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Planning Communities Executive Advisory Panel

Wednesday 15th November 2023

Agenda Item 4

Kettering Energy Park – Presentation

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KETTERING ENERGY PARK

A unique opportunity to create one of the UK's most sustainable developments.

NNC Planning Communities EAP 15th November 2023





FIRST RENEWABLE





Anthony Watkins



Matthew Thomas



Why Kettering Energy Park

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Market leading concept. First UK True Energy Park where Energy consumption can be met by Renewable Energy generated on site.



Strategic location adjacent to national arterial road infrastructure network with access to labour and ports.



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Existing Energy Infrastructure in place with Burton Wold windfarm and 400 acres of consented solar farms.



Concept in line with Government targets for transition to Net Zero Carbon by 2050.



UK self-sufficiency - following the Energy and Food crisis, the concept supports the drive for the UK to become more self-sufficient, with renewable energy generation and efficient farming.



Concept aligned with the needs of occupiers and investors to help enable their transition to net zero carbon with renewable energy operated, sustainable buildings in a biodiverse parkland setting.



Proven demand for large footprint developments with access to renewable energy.



Potential for negative zero (carbon positive development) with more energy production than utilised supporting the National Grid.



SEMLEP - Identified shortage of land of up to 500 ha with in the region, with renewable energy, large scale and strategic locations the key targets for new developments.



Local benefits of investment, 5500 jobs, £8m rates, £300m + inward investment with a community fund established to support community.



Occupiers to meet energy criteria to enable development

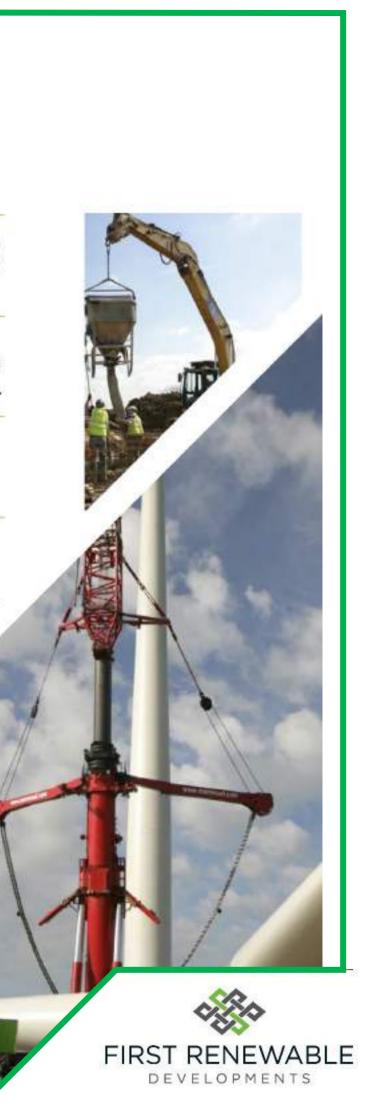


Future technologies centre providing potential EV charging, space for SME's and further education facilities to look at furthering energy technologies

