

Public

CSNP webinar: Gas network planning

July 2025

Agenda

Join Q&A at
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#4206660



Presentation includes:

- NESO: Planning the energy system
- Whole system CSNP
- Gas network planning under the whole system CSNP framework
- Next steps
- Q&A

NB – we'll record the presentation including Q&A

Join Q&A at Sli.do use code #4206660

We will moderate and answer questions that are relevant to CSNP and reflect a diverse perspective. You can also get in touch via box.sep-portfolio@nationalenergyso.com for any specific consultation questions.

At a glance:

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NESO has strategic planning responsibilities for the National Transmission System (NTS).



The gas processes within CSNP will be carried out through the existing deliverables set out in the gas system planner licence, known as Gas Network Capability Needs Report (GNCNR) and Gas Options Advice (GOA) document.



To accurately carry out strategic gas planning for the NTS, physical entry and exit capabilities are assessed using a range of demand and supply data.



These processes will be informed by the Strategic Spatial Energy Plan (SSEP) and NESO's Future Energy Scenarios (FES).



The options assessed as part of the gas-specific CSNP process can be developed and put forward either by NGT or NESO.





NESO – Planning the whole system

The challenge

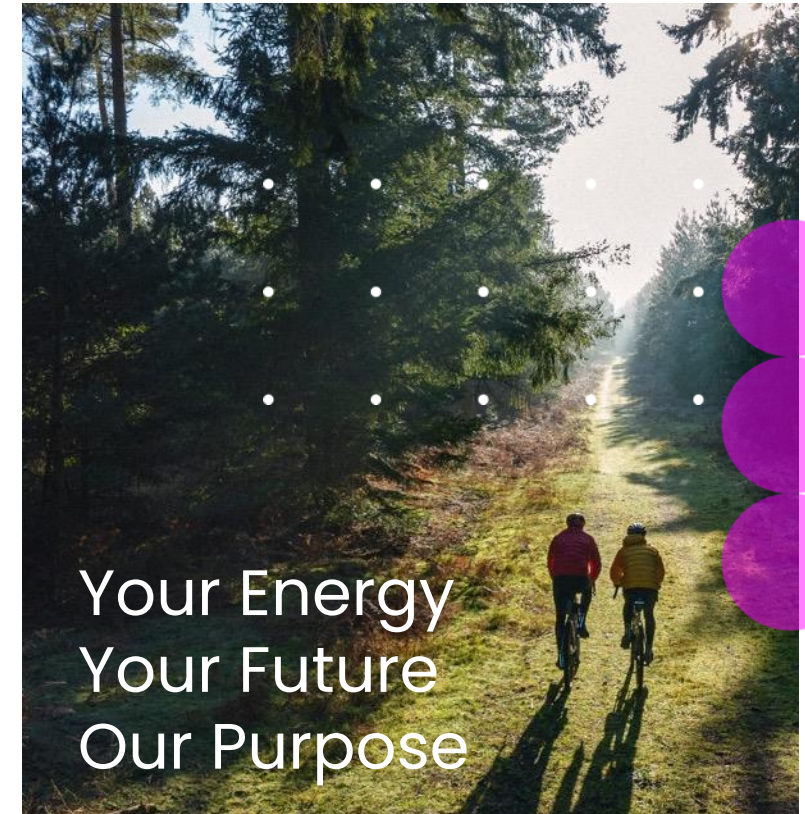
It is our job to transform the whole energy system, strategically planning the transition to a clean energy system, embracing new technologies and cleaner generation sources, always with the cost to the consumer in mind.

The opportunity

The way we use, store and source energy is evolving, and we have an opportunity in this period of change to shape an energy system that fosters economic growth and prosperity for Great Britain, creating jobs and building skills.

