Evaluation of the Innovation Link

Ofgem

17 May 2021

FINAL REPORT

Important notice

This document was prepared by Cambridge Economic Policy Associates Ltd (trading as CEPA) for the exclusive use of the recipient(s) named herein.

The information contained in this document has been compiled by CEPA and may include material from other sources, which is believed to be reliable but has not been verified or audited. Public information, industry and statistical data are from sources we deem to be reliable; however, no reliance may be placed for any purposes whatsoever on the contents of this document or on its completeness. No representation or warranty, express or implied, is given and no responsibility or liability is or will be accepted by or on behalf of CEPA or by any of its directors, members, employees, agents or any other person as to the accuracy, completeness or correctness of the information contained in this document and any such liability is expressly disclaimed.

The findings enclosed in this document may contain predictions based on current data and historical trends. Any such predictions are subject to inherent risks and uncertainties.

The opinions expressed in this document are valid only for the purpose stated herein and as of the date stated. No obligation is assumed to revise this document to reflect changes, events or conditions, which occur subsequent to the date hereof.

CEPA does not accept or assume any responsibility in respect of the document to any readers of it (third parties), other than the recipient(s) named therein. To the fullest extent permitted by law, CEPA will accept no liability in respect of the document to any third parties. Should any third parties choose to rely on the document, then they do so at their own risk.

Contents

EXECUTIVE SUMMARY 4

1. INTRODUCTION AND BACKGROUND 8

1.1. Ofgem's Innovation Link service 8

1.2. Aims of this evaluation 13

1.3. Our methodology 13

2. OUR EVALUATION INSIGHTS 15

2.1. Barriers to energy innovations 15

2.2. Diversity of innovators' needs 18

2.3. Innovators' expectations 19

2.4. The Innovation Link's impact on innovators and energy customers 21

2.5. The Innovation Link continues to be necessary 25

3. RECOMMENDATIONS 27

3.1. Future issues 27

3.2. Recommendations for the Innovation Link 28

APPENDIX A METHODOLOGY 31

EXECUTIVE SUMMARY

Olivia knows there must be a way to make electricity affordable and to meet demand from renewable resources located within her community. Drawing on her training in programming, and partnering with two like-minded friends, she develops an artificial intelligence programme that can optimise matching local electricity demand and supply. But when talking to prospective funders she learns about the need to become a licensed supplier in order to sell electricity to households.

She reaches out to Ofgem and is directed to the Innovation Link, where a case officer is assigned to her. The case officer spends time with Olivia to learn about her innovation and, on that basis, drafts a 'bespoke steer' that explains how Olivia could, by making a few changes, achieve the desired consumer benefits from her innovation and bring it to market without the need to become a licensed supplier. Olivia and her partners do so and are able to refer to their engagements with the Innovation Link to get investors comfortable with the innovation. As a result, she is able to roll out her innovation twice as fast as would have been the case without the Innovation Link. Her customers benefit from cheaper, renewable energy.

The above illustrates the kind of impact that Ofgem's Innovation Link can achieve at its best (the name is fictitious, but the story is based on real-world examples). In this report we present an evaluation of the impacts achieved by Ofgem's Innovation Link service to date.

The Innovation Link was first created in 2016 and has evolved in the years since. Its main offerings are 'fast, frank feedback' (FFF) on innovators' queries, and a regulatory Sandbox that allows trialling or market access by adapting regulatory requirements on a limited basis. Additionally, the Innovation Link publishes guides to enable innovators to better understand the regulatory framework and how to work within it.

Our evaluation was conducted during February to April 2021 through surveys and interviews of organisations that engaged with the Innovation Link. All feedback was provided under the condition that it would be attributed anonymously. Our findings and recommendations are summarised below.

Key insights from the evaluation

Responses to the evaluation largely corroborated the assumptions that informed Ofgem's creation of the Innovation Link. Specifically, that the structure of the energy sector, as well as Ofgem itself, can be challenging to navigate, and the respective remits difficult to grasp. Innovators must connect with various touchpoints in the sector through distinct processes, and from a regulatory perspective, coordinate within the wider Ofgem organisation where their innovation relies on input or approval from a number of different teams.

The regulation itself can also be challenging to grasp, particularly for those who are new to the sector, a characteristic that is not infrequently seen in users of the Innovation Link's services. Innovators desire clarity on how regulations apply to their proposal; without it, uncertainty and complexity dampens the incentives to pursue innovation in the sector.

The evaluation brought to the fore the great diversity among the innovators that engaged with the Innovation Link – in terms of how developed their innovation is, their level of understanding of energy regulation, their support needs and their expectations from the Innovation Link. The Innovation Link has developed over time to provide offerings that match that the diversity of innovators' needs.

As with any evaluation that considers outcomes and impacts, they are often long-term and diffuse in nature, making attribution and measurement challenging, notably more so where the services have only been provided over the past five years. Nevertheless, in our evaluation several consistent themes have emerged as to the **impact of the Innovation Link**, which has:

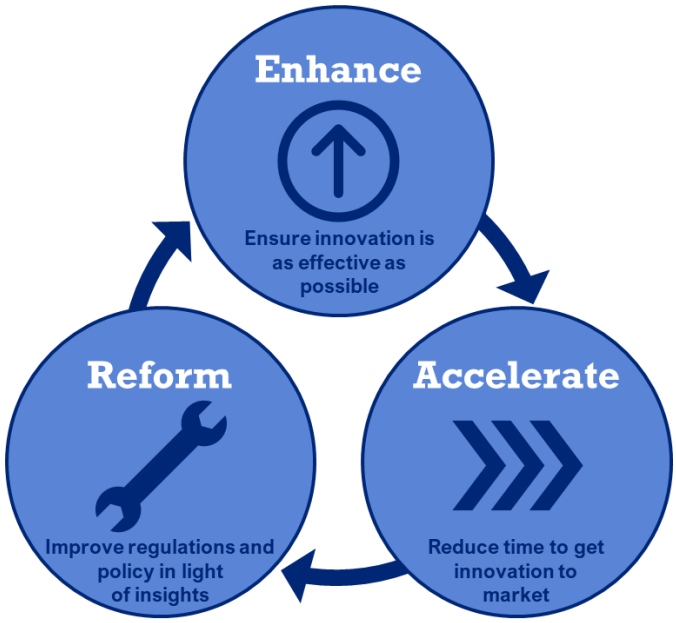
- helped innovators to better understand their own innovations and how they can work within the market;
- provided guidance regarding upcoming regulation, which innovators valued;
- enabled innovators to have greater confidence in their proposals;

- in some cases, was seen to provide a level of confidence in the innovations that made them more attractive to investors (Innovation Link guidance is for the innovator and not intended as a seal of approval or for sharing with investors); and
- helped ensure that innovation is focused on improving customer impacts.