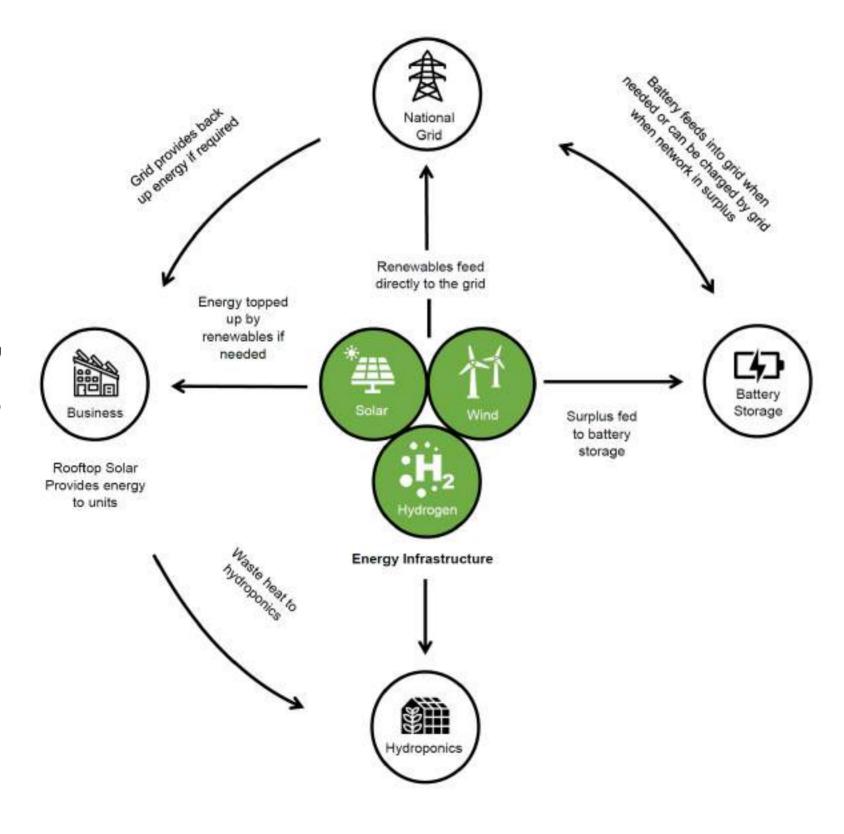


40 acre BNG area with public access





The Concept



The vision for the Energy Park responds to the Joint Core Strategy, maximising energy production and co-locating employment and other uses on the site.

The Energy Park is an opportunity to address Energy Security, Food Security, and the Climate and Environment Emergency using a sustainable and holistic approach that will support the following:

- Energy.
 - Infrastructure.
- innovation.
- Advanced agricultural uses/hydroponics.

Access to Secure & Renewable

• Additional Renewable Energy

• Future technologies to support

Drive towards Net Zero Carbon.



Key Infrastructure is already in place



THE WIND FARM WAS THE **UK'S LARGEST ONSHORE** INSTALLATION WHEN CONSENTED

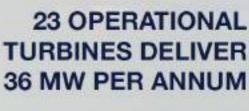
by a forward looking Council (and the first in the country).

It was developed on low grade agricultural land with an above average wind speed for the area.

Additional infrastructure, such as Battery Storage, will increase resilience.



*National Grid Electricity Distribution





Energy Criteria

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- The Energy Criteria is a key component of the Energy Park proposals.
- Standard employment sites are not required to adhere to a criteria like this. •
- Secured by planning condition to any planning permission.
- The Energy Criteria has been amended so that proposed Employment development will need to meet all 3 Criteria, rather than just 2.

What does the Criteria Cover?

- 1. Identifies appropriate uses, limited to: Energy Infrastructure and Generation, Automated Operations, Engineering, Manufacturing, Research & Development or other operations linked to low/zero carbon sectors; and
- 2. Stipulates that a minimum of 50% of energy demand from operations within the new unit to be provided by the on-site renewable energy generation (ability for 100% to be provided); and
- 3. Every Unit will have a minimum power supply based on the ratio of 1MW per 100,000sq ft/9,290sq m. (defines High Energy User)







Integrating Hydroponics

- A key component of the master plan strategy is to allow synergistic benefits between occupiers.
- Hydroponics at the park will minimise waste, reduce food miles, support food security and optimise the use of by-products.
- Energy dense developments (for example manufacturing or cold storage) produce usable heat as a by-product.
- The opportunity to attract high-tech food production through hydroponics which utilises the on-site energy production and waste heat form other occupiers will be a target of the development.

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The Future Technologies Centre



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As global businesses strive to make the transition

to net zero, Kettering Energy Park is uniquely well placed to enable them to deliver sustainable value for their customers and investors.

As a centre of innovation, it will also allow them to adopt future technologies early and remain at the forefront of the green energy market.

The park will contain facilities designed to attract:

- Innovative SMEs
- Green energy technology businesses
- R&D operations
- Businesses that can't find space in the Oxford/Cambridge arc

In addition, there is potential for an educational centre to monitor and develop energy usage and technologies.



Preparation of the Masterplan

- Provide a framework to guide future development and planning applications;
- Identify key parameters and constraints;
- Provide greater certainty to secure investment;
- Support the provision of additional infrastructure;
- Flexibility to accommodate the needs of business and responsive to requirements;
- Aspirational, to create a development that is fit for the future;
- Detail to come forward in later planning application.

