

Insights from running the regulatory sandbox

1. Introduction

We launched the regulatory sandbox service in February 2017. The sandbox enables innovators to trial new products, services and business models without some of the usual rules applying. You can read more about what a sandbox is [here](#). We have now run two application rounds (called 'windows') – this document sets out what we have learnt so far from running the sandbox process.

We intend to continue offering this service, and these lessons are informing how it evolves. We will set-out the next steps for the sandbox in the near future. We also hope these insights will be of use to other regulators and government departments who are considering a similar approach.

2. Summary of the regulatory sandboxes

The sandbox has proved a popular way for innovators to engage with Ofgem and we are delighted at its popularity. It has enabled us to support trials and identify rules which pose barriers to new products, services and business models. Running the process was challenging, but we gleaned valuable insights from working with innovators in new ways.

We launched the first sandbox window in February 2017 and the second in October of that year. We received 67 expressions of interest across the two windows, which we assessed against our [published](#) criteria, and worked with innovators to understand their aspirations. During these discussions, we found that many innovators required support to better understand the rules of the energy sector. In most cases, we provided feedback on how these businesses could go ahead without the need for a sandbox.

In a limited number of cases, we were unable to help the innovator. This was either because they sought endorsement for their business model, required permanent changes to regulation or more substantive relief than the sandbox is currently capable of providing. In a few instances, the rules innovators were seeking relief from were in the process of being reformed (for example, storage and network charges) and we judged it would not be appropriate to provide sandboxes in these areas at this time.

We awarded seven sandboxes to enable trials - three during the first window and four in the second. All but one of the trials seek to maximise the benefits of locally-produced (and sometimes stored) electricity for local consumers. Some of the trials also plan to explore the use of platforms to facilitate peer-to-peer energy trading. Trials must be completed within two years of approval.

More information on each trial is available on our website: [window 1](#) and [window 2](#).

3. What did we learn from running the sandbox process?

We designed the regulatory sandbox to be flexible, to deliver the support that innovators tell us they need. We want it to embody responsive regulation, working with innovators to 'test and learn' from what works. Through both windows we have identified ways to improve the process and evolve the service.

We spent time talking to innovators to understand their business and to locate and interpret the rules that affected them. This was an iterative process, through which we ended up working with innovators to co-create feasible sandbox trials.

This process of working together created more opportunities for us to learn. Six primary insights have surfaced from this engagement approach:

Insight 1 *It is not always clear to innovators what they can and can't do. Innovators commonly need advice, not a sandbox.*

We originally imagined sandbox requests being made by innovators who wanted to run a trial and were aware of a specific rule that blocked them. We discovered that this expectation did not match reality.

In our experience, innovators do not generally approach the energy sector thinking about licences, industry codes and secondary legislation. We found that most people, whether new to the sector or with decades of experience, often understand what they think they can and can't do by looking at competitors and talking to peers and partners.

This is totally reasonable, but meant we needed to do more work than expected to understand their proposition and identify if regulatory barriers existed. Once we had helped them navigate regulation, many ended up receiving feedback from us and went ahead without needing a sandbox.

This is largely positive, though it reflects that it is not always easy for innovators to find rules or interpret them. It reinforces the value of our [feedback service](#) while also revealing that there is some disconnect between the sandbox we were offering and the real needs of innovators.

Insight 2 *When a proposition isn't possible today it is usually because of a complex mix of requirements including industry norms, systems, charging arrangements, codes and licences.*

For those propositions that we couldn't help go ahead, it was often the case that multiple factors blocked the idea. These could include the need for new interpretations or relief from rules operated by industry code bodies or Government; both outside of

Ofgem's immediate control. Or, they required changes to rules already being reformed, so the opportunity for a trial to inform policy change was limited.

While we are working with other rule-makers to extend the reach of the sandbox service across the energy sector, we also need to ensure that we are clear with innovators about the scope of the sandbox and what tools are available.

Insight 3 Innovators are focused on launching businesses, not trials.

We see the sandbox as a way to facilitate time-limited trials and thought that innovators wanted to conduct such trials. We discovered that, understandably, most innovators want to launch enduring businesses and are less focused on trials. They want to know that, after the trial, they will be able to continue to operate. This certainty can be important for innovators trying to secure funding from investors.

However, for Ofgem, the temporary relaxation of rules is important, as it differentiates a sandbox from permanent policy change. Changing policy for all companies involves more consideration than allowing one innovator to temporarily adopt a different approach. This is an interesting challenge that we are glad to be aware of. It may not be resolvable, although we do have some initial ideas which are informing our [Future Retail Market Design](#) project and our thinking about how the sandbox will evolve.

Insight 4 Start-ups want to signal low regulatory risk to investors.

We learnt that a significant number of sandbox applicants were looking for Ofgem to review their business idea and confirm that it faced no regulatory issues. This would help them reassure investors and enable them to access funding. We recognise funding is an essential enabler of innovation, though we hadn't envisioned that innovators would seek to use the sandbox service in this way.

We are considering the extent to which it is both feasible and appropriate for us to perform this role, and welcome any thoughts.

Insight 5 Innovators have to operate within existing structures.

While a sandbox could enable a trial which doesn't directly involve consumers (e.g. network or system focused), the majority of innovators we worked with are focused on residential customers. For innovators seeking to work with consumers (domestic or non-domestic), this means they would have to become a supplier or partner with a supplier.

Setting up as a licensed supplier can be complex, costly and lengthy (particularly for a small-scale, time-limited trial). As such, all of the sandboxes we have supported involve an existing licensed supplier. These partnerships were made independently by the innovator and have not been facilitated by us.

The need to be a supplier, or partner with a supplier, caused some innovators to be disheartened. This reinforces the point that we need to be more precise about what relief the sandbox is capable of providing.

Insight 6 *Innovation is happening across the sector, with local electricity supply featuring strongly.*

We encountered innovators working across the sector, with new models in local energy, peer-to-peer trading, storage, platforms and electric vehicles to name but a few.

Across both sandbox windows, local energy featured particularly strongly. Within the local energy theme, domestic retail supply has been a key focus. Innovators are developing models that share the benefits of community-owned generation and deliver other energy services for local consumers, oftentimes more vulnerable consumers.

One of the reasons we've seen more sandboxes in this space is because of the electricity exemptions regime: a distinct regulatory framework allowing for small-scale unlicensed generation, distribution and supply. Even though its origins reach back to the Electricity Act 1989, these rules are not well known or widely applied.

Exploring the industry and regulatory interactions between the exemption and licensed regimes has been a key line of enquiry through the sandbox process. Fewer rules apply to exempt supply than licensed (an explanation of licensed and exempt supply is available [here](#)).

We worked with innovators to consider how the rules for both regimes could interact, focusing on issues such as billing, tariff information and consumer protections. Together, we ensured that consumers in the trials will have a clear understanding of who is supplying them without being overwhelmed by information, and know who to contact if they have any queries.

If you are interested in using the sandbox or have ideas about how the service can evolve, please contact the Innovation Link by emailing innovationlink@ofgem.gov.uk.