

Botley West Solar Farm

Comments on information and submissions received at D4

The role of the *Examining Authority* (ExA) is to ask questions relating to a *Nationally Significant Infrastructure Project* (NISIP), to examine the answers provided by various parties, and to make a recommendation to the relevant *Secretary of State*.

In the case of the proposed *Botley West Solar Farm*, the ExA's questions have, almost exclusively, been directed at the applicants. But it is also the ExA's responsibility to ask whether, as a NISIP, the proposed project accords with the Government policy and the needs of the UK's population. To date, there has been nothing published which addresses this key issue, so let's ask the core question.

Would the construction of large-scale solar farms like Botley West make a significant contribution to the UK's zero-carbon energy self-sufficiency?

The answer was provided in 2008 by Professor Sir David Mackay FRS, Chief Scientific Advisor of the UK Department of Energy and Climate Change, and published in his book [*Sustainable Energy - without the hot air*](#). (Any member of the ExA who has not yet read this book should do so before taking any further part in the proceedings.)

Mackay's answer in 2008 was, to paraphrase, ***"Yes, but it makes no sense to do so."***

This conclusion is based on geography and unchanging physical laws. In cloudy, northerly UK, PV is a highly intermittent, and therefore inefficient, source of electrical energy. The land area that would need to be covered with PV panels for solar power to make a significant contribution to the UK's energy requirements is so vast that it would be wholly unacceptable to the population and electorate. What is needed is a mixed, zero-carbon generating capacity, including nuclear-powered base load, with priority given to generating sources that favour our geography.

Some things have changed since 2008.

- The cost of solar PV panels has dropped dramatically while the cost of electrical energy in the UK has increased (which is why the Botley West project is so attractive to the applicants).
- The cost of batteries has also dropped but they remain expensive. At 51 degrees North in a maritime climate, Battery Energy Storage Systems (BESSs) are essential for the viability of any PV installation which generates significant amounts of energy for only a few hours per annum. The BWSF applicant simply comments that BESS is someone else's (ESO) problem and cost.

- The potential of off-shore wind to generate a large proportion of the UK's electrical energy requirement, night and day, in the seasons when it is most needed, has been demonstrated. Wind power generation regularly exceeds local consumption.

Taking these core factors into account leads to the following conclusions:

1. The mixed electrical energy requirements of the UK should include increases to both zero-carbon wind and solar generation, with the former largely off-shore and the latter on new and existing domestic, office, and industrial roof spaces.
2. Solar power projects should always include the provision and cost of energy storage (BESS), without which the technology is largely inappropriate in the UK's geography. [Domestic installations will increasingly couple solar PV with bi-directional EV batteries.]
3. The major UK energy infrastructure challenge, greater even than total zero-carbon generating capacity, is how to get wind- and nuclear-generated energy securely from source to the points of consumption.

*As a NISP, Botley West Solar Farm addresses none of these issues. Weighing its numerous downsides against its minor contribution to national energy priorities, it should **not be recommended for approval.***

Julian Morris
Appleton
[REDACTED]

10 September 2025