Since 2020 over 40 documents have been prepared to support the Masterplan to this stage. These have been issued to North Northamptonshire Council and other consultees, including Historic England, Natural England, the Environment Agency, SEMLEP and Place Services, for their review.

application, including:

- Agricultural Land Assessment
- Archaeology Geophysics survey
- **Ecological Surveys**
- Green Infrastructure Strategy
- Heritage Assessment
- Highways Modelling & Assessment
- Landscape Review
- Assessment
- Tree and Hedgerow Survey •

still more to do.





Consultation

Consultation was started in the Summer of 2022 and has included:

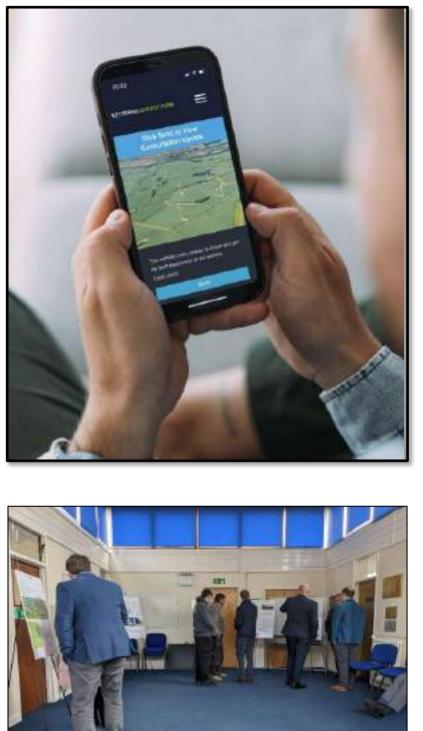
- Briefings at two EAP meetings; lacksquare
- Preliminary meetings with local Town and Parish Councils;
- Provided updates to Local MP's and Ward Councillors; ۲
- Launch of a project website;
- Held a public exhibition at Burton Latimer; lacksquare
- Undertaken formal public consultation across a period of 7 weeks.

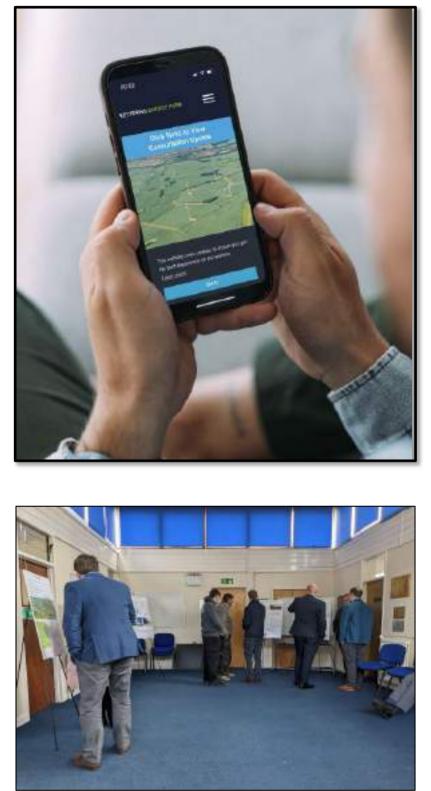
A detailed review has been undertaken of the responses. Further engagement will be carried out.

Key issues from the consultation included:

- The extent and reach of the consultation. \bullet
- Landscape, Visual Impact and Biodiversity Net Gain.
- Scale and Use.
- Highways.

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Landscape, Visual Amenity & Biodiversity Net Gain

- A detailed Landscape and Visual Assessment will be undertaken to inform landscape buffers and building ${\color{black}\bullet}$ heights for any planning application – to be reviewed with Council officers and other stakeholders.
- Existing trees and hedgerows will be retained where possible. •
- Proposals are anticipated to provide c 1,400 new trees and an additional 4,000 linear sq m (net increase) of species rich hedgerow.
- Over **100 acres** for landscape and biodiversity provision, of which **7.4 acres** is specifically for Lapwing • habitat. Public access to be provided to landscape areas.
- Habitat creation for key protected species such as Barbastelle Bats and Great Crested Newts.
- Co-ordinated design approach covering landscape, drainage and ecology. •
- The proposal will support an increase in biodiversity, achieving a *minimum* 10% net gain. •