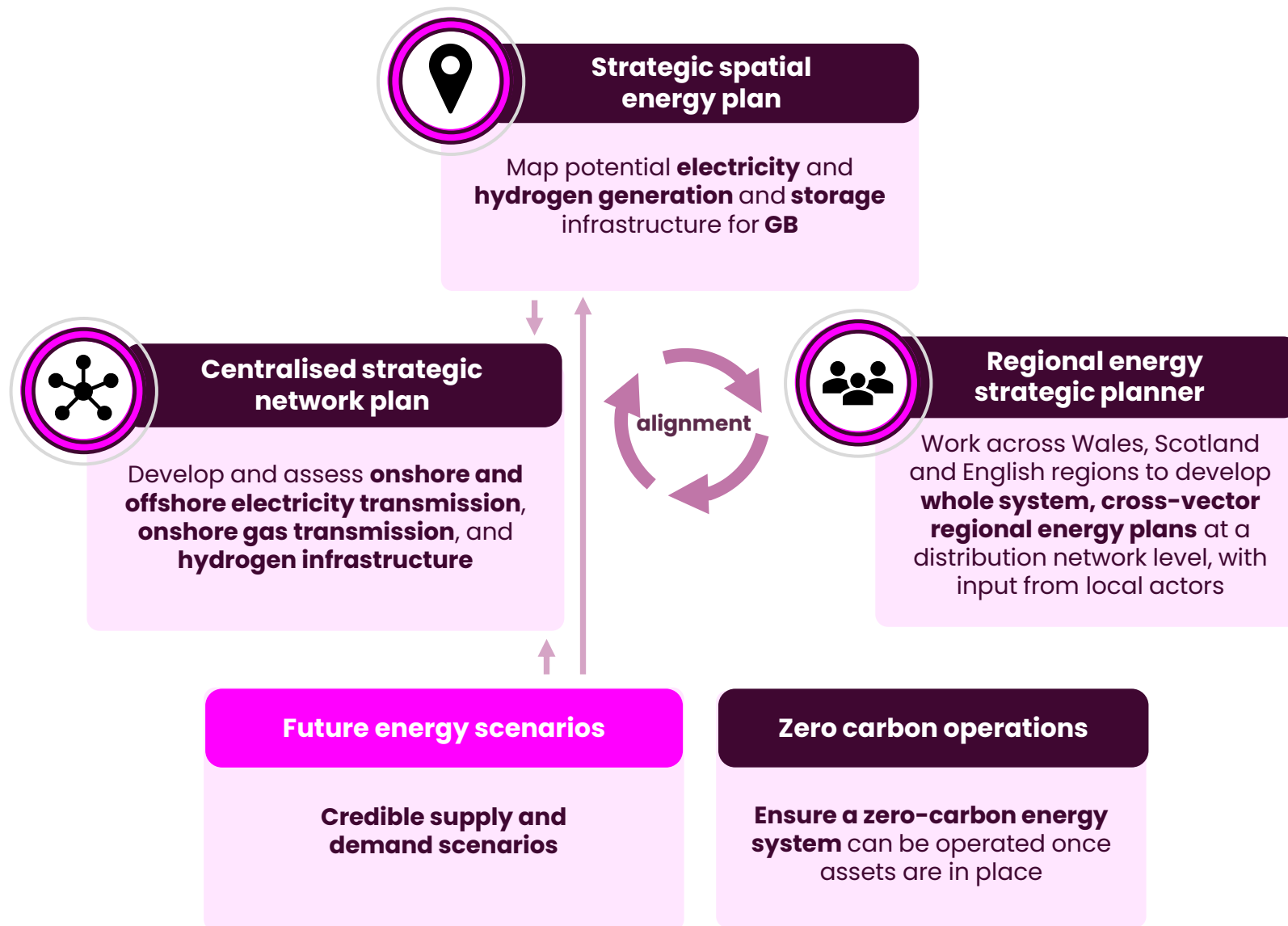
The plan

Having recently published how we intend to deliver spatial energy planning, we are now consulting on proposals for how transmission networks should be planning to transfer this energy to where it's needed over the next 25 years.



Strategic energy planning (SEP)

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Whole system CSNP

Today, our **energy networks** cover onshore and offshore **electricity transmission**, international **electricity interconnectors**, and **onshore gas**.

Electricity networks need to keep growing, so we must get ready to **support an expanded power system**.

While gas demand is likely to reduce, **we still need some supply**.

And there may be **more demand for hydrogen in future**, which will affect the electricity and gas networks.

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Ensure efficient energy network development by holistically planning the onshore and offshore electricity networks, and strategic gas and hydrogen networks.



Plan strategically, ahead of need, to enable investments required to ensure reliable, clean and affordable energy.



Accelerate delivery of network by providing certainty on the needs case and strategic parameters of options to support planning and regulatory processes.



Conduct a consistent, robust and transparent assessment on a broad range of network options considering multiple assessment criteria.





