

ENERGY SCENARIOS: WHAT DO THEY MEAN FOR THE COUNTRYSIDE?

An invitation to tender

August 2022

Introduction

CPRE invites quotes from suitably experienced consultancies to undertake modelling analysis on the land use and landscape implications of various scenarios involving increased onshore renewable energy deployment in England.

The consultants will be required, between November 2022 and January 2023, to create models of the land use/landscape implications (particularly in terms of surface land take and visual impact) of up to three scenarios, which should include a tripling of onshore wind and solar photovoltaics (PV); and write up and summarise this research in the form of a dashboard-style data summary, by the end of January 2023.

The deadline for anyone wishing to submit a quote is **5pm on Thursday 6 October 2022**. The invited quote and any supporting material should be emailed to paulm@cpre.org.uk with 'Tender – Countryside Energy Scenarios research' in the subject header. For an informal discussion and if you have any questions, please contact Paul Miner (email paulm@cpre.org.uk; tel: 020 7981 2830.)

About CPRE, the countryside charity

CPRE is the countryside charity that campaigns to promote, enhance and protect the countryside for everyone's benefit, wherever they live. With a local CPRE in every county, we work with communities, businesses and government to find positive and lasting ways to help the countryside thrive - today and for generations to come.

What we do

We connect people with the countryside so that everyone can benefit from and value it.

We promote rural life to ensure the countryside and its communities can thrive.

We empower communities to improve and protect their local environment.

Through all our work we look at the role of our countryside in tackling the climate emergency, including seeking ways to increase resilience and reduce impact.

Our vision (what we want to achieve):

A beautiful and thriving countryside that enriches all our lives.

Our mission (what we need to do to achieve our vision):

To promote, enhance and protect a thriving countryside for everyone's benefit.

Our values:

Open: We are inclusive and respectful of everybody, no matter who they are or where they live. Our countryside is for everyone and so are we.

Trusted: We use evidence, knowledge and experience to influence positive change. Others believe what we say because they know we can back it up.

Connected: We value lasting and effective relationships. We invite and encourage collaboration to find what is best for the countryside we love.

Inspirational: We bring ambition and determination to everything we do. We channel our passion to motivate others and encourage them to act.

Background

Our current [Strategy](#) includes a programme of work making the case for ‘a low carbon countryside that mitigates and adapts to the impacts of the climate emergency.’ In 2020 we set out a more [detailed manifesto](#) for tackling the climate emergency through improved land use.

Since the early 2000s, there has been an exponential increase in the deployment of renewable energy related technologies, both onshore within England and offshore, in order to meet international commitments on climate change and greenhouse gas emission reduction. Large onshore installations have often taken place in rural and relatively undeveloped locations due to the need to for visual separation from urban areas. A particular controversy came to light over large onshore wind developments in the early 2010s, leading to the government introducing an effective moratorium on this through a policy in the National Planning Policy Framework (NPPF) requiring both clear proof of community support and supportive development plan policies¹.

More recently there has been a focus on large scale deployment of solar PV through so-called ‘solar farms’, for the most part on greenfield agricultural land. These have raised similar concerns on landscape impact grounds to those arising from onshore wind development previously.

In 2017 CPRE published [a joint report](#) with Regen SW, that sought to quantify the likely amount of land take resulting from deployment of given notional amounts in megawatts (MW) of new renewable generation capacity. This took two scenarios for significant emission cuts by 2030 (National Grid ‘Going Green’ and Imperial College London’s ‘Mega Flex’) which were tested at a high level against criteria developed mainly from the European Landscape Convention (ELC). Some land take implications were discussed but only in very broad terms. The scenarios which gave rise to the given amounts are now considerably out of date, for example actual rates of new solar development (both greenfield and brownfield) have far outstripped those anticipated within the 2017 report.

Methodological guidance and intended outputs

We are seeking to generate data and a dashboard style summary, based on credible published scenarios and supporting assumptions, on comparative land take figures (ha/% area of key land use categories) and, where appropriate (for example in relation to solar PV), on the potential to maximise use of the built environment, urban areas and previously developed land. The dashboard figures would form the basis for a briefing paper that CPRE would aim to publish in spring 2023.

CPRE would also discuss the input criteria and other supporting assumptions for any scenarios that would be modelled. As a guideline these would include the potential impacts, specifically in terms of land take, of current trajectories and also credible and authoritative future scenarios for:

- maximising energy efficiency and demand management (e.g. the [2021 CREDS scenario](#))
- industrial/resource (process) efficiency
- provision of decentralised and community energy
- use of interconnectors
- offshore wind deployment
- fossil fuel (including carbon capture and storage) and nuclear

Outputs could be broken down into two sequential work packages:

¹ See NPPF 2021, footnote 54.

1. Solar PV land take analysis: review of previous assumptions of non-greenfield opportunities (mostly rooftop) in England; calculation of credible generation potential (in relation to current climate change and energy strategy targets) for rooftops, previously developed (brownfield) land and agricultural land;
2. Land take/use implications of scenarios and policy targets for other renewable/low carbon technologies: it is envisaged this would focus on residual demand for onshore wind (assuming offshore targets are credible) but could also include land take implications for co-location of generation, storage, interconnection etc for a range of energy vectors.

Budget

Currently, the budget for the commission is £15,000, inclusive of expenses but exclusive of VAT. Costs and other information supplied in tender documents should include the following details:

- The number, seniority and experience of staff involved
- The hourly rate for each person
- Estimated number of hours for each person
- Detailed costs to include all out of pocket expenses including travel and subsistence, inclusive of VAT

A completed and signed Pricing Schedule must be submitted with the tender document.

Timetable

The appointed consultants are expected to comply with key dates highlighted in bold below:

- Brief issued: Friday 2 September 2022
- **Deadline for submission: Thursday 6 October 2022**
- Shortlisted organisations interviewed: Thursday 13 October 2022
- Inception meeting: Thursday 3 November 2022

Applicants must ensure that they are available for interview if shortlisted and able to attend the inception meeting (to be held in person at CPRE's offices in Provost Street, London N1) if appointed. It is expected that the research will take place between November 2022 and January 2023 and the summary and key findings produced by the end of January. Further key dates may be agreed with the appointed organisation at the inception meeting.

Contract and Confidentiality

Tenderers shall not issue any form of publicity or advertisement regarding this process without the prior written consent of CPRE.

The contract award will be subject to CPRE's standard terms and conditions.

CPRE
August 2022