

London Assembly Environment  
Committee

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Dear Sir/Madam,

**LONDON ASSEMBLY ENVIRONMENT COMMITTEE SOLAR POWER INVESTIGATION  
– LONDON COUNCILS' RESPONSE**

London Councils is committed to fighting for resources for London and getting the best possible deal for London's 33 councils. Part think-tank, part lobbying organisation, and part service provider, London Councils formulates policies, organises campaigns and runs a range of services all designed to make life better for Londoners.

London Councils welcomes this important investigation by the London Assembly. We note that it primarily focuses on residential solar electricity generation (photovoltaics). London Councils Transport and Environment Committee (TEC) considered a presentation from Friends of the Earth on deployment of PV on school buildings in London on 18 June 2015. A number of points raised by TEC also relate to residential PV. We are grateful for the short extension to the deadline for comments, which has allowed these points to be reflected in this response.

Lower than average uptake of solar PV appears to be an issue that is common to other major cities in the UK. London Councils suggests that London government should work with other Core Cities and DECC to address this issue. This could consider regional Feed In Tariffs and/or top up payments, opportunities to provide greater incentives to landlords and the local ring-fencing of allowable solutions. Responses to the committee's questions are set out in the following section.

Yours faithfully,

A handwritten signature in black ink, reading "Julian Bell". The signature is fluid and cursive, with a long horizontal stroke at the bottom.

Cllr Julian Bell

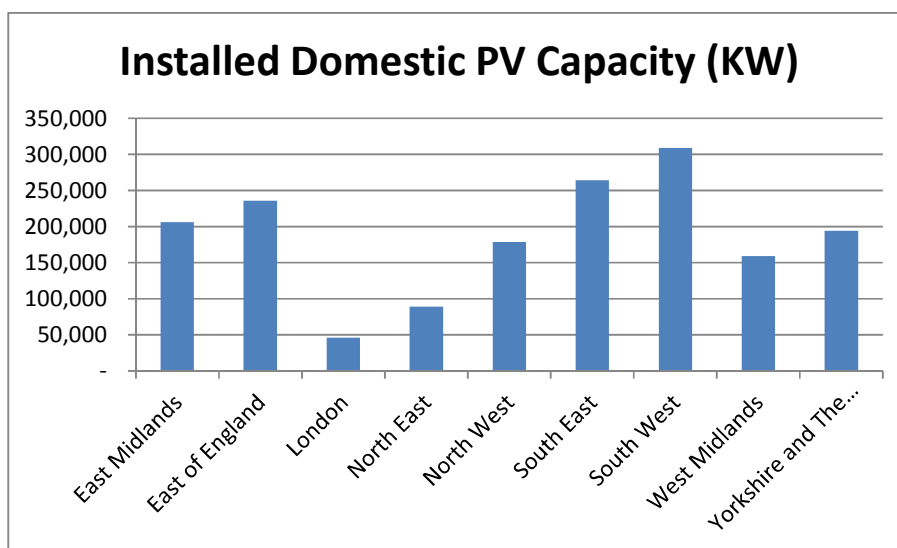
**Chair of the London Councils Transport and Environment Committee**

## London Assembly Environment Committee Solar Power – London Councils’ Response

1. How much solar capacity is already installed on London’s homes and what are the trends (by borough and sector)?
2. How does solar energy generation in London compare to other parts of the UK and to comparable major cities around the world?

The Committee’s questions 1 and 2 have been considered together.

The Department of Energy and Climate Change’s [‘Sub-regional Feed-In Tariffs’](#) data (updated April 2015) shows the following regional split of installed domestic photovoltaic (PV) capacity in the regions of England.



DECC also provides statistics on Feed In Tariff (FIT) registered PV installations by local authority. It is apparent that London is not the only large UK city that has a relatively low rate of solar PV take up. The mean uptake of PV installs per 10,000 households for a local authority is 239. The figure for London (as a region) is 48. As well as many London boroughs, the following local authorities also have rates of lower than 100 PV installs per 10,000 households:

- City of Edinburgh (51)
- City of Glasgow (57)
- Aberdeen City (72)
- Liverpool (82)

In addition, local authorities from the following Core Cities have lower than the mean rate of solar PV uptake:

- Birmingham (111)

- Leeds (134)
- Newcastle upon Tyne (135)
- Manchester (148)
- Bristol (165)
- Sheffield (165)
- Cardiff (166)

The exception is Nottingham, which has a rate of 321 PV installs per 10,000 households.