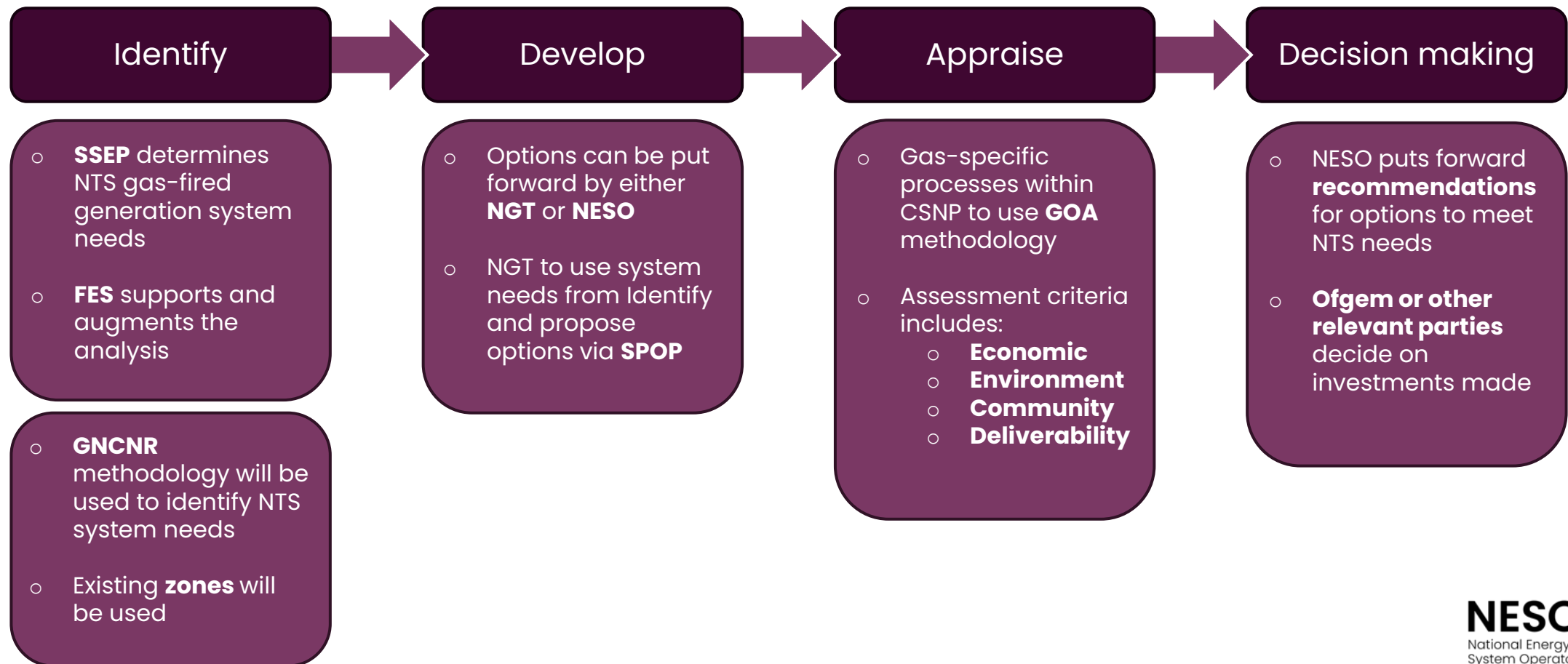
Whole system framework

- | | | |
|---|-------------------------|---|
| 1 | Drive | To plan the energy networks required for the wider transfer of electricity, gas, and hydrogen, CSNP will utilise outputs from the Strategic Spatial Energy Plan (SSEP) and complementary insights from the Future Energy Scenarios (FES). |
| 2 | Identify | The CSNP will provide a view of the current capability and future needs of the networks to inform network options development for each energy vector. |
| 3 | Develop | Considering each vector's system requirements, a range of reinforcement options will be identified and put forward by NESO, Network Owners, and broader parties, as appropriate. |
| 4 | Appraise | Options will then be assessed across multiple assessment criteria to determine the best design across GB. Required reinforcements will progress into the delivery phase. |
| 5 | Plan publication | A draft plan will be published, and a consultation window will provide an opportunity to shape the final CSNP publication. Where required, this will include statutory consultations for environmental assessments. |
| 6 | Deliver | Following publication of the final CSNP, the required reinforcements will progress through detailed design, consenting and delivery. An ongoing change control process will ensure delivery in line with the plan. |



The CSNP framework applied to gas network planning processes

The gas processes within CSNP will be carried out through the existing deliverables set out in the gas system planner licence, i.e. GNCNR and GOA.





