the Chair of Community Energy England. You are very welcome. We have Claire Maugham, who is the Director of Policy and Communications from Smart Energy GB. We have another guest who is not quite with us, Giovanna Speciale, who is from South East London Community Energy (SELCE), and hopefully she will be joining us shortly. Last, but very much not least, we have Bevan Jones, who was previously with Catalyst but is now the Chief Executive Officer of Sustainable Homes. You are all very welcome and thank you very much for coming this morning.

We have a number of questions that we want to put to you, starting with me. I am going to ask you for an overview, which will hopefully kick us all off. We think, in the scoping paper that we have been looking at, that currently in London, in terms of domestic energy and fuel poverty, we are behind the rest of the country in terms of efforts made to alleviate fuel poverty. I am going to ask you very briefly to comment on that, those of you who would like to. I will probably start with Peter, because he was nodding most vigorously, and then to Philip who nodded second most vigorously.

**Peter Smith (Director of Policy & Research, National Energy Action):** Thanks very much, Chair. I very much welcome the fact that this is the focus of your investigations and I am looking forward to the publication in February [2017] of a coherent action plan around things that the Mayor can do.

Very briefly, in terms of the scale of fuel poverty in London, despite previous Mayoral commitments, existing programmes and previous investments that have been made in terms of improving the housing stock, we continue to see a rise in fuel poverty in the capital, quite a startling rise. As the report suggested, which was prepared before the meeting, 348,000 households are in fuel poverty in the capital. That is 10% of the population. That has gone up 6.5% since the last year, which completely outstrips the national increase that we saw.

In fact, looking at this a little bit before the meeting, the increase that we have seen - that 6.5%, which is about 22,000 households, increase in fuel poverty - is 69% of the total national increase. That should focus minds in this building and elsewhere to try to --

**Leonie Cooper AM (Chair):** What you are saying is there has been a general increase nationally but it is particularly focused in London?

**Peter Smith (Director of Policy & Research, National Energy Action):** Yes. That is absolutely right, so 69% of the national increase has been driven through increases in fuel poverty in London. I could not quite

believe that when I looked at those figures, but, yes, I am happy to share my rationale and workings to see whether or not that is accurate. Greater London Authority (GLA) officers should get under the bonnet in terms of those figures.

**Leonie Cooper AM (Chair):** We will probably come back to that in a minute. I am going to bring in Philip from the Energy Saving Trust.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** Yes. Thank you very much, Chair, and thank you for the invitation today.

To give the other side of that coin that Peter has just talked about, which is about delivery or - if I am really hard - lack of delivery in London relative to the rest of the United Kingdom (UK). It is quite striking against the increase that we are seeing in fuel poverty and fuel poor households that London's performance broadly is around 35 per 1,000 households in terms of delivery. We contrast that with the national number, which is about 67 households per 1,000. More strikingly, if you compare it to certain regions, such as Scotland for instance, which has a figure of 77 per 1,000, Scotland, broadly speaking, is outperforming London by two-and-a-half times. At the same time we are seeing this rise in fuel poor households disproportionately in London. One has to draw the conclusion that the lack of delivery relative to elsewhere in the UK must be a causal factor in those numbers.

**Leonie Cooper AM (Chair):** When you say "lack of delivery", are we talking specifically here about things like programmes to insulate properties? I am looking towards Bevan here as well because I know that is something that Sustainable Homes have focused on. On current trends, how long do you think it will be before London's housing stock is insulated to a good standard? By that I could say the bottom of the Energy Performance Certificate (EPC) band C.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** The original plan was 2.5 million by 2025, and we are about 1.1 million or thereabouts. We are way off meeting 2025. I will defer to somebody else who has specialist knowledge but it is probably nearer 2030, but that is an estimation based on current performance.

**Leonie Cooper AM (Chair):** At the moment we are going to miss the 2025 target, possibly 2030; at least 2030.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** Without doubt we will miss the 2025 target but 2030 is possibly doable.

**Leonie Cooper AM (Chair):** Bevan, can I ask your perspective from Sustainable Homes? Obviously you work with a lot of landlords across the country but also specifically in London.

**Bevan Jones (Managing Director, Sustainable Homes):** Thanks, Chair, and thanks for inviting Sustainable Homes to this Committee.

I would broadly agree with what Peter and Philip are saying, because what we have seen with our landlords in the last review that we did of all the landlords that we worked with, which was in 2014, was the Standard Assessment Procedure (SAP) performance of the properties. We know that social landlords build to a higher SAP standard and a higher general standard than other housing segments, so private building or the private rented sector (PRS) has plateaued. Therefore, it would support the delivery point.

We are seeing an average SAP among our social landlords of about 70. That was fine in 2012 but then we saw the same thing again in 2014/15. I would support the fact that there is no delivery there.

**Leonie Cooper AM (Chair):** It has not moved.

**Bevan Jones (Managing Director, Sustainable Homes):** Yes, it has completely plateaued. On the other --

**Leonie Cooper AM (Chair):** Can I interrupt you very slightly? I want to check that everybody on the Committee is familiar with the EPC bandings and what SAP means. SAP is a measure of energy performance of a building. If your SAP is nought, then your building is probably a tent in a field. It might not even be a tent. You might just be sitting in a field. If your SAP is 100 then that is a very well insulated house; you would probably be too hot. EPC bandings run from A - that means it is very good and very efficient - down to E, F or even, horribly, G. Again, you would be sitting back in a field in a tent and so it would not be very energy efficient. It is a rating for energy efficiency.

**Bevan Jones (Managing Director, Sustainable Homes):** I will try to keep the acronyms to a minimum, sorry.

**Leonie Cooper AM (Chair):** We are a very new Committee and four out of the seven of us were elected to the Assembly in May and so it does not necessarily mean that we are all energy efficiency experts.

**Bevan Jones (Managing Director, Sustainable Homes):** In terms of the picture on fuel poverty, we deal with landlords and they build properties or they refurbish properties. A lot of new build properties are coming out with scores of something like 89/90 and so they are very high performing, high insulated buildings.

There is an issue with existing properties, which we can concentrate more on later on but there is a timing thing and there is a fuel poverty thing. On the timing thing, for us to get the housing sector to meet its obligations under the Climate Change Act the SAP of properties would have to be 86.

**Leonie Cooper AM (Chair):** Do you think it is feasible for all properties to meet a SAP of 86?

**Bevan Jones (Managing Director, Sustainable Homes):** No.

**Leonie Cooper AM (Chair):** There must be some that just simply cannot.

**Bevan Jones (Managing Director, Sustainable Homes):** There are some that you will not get to 86. You probably will not even get to 70 or 60 with some of them because they are of a certain type, you have planning restrictions, you are in a conservation area, you have residents who do not want their property changed because that is how they have always lived in it. There are lots of other factors there.

To finish off and to follow up on what Peter [Smith] said, we are seeing this increasing fuel poverty in the wider context of austerity and other poverty as well. These things are all exacerbating one another and that is why, particularly in London where some of the austerity policies have hit especially hard, we are seeing incomes under pressure, we are seeing families under pressure and what they are doing is making decisions on things that they know they control, "I will not heat my home", or, "I will under heat my home", or, "I do need to heat my home and I will have to face the consequences of paying for it later", and so we are seeing that in a wider context as well.

**Leonie Cooper AM (Chair):** The Mayor has an overall thrust to the Mayoralty where he is very keen to press down on the high living costs of Londoners in a number of different ways: freezing fares, introducing the London Living Rent and also the London Living Wage, which was uprated last week. What we are talking about here are the implications in terms of not just fuel poverty but also reducing carbon emissions as well, and it seems to me that you are saying that at the moment we need to be doing an awful lot more. Would that sum up what you are saying?

**Bevan Jones (Managing Director, Sustainable Homes):** Both metrics, yes.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** Also, to make the point that they are not mutually exclusive. In fact, they are mutually reinforcing, if you do one you deliver on the other.

**Leonie Cooper AM (Chair):** No, of course absolutely.

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** What has been said is absolutely right. I want to back up what Peter [Smith] was saying about the severity of cold homes in London. The figures on fuel poverty on the Government's new definition are exactly as Peter says. They are getting much, much higher, but we do have to remember that the Government redefined fuel poverty relatively recently and the redefinition caused the numbers to go down quite dramatically.

I will not go into the ins and outs on that because it is probably not so interesting for the Committee, but the point is that there are hundreds of thousands of people that Peter has mentioned who are in fuel poverty on the Government's definition, but the numbers of people living in London who cannot afford their bills and are suffering in the way that you have said, is going to be much, much higher and getting increasingly higher as people's incomes go down. There are probably hundreds of thousands or even millions of people in London who cannot afford their energy bills and are choosing between heating and eating.

The other thing I want to say is on your question about how long it is likely to be before all homes are insulated to a reasonable level. A report by the GLA on housing in London a couple of years ago showed that, according to the English Housing Survey, about 80% of homes in London are below EPC C. That does not mean they are all a very poor standard but they are below what we would consider to be a reasonable standard of energy efficiency. Things may have moved on a little bit, because that is from survey data that was done a few years ago but, as people are saying, we have not moved on that much, so the challenge is very, very significant.

**Peter Smith (Director of Policy & Research, National Energy Action):** Can I mention two quick things. The targets that London has set itself have to sit in a broader framework around national aspirations on fuel poverty. We have some very clear EPC-linked fuel poverty targets that were developed in the last Parliament. We need to get all fuel-poor households - and that goes with the caveat, as Sophie mentioned, that a lot of people are not classed as fuel-poor even though they struggle with their energy costs - as far as reasonably practicable up to a band C by 2030. We also have binding targets, which are sector-specific or tenure-specific in the PRS as well where, as you mentioned the worst performing properties are F and G [rated]. We have said that we will not be renting those out past 2018. Any targets around the scheme and the volumes of insulations happening within the scheme sit in a much broader context around those two targets and, as has been mentioned, carbon targets as well.

**Leonie Cooper AM (Chair):** Yes. Renting out properties with F and G [ratings], one would hope that landlords would not be doing that in any case but, sadly, we do know that there are still landlords that are doing that. They have been given very lengthy notice of the change from 2018, so there is literally no excuse at all for any landlord in the PRS to be renting such a property. They have had plenty of time to do the necessary works.

In terms of where we were talking about underheating homes, which Bevan introduced, have we seen a plateau in terms of no further improvement in SAP ratings or moving further up the EPC bands? Do you know what the trends are in terms of excess winter deaths and whether or not we have been able to bear down on that? We have had a couple of mild winters but, clearly, if we have a very cold winter, are we going to see anything less than the last time we had a cold winter? I wonder whether you thought that anything like the use of the Housing Health and Safety Rating System (HHSRS) will be helpful in terms of driving the private sector landlords towards improving their properties in the PRS? Excess winter deaths overall but the PRS specifically, or to any other aspect of the rental sector?

**Bevan Jones (Managing Director, Sustainable Homes):** There are a few elements to that and there is a tendency to look at the private landlord and say, "You are the bad guy. You should have done this". Also, what we see from excess winter and summer deaths is that there is an issue around communities. It is not just the fact that the house does not perform or the person under heats, it is the fact that they might be on their own or it might be there is not a neighbour or a friend to check on them.

There are lots of complex elements to excess winter deaths and the big ones are people not heating their homes properly and not looking after themselves properly, but then there is that element where their neighbours are not checking on them or no one comes around to say hello because they are either isolated or vulnerable and they have fallen out of a support system or a family network or a friend network and there is no one there to even give them a ring to see how they are. There are some complex elements.

I do agree with what you said, Chair, around landlords have had plenty of time to do this. One of the issues is that a lot of private rented landlords own two properties or less, or something like that. There is a statistic that it is their pension pot. It is their nest egg so they are not experts in running a building or running a property. If they do not know what to improve, it is not an excuse but it is not necessarily always easy for them and with things like Green Deal and the Energy Company Obligation (ECO) it did not make it easy for them to then go and do the deep retrofit that they might do on their F rated property and so there is a complex picture.

**Leonie Cooper AM (Chair):** Is that a bid for simple advice to very small landlords then to give them advice on how to improve energy efficiency? Some things are quite inexpensive but, obviously, fitting a full new set of double glazing is quite expensive but --

**Bevan Jones (Managing Director, Sustainable Homes):** We have been in Scotland recently looking at their Energy Efficiency Standard for Social Housing (EESH). It is their standard to improve energy performance of social housing and it is very simple. You need to get your building to a 69 or you need to get your building to a 65. It is as simple as that. The measures to me seem very straightforward and they are mapped out. We do need something similar here for private landlords. Around this table we might be able to manipulate the energy switching websites and we might be able to go down to a shop and buy some LED (light-emitting diode) lights because we know what that is going to do, but the average person who might be a landlord as well does not know that. Laying out those easy-to-do measures that get those SAP scores up and protect the tenant need to be mapped out.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** We are not in the business of demonising any sector, but we have to recognise that London has a particular issue with private rented property, 29% as against the national average of 17% of properties are privately rented, and over many years there have been opportunities for landlords to invest in their property in an energy efficient manner, even to the extent of grant schemes that were very poorly taken up in the past by landlords.

While I accept what Bevan is saying, that it is really important - and I would say this, I am from the Energy Saving Trust - and giving good independent advice is absolutely essential, but equally we need a harder edge at the other end in terms of enforcement. There is some very clear evidence that, despite good impartial advice plus available grant schemes, landlords in large measure in London have failed to take action and it is time for us to look at that again and start to look at compliance and enforcement.

**Leonie Cooper AM (Chair):** Advice and assistance and some information about simple measures propagated outwards but, also, some stick there in terms of enforcement against landlords who simply continue not to improve in that way?

**Philip Sellwood (Chief Executive, Energy Saving Trust):** Correct.

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** I absolutely agree with what you have just said. Landlords have had quite a lot of opportunities to do this and they have not.

To answer your specific question around the HHSRS, I am quite sceptical about how useful it can be to help us get people out of fuel poverty, partly because the cold-related part of that rating system, which is called "excess cold", only deals with extremely poor quality housing. There is lots of housing which would pass that but is still too cold to be renting out.

I would also say that we know that local authorities are suffering massive cuts to their budgets at the moment and many of them do not have the resources to go out and enforce this. This was true when I worked in local government a number of years ago and it has only got truer. They do not have enough environmental health officers (EHOs) to go out and enforce it. The Mayor's role and the Mayor's power in doing something about this will be very important.