In doing so, the Innovation Link has met its objectives of supporting innovators in navigating the regulatory environment, and the wider sector, and providing clarification on how relevant regulations relate to their proposals.

Going from the impact on *innovators* to the impact on *consumers* requires some assumptions, but our evaluation highlighted three ways in which the Innovation Link can achieve a positive impact for energy consumers, as shown in Figure 1.

Figure 1: Ways in which the Innovation Link can achieve a positive impact for energy consumers



Source: CEPA

Overall, **our evaluation found that the Innovation Link has had a positive impact on innovators** by improving clarity and increasing confidence, helping to progress innovative proposals and bringing them closer to market. This simultaneously, and over the long term, stands to benefit consumers through improved service offerings and regulation. There is a broad consensus that its services remain necessary and there even be a case for broadening the scope of the service – see our recommendations below.

Our recommendations to Ofgem

Based on the evaluation insights and our considerations of other factors that are likely to become increasingly important for energy innovations, such as access to data, we make five key recommendations for how the Innovation Link can magnify its impact.

- **Broaden innovators' understanding of what the Innovation Link can do** by (i) making the service more visible to innovators in the energy sector and beyond; and (ii) managing innovators' expectations of the service and of Ofgem's remit.
- **Help innovators navigate the energy sector** by (i) mapping the key stakeholders such as data owners; and (ii) bridging the silos within the energy sector and linking innovators with those key stakeholders.
- **Greater emphasis on impacting policy and regulation**, including building-in to major strategic reforms considerations of the likely impact on innovation and on the access to data.

- **Test ways to improve timeliness of feedback,** such as providing more immediate feedback on an informal basis, if possible, given the governance / legal processes that the Innovation Link must follow.
- **Implement ongoing monitoring and evaluation tools.** We developed a series of surveys that the Innovation Link could issue to collect feedback on ongoing basis, and to use in future evaluations.

These recommendations are likely to result in a greater draw on the Innovation Link's resources, which we realise are limited and need to exist within an overall budget envelope Ofgem agrees with HM Treasury. Our recommendations involve the Innovation Link taking on a more proactive role, compared to the primarily reactive function it has served to date. Over time, **this is likely to magnify the impact of the Innovation Link and improve its ability to bring about better outcomes for energy consumers**.

Our evaluation of the Innovation Link: summary on a page

Impacts achieved to date:

- Helping innovators understand their own proposals
- Guidance regarding current and upcoming regulation
- Improving confidence in regulation
- Improving investor confidence in the innovations
- Innovations focused on better consumer impacts

Areas for improvement:

- Service visibility
- Feedback loops
- Timeliness
- Sector demystification
- Bridging the divide

Future issues:

- Data
- Incumbent advantage
- Policy uncertainty
- New business models

Our recommendations:

- **Managing innovators' expectations**
- **Easing sector navigation**
- **Emphasising policy impact**
- **Improving timeliness**
- **Monitoring and evaluation**

1. INTRODUCTION AND BACKGROUND[1]

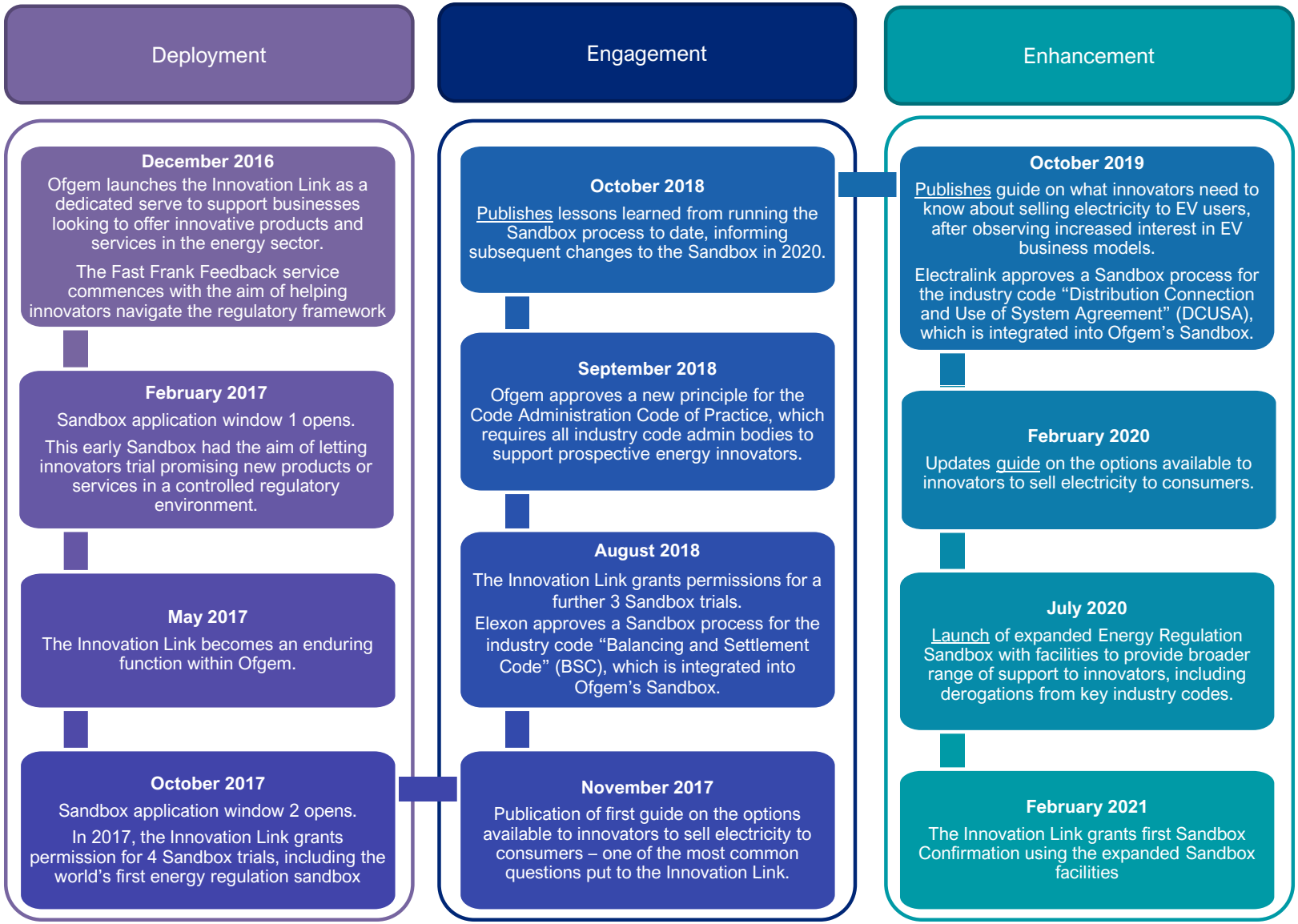
This report presents an independent evaluation by CEPA of Ofgem's Innovation Link service, which is targeted at facilitating innovation in the GB energy sector. The rest of this section provides an overview of the Innovation Link, summarises the objectives of this evaluation, and sets out the methodology we used to conduct the evaluation.