Although there may not be a causal relationship between population density and rate of PV uptake per 10,000 households, high population density is most common in cities and these cities also share other characteristics (some of which have already been identified by the Committee);

- Transience of the residential population
- 'a cityscape of thin, tall buildings as well as much terraced housing with little roof space';
- 'higher installation costs, for example due to the height of the buildings causing extra scaffolding and costs'.

It may also be expected that areas with higher percentages of households living in flats (which would be a driver of population density) would see a lower rate of PV installs per 10,000 households because fewer households will own the roof of their building. Where roofs are owned by landlords or management companies they could choose to install PV to provide electricity for communal areas (which would be expected to produce a low demand in many buildings), distribute electricity between flats (which may be more technologically and administratively challenging) or sell energy back to the grid (which attracts much lower FIT rates, as outlined below).

This analysis is certainly not presented to suggest that London's ambitions should not be to significantly increase the uptake of residential solar energy or that it should be considered impossible to do so. It would be beneficial for London's government to work with DECC and the Core Cities to investigate barriers to PV uptake in cities in general and consider potential solutions.

### **3. What is the national and local policy framework that regulates and influences solar energy generation in London?**

A number of different policies and regulations are likely to influence PV uptake. In particular, both financial and planning mechanisms incentivise it or present barriers.

#### Financial Incentives

The Feed In Tariff (FIT) is a critical financial incentive for the uptake of renewable energy.

Generation and export FIT rates are established by Ofgem and vary depending on the capacity of the energy generation infrastructure. The current export FIT rate is 4.85p/KWh, compared to the generation rate of 12.92p/KWh. FIT generation rates have fallen substantially since the first eligible year and will continue to do so through DECC's degeneration

mechanism. Larger reductions are made to the rates if deployment of the technology meets or exceeds certain targets. Degression is intended to reduce the incentive as the cost of deployment decreases with greater economies of scale.

Neither FIT nor the degression mechanism takes into account regional variations. This needs to be looked at again and the potential of a 'top up' payment explored further to provide a sufficient incentive in London.

#### Planning Policies and Regulation

The installation of solar panels on residential properties has been permitted development (i.e. it does not require a planning permission) since 2008, as long as certain conditions and limits, including those related to appearance and heritage considerations, are met.

The previous Government relaxed planning controls in 2015 to allow the installation of solar PV panels with much larger energy generating capacity on commercial properties.

Where planning permission is required for the installation of solar PV, the National Planning Policy Framework states that local planning authorities should actively support energy efficiency improvements to existing buildings. However, some London local authorities report that this general support conflicts with the need to conserve and enhance conservation areas, which cover large parts of some London boroughs. There would be benefit in planning guidance that addresses this issue.

London has a large percentage of private sector dwellings with solid wall construction, which makes them difficult to heat and very expensive to insulate. In some cases this may lead to difficulties in achieving an EPC standard of D or higher, which is necessary to qualify for the higher FIT generation rate.

Local authorities' ability to require the installation of renewable energy technology in new homes (such as in the "Merton rule", identified in the Committee's paper) was reduced by the previous Government. The previous Secretary of State for Communities and Local Government in a Ministerial Statement in March 2015 announced a nationwide technical housing standard and prevented local authorities from issuing planning permissions subject to conditions requiring compliance with any standards other than for those areas where authorities have existing policies on access, internal space, or water efficiency.

For energy efficiency, zero carbon homes are now defined as level 4 of the, now withdrawn, Code for Sustainable Homes. This level requires a 44% improvement on building emissions against Building Regulations Part L 2006. Level 5 required zero emissions from heating, hot water, ventilation and lighting. Level 6 was previously defined as 'a zero carbon home' and required zero net emissions of carbon dioxide from all energy use in the home.