The other thing I want to talk about is the current regulations around renting out homes. As Peter [Smith] said, there is new enforcement coming in, in 2018, that you cannot rent out a home that is below F or G rated and so that is very poor housing. There are a number of problems with that at the moment and it is very difficult to enforce for reasons we have just discussed but, also, there is an argument at the moment about at what level the landlords would have to comply in terms of the costs. Initially it was that if they had to pay anything upfront they did not have to comply. There are now quite a lot of very significant campaigns to stop that from being the case but at the moment that is how things rest. What that means is those existing regulations are insufficient.

The other key thing is that housing data shows that around 50% of households living in private rented homes that are E, F or G-rated in the PRS in London may be in fuel poverty under the new definition, which means a much larger number are going to be struggling with their bills. What that means is that homes that are above the level - sorry to be technical - that landlords have to get their homes to by 2018 still will be very significantly struggling.

Our view is that the Mayor is calling for more powers in the PRS and to be able to have powers over regulation in the PRS. We would say that the Mayor needs to think about including a minimum standard for energy efficiency within those things if he does get those powers, and it needs to be a lot higher than the current Government level because the PRS is a very difficult sector to live in for many people at the moment.

**Leonie Cooper AM (Chair):** You would support the Mayor calling for new powers around energy enforcement of energy efficiency, possibly across all properties?

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** Absolutely, very strongly.

**Leonie Cooper AM (Chair):** Although we have just talked about the PRS, clearly, people living alone in large, draughty properties that they own, capital rich but cash-poor, is also a big feature in London.

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** Absolutely.

**Peter Smith (Director of Policy & Research, National Energy Action):** In terms of the scale of excess winter deaths in London, we do see those figures. It is hugely shocking that 4,000 people extra die in the winter months compared to the summer period. The World Health Organisation (WHO) attributes 30% of those particularly to living in a cold home. That gives you some sense of the scale of the issue in London. If those people were dying in the street and lying there as opposed to being behind closed doors there would be an absolute outrage. It would be the number one priority on the Mayor's agenda until that crisis was abated and we do see it as a crisis.

Talking about the challenges in enforcing HHSRS specifically, local authority enforcement has been very poor. Boroughs have been under a very strained time recently, as I am sure all of you are more than aware. Also, EHOs are being increasingly asked to respond to a range of priorities in the capital, particularly around air quality, resource potentially being taken away from housing, enforcing housing standards to look at air quality, particularly in idling vehicles, for instance. There is only limited resource and so it is stretched.

Add in the complexity that Sophie [Neuburg] mentioned around the new requirements in the PRS where, at a national level, there are a huge amount of caveats and complexity associated with those requirements currently. It is often left alone and is not being policed in the way that would bring down the scale of excess winter deaths and those attributable to cold homes or fuel poverty.

There is an immediate thing that the Mayor could do, which is to push the new Department that is responsible for fuel poverty and energy efficiency - the Department for Business, Energy and Industrial Strategy (BEIS) - to come forward and consult on the basis of changing those regulations and making them much more straightforward in terms of compliance. You are either on the right side of them or you are not; take out some of that complexity. There is a consultation that has already been drafted with the Department that was looking to consult on that basis but unfortunately, due to the objections of landlords, it is still stuck there. There is an immediate thing that the Mayor could do to urge central Government to consult on taking greater steps in the PRS.

**Leonie Cooper AM (Chair):** That might be something we can pick up after this meeting and draw to the attention of the Deputy Mayor for Housing [and Residential Development] to raise that as an issue to take forward.

Is there any point in mentioning the Green Deal? I suspect not. Does anyone want to comment on ECO or to mention a few things that might have been assisting with moving us forward or perhaps not?

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** Very briefly, what I would bring to this very vivid picture of the challenges facing Londoners is one part of a package of measures, but an essential one, particularly in the PRS and for people in fuel poverty who are using too little, even less than they can afford when they can actually afford to heat and eat through the winter. We know that the challenges facing Londoners in fuel poverty are compounded by analogue technology in their homes. The meters that are ticking away under the stairs in most people's homes are not giving people the information they need to heat their homes as they can afford to. We hear a lot from people in the course of our work that they could afford to pay the bill but because, even if they are phoning in their meter readings regularly, they have no idea what is going to be in the bill when it lands on the mat. They are using less than they need to.

If you think about the particular challenges around prepayment meters, the higher prices and the element of fuel poverty that that makes such a profound contribution to.

**Giovanna Speciale (Co-Founder and Chief Executive Officer, South East London Community Energy):** About the HHSRS: my organisation, SELCE, provides frontline support for people in fuel poverty. We run energy cafés with tea, coffee and energy advice. There exists a mechanism for clients who rent homes that are excessively cold to refer them to the homes enforcement team. None of them are willing to do it. We have not had a client who is willing to make that referral, simply because of fear of retaliation. There is evidence that where similar measures have happened - it is a study in Cumbria - and where prosecution relies on a tenant complaining about their landlord, retaliation will happen in 25% of cases. That is the big problem.

**Peter Smith (Director of Policy & Research, National Energy Action):** I absolutely agree with that. Sorry, Chair, if it is possible to come in very briefly on that point, that is what we see as the picture of enforcement on HHSRS that invariably the EHOs rely on tenants to come to them with issues and invariably, for those reasons, that does not happen. Increasingly tenants feel under pressure, particularly in London given the housing shortage, and they are often made to feel that the landlord is doing them a favour in taking Housing Benefit and, therefore, they should not complain about the smashed window, the broken boiler, etc, and so that process does not seem to work. We have been trying to work with the boroughs for a long period of time, so they take a more proactive approach to enforcing HHSRS and that would certainly help.

**Leonie Cooper AM (Chair):** It sounds as though this might also be worth drawing to the attention of the Deputy Mayor for Housing [and Residential Development] as the move forward in terms of a London-wide lettings agency occurs, because this sounds like something that might be helpful for the Mayor and the Deputy Mayor to be working on in relation generally with the boroughs.

I am going to move on to the specific session to now talk about energy efficiency retrofit. We have set the scene. We have not been doing terribly well on it. We have a lot of people living in fuel poverty. It has not been going down. How do we think this can be encouraged?

**Caroline Russell AM (Deputy Chair):** More specifically, in terms of retrofitting the older buildings, we have heard so many of the buildings are going to be very difficult to bring them up to standard. Certainly, I have seen in the borough where I am a Councillor huge problems dealing with the hard to deal with buildings, all the low-hanging fruit has been done and we are now on to the stuff that is much more difficult.

The specific questions - and if we can start with Philip from the Energy Saving Trust, Peter [Smith] from NEA and Bevan [Jones] as well from Sustainable Homes, and then anyone else who wants to comment on this one. The first question: how can and should energy efficiency retrofit be encouraged in London? What could the Mayor be doing to encourage it?

**Philip Sellwood (Chief Executive, Energy Saving Trust):** Could I kick off on that to make a segway between the Chair's previous question about ECO?

**Leonie Cooper AM (Chair):** Yes.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** You can easily be led to believe that ECO has been a failure but in certain parts of the country it has been extremely successful, and there are lessons that London can and should learn. One specific I will draw attention to is the work that we do with the Scottish Government in Scotland, where, on behalf of the Scottish Government, we employ individuals whose sole function is to work with local authorities, hard-to-treat properties in housing associations, social landlords. It is no coincidence - it seems to me - that Scotland has a success rate that is 50% above any other part of the UK. What that means is they are getting about 12% of the ECO pot, which is all devoted more or less to retrofit, so there is very good evidence that if you focus even on those hard-to-treat properties - and I accept what you are saying that many of the easier jobs have already been done through previous schemes - that you can get a result.

We were talking just before the Committee met that often the first thing that people say is that it is too difficult in London, access is difficult, it is costly and so on. I have just spent two days in Glasgow and they have many of the same issues, but they have focused on those specific issues and very specific things that we could do in London. If it is expensive for an installer to come from outside London into London, why do they have to pay the Congestion Charge? If they do come into London and you are drawing skills from elsewhere, how do we make sure that that supply chain is maintained? These are the sorts of questions that cities elsewhere in the UK - and I draw specific attention to Scotland but it is not exclusive - are delivering much, much better results dealing with the same issues.

**Peter Smith (Director of Policy & Research, National Energy Action):** I would absolutely agree with Philip that there are some obvious things that the Mayor could do to try to reduce the additional cost barriers associated with doing energy efficiency in London. The charge incurred is one example. I have heard it said that people could use bus lanes, for instance. I am sure that would rankle with some but a range of things that could be done to reduce the administrative costs.

An immediate priority, particularly thinking that the budget process associated with deciding the kind of spending around this area is being pinned down now - there are things that could be done in the short term. In March 2012 London's Health Committee said that the Mayor should focus the RE:NEW scheme on fuel poor households. That has still not happened despite that report being over four years old.

There is a boiler scrappage scheme that the former Mayor [Rt Hon Boris Johnson MP] ran last winter. That did not help tackle fuel poverty at all because it was only a very small capital contribution towards the overall cost of the boiler, so paying a full grant would mean that it was much more targeted at low income households and so those two things. There are some very short-term things that can be done.

In the longer term there needs to be some bespoke policies that meet the national aspiration around those households that are on the lowest incomes living in the least efficient properties, so we need some more

bespoke programmes. That is why we very much welcomed the other day the Mayor's commitment not only to target existing programmes but also bringing forward new programmes of work on energy efficiency, specifically tackling fuel poverty. We hope that that will be laid out in a coherent action plan in time for it to influence the budget process.

There are other things that the Mayor could do, clearly, around using his national lobbying convening power, and the Deputy Mayor [for Housing and Residential Development] to pump-prime some of the initiatives in London that are going on elsewhere in the country. There is a lot the Mayor can do and perhaps we will discuss some of it instead of me hogging a lot of the discussion space.

**Bevan Jones (Managing Director, Sustainable Homes):** From our perspective and from my background - I have worked in local government and private sector consultancy and now in the housing sector - there is not a bottomless pit of public money and so there is only so much in the way of financial contributions that the GLA or the Mayor can actually make. There needs to be some better thinking around how that money is spent, and that is through targeting. Again, what underpins all of this is making it easier for the recipients. You have to make it easier for the landlords, and that is landlords of all types: private landlords, registered social landlords (RSLs), local authorities. It does not matter. It has to be made easy for them to implement this stuff, so if you are targeting you have to target the worst properties and you have to say, "It is F and G". Those are the worst ones. That has made it simple. E we can do another time. D we can concentrate on another time. That is it.

Again, the fact that we do not have bottomless pits of money and landlords do not have bottomless pits of money, there needs to be a bit of a small measures revolution. You need to maximise on things, like radiator panels and LED lighting, and you also need to bring in the water measure saving devices, because there is a hidden cost there when people are having showers and running their hot taps, which a lot of people do not know, so you need these small measures first.

I understand the boiler scrappage scheme was not a success or however you want to badge it up, but the Mayor has to concentrate on boilers, boiler efficiency and alternatives to boilers and getting it right. It is all very well saying, "We can retrofit and we can put in these measures and we can put in an alternative low-carbon source of heating, but they get a bad reputation because often the supply chain is not experienced enough to get it right. I have seen installations of ventilation systems, heat recovery systems and air-source heat pumps, ground source heat pumps, whatever you want to call them, which are atrocious. What happens is that that person ends up spending 25% more on their energy than when they had a standard gas boiler, so there is that element of it, but even when they get it right you still have to do loads of engagement with the resident or the person living there on how to operate their home. It does not even matter if the home is not complex. If it is a gas boiler and it has a door and some windows, people still do not know how to operate their homes in a basic way, so whether that is controls or the gas boiler or what they dress in at home, everything like that. There are lots that the Mayor can do on the supply side and the installation side but there are loads to do on the other side.

**Caroline Russell AM (Deputy Chair):** Also on the education side.

**Bevan Jones (Managing Director, Sustainable Homes):** Landlords play a key role in that. One of our studies - the National Energy Study 1 - found that landlords, registered social landlords (RSLs) and housing associations are the ones that are most trusted to give energy advice, above energy companies, above anyone else and so there is a role for landlords there. I am saying social landlords in particular, but all landlords need to play a part in this education and making sure they get the supply chain right in the first place.

**Caroline Russell AM (Deputy Chair):** Picking up on the education point, what forms of retrofit promotion are going to be most effective? There is the street-by-street; neighbourhood; there is using the RSLs.

**Giovanna Speciale (Co-Founder and Chief Executive Officer, SELCE):** While you have to support landlords you also have to support residents with retrofit. Our experience is even where ECO funding is available and retrofit is affordable, many people are not doing it because they are scared of the disruption, and particularly if they are vulnerable, they are carers, they have someone in the household who is not going to appreciate the disruption. In my view, not only do landlords need to be supported but residents need to be supported with co-ordination of retrofit measures, minimisation of disruption, maybe volunteers to help move stuff and furniture, temporary storage, and adherence to quality standards. Many people are very scared of being ripped off, so an expert to help them ensure that the installer has relevant quality marks and will do good work is helpful.

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** If we think about the replacement of meters that is a very important element of retrofitting every home. That is something that is coming to every home at no cost to that home but does carry the challenges that you have described around inconvenience, and just engaging with an area that is very difficult to engage with. What I would say is trusted voices are very important in an area of people's lives where they have had historically low levels of trust in the people supplying them energy, working with charities, with boroughs, with voices, with friends and neighbours, who they know and trust is an essential part of consumer engagement. That is where some of the other schemes may have struggled in communicating what a change means, how it can benefit you and how it can happen. We are working with NEA, for example, to bring together a network of charities and councils from all around the country to empower them to give some of that information through a trusted voice.

**Afsheen Kabir Rashid (Chief Operating Officer, Repowering London):** I echo those thoughts as well, obviously coming from community energy. That is what we are there to do in terms of having access, reach out to vulnerable fuel-poor residents on estates. In my experience I have found that landlords have a role to play, especially social housing and local authorities, but at the end of the day the frontline staff are really pushed for time and resources. It is not a priority for them and they do not have the required understanding themselves of what advice to give the residents.

That is where access through community energy groups who are trusted local people who could go and give quite a hand-held experience for those residents who are vulnerable, who need a bit more time and attention, need follow up, need that constant reassurance that they are taking them through the full journey to a point where they are satisfied with what they have and they are seeing a reduction in their energy bills. It is quite a resource intensive process. From a local authority point of view, it would be quite difficult for them to finance but that is where community energy groups, where you have a combination of professionals as well as volunteer expertise, can come in together using the local networks and local people who can check in and see how they are doing, how they are getting on, will be quite a valuable tool to see the education drive through.

