

AI technical sandbox– Energy UK response to Ofgem consultation

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About Energy UK

Energy UK is the trade association for the energy industry, representing companies investing billions of pounds to secure our country's current and future energy needs.

From growing start-ups to major electricity generators, grid and infrastructure developers and energy suppliers, our members are driving change across power, heat, transport and flexibility.

We provide a collective voice for the sector working with governments, regulators, charities and other organisations to provide crucial insight that shapes policy, offers solutions and promotes best practice.

Our broad view across the whole system supports evidence-based positions which are not tied to particular technologies, and are focused on delivering strategic benefits for people, businesses and the economy.

We champion initiatives such as our Vulnerability Commitment, which pushes suppliers to go beyond regulation to support customers with additional needs, and TIDE, the industry's drive for greater inclusion and diversity. Through our Young Energy Professionals Forum, we support the development of future leaders.

We are equally committed to our team and are proud to be recognised as a 'Gold' Investors in People employer.

Energy UK welcomes Ofgem's work to better understand how artificial intelligence technologies could be used in the energy sector and provides several recommendations to maximise the success and value of the AI Technical Sandbox.

We recognise that given the rapid advancements in artificial intelligence (AI) technologies, it is right that Ofgem is considering how to best mitigate any direct harms to customers, and support responsible AI adoption in the energy industry. We would like to thank Ofgem for considering our initial feedback to its earlier call for input.

To support the design of the AI Technical Sandbox (the Sandbox), we have outlined key areas for improvement, to ensure it proves valuable to the sector and customers.

At least in the pilot phase, the Sandbox should have a clear, narrow focus.

While the consultation document outlines the aims and expected outcomes of the Sandbox, the breadth and high-level nature of the list makes it difficult to determine practically what the Sandbox will focus on. If the main priority is to stress-test new AI

systems against existing regulatory oversight, to inform targeted regulatory modifications (if necessary), we recommend that this is made more explicit. This should then support more tailored design details to deliver this, and ensure a clear, narrow focus. For example, this could include a clear scope of what use cases Ofgem would consider eligible for the Sandbox, and details on how this would work in practice. This would also allow stakeholders to provide more detailed feedback on the Sandbox plans, and inform if and how they develop applications to the Sandbox.

We also note this resource, [A Capability Architecture for Data Ecosystems](#), which provides a shared terminology for the different data capabilities the sector will need to design, build, and operate a collaborative, AI-enabled smart energy system. Using this framework alongside the Sandbox could make it easier for the sector to collectively:

- Identify which capabilities should be prioritised and tested first.
- Decide whether a roadmap of multiple pilots over a year would be valuable.
- Agree which capability areas should be tested during that pilot, and in what order.

Alternatively, we suggest that the Sandbox could be used as a mechanism for Ofgem to encourage businesses to focus on a particular area where it has identified that AI innovation could hold real value for customers. For example, Ofgem could choose to focus on decarbonisation or sustainability, and push the sector forward in developing AI solutions in these areas. This would align with a focus on the opportunities of AI, not just the risks, and exploring the value of new AI innovations for customers, rather than just the implications for regulations.

Further information and consideration of timelines is needed.

Given the rapid nature of advancements in AI technologies, 12 months is too long for an initial pilot. Application, involvement, and sharing learnings would all need to be fast paced to prove useful to participants and the broader sector.

One possible alternative would be to consider a prioritised roadmap of multiple pilots within a 12-month period. For example:

- Four 12-week pilot periods spread across the year.
- Each 12-week phase focusing on a different theme or capability area.

We also note that there is a lack of clarity in the consultation document on timelines for the pilot. For example, when it is likely to start, how long the actual testing phase is expected to take, and other milestones.

Further technical and legal detail on other elements of the Sandbox is needed.

Specific information on how the Sandbox will work practically is needed, including on the technical and legal elements. This would provide stakeholders with more confidence to apply to the Sandbox. For example, details on technical specifications of the testing environment, data residency and transference, and practically how IP and confidentiality information will be protected. This would support stakeholders to

undertake the necessary legal and security assessments, as they would with any third party.

Furthermore, definitions are needed for representative and real-world data, to provide clarity on what kind of data is expected to be used during Sandbox. The consultation document implies that both would be used in the Sandbox, or that these can be used interchangeably, despite these being two different data sets. The data being used will influence how representative the results are, as well as the security and legal aspects of the Sandbox.

If you have any questions about this response or wish to engage with Energy UK and its members, we would welcome further engagement.

Kind regards,

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