1.1. OFGEM'S INNOVATION LINK SERVICE

Ofgem's primary duty is to protect the interests of current and future electricity and gas customers. Innovation has a role in improving consumer outcomes through 'dynamic efficiency', which suggests a role in fostering innovation regarding how electricity and gas customers are served. In pursuing this role, Ofgem launched the Innovation Link in late 2016, intended to support innovators looking to trial or launch new products, services, methodologies or business models. This service enables new and existing organisations to better understand GB energy regulation and, for innovators who are granted a 'Regulatory Sandbox', limited relief from specific rules. Since its inception, the Innovation Link has supported a range of existing sector companies, new entrants, and public and third-sector bodies.

[1] The views presented in this report are either CEPA's or those of participants we interviewed (any participant views are attributed anonymously). Unless specifically stated, nothing in this report should be taken to represent the view of Ofgem or of the Innovation Link.

Figure 1.1: History of the Innovation Link



Source: Ofgem Innovation Link

1.1.1. Support provided through the Innovation Link

The Innovation Link has two main lines of support, which have evolved since the service's inception in response to the needs and feedback of participating industry stakeholders.

The **Fast, Frank, Feedback (FFF)** service supports innovators in navigating the regulatory landscape by providing an informal steer on regulatory implications relevant to their business models,[2] as well as aiding in their exploration, identification and understanding of regulatory challenges.

To date, the FFF service has received c.490 enquiries, around three quarters of which were progressed by Innovation Link case officers and resulted in Ofgem providing regulatory steer (Table 1.1).

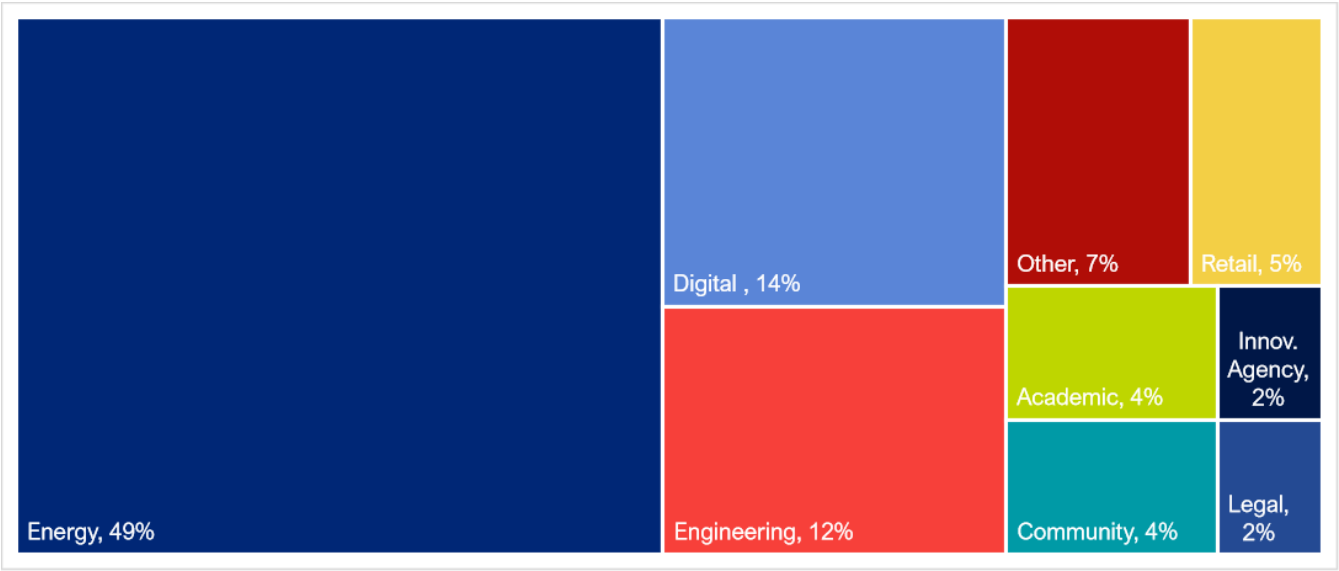
Table 1.1: FFF outcomes

Outcome	Volume	Proportion[3]
Basic information	138	28%
Bespoke steer	154	31%
Referral	64	13%
Withdrew from the FFF process	110	22%
Ineligible	24	5%
Total	**490**	**100%**

Source: CEPA analysis of Ofgem Innovation Link data

As shown in Figure 1.2, most of these enquiries come from the energy sector (49%), but also from other sectors such as digital, engineering and retail.

Figure 1.2: Sector origin of innovators[4]



Source: CEPA analysis of Ofgem Innovation Link data

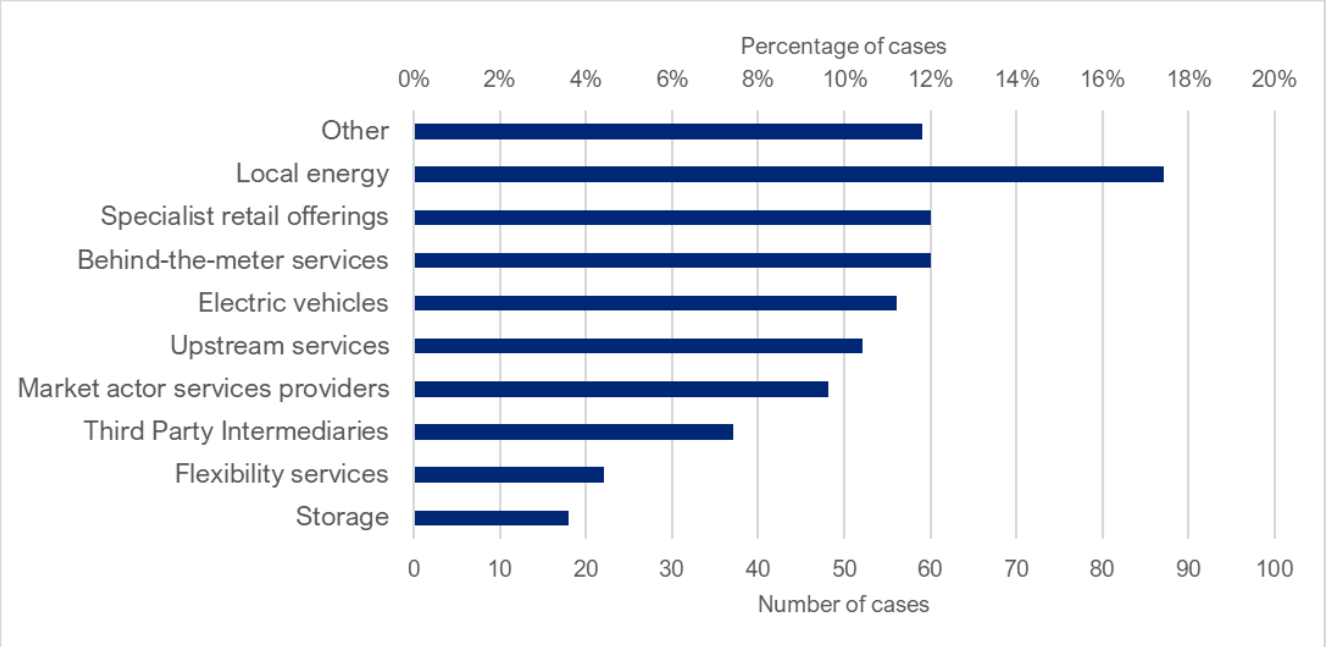
The main business models these enquiries relate to are local energy offerings (17%), specialist retail offerings (12%), behind-the-meter services (12%), and electric vehicles (11%). A full list of these is provided in Figure 1.3.