**Peter Smith (Director of Policy & Research, National Energy Action):** Very briefly, in terms of what we are seeing in London. There is some good practice in London around the Seasonal Health Interventions Network (SHINE) that operates from Islington and neighbouring boroughs, which provides a single point of contact referral system. That enables a kind of a triage process to take place through a telephone service, where people will not only be asked about the state of their homes and the energy efficiency but it looks at wider referrals, things around: social exclusion, benefit entitlement checks, which is a crucial part of tackling fuel poverty, giving people information about the entitlements that they can claim. We do work in East

London on that and people's experience could be transformed. £6,000 a year that people did not know that they were entitled to can find their way into their pockets as a result of doing those benefits entitlement checks.

The Know Your Rights Campaign in London started some of that, but there was not a clear fit with referrals from the benefit entitlement check through to delivery of energy efficiency measures, and the two are very linked because, as soon as you are on a certain set of eligible benefits you can be passported through to not only receiving support for energy efficiency measures but, equally, things like the Warm Home Discount Scheme, which can provide a further rebate in the winter months, taken automatically off your electricity bill, so joining up around advice services --

**Leonie Cooper AM (Chair):** SHINE is one example in the London Borough of Islington. You are doing work on similar schemes in East London, and I know that SELCE has also been doing work using the community energy company in South East London. SELCE has been working out of Citizens Advice Bureaux (CAB) offering fuel poverty advice alongside the other benefit advice, so slightly different models that we can look at in our report there. Thank you.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** I absolutely agree with the experts in community energy, but I want to give one brief overlay, which is why it is so very, very important, because often community energy is seen as rather fluffy, doesn't really deliver, hard to evidence, hard to evaluate. Interestingly, we have been doing some work with Forum for the Future, which we are about to publish. That shows pretty definitively that those areas in the country that have the best access for the Carbon Emissions Reduction Target (CERT) and the Community Energy Savings Programme (CESP) - which for other members were parts of the old ECO scheme targeted to the most vulnerable - without question, definitively, were better executed with better outcomes when they sought and had community engagement. It is important because there will be many people who tell the Committee, "All very well community energy but it does not really deliver". It does and we have to bring evidence to bear on that.

**Leonie Cooper AM (Chair):** Hearing loud and clear we need to involve community, all the stuff about telling people the benefits and making sure everyone is properly on board and trust the people that they are hearing this information from.

There are one or two more questions on retrofit schemes and then there are other questions on other elements of all of this but, very quickly, we have already touched on retrofit in both the social rented and the PRS, so is there anything that any of you are waiting to say about retrofit in those two sectors?

**Peter Smith (Director of Policy & Research, National Energy Action):** The biggest challenge that London has faced in terms of accessing the ECO, which is the national scheme, is twofold: a lack of resource. The national resource that is available has declined. Then, second of all, if you are trying to access the support, even if you are eligible for it, you are not guaranteed to receive anything. That makes the boroughs' willingness to promote those schemes - the ECO in particular - mixed because, even if you can determine eligibility for measures, you can say to households, "Yes, you fit the eligibility criteria", push them off into the arms of a supplier, for instance, to go and get that assistance, there is no guarantee that they will receive anything. Second of all, the capital contribution that is often sought when the offer of a measure materialises, varies hugely. Some households in one borough may be told that for a boiler you are looking at having to pay out of your own pockets £300/£400, and in another neighbouring borough that figure may be over £1,000. That variability, in terms of the amount of capital contribution you are going to have to make yourself towards the cost of those measures is very difficult.

In the context of what the Mayor could do and what London could do is have a universal top-up scheme, which would essentially pay the difference between what the supplier is willing to provide for the cost of the measure and what the market rate for that measure is. A universal top-up service, particularly for low income households that do not stand a chance of being able to fund the variance or the capital contribution that is required in schemes. That could be done at a GLA level, albeit the top-up for the capital contributions could be sought by the boroughs.

**Caroline Russell AM (Deputy Chair):** That is an idea for the Mayor. Does anyone have anything else on that? If not, I will move swiftly on?

**Bevan Jones (Managing Director, Sustainable Homes):** Just quickly on retrofit, I was going to say that it does not matter how well you retrofit or what you do in your retrofit; we still find that around 30% to 35% of people do not know how to use their controls in their home. It does not matter what you retrofit or what you put in. If they do not know how to operate their home, that retrofit goes out the window.

**Caroline Russell AM (Deputy Chair):** Information and advice and education for recipients of retrofit measures?

**Bevan Jones (Managing Director, Sustainable Homes):** It is a little bit more than that. We are talking about carrot and stick with landlords. There is carrot and stick with users as well. There has to be an understanding that, "Yes, my home is lovely and retrofitted, but if I do not use it properly I know I am still going to get a high bill and then I go back and blame whoever has retrofitted it for me getting a high bill". There has to be that intense user engagement and follow up. You can give someone the training in October and then follow up in December and they have reverted back to their old behaviours, then your retrofit is pointless.

**Leonie Cooper AM (Chair):** The Mayor's desire to have zero-carbon homes will not be achieved if we do not put tenants who do not lead a 12-tonnes of carbon lifestyle in them. We need to help people achieve a zero-carbon lifestyle as well as making homes that are able to be zero-carbon?

**Bevan Jones (Managing Director, Sustainable Homes):** Yes.

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** I want to make a broader point about ECO, back to what Peter [Smith] said about the amount of money absolutely not being sufficient. The ECO used to be much higher. It used to be in the billions of pounds. We are now looking at hundreds of millions of pounds across the whole country. If you think about the fact that to retrofit a home up to a good standard it costs about £4,000 on average, if you divide that between the whole country it is very little money. I would say that the Government has relatively recently recognised energy efficiency as infrastructure, which is a new thing. They have never done that before. That is something where many people here were part of a campaign to get the Government to do that and the Mayor when he was an MP supported that campaign. I would urge you to urge the Mayor to call on Government - now that they have recognised energy efficiency as infrastructure - to put some of the £120 billion infrastructure budget into insulating homes across the country, particularly in London because we need more cash from Government to insulate homes.

**Leonie Cooper AM (Chair):** The Energy Bill Revolution campaign.

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** Absolutely.

**Caroline Russell AM (Deputy Chair):** Is there anything that could be done with the Green Deal, maybe a non-profit version that would galvanise more retrofit.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** Rather than say there is something to be done with Green Deal, because I would be leading the Committee up the garden path to an ambush - mixing my metaphors - revisiting the pay-as-you-save model is a perfectly credible place to start. We could be here all day talking about why Green Deal did not work and so on but --

**Leonie Cooper AM (Chair):** Let us not.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** -- I do not think we need to bother with that.

**Leonie Cooper AM (Chair):** Let us just say the 7% interest rate on the loans sank it.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** The pay-as-you-save model is a perfectly credible platform as long as we do not overcomplicate it, as long as we do not make it more expensive, and to Bevan's earlier point, that it is a two-way process. Those in receipt also know that they have to put something into the pot, not necessarily financially.

**Leonie Cooper AM (Chair):** Nicky Gavron wants to come in now to specifically ask some questions about domestic and community generation.

**Nicky Gavron AM:** This section is about community energy from renewables and also about home scale from renewables. I want to ask as an opener what could, can and should be done to encourage more home scale and community generation from renewables.

**Giovanna Speciale (Co-Founder and Chief Executive Officer, SELCE):** I should perhaps explain the community energy model for the benefit of the panel. Essentially, SELCE works in the same way as most community groups work, and Repowering London. The model is the same. Essentially, we find places to put renewable energy, in the case of our organisation, solar panels. Once the solar panels are up there they generate a revenue stream. That revenue stream comes from three sources: the feed-in tariff, sales of electricity at a reduced rate relative to grid feed electricity; to the building; and also sales of electricity that is not used by the building to the grid.

That generates a revenue stream that allows us to maintain the solar array at peak efficiency. Also, to pay our investors we raise the finance for those solar panels by inviting people to invest. We pay our investors a small return on their investment and also put some money aside to a social fund and the social fund in the case of SELCE and in the case of Repowering London is very much targeted at tackling fuel poverty. That is the model. SELCE has raised £370,000 from the local community, mostly Londoners, to install 326-kilowatt peak of solar panels across seven local schools. That will generate a fuel poverty fund of £130,000 across 20 years. It will result in savings to those schools of £445,000 because we charge them less for the electricity than they are charged from the grid and also carbon emission reductions of about 146 tonnes per year. There are multiple benefits.

**Nicky Gavron AM:** Can I ask one question? It is really very interesting. The energy or the electricity is for the schools' use. Is there a model where people can put an array up or perhaps have shares in an array and get electricity back for themselves? So they don't have the solar on their roof or whatever.

**Giovanna Speciale (Co-Founder and Chief Executive Officer, SELCE):** Currently, no. There are barriers to doing this at the domestic level. The barriers are multiple. The set up costs of any solar scheme are high simply because the legal costs of putting in place legal agreements that will protect all parties over the course of 20 years. Also, we put in place two legal agreements. One is a lease agreement. We lease the roof space above a building but we also put in place a power purchase agreement with the schools, so they guarantee to buy the electricity from the solar power panels at a particular rate for 20 years. You cannot do that at domestic level. You cannot bind a householder into buying electricity from your solar panels for 20 years. There are Ofgem (Office of Gas and Electricity Markets) guidelines against doing that but, also, I imagine there are very few householders who would be willing to do that.

The barriers to working at domestic level are cost barriers because you need a large scheme to spread the upfront capital costs, the upfront legal costs across a scheme, but also practical. There is an additional barrier in that the feed-in tariff has recently dropped substantially. It is making any future schemes much more difficult. In essence, the Feed-In Tariff was a central part of the revenue stream that drove this win/win process. The Feed-In Tariff has dropped from 11.7 pence to, it depends on the size of the array, 2.7 pence, which is a massive drop in revenue stream.

This means that this model is theoretically possible but we cannot provide savings for schools. It would be possible under the circumstance where a building was willing to pay the same as they pay for grid feed electricity, and we do not put anything aside in our fuel poverty pot. That's not the same model.

**Afsheen Kabir Rashid (Chief Operating Officer, Repowering London):** I would like to come in just to add to a few of the bits that you have been talking about. Just to put into context community energy is not just about energy generation. The principles of community energy are around community ownership, community benefit and, if you take it further, community management. To me our starting point has been generation because it had a financially viable income stream, thanks to the Feed-In Tariff. Community energy existed even before the Feed-In Tariff through a lot of the initiatives, a lot of community energy groups giving direct fuel poverty switching advice, raising awareness about what could be done in your home, the simple top ten measures.

Community energy has gone through a journey over the last four years where we have seen ups and downs with the policy, in terms of introduction of Feed-In Tariff, reduction of the Feed-In Tariff, again further reduction of the Feed-In Tariff, in response to the market changes in terms of the cost of solar panels, which has also been going down.

There has been quite a huge focus in the last couple of years on generation, primarily because you are able to pay people to do things and continue the work and develop the scheme and you are able to create this fund that can go into the community - the one that we are talking about. Ultimately, I know many community energy groups, while they are starting off with generation want to be able to supply that energy that they are generating to local people. That is a shortfall in our model in the current place and to meet that shortfall, because we could not supply the electricity to the 80 flats that sat under Brixton Energy Solar 1, we said, "We are going to keep aside some of that extra income towards a community fund and that will go towards helping the fuel poverty and implementing energy saving measures in that home.

The climate has changed. The Feed-In Tariff has dropped significantly. We are having to be very picky about the sites that we select because not all sites will stack up economically, financially, we are having to be selective. The challenge of creating a substantial community fund, to warrant all that upfront investment, is

becoming challenging and so we are having to weigh that balance off as well. Ideally, we want to move to a place where we can work with energy suppliers or work with an energy supply company, one of the independent ones, to be able to create an offer in which we can use our generational capacity and provide electricity. Local people benefit from that local generation at an affordable price, not something that is unrealistic. Currently, what happens is that a lot of our electricity gets sold back to the grid at 4 pence, whereas that resident living in the very same block is buying that electricity at 13 pence and paying standing charges on top of that.

How can we close that gap? How can we be able to supply that electricity directly to those residents? This is what the model now for community energy is evolving into. It is about looking at how we can integrate storage so we can create more value for the user onsite, how we can integrate with smart meters so we can encourage people to use their energy more efficiently and how we can tap into the demand flexibility market. That is when the users are not using it; we are selling it to the grid but there is a value for that - it is not just going back into the grid for 4 pence - depending on the time of day. There is a more sophisticated model that we are looking to develop.

Currently a lot of us - very few of us, actually - are at the stage of trialling these and starting discussions with the district network operator (DNO), UK Power Networks, and some of the supply companies. One of those supply companies, Tempus, had quite a unique offering in the marketplace. However, it was too far ahead of the curve and had to roll back. The market is not quite yet ready.

**Nicky Gavron AM:** We have had two different models here and, Afsheen, you have just been saying that we want a more sophisticated model. Both of you are talking about solar, correct?

**Afsheen Kabir Rashid (Chief Operating Officer, Repowering London):** To me, the principle can apply to any technology.

**Nicky Gavron AM:** There could be models using other fuel sources.

**Giovanna Speciale (Co-Founder and Chief Executive Officer, SELCE):** Yes. We are doing some feasibility on renewable heat. It is the same model. Essentially, you are raising finance from the communities. You are encouraging the community to lend you money so that you can install some renewable energy and that energy brings benefits to the building and to the community.

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** I would briefly suggest the Committee might want to look at examples of other European cities - I am thinking in particular of Gröningen in the Netherlands - when the consumer becomes a prosumer and is able to sell back to the grid, using smart technology, what they generate on top of their own house. The regulatory environment allows them to do that. That is both financially beneficial to them and is an important part of getting consumers used to and engaged with the idea of buying energy in different ways, which gets us to a place that perhaps people like Tempus, which you mentioned was offering time-of-use tariffs that perhaps were slightly ahead of where people were, have reached. We know that there is huge appetite among consumers to use time-of-use tariffs and often it is community projects that galvanise them into seeing directly, "When the sun is shining and I use my energy, I benefit", as well as a sense of being self-sustainable as a community.

**Peter Smith (Director of Policy & Research, National Energy Action):** I would just like to say two quick points. One is that one of the many reasons I applaud the work that is being done in terms of this energy services arrangement, one of the reasons that it is evident and that we are reliant on middle agents, if you will,

to do these types of projects, particularly for low-income households, is that the incentives that exist are operational. You get paid per kilowatt hour. You do not get a capital grant to invest in that technology upfront. That is for the Feed-In Tariff and it is also the same for the Renewable Heat Incentive. That presents a real, acute issue from a fuel poverty perspective because low-income households do not have the capital to invest in that kit upfront and therefore to benefit from the operational subsidy thereafter. What these guys do is essentially capitalise the future value of that operational incentive to bang the kit in and then take a share, and it is great that there is a fund.

