

# Energy Infrastructure

The purpose of the Energy Park project is to co-locate a range of complementary uses that match the demand for energy with the provision of on-site energy from renewable/ low carbon sources.

The Energy Park is based on a holistic approach to development to provide renewable energy and associated infrastructure, new employment premises for a range of business types, hydroponic uses to help reduce food miles and extend growing seasons as well as supporting infrastructure for access and landscaping.

There is already existing and consented Energy Infrastructure at the site and agreement is in place with the Network Provider to create a new point of connection to the Grid via the existing overhead power lines that cross the site.

One of the acknowledged weaknesses over recent years across the UK and also within the East Midlands is a lack of investment into energy infrastructure, particularly related to the transmission network and increasing resilience across the Grid. In turn this has led to issues for business in providing suitable power supplies to meet their needs, particularly where these businesses have high energy requirements.

Detailed discussions with the Network Operator NGED, have identified that the overhead power lines and transmission network in this area have capacity to handle increased power generation, and an agreement is in place to provide a new point of connection to these overhead lines to connect to the solar PV, battery storage and other energy generated at the site.



The Burton Wold wind farm is already in place and generates renewable energy at the site and there are also extant planning permissions in place to develop solar farms adjacent to the wind turbines. The permissions for the solar arrays have been implemented, but the solar panels have not yet been installed. The concept for the Energy Park is to use this available energy to serve new development, including employment uses, and also to provide additional energy infrastructure to provide greater resilience to the National Grid and assist in the transition to a low/zero carbon economy and society.

The ambition of the development is to enhance energy infrastructure to increase resilience and energy security for the UK and at the same time provide a source of renewable energy that can meet the demands of high energy businesses at the site by providing 100% of their energy needs via renewable energy infrastructure from within the boundary of the Energy Park site.

Following the consultation over 2023, the area of the site to accommodate Energy Infrastructure has been increased to accommodate more space for Battery Storage or Hydrogen Generation for example. :

The Energy Park proposals respond to the Climate and Environment Emergency that was declared by North Northamptonshire in 2021 as well as the Government's Net Zero Strategy which has the ambition that the UK will be powered from clean electricity by 2035.

---

## Energy Criteria

A key part of the proposals for the employment use is that any business taking new premises at the site will need to comply with the Energy Criteria. This places higher demands on these businesses when compared to all other employment development. This Energy Criteria places Renewable Energy and low carbon operations at the heart of the Energy Park Proposals.

1. The proposed operations are associated with activities related to:
  - a. Energy infrastructure, potentially including: Solar, CHP (if sustainably powered), hydrogen, ground source heat pump, battery storage and other appropriate technologies (biomass is excluded from this list);
  - b. Automation of operations, e.g. manufacturing using robotic assistance / automated processes, logistics and distribution operations using intelligent robotics, automated scanning or picking, as well as measures that can increase efficiency and productivity; and/or
  - c. Engineering, manufacturing, R & D or other operations linked to low/zero carbon sectors or the transition away from fossil fuel dependency.
2. A minimum of 50% of the energy demand from operations within the new unit is provided by the on-site renewable infrastructure;
3. Every Unit will have access to a minimum power supply based on the ratio of 1MW per 100,000sqft/9,290sq m.

Businesses will be able to have 100% of their operations powered by on site renewable energy, but due to the intermittent nature of the energy, the minimum requirement is set at 50%.

All new employment buildings will be built to high energy efficiency standards with low energy fittings and high insulation levels to make the energy go further, and the roof space of these buildings will also be maximized with solar PV panels to provide yet more energy for the businesses on-site to supplement the existing, consented, and proposed energy sources at the site.