[2] We use 'business model' here as a broad term encompassing products, services and delivery methodologies.

[3] The remaining enquiries withdraw early due to, for example, not meeting the Innovation Link criteria or seeking support that is not provided through the Innovation Link, such as funding.

[4] Individual outcomes sum to 99% due to rounding

Figure 1.3: Business models proposed by innovators (until and including Q1 2021)



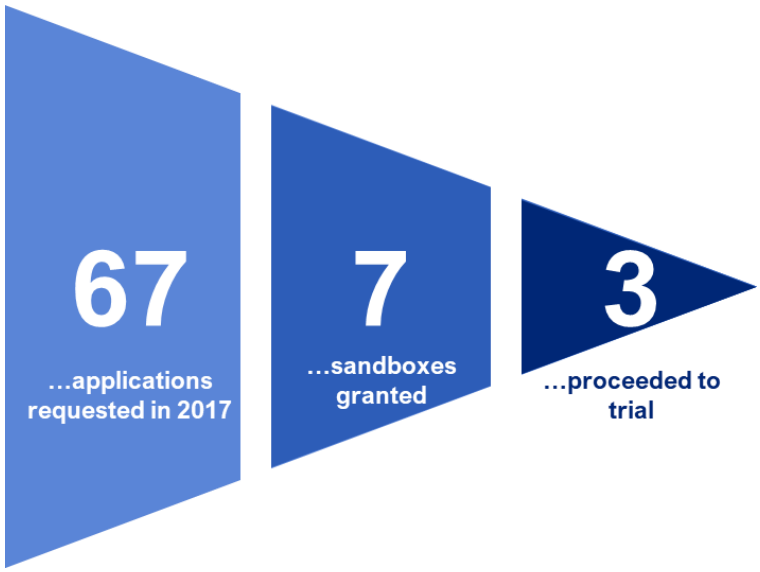
Source: CEPA analysis of Ofgem Innovation Link data

The **Sandbox** service aims to enable innovators to trial and launch their new products, services and business models by adapting regulatory requirements, which can be temporary or enduring, and by providing certainty about specific rules related to their innovation.

Initially Sandbox applications were requested through application 'windows'. Two windows were run in February and October 2017. As Figure 1.4 shows, seven applicants were granted a sandbox, of which we understand three proceeded to trial. The resulting trials included locally produced generation and storage solutions, and designs for flexible energy systems.

Since 2020, applications have been considered on an ongoing basis.

Figure 1.4: Outcomes of the first two Sandbox windows



Source: CEPA analysis of Ofgem Innovation Link data

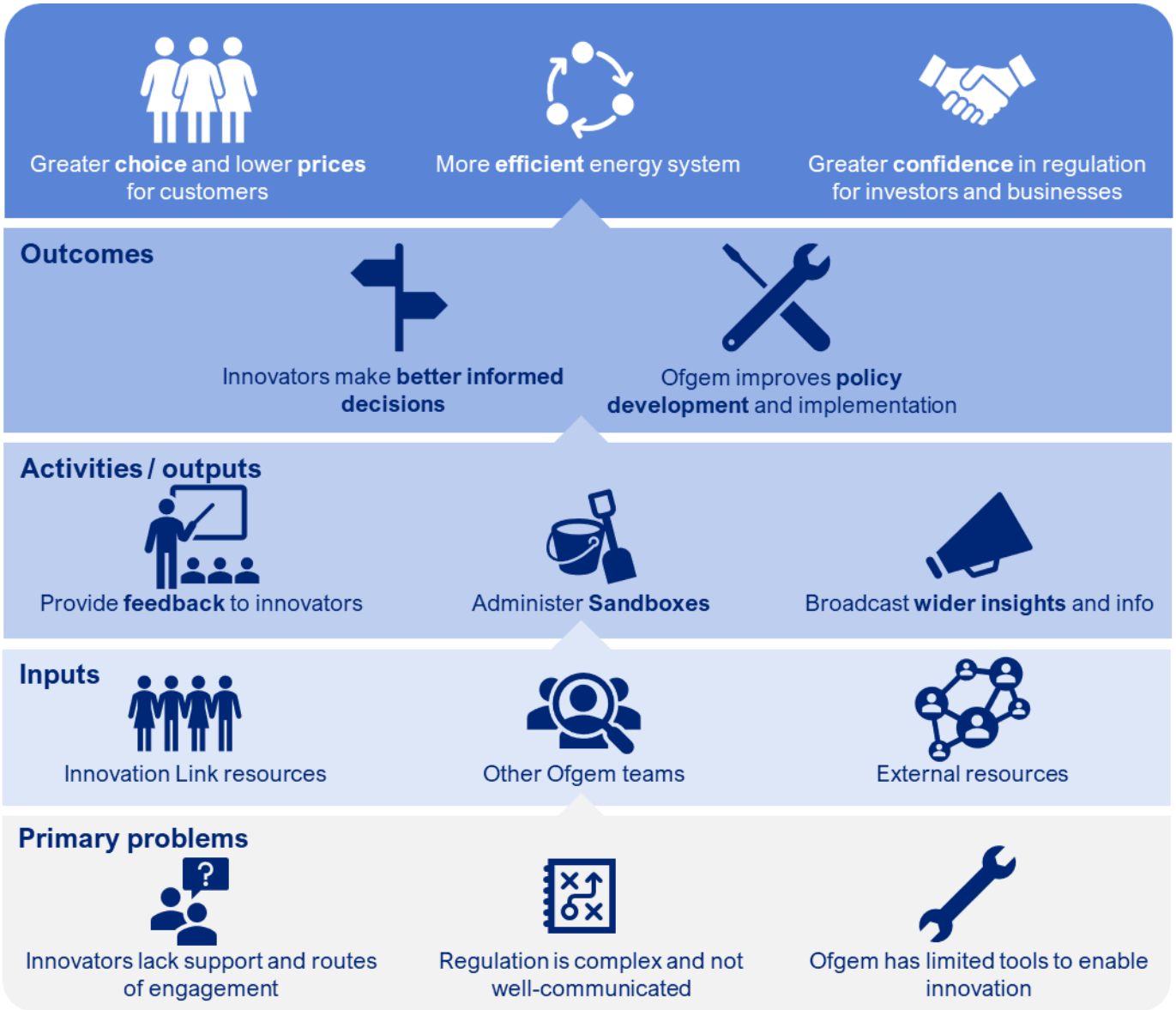
Both the FFF and Sandbox applications also provide Ofgem with insight into the sector's innovation priorities and needs, which could then inform Ofgem's views on policy and regulation more broadly.