One of the things that is happening is that with some of the rent-a-roof schemes that were installed, particularly on social housing, the tenants there were told, "Look, you will get this free electricity", but they are not in a position to harness that or use that because they are out during the day when the sun is shining. One of the technological solutions to that that is coming through and I know UK Power Networks is very interested in domestic energy storage, which not only means that the household is able to get the value out of that free electricity but equally it solves some of the grid constraints associated with small-scale embedded generation, particularly solar, where you are in an unpredictable way pushing unpredictable amounts of power back up the network. It solves that grid constraint from the DNO's perspective and also helps the householder. Looking at storage --

**Leonie Cooper AM (Chair):** My understanding, though, at the moment is that the battery backup for the storage is quite expensive. I was talking to somebody about Energise Barnsley, where there is a Government-funded project that is in the making at the moment and is about to be installed, but the cost of battery storage on a domestic scale is probably too high currently.

**Peter Smith (Director of Policy & Research, National Energy Action):** We are doing technical trials through the Technical Innovation Fund in Camden and we have been able to bring down the capital cost on the units quite significantly by bulk purchase.

**Leonie Cooper AM (Chair):** To roughly how much?

**Peter Smith (Director of Policy & Research, National Energy Action):** I would not want to say because we are using a range of technologies but essentially we are able to shave some significant costs, 15% to 20%, off the capital value of these units. I will happily share the figures after the meeting.

**Leonie Cooper AM (Chair):** That would be very helpful. If we are going to collate something into a report, which is why I mentioned Energise Barnsley and what they are doing there, if you also have examples from Camden to make some suggestions about how the Mayor could potentially take this forward through Energy for Londoners, it would be really helpful to have the latest cutting-edge details.

**Peter Smith (Director of Policy & Research, National Energy Action):** Sure.

**Leonie Cooper AM (Chair):** Thank you.

**Philip Sellwood (Chief Executive, Energy Saving Trust Service):** I was just going to reinforce what Claire [Maugham] was saying particularly. There are places that are not London that are getting on with this agenda, some of them nearer to home. For instance, Birmingham has commissioned a citywide initiative to map both solar and renewable heat opportunities for the municipal authority, whether it is to rent those roofs or whether it is to encourage the private sector into more community energy arrangements along the lines that have been talked about. There is a leadership role for the Mayor there.

Specifically - I do not know the details but I am sure we can access them - cities like Sydney and Brisbane are way ahead of us on domestic battery storage. They are talking about levels of cost that suddenly start to make storage and photovoltaics (PV) very interesting. Interestingly enough, they are looking at it from a community point of view, not necessarily from an industrial/commercial point of view. There are emerging areas in other cities that we should look at.

**Nicky Gavron AM:** Is it possible, do you think, to put individual, home-scale renewable energy generation - or even street-scale - together with energy efficiency measures? Do you think that might work? Does anyone have any experience of that?

**Peter Smith (Director of Policy & Research, National Energy Action):** Absolutely. As I have mentioned, we are doing a range of technical innovation trials at the moment that are looking to integrate microgeneration and some small-scale community generation alongside energy efficiency. In the context of district heating, for instance, often a way of extending a district heating network or the capacity of a district heating network is to retrofit buildings that it is already connected to. That creates a bit of headroom in terms of the capacity for the hot water and that can then be used in other buildings. The two are mutually reinforcing.

The challenge is, at a contracting level, having the contracting framework to be able to do it all in one hit. We talk about the comprehensive house retrofits that perhaps include insulation and some degree of microgeneration. There are not that many organisations that can pull all of that together and project manage it on a house-by-house basis. There are opportunities for contracting companies in London to do just that.

**Nicky Gavron AM:** That is interesting. I am just remembering Woking. There, a whole street - I do not know how much it was linked with energy efficiency measures - were offered solar roof panels and many took it up, with one inverter for the street. They saved a lot of money because the inverter is quite an expensive part of the solar kit, as I understand it.

**Philip Sellwood (Chief Executive, Energy Saving Trust Service):** Just to add one caveat, there are many areas where technically it is already possible to combine basic and sophisticated energy efficiency with small-scale renewables. To Bevan's [Jones] well-made point - there is no such thing as a smart home. There are smart people. If all we do is become technologically determinist, we will not engage communities and we will not engage individuals. That is, I believe, the wrong way to go.

**Nicky Gavron AM:** The final part of this because we must move on: what can the Mayor do? There is Energy for Londoners. That is there, emerging. What can the Mayor do through that? What can the Mayor do through promoting, as he is going to, a solar plan for London? What can the Mayor do there? What can the Mayor do through the London Plan, for instance, in terms of promoting technologies?

**Afsheen Kabir Rashid (Chief Operating Officer, Repowering London):** I can kick off with a few bits here. One of our challenges has been working with local authorities and convincing them that this is something that they should be actively promoting. There have been a few leaders in this space, like Lambeth Council and Hackney Council; however, even among them it has been quite a challenge to promote these initiatives and support community energy.

One of the things that the Mayor can do is by leading in this area and allowing community energy groups to develop projects on assets that are owned by Transport for London (TfL) or the GLA. This will help develop templates and the standardisation of lease agreements and power purchase agreements that will give local

authorities and other public sector bodies the confidence to adapt them and adopt them as their own as well and sign off on them, because a lot of our time is spent on the building-owner lease negotiations. That is one key area, standardisation of legal documents.

Overall, a strategy or some policy statement that encourages local authorities to take this on more, but also brokering relationships with commercial developers as well. Beside social landlords and the local authorities, there is a huge amount of commercial property in London that has huge potential. That is a unique relationship that can be brokered by the Mayor.

I see Energy for Londoners providing real value for community energy groups in terms of buying the energy generation assets and being able to provide that benefit to residents at affordable prices. I do, however, promote quite strongly a community energy approach in terms of energy supply. I know you mentioned about local authorities being able to set up supply companies themselves, which is great, but there is a collaboration to be had with community energy if we are to get this right and to get the model right. I hope that Energy for Londoners does not take too long to get established because we need a new marketplace today rather than two years or three years down the line. We need some intervention now.

**Giovanna Speciale (Co-Founder and Chief Executive Officer, SELCE):** Can I endorse everything Afsheen has said? In addition, dare I suggest a London Feed-In Tariff? We are so far behind other European cities in terms of renewables. Perhaps a London Renewable Heat Incentive because I imagine that is going to drop come the Autumn Statement [2016].

I can only endorse everything Afsheen has said about the difficulty of finding sites. The negotiations that are required are extensive. Certainly the Mayor could help with identifying sites and in fact identifying commercial sites that are willing to pay a slightly higher per kilowatt charge to support community energy.

The Urban Community Energy Fund has just been scrapped. That paid for feasibility studies. Without that, we would have experienced extreme difficulty in putting in place the schemes that we have put in place. It is slightly galling because the Rural Community Energy Fund still exists. May I suggest the Mayor of London put something in place to help groups like ourselves pay the feasibility costs? Yes, I do share the vision with you that we would be able to work at street level with groups and residents to use renewable energy for their benefit but currently we are facing massive challenges. Particularly the smaller groups are facing massive challenges.

Another thing that would help is to help to establish a Community Energy London forum in which we can share best practice. There are lots of groups who are under-scale at the moment. You have to scale up very quickly to become a viable community energy enterprise. There are lots of groups that are too small and they need to be supported.

**Nicky Gavron AM:** Could they be aggregated or would that not work?

**Giovanna Speciale (Co-Founder and Chief Executive Officer, SELCE):** Yes, there are things we could do. We are supporting a number of community groups. We are managing their assets for them because they do not have the capacity to do that. We need London-wide co-operation.

**Leonie Cooper AM (Chair):** We need scale but we have also talked about community energy being very local. We need to be careful not to lose the benefit of having the very localised input from the community energy groups. I believe the GLA has already given some support to Community Energy England during

Community Energy Fortnight to hold a session on the idea of setting up Community Energy London. That does need to be taken forward. You have raised the issue of the collaborations between community energy groups, maybe via Community Energy London, and local authorities. That is something that could be brokered by the Mayor or through Energy for Londoners.

The issue of a London Feed-In Tariff would definitely have to be something that Energy for Londoners decided to incorporate into its business model. If it is talking about buying and selling power then it could incorporate that, potentially, as part of what it is doing. I just saw that Bevan also wants to come in.

**Bevan Jones (Managing Director, Sustainable Homes):** Three quick points. Allowable Solutions is one where developers and housebuilders who cannot put renewable energies onto their site should pay into a fund that is managed across London. Local authorities should have a suite of assets and schemes which that money can then be put towards to create renewable energy projects. Allowable Solutions needs to be rolled out, probably --

**Nicky Gavron AM:** London's Carbon Offset Fund, yes? It will be like the Carbon Offset Fund for new build, which goes to boroughs?

**Bevan Jones (Managing Director, Sustainable Homes):** Yes. Sorry, I am using an old term. The best thing to do is that that is where your money comes from. Developers, particularly those who are building homes, in the past have had to shoehorn renewable energy onto their scheme, which gives renewable energy a bad name because with something as simple as solar panels they go, "I have to squeeze these solar panels on and that messes with my design. Then I cannot put my penthouse on the top", and so on. Reduce the solar on that scheme and put the money into a fund that the local authorities can access easily. They can say, "I have a school. I have this and this. This is my asset. I can then use that for community energy", and there is however much money from that pot for a feasibility study.

**Nicky Gavron AM:** That is very interesting. You have to have the expertise to be able to understand the energy performance of the new build and know exactly how much, at £60 a tonne, is being offset for all the carbon you do not reduce. The best example at the moment is in the London Borough of Islington, which has already raised, theoretically, £9 million. It is about £2 million that has been connected. It is targeting it on energy efficiency, I believe.

**Bevan Jones (Managing Director, Sustainable Homes):** Yes.

**Nicky Gavron AM:** You are suggesting targeting it on renewable energy, which is interesting.

**Bevan Jones (Managing Director, Sustainable Homes):** I am just saying as part of it, yes.

**Leonie Cooper AM (Chair):** I know this is something that Nicky has raised with me before. Certainly having some way of co-ordinating a London Carbon Offset Fund that is more effectively used --

**Nicky Gavron AM:** In conjunction with boroughs. I do not think we need to take the incentives away from boroughs.

**Bevan Jones (Managing Director, Sustainable Homes):** If the issue is finding assets, then if the boroughs and housing associations are the people who are holding assets that you could quite easily put solar on, we should know about it.

Sorry, just two more points. For Energy for Londoners to be part of this and for it to work properly to help reduce fuel poverty and help increase energy efficiency, it has to have community energy expertise sitting within it somewhere. At Sustainable Homes obviously we have been talking to the GLA about a few things but we think that Energy for Londoners should be tied to Homes for Londoners and they should be the same or co-funded businesses. If you are leasing homes at a low cost, you could do something to those homes that ties someone to an energy tariff that is the “pay-as-you-save” model, which then allows you to retrofit the home at a certain speed and scale. Obviously we are in initial thoughts on this. It is just an idea but we think there is utility in tying those two businesses together somehow so that you can have community energy or you can have deep retrofit on older and existing homes, which might be in the mix.

**Leonie Cooper AM (Chair):** We did talk to Shirley Rodrigues [Deputy Mayor for Environment and Energy] at our October meeting and the transcript of that is available. We specifically raised the issue of how she would be working, as she is the Deputy Mayor for Environment and Energy, with the Deputy Mayor for Housing and Residential Development, and how closely and how meshed together the roles of her team would be with the people working with the Deputy Mayor for Housing and Residential Development, James Murray, and obviously the Deputy Mayor for Planning, Regeneration and Skills, Jules Pipe. There are a number of different areas where they need to be working very closely together and she did assure us that that is going forward. Energy for Londoners is going to be separate from Homes for Londoners but there is an assurance that in the building there is going to be some close working going on.

**Shaun Bailey AM:** We know that people can make a difference in the energy they use by changing their behaviour. How exactly could the Mayor be involved in that education process, leading people down there? I was quite interested early on when the concept of a carrot and a stick for energy users, not just landlords, was entered.

**Philip Sellwood (Chief Executive, Energy Saving Trust Service):** I am not sure this directly answers your question in terms of what the Mayor can do but just to offer what we think is a more engaging way of providing certainly carrots and, yes, sticks too, to individual householders to change behaviours, one of the things that we have published quite a lot of research on - we would be very happy to share it with the Committee - is something that rather strangely started its life as a concept called “trigger points” and very rapidly became, thankfully, a view of how people change their behaviour at certain life stages.

People generally do not wake up in the morning thinking about energy efficiency. I do but I am probably exceptional in that way. They do wake up thinking, “I am going to refurbish the bathroom. I am going to put an extension on my house”. Perhaps elderly parents are moving back into the home. There may be a life stage in terms of children that triggers an activity in terms of extending that home. The evidence is pretty compelling that when people are prepared to make those activities around those life stages, that is the point at which they are very well aware of the opportunity of putting energy efficiency into that scope. They are already spending a very large sum of capital money and [it is] another £1,000 on a £10,000 or £15,000 project, if you are an ‘able to pay’ customer.

It seems to incentivise people to not only change their behaviour in terms of what they are willing to invest in but that also seems to trigger further behavioural change. Once you have put in those energy efficient measures, the evidence seems to lead to people living different lifestyles within those properties, whether that is showers that people are now taking with the right sort of time involved or whether that is using the heating control systems more adequately because that is 75% of your energy bill, potentially. All of these things mean that there are some fairly well-trialled pieces of evidence to suggest that if we can capture people at the right

point in their life - this goes for Londoners as well as for anyone else - then there is an opportunity. That does require a set of heavy lifting in terms of making people aware at that point of their activity that they can take those actions.

**Leonie Cooper AM (Chair):** It is an interesting point, Philip, that you are making there about capturing people when there is some sort of change in their life circumstances. I know there are a number of housing associations who have run specific projects so that at the point when a tenant moves into a new property, they have created DVDs so that people can play them so that as they do the tenancy sign-up to move into somewhere new, they watch a DVD all about energy efficiency arrangements and installs.

I would like everyone to turn around to see our new set of guests who have just arrived, many of whom are wearing red. We are going to wave to you now and we are going to say hello to Christchurch Primary School, who have come all the way from Redbridge to join us today. Hello.

Coming back to Claire, she is going to talk about the answer to Shaun's [Bailey AM] question about either what the Mayor can do or what people individually can do.

