

BOROUGH OF KETTERING

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Report Originator	Head of Development Services	Fwd Plan Ref No: -	
Wards Affected	All	15 March 2016	
Title	RENEWABLE ENERGY – SOLAR PANELS ON ROOFS OF COMMERCIAL BUILDINGS		

1. PURPOSE OF REPORT

To consider the potential for introducing new planning policy to increase roof-mounted solar energy provision on commercial buildings, as opposed to ground mounted solar farms in the open countryside.

2. INFORMATION

- 2.1 At the meeting of the Rural Forum on 17 September 2015, the Forum discussed the amount of land in the Borough that was consented for solar photovoltaic (PV) farms. At the meeting, Members of the Forum spoke of concern that emerging policy did not set a maximum amount of solar panels for the Borough, and at the cumulative impact of implemented sites on the character of the countryside. Members favoured that our rural countryside be used for food production, rather than it be taken up by fields of solar panels. It was noted that as a nation, the UK was some way short of European targets for renewable energy production, and that this was influencing decisions at planning appeal.
- 2.2 The Forum agreed that representatives, including the Chair, attend a meeting of the Executive Committee to articulate its concerns regarding the inability of the Council to divert solar energy capacity into roof mounted provision and instead had to consider an increasing number of large solar farms as a consequence. It asked the Council to examine the possibility of requiring new warehouse/large building development to install solar panels on roofs; and lend support to a lobby to change Government policy on this matter.
- 2.3 The Executive Committee considered the Forum's request at its meeting on 14 October 2015 and agreed that the issue be referred to the Planning Policy Committee for further consideration.
- 2.4 Following research, the following main conclusions have been made:
1. There is enormous vacant functionless roofspace on warehouses, factories and nationally, a quarter of a million hectares of it faces south (The Guardian 18.07.14);
 2. Companies can save money instead of buying all its energy needs by solarising roofspace; and

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3. Commercial roofs are where the Department of Energy and Climate Change (DECC) says it wishes to see much of the solar energy installations in the future.
- 2.5 It was reported in the media in 2014 that half a million homes were solarised in Britain, but only 400 commercial-scale solar PV systems had been installed. There are approximately 1.8 million commercial properties in the UK. Commercial installations therefore represent a tiny fraction of all UK solar, whereas on the continent almost a third of all solar is on commercial roofs. The total amount of solar PV installed in the UK exceeded 4.6GW, in comparison to in excess of 30GW in Germany.
- 2.6 There is undoubtedly significant untapped potential to be fulfilled from using commercial rooftops for solar generation. The feasibility of providing PV panels on roofs is not a constraint to development; the panels are sufficiently light that snow bearing requirements far exceed that necessary to support PV panels. In addition, the visual impact of panels on the character of the environment are also limited, given they sit relatively tight to the roofs of buildings. The roof-mounted sector of the renewables industry see roof-mounted PV systems on commercial buildings as the way forward. Once the panels are bought and erected, then free electricity can be provided at limited maintenance costs.
- 2.7 The Department of Energy and Climate Change (DECC) published the *UK Solar PV Strategy Part 2: Delivering a Brighter Future* for consultation in April 2014, to 'inter alia' stimulate the commercial and industrial scale building-mounted solar market to improve its performance. The Strategy highlighted some of the barriers to the take up of solar PV by business. These included the ability to access capital; the transaction costs (management time); prioritisation of other uses; suitability of the building stock; split incentives primarily in relation to landlord/tenant issues.
- 2.8 Ownership complications would appear to be one of the biggest deterrents to roof-mounted systems in the UK. Germany has a higher proportion of commercial and industrial buildings that are owner-occupied, thereby simplifying PV deployment and avoiding the contractual complications between landlord and tenant which often prevents their utilisation in the UK. In addition, in Germany the contractual arrangements are often simpler because the array can be dismantled and moved elsewhere, should the business move to new premises.
- 2.9 The landlord/ tenant relationships are further complicated by the commerciality of potential installations in the UK. For example, where landlords incur the costs of the deployment and take the Feed-in Tariff (FiT) payments but tenants benefit from reduced energy bills
- 2.10 Twenty-eight responses were received to the DECC consultation. As a result of the responses, the Government decided to introduce transferability for building-mounted solar PV installations. This however, requires both primary and secondary legislation, which will take four years from its inception in 2015. This

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commitment was made under the coalition Government; it is unclear whether the commitment will remain under the new Government.

- 2.11 The technology for roof mounted solar is not an issue preventing its wider use. Aspects of concern however are capacity and connection to the network, and/or energy storage capacity technology. There is currently a small amount of capacity on the network, major reinforcement would be required for any significant development. Also, these renewable energy systems require stability in energy production and energy use, at times when solar levels are low, tapping into a reserve of available power is essential. Energy storage would appear to come in two forms, one being through battery cells, however the issue here is capital cost and life expectancy, this being approximately 5 years. The other technology is flywheel, which has a lifespan of in excess of 10 years.
- 2.12 There would appear to be no Government guidance that enables the introduction of policy that imposes building-mounted solar PV on new large-scale commercial buildings. As such, the only real means for securing this technology in new development is through encouragement. It is therefore proposed that the local planning authority explore a set of words that encourage roof-mounted solar on commercial buildings, through the Site Specific Part 2 Local Plan.
- 2.13 Progress in this area is more likely if the Government can be more proactive in its legislative framework, and/or the offer of incentives. This would be of particular relevance in helping to resolve complications brought about by the landlord/tenant relationship. It is suggested the Council lobby the Government to highlight the significant benefits of roof-mounted solar PV systems for renewable energy generation.
- 2.14 Finally, the Rural Forum asked that roof-mounted solar provision be provided as an alternative to ground mounted solar farms. An increase in roof-mounted solar facilities may add to competition, and may drive technological developments to tackle concerns over this form of provision, but it is not possible to require in policy that roof-mounted solar PV replace the ability to develop ground-mounted solar farms.

3. CONSULTATION AND CUSTOMER IMPACT

- 3.1 No consultation has been undertaken in the preparation of this report. Should the Council decide to advance policy or supporting text to encourage roof-mounted solar PV on commercial buildings, then this would be subject to public consultation through the Site Specific Part 2 Local Plan.

4. POLICY IMPLICATIONS

- 4.1 The Site Specific Part 2 Local Plan, once adopted, will form a part of the Borough's Development Plan. If agreed, the Council will lobby the Government seeking that it make progress in resolving issues currently discouraging the use of commercial roof space for roof-mounted solar PV.

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5. USE OF RESOURCES

5.1 There are no resource implications as a result of the conclusions from this report.

6. RECOMMENDATION

That the Council:

- i. explore a form of words for inclusion in the Site Specific Part 2 Local Plan to encourage roof-mounted solar PV on commercial buildings;
- ii. lobby the Government to remove barriers that discourage roof-mounted solar PV on commercial building; and
- iii. officers update Rural Forum of the findings and resolution of this committee.

Previous Reports/Minutes:

Title of Document: Executive Committee – Renewable Energy – Solar Panels on Roofs of Buildings

Date: 14th October 2015

Title of Document: Rural Forum – Solar PV Farms

Date: 17th September 2015

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