

Strategic Spatial Energy Plan explained

Energy demand is changing in Great Britain. We now see more electric heating and transport, growing renewable electricity and rising need for clean, reliable and affordable energy.

We must make big changes to the energy system to meet these needs, and move at a pace and scale that GB has not seen before. It's a big challenge, that demands a more coordinated approach.

What is the Strategic Spatial Energy Plan (SSEP)?

The SSEP is part of a new GB-wide energy plan. It will recommend:

- **How to meet GB's future energy needs**
- **Where new energy is needed**, both on land and in the sea.

In 2024, the UK, Scottish and Welsh governments asked NESO to produce the SSEP. This plan will help make sure that **energy infrastructure is built when and where needed**.

The first SSEP will show:

- **GB's electricity and hydrogen infrastructure needs** from 2030 to 2050 and beyond
- Possible **places to site new energy infrastructure**.

Why we need this plan

Electricity demand is set to triple by 2050. But parts of GB are already using all the electricity the grid can supply. Some places are waiting for a connection that takes years to happen. We must plan our future energy system now, to make sure energy is available when and where needed. That means generating and storing more energy from sources like solar, wind, nuclear and hydrogen.

The SSEP will split GB into 19 areas called **zones** and suggest how much of each technology is best for each zone. This will give investors, developers and communities more certainty



about energy needs across GB and support long-term planning. It sets the context for GB energy requirements for decades to come.

Many people have given input to the plan. This includes representatives across industry, government, society, the environment and representative bodies of community organisations.

SSEP links to other plans

The SSEP will explain how to meet future energy needs. This links to two other key plans:

- The **Centralised Strategic Network Plan (CSNP)** will show priorities for GB-wide transmission networks
- Our **Regional Energy Strategic Plans (RESs)** focus on the gas and electricity distribution networks that bring energy from the national transmission systems to our homes and businesses.

Six steps to build the plan

We will work through six steps to develop the SSEP. Let's see what's involved at each step.

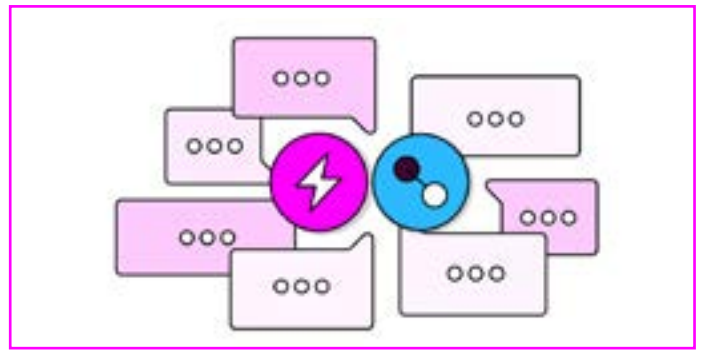
- **Prepare** – collect data and set out how we will develop the plan
- **Model** – look at which areas are best for future development, and how to minimise energy system build costs. Lots of information goes into the plan. This includes future energy demand, technology costs, different land uses and environmental data. We run lots of tests and checks to make sure our findings are reliable
- **Appraise** – identify and test pathway options to reach net zero by 2050. We must make sure the options are realistic and achievable. We will then share six pathways with the UK, Scottish and Welsh governments
- **Consult** – the UK Energy Secretary chooses a pathway and we then ask people for feedback. We will listen to government, society representatives, industry and communities
- **Refine** – assess all feedback received, address potential issues and adjust the plan as needed
- **Publish** – ask the UK Energy Secretary, Scottish and Welsh governments and Ofgem to endorse the SSEP. We will then publish the final, approved plan on our website.



How we will consult on the plan

Stakeholder input is key to the SSEP. We want to make sure our plans are visible, and give people the chance to shape this work at every step. We will also:

- Seek input from representative organisations across GB
- Speak with people across all nations and regions, to build understanding of our work
- Run a public consultation on the draft SSEP in Spring 2027.



The SSEP will consider all parts of GB:

- Some places may be familiar with energy development
- Some may see more energy developed
- And others might host energy infrastructure for the first time.

When we run the draft SSEP public consultation, we will do extra work in areas that may be affected. We want to make sure that:

- People in these places know about the SSEP and understand what it means for their area
- People are supported to share their views and help inform our decisions.

We will conduct our consultation fairly and transparently. We want to ensure that everyone can have a say.

Key dates

We will **consult on the draft SSEP** in spring 2027.
We will **publish the final SSEP** in autumn 2027.

We will refresh the plan **every three years** to make sure it stays relevant and effective.

Any questions? Contact us

We hope you find this factsheet useful. If you have any questions, please contact our team.

Visit our website

neso.energy/strategic-planning

Email us

box.ssep@neso.energy