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** Yes, absolutely. Philip [Sellwood] is absolutely right that this has to be a revolution in behaviour and empowerment, not just a revolution in technology. Consumers have struggled with engaging. Even those who have been keeping a very close eye on their bills and who are not going around wasting energy. We know that people particularly in fuel poverty are not going around wasting energy but they have not historically had the immediate visibility of what they are doing, let alone other tools such as tariffs and incentives and other ways of even gamifying the way we use energy, visualising within a community or visualising it within a family.

With smart meters being fitted in every home by every energy supplier by 2020, that is a major point at which this can be triggered. The changes have to be made with a very deep understanding of the academic thinking behind behaviour change. We have published a white paper, *A Smart Route to Change*, which brings these together, and I wonder if the Mayor would like to consider some of the learnings in that in designing how Energy for Londoners can ensure that if it becomes a supplier, that behaviour change is at the heart of how it does it. In Nottingham, for example, they appointed a behaviour change specialist to work with their energy team in setting up their own licensed energy supplier. The smart meter is the starting point. We know that after a smart meter is fitted, eight in ten people reduce their energy usage and people who are using too little often use more. It's about appropriate energy use.

**Leonie Cooper AM (Chair):** Sorry, can I just capture that? Do 80% of people reduce their energy usage after they have a smart meter installed?

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** Eight in ten people take steps to reduce their energy use, yes. Aware as we all are of turning off lights, often just the act of measuring something and seeing it makes you do it. I do not know if any of you have worn a Fitbit. You do not need to be told when you have gone for a walk but somehow just the act of measuring incentivises you. Interestingly, the number of steps people are taking to change their behaviour increases the longer they have had their smart meter. People are carrying on looking at them, time after time. There is a lot the Mayor and the boroughs could do, people who understand their communities very well, to communicate how these devices can be used, how information can be shared and how peer-to-peer learning such as the national network of charities and other bodies that NEA is working with us to co-ordinate can be brought into this.

**Peter Smith (Director of Policy & Research, National Energy Action):** Can I just say a little bit about that? The Smart Energy GB in Communities project is something we are running in conjunction with Smart Energy GB, which is hopefully a big opportunity for the boroughs and the GLA to co-ordinate people's enthusiasm around getting involved in that programme. That provides some funds for people and some training for people to get up to speed about the benefits of smart meters, do a bit of frequently-asked-questions in terms of understanding often the questions that people are going to get asked about the smart meter rollout. What is the benefit of them? We think it is particularly an end to estimated billing, which is often the reason that people ration their energy use. There is a lot that the Mayor and his Deputy Mayor for Environment and Energy could do to encourage the boroughs to get involved in that programme.

We also run another national programme alongside BEIS on the big energy-saving networks. This is a broader programme. It does look at smart meters but it also gives practical advice to people about the right tariffs, information about being on the priority services register and a bit of information about energy saving, and it tries to provide community champions, again, with the information they need to be able to be front-of-house if they get asked any questions about the range of things people can do to save energy in their homes, get the best tariff and take advantage of the smart meter rollout. Both of those national programmes are applicable in London and we hope that the Mayor would recognise the benefit of working with us to get the message out there about them.

**Shaun Bailey AM:** Maybe I am getting the wrong end of the stick here. There seems to be an assumption that people will engage with their local authority and that they care. The only time I have engaged with a local authority is because of my job or because somebody does not come and get the bins. I am looking for that behavioural change that is a bit more universal. I am not going to engage with somebody and ask them about my bill.

The meter stands a chance and I am happy to hear that it is an ongoing thing and is not just a flash, but what else can be done? What is not being done? Where is the blue-sky thinking? Where is the practical day-to-day stuff that actual functioning adults will engage with?

**Giovanna Speciale (Co-Founder and Chief Executive Officer, SELCE):** This discussion is about energy prices and tariffs and we have a systemic issue here. If you are going to get the best energy price, you have to switch every year. Energy companies offer their best prices to their new customers. This systematically disadvantages anyone who is not IT literate, who lives a chaotic lifestyle, who is not confident to do that or who is loyal to their energy company. In other words, it disadvantages those who are most vulnerable.

**Shaun Bailey AM:** It disadvantages everyone.

**Bevan Jones (Managing Director, Sustainable Homes):** In relation to this point and the next point on tariffs as well. It is carrot and stick. Let us keep it positive. We have to incentivise people through their bills. Catalyst, where I used to work, was involved in the Big Energy Saving Network and we found it very successful. On average we saved people just under £200 through switching and we saw switching as a foot-in-the-door to talking about energy efficiency, spotting if they were on the right benefits, seeing if they had any mould in their kitchens and things like that. We used it as a tool to do that.

The flipside of that is that, out of the 300-odd people we spoke to, I can honestly tell you that about ten of them understood their bill. That is one thing. You have to incentivise people through their bills. If they get a bill, there are five things on that bill that they need to understand: how much they are going to pay; how much

they have used; what tariff they are on; how long it lasts; and ways to pay. Honestly, they look at the number, put it to one side and think, "I will pay it when I pay it", and there is no engagement with that bill.

If there is some incentivisation built into that and if the energy companies through a Mayor's pledge that energy companies operate in London pledge to incentivise energy reduction or whatever, it is the only way that people are going to start paying attention and saying, "Yes, I am going to do something about it". Shaun [Bailey AM] is completely right in that people are not going to take that extra step and go to talk to their local authority if they only talk to them about council tax. I do not really want to phone them up every time and be on hold.

The last thing I will say is that you incentivise through the bill and this is the age where individuals have the most information available at their fingertips. For want of a better example, the reason why something like Uber has been successful is because it has developed an app that is instinctive and easy to use. There is a lot to be said for app technology for bills and app technology for encouraging energy efficiency, but what companies like Uber have done is they have taken a bit of kit, essentially, and have done some programming that just makes it intuitive for people to use. Unfortunately, what we have at the minute are app systems and ways of engaging with energy companies and landlords that are not intuitive, require you to be on the phone, require you to write an email. It is those types of technologies that should be brought in this field.

**Leonie Cooper AM (Chair):** Improving the interface between the energy companies and everyone who uses - which is all of us - their services to have gas and electricity.

**Shaun Bailey AM:** It really needs simplification. I do not want any more interface with my energy company. I want to just see what is happening. See these smart meters? Do they have a big red light on them when I cross a threshold?

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** They have red-amber-green. It is very simple. You do not need to have Wi-Fi in the home. The energy supplier has to offer this very simple device. It is very visible. You know exactly how much you have spent currently, per hour, per week and per month.

I just wanted to pick up on your excellent question about innovation and just make the point to the Committee that it does not have to be a licensed energy supplier that is able, with the consumer's permission, to use that data. Exactly as with a smartphone, with permission, the possibilities are endless. London's innovators could take this data that we will now have from people's homes and think about how it could be used to innovate in social care, in healthcare or in gamifying communities getting greener. Really, we have not seen who might be the Uber in this market, but the meter is just the start. What happens in the home is important but as a platform and as an enabler for further innovation.

**Leonie Cooper AM (Chair):** I feel that you are all throwing down a bit of a challenge there for some innovation on how we can better use the data on our energy usage here individually. I am going to move on to Jennette, who is going to talk a bit about tariffs and energy prices. This is going to be our last section and so thank you very much for being with us so far.

**Jennette Arnold OBE AM:** I have some questions on energy prices and tariffs. Can I say through you, Chair, and thank Philip Sellwood? He has given me the phrase today that I shall leave with in that there is no such thing as a smart home. What we need are smart people, Philip. Thank you for that. It seems to me that that feeds in, really, to what most of our witnesses have talked about one way or another about this absolute need

for education linked with changed behaviours. I am in the midst of changing my behaviour in having a smart meter.

In terms of changing behaviour, I just wanted to say to Bevan [Jones], and share this story with you. My mother was opposed to winter clothing. She was a proper Caribbean woman. Winter came and she wanted to ignore it and, when she felt cold, she just put [the heating] up another level. I spent my life trying to get her to put on a cardigan and she thought that this was just not for her.

I was wondering whether or not in your work you are picking up these ethnic differences. We talk generally about the disadvantaged and people on low incomes, but it just came to me when you were talking about a population of Caribbeans or Africans in London who may well be some of the highest energy users because of their lifestyle choices in terms of clothing. Have you met this in some homes?

**Bevan Jones (Managing Director, Sustainable Homes):** I have met it across all ethnic groups, to be honest. In previous roles when I have gone in and given energy advice and someone has said they are cold and they are wearing flip-flops, a t-shirt and shorts in December, this is when I have stopped giving energy advice quite quickly. I could not just go in and say, "Put on a jumper". What I have to do is to give them something that incentivises them and say, "If you put on that jumper and put on those tracksuit bottoms and if this behaviour change leads to a £400 saving a year, plus you switch and that turns into £600, you could go on holiday or you could go out for dinner". At Catalyst, we used to couch this behaviour in those terms because people would say, "Brilliant. I have saved some money off my energy bill", but they would not get a cheque saying, "You have switched and you have saved £250". They would see it at some point maybe in the future if they read their bills. What we used to do was couch it in terms of saying, "This is worth an extra £40 a month to you. What could you do with that £40 a month? Could you take the kids to the cinema?" We used to try to route it back into normal, everyday behaviour when they were saying, "I wish we could go to the cinema. I wish we could do this".

**Jennette Arnold OBE AM:** That brings us to that great point you made about incentivising users by getting them to "own" the bill and then, through that, get engaged with their supplier. What role could the Mayor play in this? Could we see him reading his own electricity bill or gas bill?

**Bevan Jones (Managing Director, Sustainable Homes):** Either this comes through Energy for Londoners or it comes through working with the energy suppliers that supply homes in London. There are ways there to incentivise people. This is, again, where the energy companies need to be a bit more creative themselves. We do not want people under-heating their homes simply to get an incentive and so they would have to be very clever about it but, "If you do this, you could see this on your end-of-year statement and we could give you a bonus on your next switch", or, "If you stay with us and sign up for another year, we will match the cheapest tariff on the market". There could be things like that where incentivisation is made simple and you are not having to keep interacting with the energy company. You want to have just one interaction, get your direct debit taken every month or bill every quarter and then just get on with your life. There needs to be some thought around how to do that.

Some companies have done it. If you go onto a switching website, some companies will pay you interest on any overpayments you have made in the year and so that might breed some brand loyalty, although if the year after that their tariffs go up it is a bit pointless. There are some that give you extra Nectar points. Personally, I do not see any utility in that. I want to see money off my bill and I want to be rewarded for being energy-efficient but having a comfortable home. There are incentives out there already. I am not sure that they have captured the public's imagination, but this is where the Mayor could get energy companies to sign

up to a pledge working with Energy for Londoners or Energy for Londoners itself could offer this type of incentive for behaviour change.

**Jennette Arnold OBE AM:** Thank you for those ideas. Can anybody speak to me about the role of the prepayment meter in fuel poverty? I represent Londoners who are most vulnerable in terms of being caught up in the fuel poverty trap and have no option at the moment but to live with these prepayment meters, which have some of the highest tariffs. Is it not quite disgusting that the least able are forced to have a system that is taking the most out of their pockets and, indeed, out of the benefits that they pick up?

**Peter Smith (Director of Policy & Research, National Energy Action):** It would maybe be useful to give you an indication of the scale of prepayments in London. Yes?

**Jennette Arnold OBE AM:** Yes, quickly.

**Peter Smith (Director of Policy & Research, National Energy Action):** About 15% of Londoners have a gas prepayment meter and 19% of Londoners have an electricity prepayment meter. In absolute terms, there are 617,000 domestic electricity prepayment meters and 496,000 gas prepayment meters.

The Competition Markets Authority (CMA) has recently undertaken a market investigation looking at the energy industry and that found that there is a huge difference between the best deals in the market, which tend to be fixed direct-debit deals, versus a household that is on prepayment, particularly a household that is on prepayment but often goes into emergency credit and also has to pay down large standing charges on arrears as well as being on a prepayment meter. There is a huge difference. There is something like a £250 to £350 swing in the difference between that.

There are some households in London that will be on a prepayment meter because it is convenient, they want to be on that payment type and they find it useful for budgeting purposes. Equally, there are other Londoners who will be in that position because they have a very poor credit history, they have run into energy debt, it has stood there for some time and then the supplier has automatically put, under warrant, them on a prepayment meter. Essentially, that is the scale of the issue in London.

In terms of what that might look like in terms of how much Londoners are being overcharged, there is going to be a prepayment meter cap set by the CMA so that you are not going to be overcharged. That is going to reduce bills by about £75 per customer, which is a very positive step. There are some question marks about whether or not you will get that if you are on a SMETS 2 (Smart Meter Equipment Technical Specification) prepayment smart meter and so there is an issue there. However, overall, there is still going to be a big variance with a gap of over £200 potentially still that Londoners will be paying.

If you bundle all of that up, given how many people are on prepayment meters in London, you are looking at something approaching £100 million that people would be spending as a result of being on that payment type in London. As I have said, some households will want that, but that is the value of the difference between households being on the cheapest tariffs, direct debit, fixed, versus those on prepayment. I hope that that gives you some indication of the scale of the issue that we are talking about.

**Jennette Arnold OBE AM:** Yes, because if you were to stay with people in receipt of benefits, it is benefits coming out of one Government pot and going straight into the hands of the market, which --

**Peter Smith (Director of Policy & Research, National Energy Action):** Yes, particularly to pay down large energy arrears. Energy arrears really cripple local communities in terms of the economic activity within them. The impact of the household receiving benefits and then having to straight away pay out large energy arrears means that they are not going to spend in the local community, which has a knock-on impact on the local shopkeeper, etc. There is a ripple effect as a result of people being indebted that is absolutely clear. Simply, the converse is true.

**Jennette Arnold OBE AM:** Claire, Peter has put the overall narrative so well. Is there a role for Energy for Londoners in this area?

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** Absolutely. There is a real opportunity for Energy for Londoners here and Peter is absolutely right. Analogue technology benefits nobody but, for prepayment customers, the inconvenience as well as the huge expense in this day and age is just extraordinary.

**Jennette Arnold OBE AM:** Give us some ideas.

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** Energy for Londoners, if one aspect of its activities is to become a licensed energy supplier, will be obliged to fit smart meters in the home of every one of its customers by 2020. It could prioritise people who are currently on prepayment meters, for example. I want to make sure that the Committee understands that with a smart meter you do not need a different type of meter to use a prepay tariff. Prepay will become a choice that many of us make with mobile phones and other areas of life not associated with poverty and a choice taken up by a lot more people than it currently is. That will be a real opportunity for Energy for Londoners.