Identify

The identify requirement will be undertaken by Gas Network Capability Needs Report (GNCNR) methodology as detailed under conditions C8.11 to C8.16 of the gas system planner licence.

Identify purpose

The intent of identify is to enable us to identify any current or future system needs on the gas transmission network. This will be undertaken by assessing the “network capability” of the NTS and is defined the maximum flow of gas that can transported to and from zones (for both entry and exit)

The primary part of the assessment is to highlight where network capability is insufficient that can lead to a constraint and may need network reinforcement.

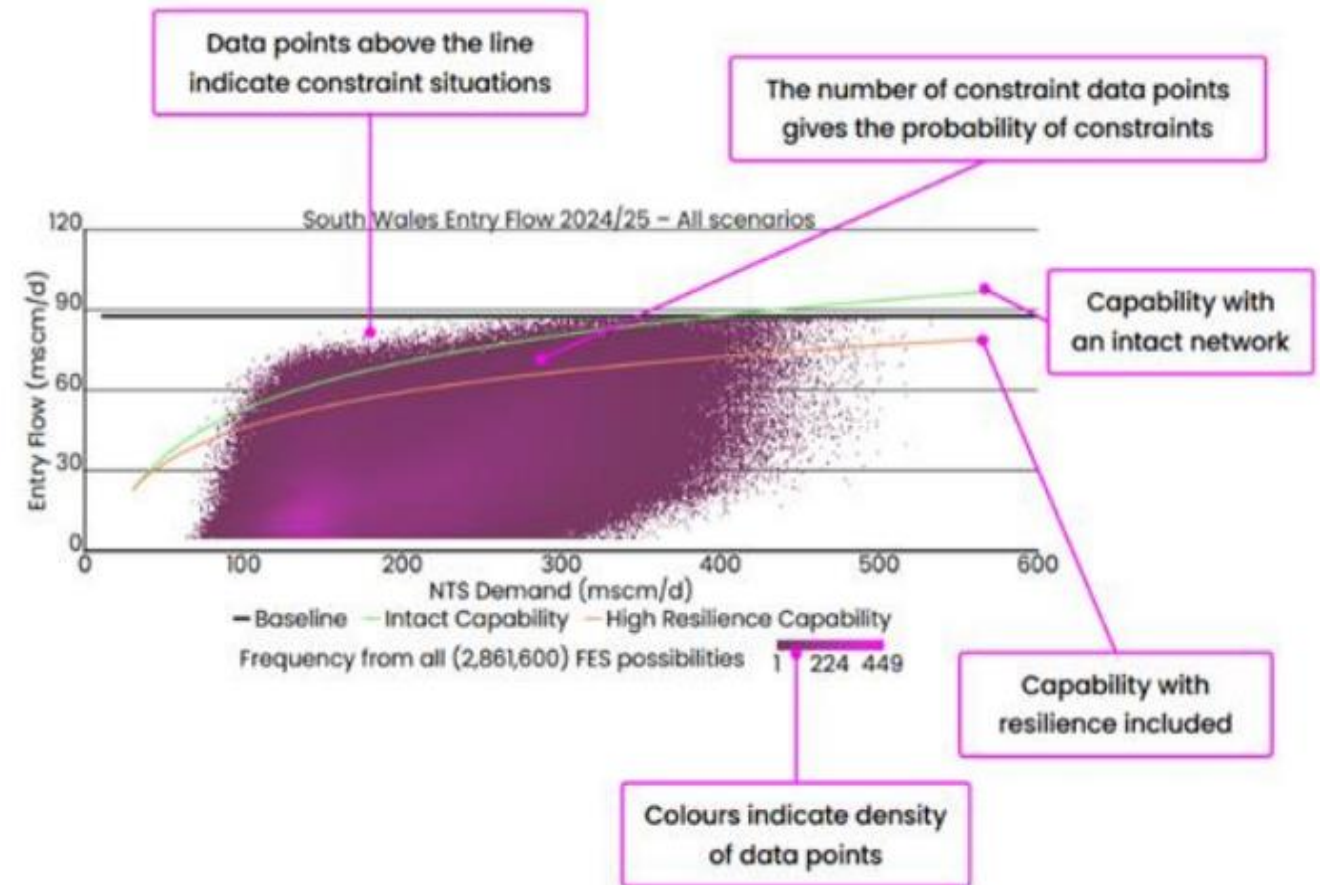
Identify

The NTS is split into “zones” that allow us to complete network analysis to define entry and exit network capability curves.