The Government's recent changes will have had very little impact (if any) on the amount of PV panels in place in London at present (due to the time between new homes being granted planning permissions and being built). However, the Government has provided developers with greater flexibility to choose non-PV options to meet the zero carbon target on development sites and reduced the ability of local planning authorities to demand on-site renewables.

#### Allowable Solutions

In addition to the zero carbon homes standard, the Infrastructure Act 2015 (section 37) allows for the introduction of 'allowable solutions' to meet the shortfall between the minimum

on-site energy standard and the zero carbon requirement (equivalent to level 5 of the Code for Sustainable Homes – see above) through carbon abatement measures on or off-site. The specific details of how this system will work are still to be published. The previous Secretary of State for Communities and Local Government (in March 2015) announced that an exemption for housing sites of 10 units or fewer from the 'allowable solutions' element of the zero carbon homes framework would be introduced.

The previous Government's policy document 'Next steps to zero carbon homes – allowable solutions' states that 'house builders should be able to decide how they meet the carbon saving shortfall from four options:

1. More carbon abatement on site
2. Through their own off-site carbon abatement
3. Through a third party delivering carbon abatement on their behalf
4. Through payment into a fund that invests in carbon abatement projects.

The fund (option 4) is expected to be part of a national framework and a price cap for carbon will be announced. London's government should seek to ensure that off-site carbon abatement measures are delivered locally (or, as a next best option, within London) and that contributions to the fund are regionally ring-fenced with boroughs playing a central role in determining how they are spent. Consideration should be given to whether this could be used to provide one off FIT top-up payment to provide a sufficient incentive for the uptake of PV in London.

#### **4. What is the current state of the solar energy market and what opportunities are there for further developing it?**

In the response to question 3, London Councils identified that landlords (which may include housing associations) or management companies may have less of an incentive to install PV because they either need to use it to provide communal energy, provide it to tenants or export it back to the grid. Either higher export FIT rates or a simple approach that allows the buying and selling of energy locally are required to provide a better incentive in these cases.

It is understood that more profitable buying and selling of locally produced energy is the intention of the Licence Lite scheme that the GLA is progressing. The Mayor should ensure that boroughs and housing associations are properly informed of the opportunities to sell energy through it. This should be an on-going process, so that new capacity can be considered as it is planned or deployed. Where the energy is supplied from residential blocks, consideration should also be given to how residents can benefit from renewable energy and the financial benefits.

#### **5. What are the Mayor/the GLA and other public bodies doing to promote solar panel installations in London?**

London Councils has disseminated relevant information to its membership both through its officer network as well as its Transport and Environment Committee (TEC). London Councils lobbied against the introduction of a lower multi-installation tariff (for organisations with 25 solar PV installations) because this could reduce the number of schemes installed by boroughs and social housing providers, which have an important role to play in supporting community facilities and tackling fuel poverty.

London Councils is also represented on the RE:NEW Sponsors Board and has been working with the team to consider how the programme can achieve greater uptake of its services and provide greater carbon savings.

**6. What are the benefits and challenges /barriers to installing more solar panels on London's homes? How does solar compare to other renewable energy technologies?**

London Councils has identified a number of challenges/barriers in response to previous questions and has no further comments.

**7. What, more specifically, are the current practical and technological limitations? What opportunities are offered by new, emerging and evolving technologies and how can the domestic sector take advantage of these?**

London Councils has no specific comments to make in response to this question.

**8. What are public perceptions of solar power? Is it seen as a mainstream or a niche energy source?**

London Councils has no specific comments to make in response to this question.

**9. What more can a future Mayor and the GLA do? What impact are possible actions likely to have? What limitations are there?**

London Councils suggests that:

- London government should work with DECC and the Core Cities to investigate barriers to PV uptake in cities in general and consider potential solutions.
- London's government lobbies for regional variations in FIT rates or some form of one off 'top up' payment to provide a sufficient incentive in London.
- London's government should seek to ensure that off-site carbon abatement measures provided through 'allowable solutions' for new development are delivered locally (or, as a next best option, within London) and that contributions to the fund are regionally ring-fenced.
- The Mayor continues to progress the London Lite scheme and ensures that boroughs and housing associations are properly informed of the opportunities to buy and sell energy through it. This should be an on-going process, as much as possible, so that new capacity can be considered as it is planned or deployed.