There are particular challenges in engaging people with their energy use and with getting their meter changed when they are on prepayment meters. They are more likely to be renting their home. We talked earlier about landlords. There is often confusion about who has the right to have the meter changed. If a tenant pays the bill, they are able to ask the energy supplier to have the meter changed. They do not have to ask permission. In fact, there is no reason a landlord should want to refuse because there are huge benefits for landlords and no more confusion about who is responsible --

**Jennette Arnold OBE AM:** That relationship is so distorted. It would take a brave tenant to bring in a company and say, "Fit a smart meter", would it not? That does not sound real in terms of the people I represent.

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** Of course. Just politeness would be to inform one's landlord, but just communicating with both tenants and landlords to say that this is a very positive change for both parties here and not something that should fall into a, "It is a bit too difficult and I am not sure", kind of bucket is very important. We in our work are focused on that.

**Jennette Arnold OBE AM:** I sometimes think that we go to this generalisation. I know so many people and the last thing they want is a conversation with their landlord. There are so many people for whom there is not the power relationship there that could ever get them into having that sort of conversation.

Going back to what you were saying, in terms of a strategic body pulling levers, that will enable widespread change and then those who are vulnerable or in circumstances where they are too busy doing other things could benefit. You gave us that fabulous example. Do you have any other examples?

**Claire Maugham (Director of Policy and Communications, Smart Energy GB):** The Mayor could encourage the boroughs to think, for example, about the void periods between tenancies and taking advantage of that. We talked about the moments in which one is engaged with one's life at particular points. That is a real opportunity.

It is really a convening role as well. You are quite right about the barriers particularly for renters. Communicating to different audiences about what those barriers are and how they can be overcome could be a very important part of the Mayor's role.

**Jennette Arnold OBE AM:** That is lovely. The other question I wanted to ask was in terms of the role for Energy for Londoners and going back to previous discussions. Do you think that Energy for Londoners could insist during the deal it is going to make with a landlord that the property then is fitted to be able to get a higher standard like an energy savings standard of a building and when they go into negotiation with landlords - apart from other local government but other landlords - this could be part of the discussion?

**Peter Smith (Director of Policy & Research, National Energy Action):** Absolutely. We would think that energy efficiency requirements as part of a licensing arrangement makes absolute sense. We should set a *de minimis* in terms of that and be very clear to landlords that they cannot rent out this property or receive any Housing Benefit unless it is up to a certain standard of energy efficiency. That would particularly help at the lowest or the worst bit of the PRS, houses of multiple occupation (HMOs), which have not benefited at all from energy efficiency measures in the past and contain some of the most vulnerable tenants.

**Jennette Arnold OBE AM:** That is the strategic piece, which is what we really want to be able to say to the Mayor in our recommendations and to the Deputy Mayor [for Housing and Residential Development], "Go there first. Ensure that in your negotiations this is the requirement".

**Peter Smith (Director of Policy & Research, National Energy Action):** Also, at a strategic level the Mayor or his Deputy could speak to the National Landlords Association about removing some of the barriers and issues that have just been referenced around the PRS in particular and the representative bodies. He should speak to them and put questions to them to enable tenants to benefit from smart meters.

**Jennette Arnold OBE AM:** I just want to know if anybody has any thoughts about whether teaser rates should be allowed.

**Leonie Cooper AM (Chair):** Giovanna actually wanted to talk about that. You were talking about tariffs, were you not, earlier on? You said that people should switch every year, presumably so that they can take advantage of the teaser rates, but should we have them at all?

**Giovanna Speciale (Co-Founder and Chief Executive Officer, SELCE):** I suppose your question is: what can the Mayor do to help?

In this current market setting, the best thing you can do is support vulnerable customers through that process of switching. Many of them are very nervous about it. In our energy cafés, through a combination of measures such as enabling people to access the Warm Home Discount, switching and enabling people to get rid of their prepayment meters and go on to direct debit tariffs, we saved people £50,000, which is in excess of fourfold the cost of delivering the programme.

In response to the question, help us to deliver this kind of service. Funding for this kind of service is extremely scarce. We were very lucky to get funding from the Ebico Trust, but that is only one year's worth of funding.

The difficulty with things like the Big Energy Saving Network that has been mentioned is that the Big Energy Saving Network provides funding for you to deliver services. A good fuel poverty alleviation programme does not just deliver services. The hard work is in networking with other community sector organisations, creating referral routes into the service and out of the service, creating those relationships. It is extremely difficult to identify the fuel-poor. Funding such as the Big Energy Saving Network will pay only for you to deliver the service, not for you to develop that good network of relationships across a local area. Help us to fund this kind of work. It is vital and it does save people substantial sums.

**Peter Smith (Director of Policy & Research, National Energy Action):** Two things that Energy for Londoners could do are to have a priority services register, which would list its vulnerable customers and you would provide appropriate services to them like any other supplier, and to provide the Warm Home Discount Scheme, which provides an automatic rebate to the poorest pensioner households.

Those two things are absolute red lines from our perspective. If they did not happen, we would have a great concern that the people who already receive the Warm Home Discount Scheme switch to Energy for Londoners and do not get the benefit of that £140 rebate every year. I will speak to you afterwards about the Big Energy Saving Network.

**Philip Sellwood (Chief Executive, Energy Saving Trust):** I just wanted to respond to your challenge about teasers. We have, unfortunately, a rather long and ignoble history of mucking about with price mechanisms that then have consequences that we did not think about. I think to Ofgem's wheeze to go to four price tariffs and all of the problems that that has caused in the market, which is not to say that we should be encouraging that behaviour.

However, what I would say is, on the basis that banning is probably not where we would seek to go, insisting that if those available tariffs continue, (a) at the point at which they are offered the transparency is real in terms of what people are actually signing up for and then (b) an insistence that there is an automatic prompt when those teasers come to an end and what you are moving into because, at the moment, you do not have that. They rely on structural and personal inertia for people, frankly, to be had over in terms of going onto the most expensive tariff having had a year, supposedly, at the cheapest tariff.

**Jennette Arnold OBE AM:** Thank you.

**Nicky Gavron AM:** Can I just come in very quickly? I think it was Giovanna earlier who said that there are some companies that have incentives rewarding loyalty. The Chair said, "Why do we have switching at all, switching annually?" *Money Box* [BBC Radio 4 consumer programme] has really looked into this. We are looking into it. Why can people not be rewarded for loyalty? If you stay with --

**Leonie Cooper AM (Chair):** It was Bevan, and Bevan did say that some --

**Bevan Jones (Managing Director, Sustainable Homes):** That is just the reality of the way that the energy companies, particularly the Big Six because they are both generation and supply companies, have structured the market. That is how they purchase energy and that is how they do it. That is not to say that it is right how that goes around.

What we have now is around this annual switching. When switching became a bit more than just uSwitch and there were other sites that came into it, there were two-year and three-year fixed deals in the market. Now we seem to have gone down to this one-year thing and that is an inevitable consequence of early-stage competition within a market when you get this storming phase. We have 30 energy companies now. I do not think that those 30 are going to be the same 30 in ten years' time. There are going to be more and some of them will not exist anymore. Some of that is a natural consequence of competition.

**Nicky Gavron AM:** You have to know your way around the websites and you have to be very good online. That cuts out so much of the population.

**Jennette Arnold OBE AM:** Thank you very much.

**Leonie Cooper AM (Chair):** I am going to have to draw this to a close because we have now slightly run over. As you can see, we are as interested in this area as you are. Can I thank Philip [Sellwood], Peter [Smith], Sophie [Neuburg], Afsheen [Kabir Rashid], Claire [Maugham], Giovanna [Speciale] and Bevan [Jones] for coming today? It has been really helpful for us.

**Environment Committee – 10 November 2016****Transcript of Item 7 – Environmental Implications of the Expansion of Heathrow Airport**

**Leonie Cooper AM (Chair):** The second part of what we are discussing today is going to be on the subject of Heathrow. We will be looking at this not from the transport angle but from the environmental angle with specific reference to air pollution, noise pollution and the production of carbon dioxide (CO<sub>2</sub>).

We are very lucky that we have four guests with us today. We have Sophie Neuburg, who has stayed on from the previous session on domestic energy and fuel poverty. She is the London Campaigns Lead for Friends of the Earth. We have also been joined now by Simon Birkett, who is the Director of Clean Air in London - welcome, Simon - and also, confusingly or not confusingly, by another Simon, this time Simon Alcock, who is going to update us on Client Earth's latest exploits in court and the interface between the expansion of Heathrow and the outcome of the court case. Finally, also welcome to Colin Stanbury, who is Director of the Local Authorities Aircraft Noise Council (LAANC). He will be able to talk to us about the noise aspects.

Without further ado, I am going to hand over to Caroline now, who is going to lead off with the first set of questions - and then anyone else who wants to come in - on the whole issue of air pollution.

**Caroline Russell AM (Deputy Chair):** Thank you. I cannot get to the questioning without congratulating Client Earth on its extraordinary success just recently in the High Court in challenging the Government on its woefully inadequate air pollution and air quality plans. We now have a situation where the Government has to revise its plans to bring air pollution within legal limits as soon as possible, which is going to affect things around the decision about the Heathrow Airport runway.

What would be the likely air pollution impacts of a Heathrow expansion?

**Simon Birkett (Director, Clean Air in London):** If I may start with a point of disclosure, I have just celebrated my 20th wedding anniversary but my father-in-law was Lord Marshall [of Knightsbridge], who was Chairman of British Airways, who died four years ago and so there is a family connection to British Airways, if I may just disclose that first, please.

There is no doubt that the expansion of Heathrow would trigger breaches of air quality laws, in my view. The laws are very powerful. They apply at many different tiers of government. They are quite complex, therefore, because there are so many different powerful aspects to them. Today what I will try to do is to talk in general terms, just to give the highlighted issues. However, in my view, there is no question that the expansion of Heathrow would cause breaches of air quality laws.

**Simon Alcock (Communications and Public Affairs Manager, Client Earth):** Shall I update you on what the ruling means for Heathrow?

**Caroline Russell AM (Deputy Chair):** Yes, that would be very helpful. Thank you.

**Simon Alcock (Communications and Public Affairs Manager, Client Earth):** The ruling is a very complicated legal discussion, but I will try to simplify it and we can talk about what it means. Basically, we were pleased with the ruling because, for the first time, the judge ruled on the plans that the Government had

rather than just talking about compliance. He ruled that the plans were not good enough, which is significant legally.

There are two areas where it affects Heathrow. In a nutshell, it definitely throws a spanner in the works for Heathrow. Firstly, paragraph 52 of the judgment talks about “exposure”. In the past, the Government and the Airports Commission [Final Report 2015] had said that as long as Heathrow does not stop compliance with the air pollution rules, it can go ahead. What that meant was, if you had the worst part of London - say, Oxford Street - that had worse air pollution, Heathrow would not stop you meeting compliance because it would not be as bad, which is ridiculous. He said in the judgment in paragraph 52 that it had to have plans that limited people’s exposure, which changes things. The plan now has to take into account people’s exposure rather than just the legal limits, which is crucial.

Secondly, it was the modelling. The judge ruled that the Government had used overly optimistic modelling for its plans and that this was not realistic. In any of the plans for Heathrow, it has not used the latest testing for emissions and is now going to have to go away and do that. Basically, the plans are going to have to be a lot more realistic in order to meet compliance.

They are the two areas where it throws a spanner in the works. What that means is that unless you are going to meet compliance in the shortest time possible, Heathrow cannot go ahead. The Government should be bringing in plans now to mitigate things and taking steps now to mitigate as much as possible. If you go ahead with infrastructure projects such as Heathrow that expose people to dangerous levels of air pollution, you cannot go ahead.

**Caroline Russell AM (Deputy Chair):** Just to clarify what you have said there, Heathrow cannot go ahead unless exposure to air pollution is properly limited?

**Simon Alcock (Communications and Public Affairs Manager, Client Earth):** Mitigated or limited, yes.

**Caroline Russell AM (Deputy Chair):** That means to bring it within European Union (EU) limits or World Health Organisation (WHO) limits?

**Simon Alcock (Communications and Public Affairs Manager, Client Earth):** The EU limits. It is Article 23 of the Air Quality Directive.

**Caroline Russell AM (Deputy Chair):** Thank you.

**Simon Birkett (Director, Clean Air in London):** I have prepared some points to try to focus or support, really, what Simon [Alcock] has said. If I may, there are a few different things.

The first is that when thinking about the way that these laws apply, there are at least three different tiers that are relevant to this discussion. The first is whether one of the 43 zones in the UK - and London is one zone and it includes Heathrow - when it is reported annually to Brussels, breaches the air quality laws or not. That could be anywhere in the zone which is the worst place, obviously.

The second is that these laws can be enforced within the UK and so not just the European Commission launching infraction action. They can be enforced within the UK and that is what Client Earth has done so brilliantly in saying that the Government must produce plans to comply and to show compliance as soon as possible.

The third thing, though, which is really pretty much ignored by the Government, is that the air quality laws have to be complied with through the planning system and they do apply locally. It is not just about reporting things to Brussels. It is not just about Client Earth's case, which was about making sure that there is a proper plan. The air quality laws apply at every tier of government through the planning system and they cannot just be dismissed.

Clean Air in London commissioned an opinion by Robert McCracken QC, which we published about 12 months ago and which was about the role of the Air Quality Directive 2008/50/EC in the planning system. By publishing that opinion, Clean Air in London may have played a significant part in the deferral of the decision by 12 months in relation to Heathrow when the Government went away to do further work because it highlighted these different aspects: reporting to Brussels, Client Earth's work and also the role of the air quality laws in the planning system.

To my mind, the Air Quality Minister [Thérèse Coffey MP] misled Parliament a week or two ago and I will just read out what she said:

*"The Government believe that the Heathrow north-west runway scheme can be delivered without it having an impact on the UK's compliance with air quality limit values."*

What she was talking to Parliament about was the compliance of London as a zone. She was not actually talking about these other levels of compliance that were required. To my mind, really, that is very misleading of the Air Quality Minister in Parliament.

**Simon Alcock (Communications and Public Affairs Manager, Client Earth):** Simon [Birkett] is completely right. She is talking nonsense there. That was the day after the hearing in a debate. What she was saying is basically my point about Oxford Street. As long as Heathrow is not any worse than anywhere else in London, because London is a zone, you are fine, whereas what the judge has said now is that you have to limit exposure. That is the change.

**Caroline Russell AM (Deputy Chair):** In terms of Londoners' experience and the Mayor making sure that we are compliant, what has changed with this judgment is that if somewhere else in London has higher pollution than Heathrow, it is not OK and Heathrow still has to be able to limit the exposure of people living, working and travelling around Heathrow.

