Manor Royal BID is working with West Sussex County Council and Crawley Borough Council on the BISEPS Re-Energise project to develop and share secure, competitivelypriced, low-carbon energy for our businesses.

With energy costs predicted to rise in the medium term and carbon taxes linked to the use of fossil fuels set to increase, the smart option for businesses is to think about their energy collectively and work together to generate and use more of their own secure, affordable and low-carbon energy.

We have been working with Manor Royal businesses since 2017 to understand their energy demand and consumption data and formulate initial proposals to generate and use more renewable energy across the business district. A study identified a number of suitable technologies for the business district:

Solar PV	Solar panels mounted on the roof space of suitable commercial properties or on car ports generating cheap, low- carbon electricity for use by Manor Royal businesses and for exporting to the electricity grid.
Solar PV plus battery storage	Solar panels on roof space linked to large battery storage systems, enabling businesses to make use of the stored renewable energy when their solar panels are not generating.
Combined Heat and Power	An on-site gas or biomass-fired generator producing both heat and electricity for companies located across the business district.
Heat pumps	A pump, run by solar PV, extracting ambient heat from the air or ground that can be used for heating buildings.

## **Clusters**

We have identified four specific areas (or 'clusters') within the business district where these technologies could be applied, as well as a potential district heat network to share heat energy across the business district.

**Cluster 1** – a group of office buildings surrounding a manufacturing facility with a large amount of roof space, high peak energy demand and demand for low-temperature hot water. The site is suitable for solar PV, CHP and, possibly, battery storage.















**Cluster 2** – a group of six adjacent businesses with high energy demands and available roof spaces that are suitable for electricity generation by solar PV, and CHP. Installing battery storage may also be an option in the future.

*Cluster 3* – a group of light manufacturing businesses with significant power demand. The businesses are located close to cluster 1 and may be treated as a single, large business cluster. Solar PV and CHP with battery storage are viable options for this site.





**Cluster 4** – A group of co-located small and medium-sized enterprises with the potential to share energy generated by solar PV, CHP and, potentially, a ground source heat pump.

## Next steps

- Contact <u>andrew.tolfts@westsussex.gov.uk</u> or <u>ingrid.bennett@westsussex.gov.uk</u> to get involved in shaping the future of energy at Manor Royal Business District.
- Come along to our workshop on 4<sup>th</sup> December (10am 1pm) to help us develop the governance and finance arrangements for generating and trading energy between businesses.
- Look out for the business cases detailing the rationale, investment and benefits for each aspect of the BISEPS Re-Energise project which will be ready for implementation in 2019.