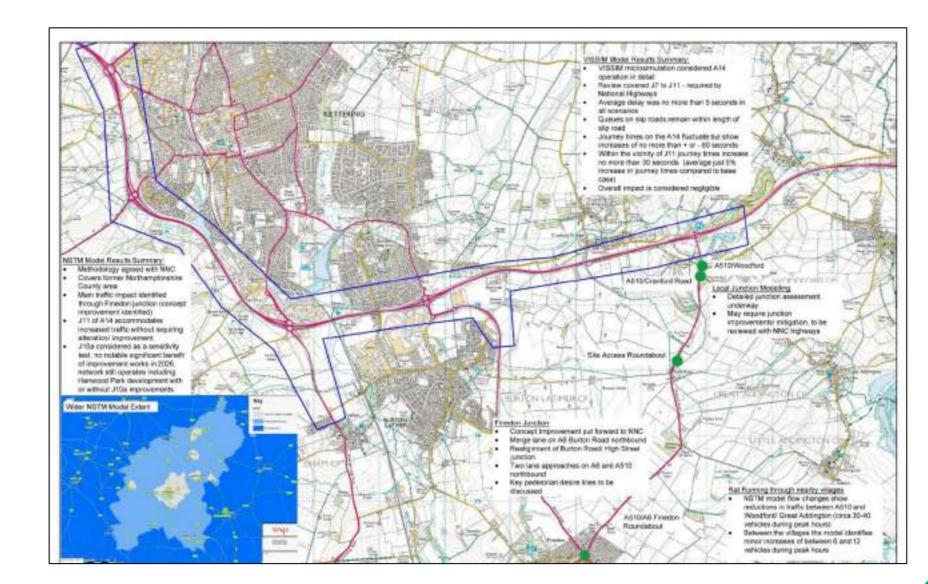


Transport & Highways

Modelling work started in 2021 in conjunction with the Highway Authority and National Highways.

NSTM – Validated in 2019, in line with guidance. **VISSIM** – Additional detailed assessment of A14 corridor.

Scope of assessment: The modelling work considers the proposed development based on B8 and B2 uses, with allowances for stand alone offices and other employment uses such as Research and Development. For robustness an allowance for future mezzanine floorspace has also been modelled. Nearby committed development is also assessed within the model.





Transport & Highways

Local Junctions – The need for works to junctions including the A6/A510 junction in Finedon and other junctions with the A510, such as with Cranford Road, will be assessed as part of work for a future planning application. Options for J10a have been assessed. No notable benefit of the junction 10a improvement works has been demonstrated.

The results indicate that **Junction 11 of the A14** will continue to operate effectively with the development traffic and no improvement works have been identified as being necessary at this junction.

Rights of way : Existing public rights of way will need to be amended through the appropriate process. Additional permissive routes will be provided to increase public access and enhance connectivity (to be secured by S106/legal agreement for any permission).

Bus Access: Discussions have been held with bus providers to **extend or provide new bus services** to the site from nearby centres. Detailed proposals for services will be subject of further discussions with service providers and stakeholders.

Cycling and Walking: Further work to identify new or improved cycle and walking connections will be undertaken for future employees at the site and leisure users.



Benefits

Economic Benefits

- c. 550 jobs during the construction stage.
- Investment of c. £512 million during the construction phase. ullet
- c. 5,500 jobs during the operational stage. ۲
- £167 million per annum for wages into the local economy. ۲
- £8 million from business rates per annum. ullet
- Employment and Training initiatives from employers at the site strategy • agreed with NNC Economic Development Team and endorsed by SEMLEP.

Further Benefits

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- Integrating Hydroponics minimise waste, use of by-products, supports food security. ${}^{\bullet}$
- Community Fund to financially benefit and support local communities. lacksquare
- Biodiversity Area with Public Access. ۲
- Educational Perspectives from future technologies, research, schools, visitor centre. ۲
- Partnerships with Universities active discussions are progressing with Cranfield ۲ University.
- Potential for Public Vehicle Charging •











Next Steps

The Masterplan is a stage in the journey, It is not the end of the story.

- Improve availability of background reporting and assessments to provide greater transparency with Parish & Town Councils and Local Residents.
- A lot of work has already been undertaken, some of this has not been visible. Further work and ${\color{black}\bullet}$ visibility is needed.
- Review recommendations from the EAP. (21 of the recommendations within the report to the EAP have already been accepted. We will consider all recommendations to see if these can be accommodated).
- Attend Meeting with Parish and Town Councils.
- Any work to support an Outline Application will be underpinned by a consultation lacksquareprogramme with stakeholders including the local Parish and Town Council's.



Thank You