In addition to the above, the Innovation Link also publishes **guides** in topical areas to enable innovators to better understand the regulatory framework and how to work within it. In addition to the guides published to date,[5] we understand that Ofgem intends to develop further guides in the future.

1.1.2. Theory of change

Ofgem has developed a Theory of Change to identify the problems the Innovation Link seeks to address, and to describe how the service's activities (i.e. granting sandboxes, providing FFF, publishing guides) is intended to result in positive impact on innovators and, ultimately, energy consumers. The Theory of Change considers service users, Ofgem, consumers, systems and the wider market, and includes factors both within and beyond the control of the Innovation Link. Figure 1.5 below provides the key components of the Theory of Change.

Figure 1.5.: High-level description of the Innovation Link's Theory of Change



Source: CEPA based on Ofgem's Theory of Change for the Innovation Link

[5] i) What you need to know about selling electricity to Electric Vehicle users ii) Selling electricity to consumers: what are your options? All available at https://www.ofgem.gov.uk/about-us/how-we-engage/innovation-link

1.2. AIMS OF THIS EVALUATION

Ofgem has commissioned this evaluation to:

- Assess the impact of the Innovation Link, and specifically:
    - Consider to what extent the service's intended outcomes and impacts are being pursued and achieved through the Innovation Link's activities.
    - Identify what is or is not working, and what potential changes could be made to increase the effectiveness of the Innovation Link's ability to meet its objectives.
    - Assess whether the Theory of Change holds true.
- Develop monitoring and evaluation tools to enable ongoing measurement of the Innovation Link's performance.

1.3. OUR METHODOLOGY

We conducted the evaluation of the Innovation Link by drawing on the views of those who used the service or provide other forms of support to innovators in the GB energy sector. Specifically:

- We sent an online survey to 200 FFF participants and received 18 responses (9% response rate).
- We interviewed representatives of three organisations that used FFF multiple times.
- We interviewed representatives of two organisations that launched trials under the first and second Sandbox windows.
- We hosted a workshop with three other innovation-supporting organisations.

All feedback was provided under the condition that it would be attributed anonymously.

1.3.1. Limitations of the methodology

While our methodology has sought to best capture the outcomes and impacts of the Innovation Link, there are some inherent limitations. We recognise these limitations and account for them in reporting of our findings.

The sampling of survey participants and interviewees may be biased. We sent the survey to a representative sample of the FFF participants, agreeing with Ofgem an over-sampling of participants who received a regulatory steer. However, there is likely to be a self-selection bias among respondents, meaning the actual set of responses may not be fully representative. For example, participants in online surveys are more likely to respond if they have strong views (positive or negative) than if they have neutral views.

Additionally, both the FFF and Sandbox participants selected for interviews may have a positive bias toward the scheme as they are likely to have got the most out of the Innovation Link's services (bespoke steers for their innovation or a Sandbox trial). Conversely, we did not survey organisations that decided not to approach the Innovation Link at all – meaning that our evaluation does not capture the views of any innovators who may perceive the Innovation Link more negatively than those who participated in our survey and interviews.

In the report we have accounted for these biases in the way we present and contextualise our findings.

The evaluation does not consider how Ofgem team members perceive the Innovation Link. This evaluation considers the views of participants and external stakeholders with a connection to the Innovation Link and its services. The Innovation Link also liaises with other Ofgem teams for advice and guidance. Given resource and time limits, it was decided not to survey other Ofgem teams for our evaluation, but it is an area to explore in future evaluations. Of particular relevance here is the extent to which insights from the Innovation Link inform decisions made by other Ofgem teams.

This is the first external evaluation of the Innovation Link. There is little feedback from innovators' previous engagements with the Innovation Link and no previous evaluation of the service's outcomes and impacts that could have served as a comparison.[6] As a result, the findings of our report are based entirely on the primary research undertaken for this evaluation.

It is difficult to attribute some of the outcomes and impacts discussed by the participants directly to the Innovation Link. To account for this, we had survey and interview respondents consider a counterfactual scenario where they did not participate in the Innovation Link. However, it is still difficult in some cases to establish a direct link. In others, respondents directly attributed impacts to the Innovation Link. Where respondents engaged with the Innovation Link several years ago, they may misremember their experience or incorrectly attribute impacts (positive or negative) to the Innovation Link. Again, we have considered this in how we frame our findings.

[6] Ofgem carried out an in-house evaluation in 2017 – conducted to inform whether the Innovation Link should transition from a time-limited project to an enduring team – which included asking FFF recipients what impact the service had on their business. Further stakeholder satisfaction survey was issued to FFF recipients in 2019.

2. OUR EVALUATION INSIGHTS

Our key insights from the evaluation can be categorised into the following areas:

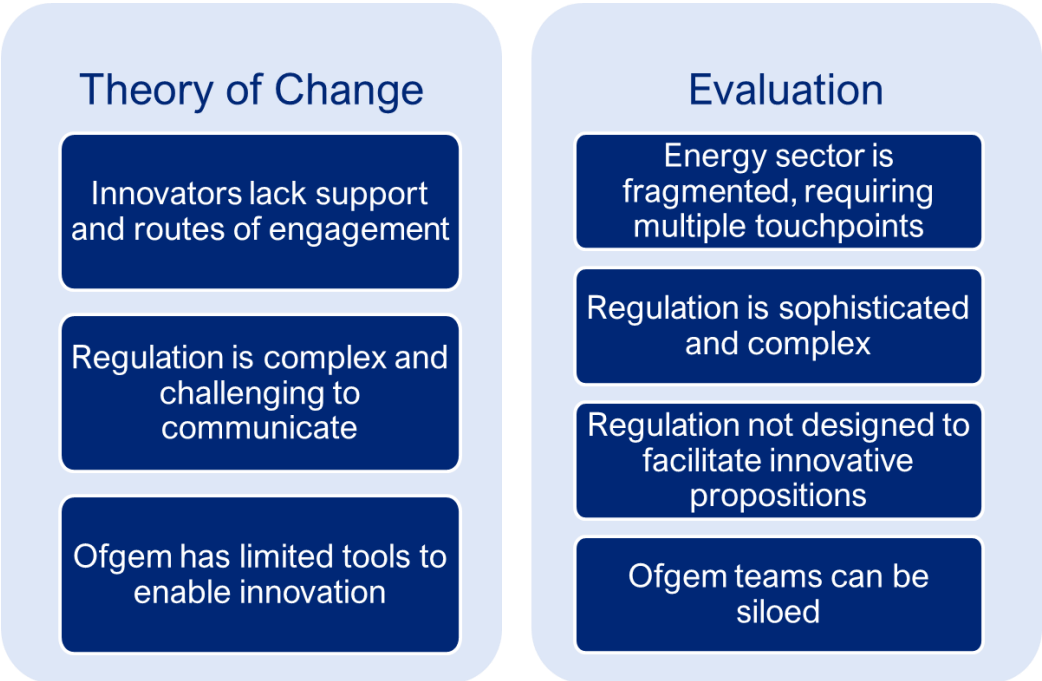
- Barriers to innovation in the energy sector.
- Diversity of innovators' needs.
- Expectations of the Innovation Link.
- Impact of the Innovation Link on innovation and on end consumers.
- Reliance on the Innovation Link and how the scheme can evolve.

We discuss each of these in further detail below. In doing so, we use our findings to assess the accuracy of the Innovation Link's Theory of Change, including any areas it does not cover.

2.1. BARRIERS TO ENERGY INNOVATIONS

A common theme from our evaluation is how complex the energy sector is for innovators to navigate, including the complexity and inaccessible nature of some of the regulations. Seeking help to overcome these barriers to innovation has emerged in our evaluation as a key reason for why innovators approach the Innovation Link. Many of the barriers identified by respondents mirror the primary problems set out in the Innovation Link's Theory of Change. But we have also identified additional challenges, as summarised in Figure 2.1.

Figure 2.1: Primary barriers to innovation identified in the Theory of Change and through this evaluation

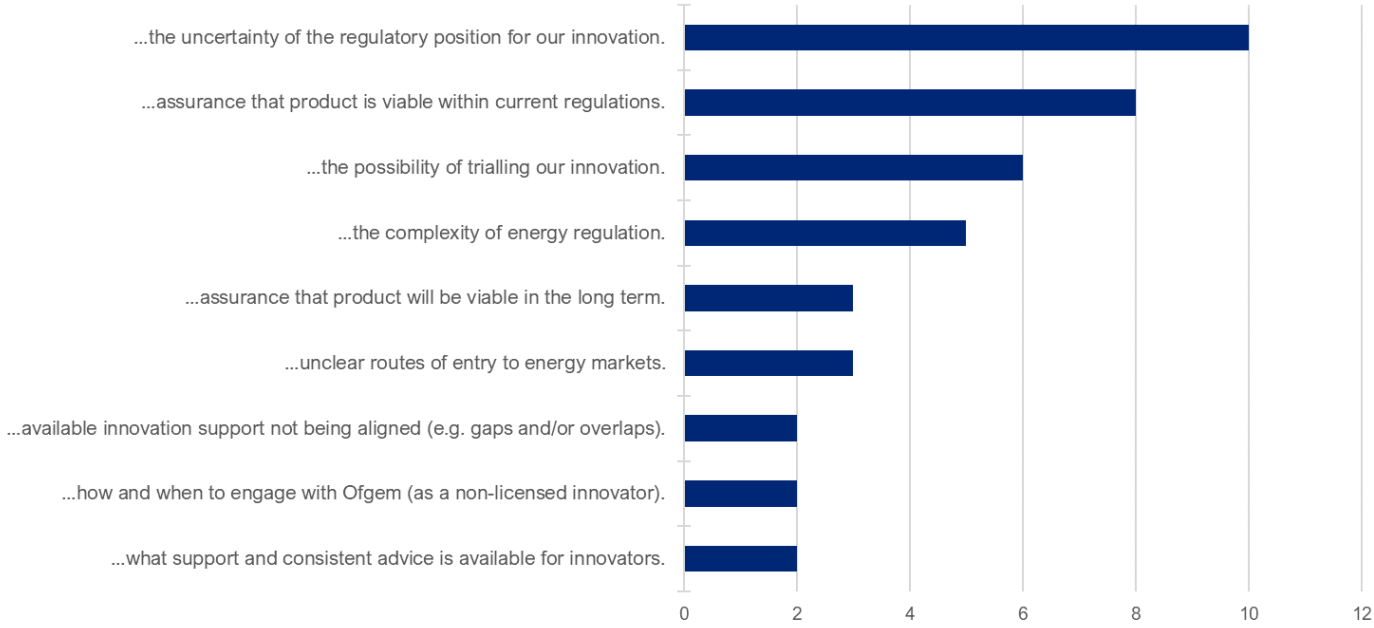


Source: CEPA analysis of evaluation responses

2.1.1. Complexity of regulation

Feedback from respondents has highlighted the difficulties in bringing innovations to market when the innovation interacts with energy regulation. Many FFF participants who responded to the online survey were uncertain of the regulatory position of their innovation or needed assurance that their product was viable. Other respondents indicated that unclear routes of entry to market and the complexity of energy regulation led them to the Innovation Link. These reasons for engagement have a common theme in overcoming regulatory challenges to help bring innovations closer to market as summarised in Figure 2.2.

Figure 2.2: Responses to the question "We sent an enquiry to the Innovation Link FFF because we wanted advice regarding…" (respondents were able to select multiple options)



Source: CEPA analysis of FFF survey responses

Some respondents have told us that the support they received from the Innovation Link drew on legal advice from Ofgem's internal lawyers in interpreting the rules (this is distinct from Ofgem offering legal *advice* to innovators, which is not its role). This indicates that the innovative propositions brought to the team often constitute a 'grey area', making it even more challenging for the innovators themselves to navigate and interpret existing regulation. But it also demonstrates one of the values of the Innovation Link – respondents have told us how valuable having some insight into Ofgem's legal advice was.