**Simon Alcock (Communications and Public Affairs Manager, Client Earth):** Yes. The plan now is not about making sure the zone as a whole is compliant. It is making sure that exposure throughout the country is taken into account. It is not OK to have somewhere that is really badly polluted because you have a worse place in that same zone. If you are going to have policies and infrastructure plans like Heathrow, you have to take exposure into account.

**Caroline Russell AM (Deputy Chair):** That is very powerful.

**Simon Birkett (Director, Clean Air in London):** If I may support that, Simon [Alcock] is absolutely spot-on there. What the High Court judge did, of course, was to confirm what the McCracken opinion had said and what I have been saying since 2008. It was very clear and it did support that and it is a very powerful extra weapon in our armoury.

If I can just talk about this tier and about where the laws apply in the local planning system, I will give you several examples in terms of this. It is not just about exposure. The limit values, which we have often talked about for nitrogen dioxide (NO<sub>2</sub>), are hard, binding limits to protect public health that had to be complied with by January 2010. They are immutable, absolute limits to be complied with to protect public health, set at the level of the WHO's guidelines. This is, of course, a health-based objective.

Those limit values are tough, therefore. They apply everywhere where people can be exposed to air pollution with three exceptions and those three exceptions are spelled out as common-sense exceptions and again by McCracken. For example, they do not apply where health and safety limits apply within somebody's premises and they do not apply in the middle of a carriageway. They are tough and absolute. They apply everywhere with three exceptions.

Also, it is not just about a fixed limit. There are very powerful aspects of the laws in terms of the possible worsening of air pollution below the limit values. It is very black-and-white also. You cannot go from below to above and you also cannot make air pollution above the limit values significantly worse. The Government tried to say that "significant" is going from 40 to 41 or from 41 to 42. To my mind, "significant" is any change in the significant figure. If it is 40.1 going to 40.2, it is significant. If it is 40 and it goes to 41, it is significant. It is not about how many decimal places are used or how many significant figures. If there is a change in one of those, then it is significant. That is very strong, in my view. Significant worsening is important.

McCracken was absolutely clear. He said that in his view the Airports Commission had misdirected itself in the law. He was also clear that you cannot approve Heathrow and just leave it empty, waiting for these limit values to be complied with. You need a realistic plan in place to comply with these limit values before you approve Heathrow expansion.

You could achieve that - and I shall not pause in this sentence in case somebody misuses a soundbite - and you could comply with air quality laws around Heathrow if you banned diesel vehicles for many miles around Heathrow including the M4 and the M25 before taking the decision to expand Heathrow. That is really what we are talking about. Anything less than banning diesel vehicles for many miles around including those motorways before taking the Heathrow decision to my mind - and I believe it is supported by the McCracken opinion - would be illegal.

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** I just wanted to come in on a broader point. I absolutely agree with what the others have said and huge congratulations to Client Earth for its amazing victory. We are all extremely excited for what it means for air pollution in general.

I did just want to say that from the Mayor's point of view and in terms of political narratives, it is really important that the Mayor keeps in mind that, leaving aside the changes in how we now interpret the law, what the Government is trying to do is really quite dodgy. The idea that it could have decided that it could increase air pollution in one area of London just because it is worse elsewhere is entirely immoral. We know that air pollution is very dangerous for health. The [Environment] Committee is very aware of this. We know that, but we also know that no level of air pollution is really safe. Even if we did ban diesel throughout London and up to the M25, which we would absolutely support, although it might be legal, it still would not be moral to expand Heathrow because it would still create significant air pollution. This is a really serious problem that the Mayor needs to be talking about in his opposition to Heathrow.

**Simon Birkett (Director, Clean Air in London):** I am going to make four recommendations and then I will shut up.

The first is to please bear in mind that the Labour Government, when it was looking at Heathrow expansion, would have given very strong powers to the Environment Agency, duties to ensure compliance with air quality laws and powers to wheel-clamp aeroplanes.

Secondly, I really would urge this Committee, encourage this Committee and encourage the Mayor, to join any air quality legal case. I believe it was very helpful for the Client Earth case to have the Mayor joined in that case. That is the second thing.

The third thing is for this Committee to investigate and I am sure you would.

The last thing is that we need a new Clean Air Act in place well before Brexit that enshrines these public health protections in place. In 1954 the City of London sponsored the original Clean Air Act [City of London (Various Powers) Act of 1954] before there was a national Clean Air Act in 1956. The Mayor, as many Committee Members here will know, can sponsor annual legislation. I believe the deadlines have just been missed for this year, but next year the Mayor should sponsor a Clean Air Act. Thank you.

**Leonie Cooper AM (Chair):** There is every chance that at least two of those things that you have just mentioned are likely to happen. My first question at Mayor's Question Time asked the Mayor if he was going to join the Client Earth action and that was when he announced that he would and he then did.

I can pretty much guarantee you, because I asked that this item about Heathrow, whenever the announcement was made, should be on the agenda and certainly while I remain as the Chair we will be investigating the impacts of Heathrow. We were very pleased that you were able to come because you are a guest that we particularly wanted to talk to about the air quality aspects.

I know that the Mayor has already called for a new Clean Air Act and in fact he launched that call in Great Ormond Street Children's Hospital and he specifically chose that location on the 60th anniversary of the Clean Air Act because of the impact on children's lungs. I know that a number of those are going to be things that he will be pursuing.

**Nicky Gavron AM:** As we have such an expert panel, it would be really worth us knowing how much of the pollution comes from the aircraft themselves and an increase in the flight movements and how much from an increase in [road] transport. We know. We can see the carbon. We can see the particulates, some of it, and there is the smaller stuff that gets in your lungs. We know that when planes take off there is a huge amount of energy used and therefore a huge amount of carbon emitted. How much of that is counted?

**Simon Birkett (Director, Clean Air in London):** The first thing I would say is that anyone who looks at a NO<sub>2</sub> compliance map of London sees a big yellow and red blob in central London and a big yellow and red blob over Heathrow. That is the first point.

The second is that you are absolutely spot-on to ask about aircraft versus road transport. In terms of the air quality laws, because they apply outside the Heathrow fence, the modelling shows that it is the associated road transport movements that cause these breaches of air quality laws. They have identified a junction on Bath Road, I believe, which would be the trigger point.

In terms of the aviation, only aircraft emissions in the landing and take-off cycle, which is up to 1,000 metres, are included in this modelling. That basically says that there is no impact from aircraft emissions above

1,000 metres. I cannot believe that these vast planes flying over London have no impact on London air quality one way or another. It is important to bear that in mind. You are asking good questions.

**Shaun Bailey AM:** If we measure the air quality - forgive my ignorance - above 1,000 metres it is not measured, but would an effect above 1,000 metres have an effect on the ground and be caught in the measurements that we have anyway?

**Simon Birkett (Director, Clean Air in London):** To an extent. My guess is - and I do not know and it would be worth getting Frank Kelly [Professor of Environmental Health, Kings College London] or one of his scientists who do measure these columns of air - that it would be measured, perhaps, in different ways. You would find that the aviation emissions appeared as particle emissions at a lower level or something like that, but you would not pick it up as NO<sub>2</sub> levels lower down, which is probably why it does not appear in the modelling. I am saying that it would have some impact on some form of air pollution in London. It would be incredible to think that it had no impact.

**Tony Arbour AM:** This relates to the points that two of you have made in relation to enforcement. You said that enforcement can be made at any level and you have drawn attention to through the planning laws, but why not through the straight environmental laws? It is alleged that currently pollution levels exceed the permitted limits. Why, therefore, is no action being taken at these lower levels, ie by the London Boroughs of Hillingdon, Hounslow or whichever local authority is closest? What is the impediment?

**Simon Birkett (Director, Clean Air in London):** I would pass to Simon [Alcock]. The first thing is that the duties on the local authorities are to work towards these legal limits. It is actually the Government or the UK as a Member State. When it gets triggered is when the local authority takes a planning decision or when the Mayor takes a planning decision that these things bite. It would make sense, of course, to do exactly what you are saying, but I am not quite sure what the legal mechanism is under the air quality laws. It would perhaps be under some other environmental protections.

**Leonie Cooper AM (Chair):** Perhaps Simon can help us with levels of culpability, as it were.

**Simon Alcock (Communications and Public Affairs Manager, Client Earth):** Sure. Simon [Birkett] is right that it is the Government that has responsibility under the law to ensure that we meet compliance, not the local authorities, and what we have seen is that it is trying to pass the buck a little bit to local authorities whilst simultaneously cutting their funding.

We want to see a national network of clean air zones mandated by the Government so that local authorities have clean air zones across the country where they need them and banning the most polluting cars. That is what is needed. It is no good passing the buck to the local authorities. They are doing what they can.

**Tony Arbour AM:** I thought you as a group were saying that the judgment you have recently had -- and you did talk about enforcement at every level. Does that mean that they are still excluded - local authorities - from taking action despite the decision that you have had?

**Simon Birkett (Director, Clean Air in London):** There are different types of action at the local level. One is about planning decisions, where the laws do apply. Another is about complying with the limit values independently of planning decisions. The Government has that duty but local authorities, I do not think, do have that duty. They have a moral duty but not --

**Tony Arbour AM:** Forgive me, but are you not wrong in relation to the planning decision? Because it is related to an airport, at the end of the day the local authority does not make the decision, nor indeed does the Mayor.

**Simon Birkett (Director, Clean Air in London):** No, but, for example, there are many decisions that are taken around London where these laws would be triggered and would bite. Enderby Wharf breached the law. There are things like that that would have been triggered.

**Tony Arbour AM:** Today we are concerned with Heathrow --

**Simon Birkett (Director, Clean Air in London):** Yes, and so it is a Government --

**Tony Arbour AM:** -- and the local authority cannot intervene?

**Simon Birkett (Director, Clean Air in London):** I am not quite sure what its role is. The London Borough of Hillingdon, I know, is objecting and it does see a role here. You can be a party to these cases. I do not know. Perhaps others can comment specifically on that.

**Leonie Cooper AM (Chair):** I know that the London Borough of Wandsworth and others are considering their positions at the moment and whether or not they can --

**Tony Arbour AM:** Yes, but it is not in relation to that specific point?

**Leonie Cooper AM (Chair):** No.

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** In practical terms the local authority could do absolutely everything in its power to reduce air pollution in its area and, if the Government decided to expand Heathrow, it would blow all of that out of the water. We cannot blame local authorities for not doing enough on air pollution because Heathrow is so much bigger than anything a local authority could do to mitigate it.

**Tony Arbour AM:** Honestly, I represent the South West [of London] and this is completely on my patch. What I am suggesting is that your comment about enforcement at every level in relation to Heathrow is actually a red herring.

**Simon Birkett (Director, Clean Air in London):** I am drawing a distinction between two things. One is about compliance with limit values and the other is about taking decisions that work against it. That is what I am trying to say.

**Leonie Cooper AM (Chair):** We have explored this in some detail and there seems to be a bit of a grey area, if you like, as to whether that could be taken forward by local authorities or whether it is something that the Government still needs to take forward without passing the buck to local authorities.

I am going to move on because we are not going to bottom that one out right now. I know that David wants to come in at this point and ask some questions about noise and perhaps, again, others will want to follow on. David?

**David Kurten AM:** Yes, thank you. I suppose I will be asking mostly you, Colin, about noise because it is your area of expertise.

I understand that there are about 700,000 people currently affected by noise from Heathrow. What would be the impact of a Heathrow expansion on noise pollution?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** Through you, Chair, this is one of the things that concerns us very much about the recent announcement because the [Rt Hon Chris Grayling MP] Secretary of State [for Transport] in his wisdom indicated to the House that, in his view, Heathrow expansion could take place and could be achieved with less noise than today.

The first thing to say is that in our view that is abject nonsense at any level because part of the proposal for the third runway, however you cut it or however you look at it in terms of how aircraft will take off and land, means that at least 100,000 people across London will be newly affected, people who do not come within the definition of being adversely affected or annoyed by aircraft today or actually do not experience aircraft noise. For those at least 100,000 - and it could be as many as nearly a third of a million - the experience of a third runway can never be better. There can never be less noise. There has to be, by definition, more noise and more effect on most people.

In trying to explain to the Committee what this is about, when we look back at what the Airports Commission did in its modelling for noise with a third runway, it took a number of scenarios that were modelled by Heathrow Airport and produced three main scenarios but not one of them actually replicated the way the airport currently works. The statement that Heathrow could be delivered with a third runway with less noise than today is possible only if one assumes that it is practicable and safe in the future to introduce concepts such as curved flight approaches, curved departures and increased rates of descent for aircraft.

Certainly the concept of curved approaches and departures is innovative, untested and untried. My own personal experience in terms of talking to pilots is that at Heathrow they are very concerned about being able to fly these undefined paths, as they are at the moment. The Civil Aviation Authority, as the regulator, is on the record as saying to the Commission that it should be cautious about adopting these new innovative flight paths for that very reason: they are untested and untried.

To come back to answering your question, how many may be affected, the most reliable estimate is from a report done by TfL last year, which estimated that about 1 million a people could be affected and so up by a third.

**David Kurten AM:** Thanks. Would that be just a little bit of an effect or impact on people's lives or would it be a big impact? How is it likely to affect them? What specific effects would it have on the new people who would be disturbed by the noise?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** Looking at the experience of airports such as Frankfurt, one can expect a very significant impact on particularly the lives of people who are going to be newly overflown. Members may know that the Frankfurt Airport expansion had been highly controversial when they had a new runway. It has resulted in, still, weekly protests at the airport by communities newly overflown.

One of the problems that the Government has in selecting Heathrow is that it has done virtually no work - or at least no work has been published - to date on assessing how people might react to being overflown for the

first time. Bear in mind we are looking at an order of magnitude here of effectively planting an airport the size of Gatwick as it is today and bolting it on to Heathrow. When you look at it in those terms, simply the concept of that, it is very difficult to imagine how that can happen without increasing noise annoyance to a large number of people.

**David Kurten AM:** You mentioned new things I had not heard of that the Government has thought of for mitigating the noise such as curved approaches and steeper descents. There is another idea that has been floated that aircraft are going to get quieter as time goes on through new technology. Is that something you have heard and what do you think about that idea?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** Yes, it is correct that new technology will bring some benefit in terms of the individual noisiness of aircraft. It is not that great, actually, in terms of what it will produce or is predicted to produce in the future.

One of the things that is possible to see is, if you look at Heathrow's operation as it is today and the number of people who are affected and the number who would be affected at its current cap - ie while it is not allowed to expand - and project that forward to about 2040 or 2050, we would see a reduction of about 25% in the numbers of people who fall within what is known as the "annoyed" category. Beyond the current fleet and into when we can expect significant changes in that from about 2030 onwards, the projections are that it is not going to get a lot better.