These network capability curves are then analysed against a large series of supply and demand forecasts. This allows us to identify points above the curve as a “constraint”

The NTS capability is then visualised as a “flame chart”

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Develop

The identify requirement will be undertaken by National Gas Transmission as detailed under their licence special conditions 9.10 Strategic Planning Options Proposals (SPOP).

Purpose

The intent of develop is for National Gas Transmission to propose NTS reinforcement, repurposing or decommissioning options for the needs stated within Identify that they deem suitable. NESO also has the option to develop and propose options where we deem appropriate.

The primary part of the assessment is to highlight any relevant NTS investment requirements for network capability as highlighted within Identify section.



Appraise

The appraise requirement will be undertaken by Gas Options Advice (GOA) methodology as detailed under conditions C8.11 to C8.16 of the gas system planner licence.

Purpose

The intent of appraise is to provide independent advice to Ofgem about which, if any, investment option for the NTS put forward by NGT during Develop stage or recommended by NESO, should be taken forward and further developed. We are required to make a recommendation.

The primary part of the assessment that will be carried out will be made up of the economic assessment, which makes up the majority of our proposed GOA methodology consultation.



Appraise

Investment options put forward in Develop will be evaluated within Appraise process.

Assessed against following aspects:

- Direct economic impacts
- Environmental impacts
- Social impacts
- Deliverability

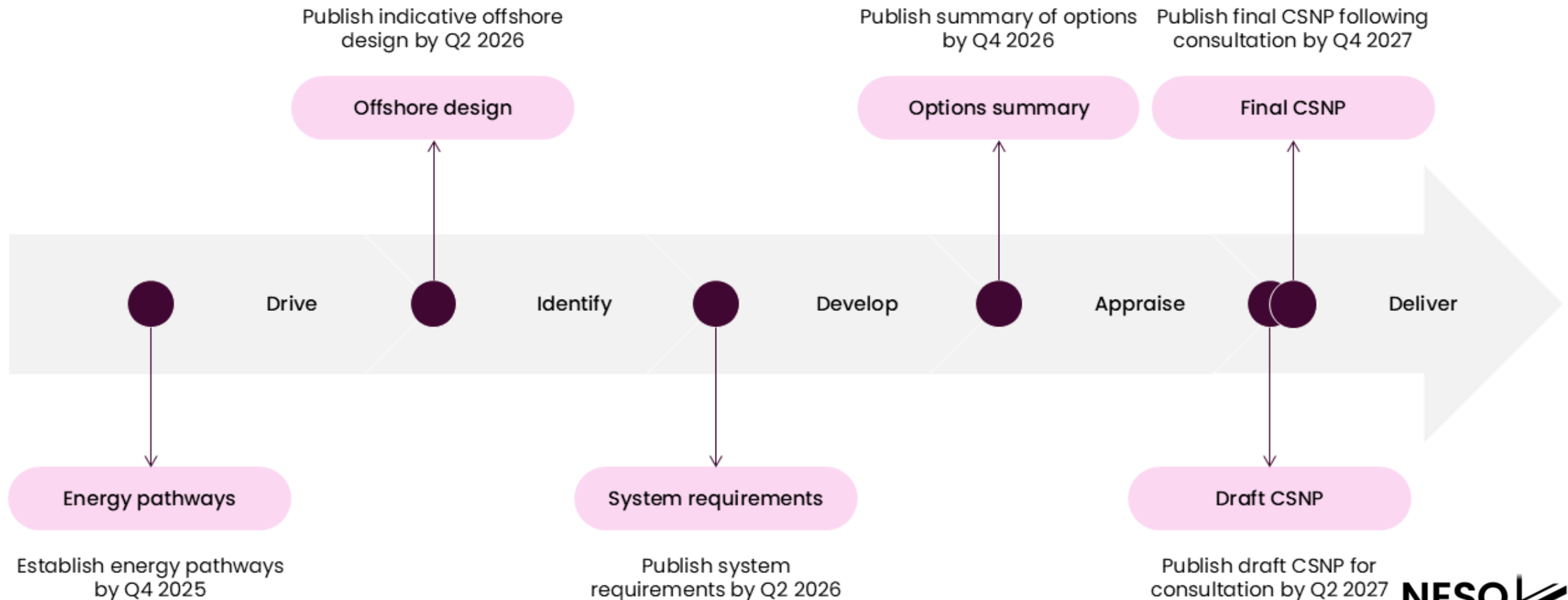
We are intending to include GOA methodology that was consulted during May 2025 for CSNP