> "The regulation…requires significant work to ensure compliance and often the only way to achieve this is to try and engage Ofgem."
>
> Anonymous FFF respondent

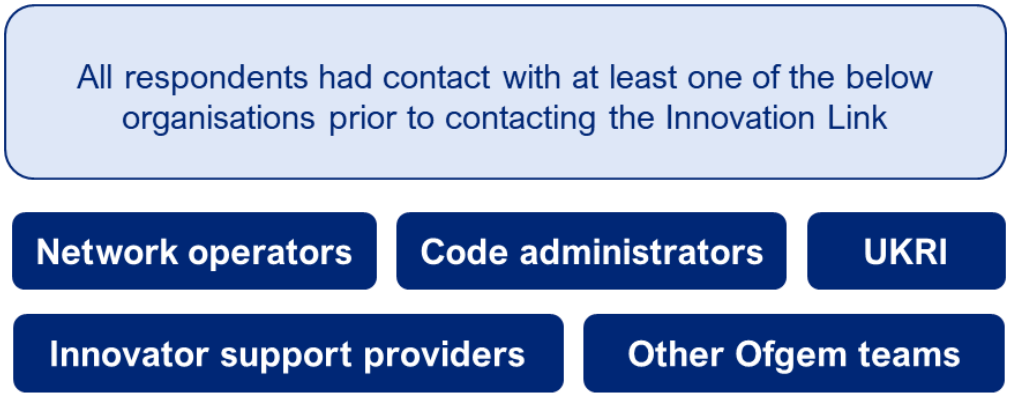
The primary aim of regulation is to prevent consumer harm. While it may be designed with the intent of leaving space for progress and change, its purpose is not to facilitate innovation, and it remains constrained by the context within which it was created.[7] Multiple respondents noted that they were unclear how to define their proposed business models (e.g. as a supplier) within the confines of current regulation, and consequently struggled to understand how various regulations would apply to them.

2.1.2. Fragmentation of the energy sector

Respondents indicated that developing successful innovations in energy requires buy-in from multiple parties in the sector. This is evidenced in Figure 2.3, showing that all survey respondents who completed the relevant question had been in contact with other energy sector organisations prior to contacting the Innovation Link.

[7] Primary legislation dates back to the 1980s, at which point the energy system was vastly different than it is today. This, to an extent, defines how innovative propositions are able to fit within today's regulatory landscape.

Figure 2.3: Respondent interaction with energy sector stakeholders



Source: CEPA analysis of FFF survey responses

Innovators often take it upon themselves to connect with these various touchpoints through distinct processes. However, there is some evidence from responses that the Innovation Link has helped smooth that process:

- one interview respondent noted that engaging the Innovation Link supported further engagement with other organisations; and
- another suggested that the Innovation Link team has been willing to engage with other bodies where helpful.

For those that are new to the energy sector or resource constrained, both of which are common characteristics of start-ups, the sector's fragmentation can be challenging to navigate. There is the risk that this could inadvertently favour larger incumbents, making it less likely that that the sector, and ultimately consumers, would benefit from disruptive innovations.

2.1.3. Ofgem teams can be siloed

Some innovators told us they found it difficult to liaise and coordinate with the wider Ofgem organisation. This appears to be a more significant hurdle in instances where the progress of an innovation relies on input or approval from a number of different teams within Ofgem, each of which may understandably have other priorities.

> "the need for [the Innovation Link's] existence as a separate team is perhaps a reflection on… poor access / engagement of the other teams within Ofgem."
>
> Anonymous interviewee

> "Engagement with Ofgem has previously been very difficult as it [is] often… up to the [innovator] to ensure they are doing everything correct… when in reality, outsiders just want to be told what the rules are and how to comply; this would make it much more efficient and economic for market entry and innovation."
>
> Anonymous FFF respondent

The Innovation Link has a role in helping innovators liaise with Ofgem policy teams as well as informing these teams on trends in energy innovation. This is reflected in the Theory of Change, which identifies "Ofgem policy teams lacking sufficient tools to keep up with the energy innovation space" as one of the primary problems that the Innovation Link was set up to address.

We note that the approach taken by the Innovation Link to date is designed to address the barriers noted in this section. We discuss the impact the Innovation Link has had on helping innovators overcome these barriers in Section 2.4. In Section 3 we consider how the Innovation Link may further evolve to address the above issues.

2.2. Diversity of innovators' needs

An innovator's individual needs will depend on a variety of factors, including the nature of the innovation and its own understanding of the sector and the relevant regulations. Survey respondents were at various stages of development with their innovation: they were at the research and development stage, the demonstration and prototyping stage, or already available to market. Table 2.1 highlights that the needs of respondents varied based on the development stage of their innovation.

Table 2.1: Heat map plotting respondents' stage of development against their expected outcomes from engaging with FFF (respondents were able to select multiple options), darker cells signify more responses

Development stage / Expected outcomes	Research and development	Demonstration / prototyping	Available to market
Introductions			
Financial assistance			
Endorsement			
Influence policy			
Bring innovation to market			
Trial			
Steer on future policy direction			
Locations of regulatory support and advice			
Regulatory certainty			
Regulatory barriers to innovation			

Source: CEPA analysis of FFF survey responses

The table above shows that respondents with innovations at the research and development phase were most likely to require an understanding of the sorts of barriers their innovation was likely to face, and where they could get regulatory support and advice. These enquiries tend to be broader in scope relative to those at the demonstration or prototyping stage, where we see a greater need for regulatory certainty on the viability of their innovation.