The answer is that, even with new technology, large jet-engine aircraft are not going to take off and land silently. There is no prospect of that.

**David Kurten AM:** Yes. There are some ideas that have been put forward by the Government to mitigate noise such as a ban on night flights, binding targets for noise reduction and funding for noise insulation for the worst-affected areas.

How effective do you think these and other proposals you might have heard of will be at reducing aircraft noise?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** If I could start with the ban on night flights; that was one of the things that we found very disappointing in the recent announcement. I was in the public gallery in September 2015 in this building when the Chairman of the Airports Commission [Sir Howard Davies] sat here and told Members, "I am quite clear about this. What I am recommending should only come with a set of very strict conditions". One of those was, quite clearly, a night flight ban between 11.30pm at night and 6.00am in the morning. At the moment, for Heathrow, there are about 16 to 18 flights that arrive from 4.30am until about 6.00am. Those of us who live on the flight path know that very well. At the moment there are about 18.

What we see - and, as I said, one of the things that is most disappointing - is that with the announcement the Secretary of State [for Transport] said that there will be, indeed, a six-and-a-half hour ban on night flights but it is not, so far as we can see at the moment, a ban from 11.30pm to 6.00am in the morning. It is from 11.00pm at night until 5.30am in the morning. Members might say to me, "Why is that significant?" It is significant because at the moment there are no night flights scheduled from 11.00pm until 11.30pm, but in the morning most of the night flights arrive from 5.30am onwards. What will that mean? If we do not have night flights between 4.30am and 5.30am, it will give a benefit of perhaps three or four flights that will have to be retimed out of the 16 or 18 and so they are not giving very much away. That is the point about that. We

are not going to see an end to night flights, particularly in that period from 5.30am onwards. It was most disappointing. The Secretary of State [for Transport] was unable to say in his statement that in wanting to be tough on noise he was going to insist on this condition.

Part of this disappointment is also reflected in the recent documents that have been released by the Government, which are clearly indicating that all of the conditions that Sir Howard [Davies] sat here and told this Committee a year ago were absolutely essential as part of any expansion or third runway at Heathrow are now delegated to the category of being “advisory”. It sees these as being advisory matters to be discussed and consulted on at a later date, rather than being, as Sir Howard indicated in this building, essential.

The other matters concerning moving the runway to the west slightly or steeper approaches as mitigation, technically, in our view, will make a difference and, scientifically, one might be able to detect a difference. However, our view is quite clearly that that is at the margins. They are not going to make a huge amount of difference to Londoners as they are overflowed, particularly on their way in in the early morning.

**David Kurten AM:** Are there any noise mitigation measures that would be preferable or anything that you think might work?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** There is a noise mitigation programme that has been proposed and a sum of money has been set aside to provide insulation for homes. We do not know exactly how that is going to work. No details have been provided. Of course, you can never sound-insulate or mitigate noise in people’s gardens or community areas.

One of the things that perhaps the Committee should be made aware of is that these “idealised” flight paths, as we call them now, for enabling curved approaches - as part of the background to that - rely on overflying public open spaces and amenity areas to an extent that has never happened before. How the Secretary of State [for Transport] arrives at a point of saying, “We can get there with less noise”, relies to a great extent on the fact that amenity areas that are valued at the moment in London will be affected and overflowed because that is where you have to push your flight paths to reduce the numbers of people overflowed. That is how it is done.

**Leonie Cooper AM (Chair):** Sorry, can I just clarify that point? What you are saying is that the curved flight paths might come in, let us say, over Wimbledon Common in my constituency, followed by disturbing all of the deer in Richmond Park in Tony’s constituency and that that is then going to be preferable, despite the fact that after you have finished passing over Wimbledon Common and Richmond Park you then go over huge numbers of people’s dwellings?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** That is exactly the point.

**Leonie Cooper AM (Chair):** That is a huge piece of mitigation. I had not quite understood how intense that mitigation was going to be. We are obviously all very delighted. That was said rather sarcastically, just for the sake of anyone who did not get the sarcasm.

**Jennette Arnold OBE AM:** Sarcasm apart, Chair, it was a great intervention. I just wanted to say thank you to Colin for the work that he is doing with the campaign around local authorities.

I represent London North East - Hackney, Islington, Waltham Forest - and it strikes me and many of my constituents that when we complain about our distress from aircraft noise, it is not treated in the same way as

the flights over Wimbledon or the flights over Richmond. Do you think that there needs to be greater acknowledgement that far more Londoners are affected by noise nuisance from aircraft flying over London at inappropriate times?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** I am sorry. I did not quite understand the question.

**Jennette Arnold OBE AM:** It seems to me that the focus around noise nuisance is on just a small number of boroughs.

**Nicky Gavron AM:** One million.

**Jennette Arnold OBE AM:** One million people or 1 million households, but then how many more Londoners are there?

**Nicky Gavron AM:** Yes, sure.

**Jennette Arnold OBE AM:** Should we be seeing the focus widened because many more Londoners are affected by this?

**Tony Arbour AM:** We are here to talk about Heathrow.

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** This is absolutely right. We have seen recent press releases that Heathrow has put out that seem to indicate that the vast numbers of complaints it receives are the fault of about ten people. What we know is that in actual fact the numbers of people who are annoyed by this on a daily basis are absolutely vast.

Part of the difficulty is that it is actually quite hard to make a complaint about an overflying aircraft because, if you contact the --

**Jennette Arnold OBE AM:** Yes, you cannot do it.

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** -- helpdesk or the complaint line, you have to have all sorts of information available.

One can tell to some extent, again, if one looks at the Secretary of State's [for Transport] recent statement to the House where he says - and I paraphrase - that one of the things the Government wants to do is to get rid of "stacking". This is when aircraft are held around Heathrow because they cannot come in to land immediately. He indicated that he knows that this is a problem because his constituents in Epsom complain to him. If the Secretary of State is aware that Epsom residents are upset by Heathrow, one can only ask how many other people all around the four corners of Heathrow Airport are also similarly upset currently.

**Jennette Arnold OBE AM:** You then went on to one of my concerns and that is about how difficult it is to complain about noise nuisance. That is not new. In 2013 I was on this Committee and the then Chair and Members wrote to the Airports Commission calling for an independent noise regulator. It was felt to be a good idea at the time. Do you think that that is still a good idea?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** Yes, we do. Another one of the disappointments that we had with this recent decision is that one of Sir Howard's [Davies] recommendations when he came to this Committee was the appointment of an independent noise regulator or noise authority. Not only has that authority not been appointed - and in fact Sir Howard has expressed his frustration at that over the period since he compiled his initial and interim report - but in the recent decision it is another one of these matters that have been relegated to, "We will consult about it".

Something that we would be very keen to see is an independent noise authority or noise regulator.

**Leonie Cooper AM (Chair):** Perhaps we could encourage Heathrow to arrange for some of the stacking routes more permanently to spend their time over Epsom and Ewell so that the Secretary of State for Transport is encouraged towards establishing an independent noise regulator in a rather practical way.

**Jennette Arnold OBE AM:** Colin, in terms of the buy-in to your campaign from the London boroughs, is that total or is that patchy? Is the work that you do with local authorities just with specific local authorities?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** It is with specific local authorities and it --

**Jennette Arnold OBE AM:** Why not with, say, London Councils as a body?

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** We have never been invited to work with them. We are very happy to work with any of the regulatory authorities around London. It is just that the LAANC from a historic perspective - and it has been around since the late 1970s - has been a local authority umbrella organisation focused on Heathrow noise. It has been a forum that has existed throughout the Terminal 5 Heathrow expansion issue and also has addressed the night flights issue. It has existed, really, as almost like a focus group. We would be very happy to work with any of the other groups.

**Jennette Arnold OBE AM:** My point in there is just from the casework that I do and have been doing over the years since 2010. An organisation like yours should have a pan-London approach and be working with London Councils and the Mayor in a much more focused way because we know that that is how you get legislative change when there is one voice.

I remember once meeting Sir Eric - or whatever his name is now - and he told us that if the London Assembly, the Mayor and the local authority could be on the same page making the same demand, the Government would be in a difficult position to refuse that demand. We have not done that yet in terms of noise nuisance across London.

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** No, we have not and I apologise for any failings on our part in not promoting ourselves.

**Jennette Arnold OBE AM:** That is OK.

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** I can only say that we remain very happy to work with others, as you have described.

**Jennette Arnold OBE AM:** We should have that as a recommendation, Colin. It is no failure on you. You are doing great work.

**Colin Stanbury (Director, Local Authorities Aircraft Noise Council):** Yes.

**Leonie Cooper AM (Chair):** That, along with the point about the independent noise regulator, are things that we can pick up in our deliberations afterwards, but I do not think that in today's session Colin is going to be able to secure the participation of all 32 boroughs and the City [of London] before the end of the meeting. Shaun, you wanted to come in on something as well?

**Shaun Bailey AM:** It is just to pick up a general point, almost Jennette's point in a strange way. What would Heathrow say about this? For the avoidance of doubt, I am publicly on the record as being opposed to development at Heathrow, but we are having quite a lopsided conversation here. I wonder, (a) Did Heathrow refuse to attend --

**Jennette Arnold OBE AM:** Is he asking?

**Shaun Bailey AM:** -- and (b) what would be its counterpoint to the points that we are making here? Is it fair to ask you these questions? Are you aware of what the counterpoint might be?

**Jennette Arnold OBE AM:** Chair --

**Leonie Cooper AM (Chair):** This is a difficult question for our guests to answer because they are not from Heathrow and I --

**Shaun Bailey AM:** What is the opposition to the points that you have been making to Heathrow?

**Leonie Cooper AM (Chair):** Shaun, we should all know what Heathrow has been saying about it because certainly it has been keeping me very well informed and surely has been sharing the various documents that it has been sending out pretty copiously.

**Jennette Arnold OBE AM:** Yes, inundated.

**Leonie Cooper AM (Chair):** There are some people who are saying that the entire advertising business is going to collapse once Heathrow and Gatwick stop advertising all the benefits of their individual airport expansions.

I do want to move on to the carbon emissions section, which is the last part.

**Caroline Russell AM (Deputy Chair):** Yes. It is a really simple question on carbon emissions and the Paris Climate Agreement. How does Heathrow expansion fit with the UK's carbon reduction goals?

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** Yes. Very simply, it does not at all. There is a lot of evidence around this. The first thing to say is that expanding Heathrow is probably the single most climate-damaging decision that the Government could make. Coming on the back of the decision recently to allow fracking in Lancashire, it really is even worse.

Also, we have to remember that if Heathrow is expanded, it will become the single most carbon-emitting piece of infrastructure in the UK. At the moment, it is the Drax power station, which is a coal-fired power station, but if Heathrow is expanded it will overtake Drax. That is just to put all of that into context.

We know that aviation takes up 7% of the UK's emissions at the moment and we really have to curb those. The Committee on Climate Change has been saying that we have to curb the UK's emissions already and that is according to the UK's own carbon budgets. The Paris Climate Agreement goal to keep global warming below 1.5 degrees is more stringent than the UK's current Climate Change Act. Really, if we want to stick to [the] Paris [agreement], we absolutely cannot expand Heathrow. There is no way to do that.

**Caroline Russell AM (Deputy Chair):** Does this mean that we cannot expand other airports either or are you saying that we cannot expand just Heathrow?

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** That is a very good point to get me to make. No, it means that we cannot expand any airport. Heathrow is the big fight at the moment but, really, if we want to deal with climate change and particularly if we want to stick to the Paris Climate Agreement, we cannot expand any airport.

We are very pleased that the Mayor is opposed to Heathrow and that is fantastic, but we are aware that he has backed Gatwick. The Mayor really needs to oppose all airport expansion in the London area in order to fulfil what he says he wants to do, which is to make sure London fulfils its needs under the Climate Change Act and also under Paris.

**Leonie Cooper AM (Chair):** His statement has been that he would like London to become a zero-carbon city by 2050 and you are fairly clearly saying that the expansion of Heathrow does not fit with that goal?

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** Expansion of Heathrow does not fit with that goal and nor does the expansion of City Airport. I know that it is not in the Mayor's hands anymore because it is major infrastructure, but Sadiq [Khan, Mayor of London] has not been particularly oppositional to that. I will not go into that much, but it is a point worth making. We need no more airport expansion, not just at Heathrow.

**Nicky Gavron AM:** Yes. I need a bit of help with this. Am I right? There is an allocation per sector and aviation has an allocation. Therefore, if Heathrow is taking a great lump out of that allocation over and above what it is meant to, then other regional airports will have to reduce their flights, or there could be another way forward in terms of this so-called carbon allocation or budgeting, which is that the emissions from buildings, transport, etc, will have to be reduced even more to allow Heathrow to expand. Do I have that right?

**Sophie Neuburg (London Campaigns Lead, Friends of the Earth):** Yes, sort of. I will explain that a little bit more. The Committee on Climate Change has said that in order to stick within the UK's carbon budgets - which I should say are weaker than [the] Paris [agreement], which is an important point to make - we could expand the aviation sector and could expand Heathrow if a lot of savings were made in other sectors.

In the same way that Simon [Birkett] did not want to be quoted out of context halfway through a sentence, the key point here really is that in order to make the numbers work for Heathrow expansion, some really quite heroic assumptions have been made about carbon emissions reductions in other sectors, assumptions for which there are no policies at the moment. We would need an 85% reduction in carbon emissions across all other sectors - transport, housing, industry, energy and absolutely everything else - in order to allow aviation to expand.

It also made some assumptions about the reductions in aviation's own carbon emissions. Within this, there is built into the modelling the idea that, despite expanding at Heathrow and elsewhere, aviation's emissions will reduce per flight. At the moment, as I said, aviation makes up 7% of the UK's emissions. Under this modelling, aviation would make up 25% of the UK's emissions because the amount that we can emit will come down very significantly. That is huge.

We know that cutting carbon will mean a lot of changes across a lot of sectors. Quite apart from the question of whether it is possible to reduce carbon emissions across all sectors other than aviation, we also have to wonder why aviation should get this special treatment. There are all sorts of other ways to get places. A lot of flights that will come through Heathrow are domestic flights and people can get trains and all sorts of other things. In terms of business, the revolution in videoconferencing means that the need to fly somewhere for a meeting is reducing significantly. We think that there is a big question about why aviation should get such a big chunk of our emissions allocation.

**Leonie Cooper AM (Chair):** That probably is just the right point for us to end today's session. That was a very clear statement.

Thank you very much to Sophie [Neuburg], Simon [Alcock], Simon [Birkett] and Colin [Stanbury] for the clarity that you brought to that discussion on the environmental impacts of Heathrow.

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