Plan timeline

Gas System Planning for CSNP will be developed in line with the overall CSNP timeline





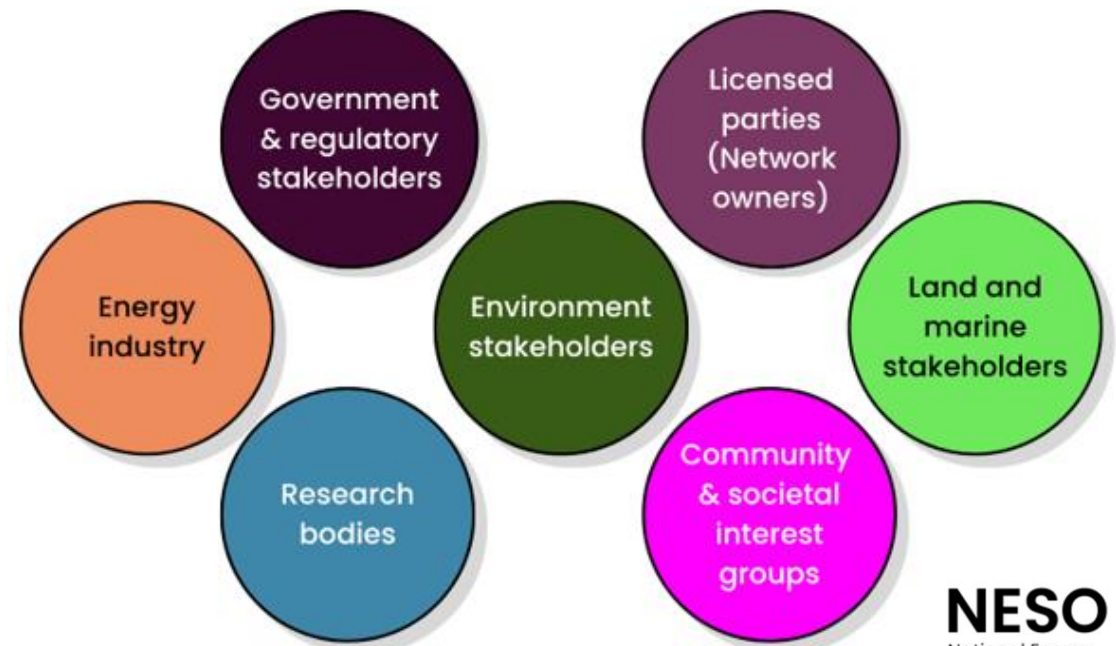
Stakeholder engagement

We will engage with stakeholders using the established Strategic Energy Planning (SEP) expert working groups. These groups include industry, societal interest, environmental, marine and land spatial planning.

They serve as an engagement channel that:

- facilitates networking among members
- provides a clear overview of the CSNP
- tests understanding
- gathers data and feedback
- ensures deliverable outputs
- offers opportunities for stakeholder review

Who will we engage with?





Immediate next steps

Come along to our technical webinars to learn more about the specific aspects to the proposals.

Leave us consultation feedback through our CSNP surveys:

<u>Electricity planning</u>	22 July	2pm
<u>Broadening participation</u>	23 July	10am
<u>Appraising network options</u>	23 July	2pm
<u>Offshore Coordination</u>	24 July	10am
<u>Hydrogen planning</u>	24 July	2pm

[Whole system network planning](#)

[Electricity network planning](#)

[Gas network planning](#)

[Hydrogen network planning](#)

Consultation closes
1 August 2025



Final methodology
30 September

Public

Q&A