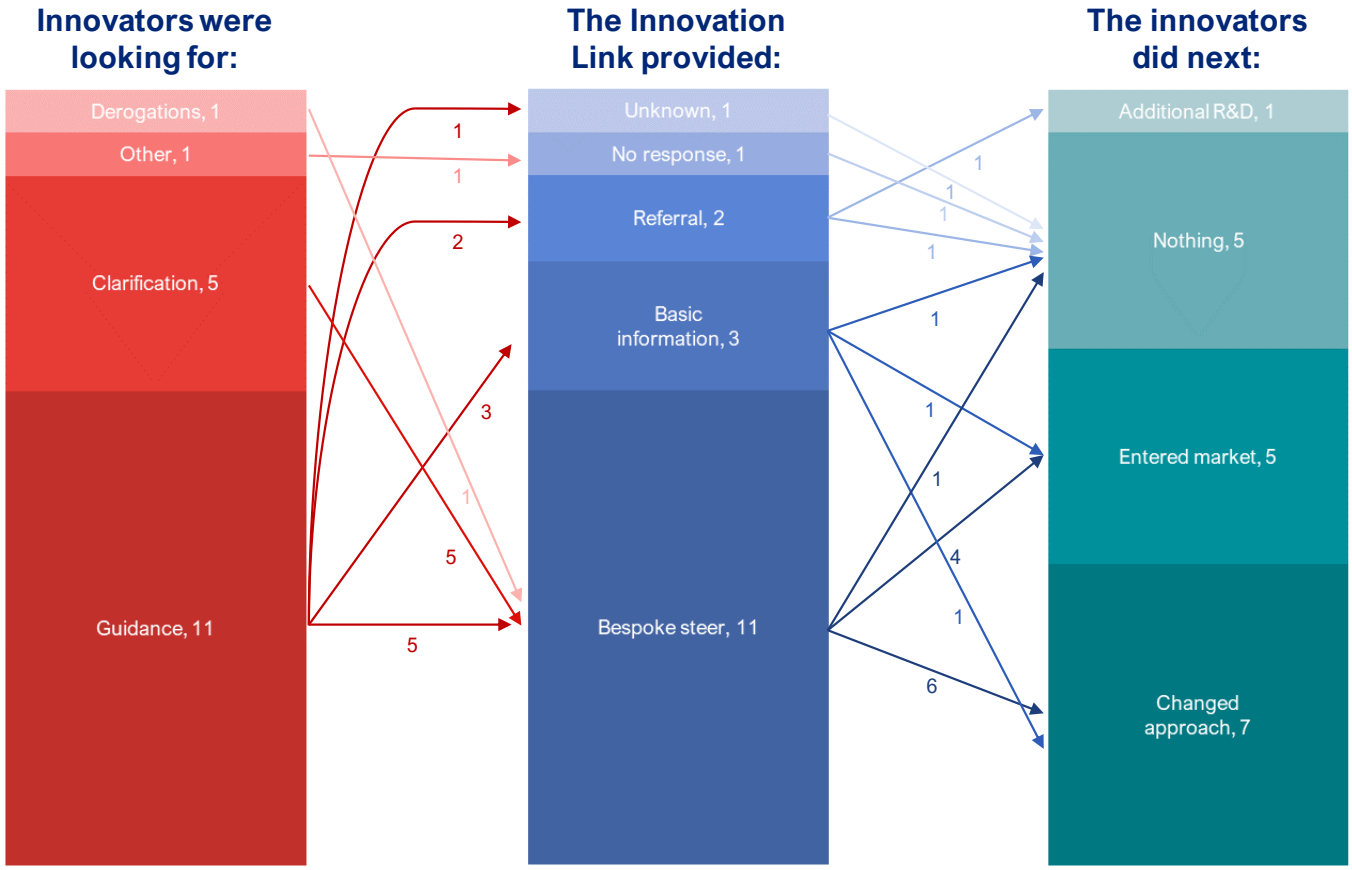
> "I have 20 years experience in regulation and understood the market very well. I could not see a regulation we would need exemption from but wanted confirmation from Ofgem. I wanted to confirm to potential investors that our new business model was workable."
>
> Respondent with innovation at demonstration stage

> "Very little understanding of the regulations. I expected to [be] introduced to the key people who could help us understand the impact and value our technology offers."
>
> Respondent with innovation at R&D stage

A clear message from the evaluation is that the type of support required varies across innovators; the Innovation Link has developed to offer a menu of services to match these needs. This diversity is also reflected in how innovators have used the output from their engagement with the Innovation Link – as illustrated in Figure 2.4 below. The numbers in the figure are indicative of the number of respondents who answered a certain way. For example, five innovators were seeking a clarification when they contacted Innovation Link.

From the figure we can see that innovators are not always clear on precisely what type of support they need. While the majority of respondents were seeking guidance, what they actually received from the Innovation Link ranged from a referral to a more in-depth bespoke steer. Similarly, what innovators chose to do following the receipt of support varied. For example, more than half of those that received a bespoke steer subsequently changed their approach, while many of the others entered the market with their innovation.

Figure 2.4: Routes of engagement with the Innovation Link, numbers indicate survey responses



Source: CEPA analysis of FFF survey responses

In Section 3 we consider how the Innovation Link may further tailor its services to innovators' differing needs.

2.3. Innovators' expectations

Different innovators have wide ranging expectations for what they hope to achieve from their engagement with the Innovation Link. This, again, is a function of their stage of development, understanding of the sector, and more broadly their understanding of Ofgem's (and specifically the Innovation Link's) remit. For example, someone who may have engaged with Ofgem E-serve in the past might then approach other Ofgem teams, including the Innovation Link, to ask for accreditation of their idea. They may not be aware that Ofgem's *regulatory* remit does not cover energy efficiency in buildings, nor that Ofgem policy teams do not provide accreditation.

This links to another observation about innovators' expectations of the service that has come up in the evaluation: timeliness. It is reasonable to assume that many approaches to the Innovation Link are made under time pressure – an innovator is referred to the Innovation Link when they reach a key milestone (e.g. raising finance) or when a need to demonstrate compliance with regulations is identified. In such situations, the longer it takes for an innovator to receive a response, the greater the risk that they would lose out on an opportunity and their innovation may stall.

Clearly, for Ofgem there is a need to balance timeliness of responses with ensuring that the relevant information is communicated to the innovator, and that it had been through appropriate internal governance. There may also be a

matter of resourcing: the Innovation Link team is relatively small and may reasonably need to prioritise its resources – particularly if dealing with a larger than usual volume of enquiries.[8]

Feedback suggests that the innovators' perception of the timeliness of responses from the Innovation Link varies, and that it was often dependent upon the specific query and when it was submitted, with enquires from the early years of the service generally being rated worse for timeliness by our survey respondents. This finding is consistent with the trends in average response time, which have improved considerably since the Innovation Link's inception as set out in Table 2.2.

Table 2.2: Average response time (FFF and Sandbox)

2016	2017	2018	2019	2020	2021
18 days	47 days[9]	28 days	8 days	10 days	9 days

Source: Ofgem Innovation Link

Three survey respondents suggested an approach of providing initial thoughts before taking the time to draft a more in-depth response. Of these, two respondents applied in 2020, indicating that there are still cases of longer than expected waiting times. It is beyond the scope of this evaluation to establish the cause of individual cases taking longer than average; however, we understand that response time often increases when enquiries relate to new use cases yet to be investigated by the Innovation Link. Managing expectations of clients as well as proactively developing internal understanding of new use cases ahead of time can help to improve response times.

Other respondents did not consider the speed of responses to be an issue, and were empathetic to the reasoning:

> "it's not to say that there weren't sometimes that were frustrating. There were times when [the Innovation Link] took some time to come back to you because they were waiting and relying on people outside of their department…You've got all this energy and you want to get going but you can't get going because you need their advice. Overall, it was great…but there were times when we had to wait, I had to be patient."
>
> Anonymous interviewee

A number of responses made it clear that the Innovation Link often exceeded expectations due to the time and effort that its case officers put into understanding innovators' requirements and tailoring feedback accordingly. Some highlighted instances where this has had a meaningful impact on the decisions they made; below we set out two cases of the added value from the efforts of Innovation Link's staff:

> "We were given bespoke guidance and were able to check that our interpretation of this was correct by coming back with specific questions regarding hypothetical examples of use-cases. These were patiently responded to until both sides were confident that we understood one another. Hard to see how we would have gained this understanding without Innovation Link."
>
> Anonymous FFF respondent

[8] Expectations for the turnaround time of responses from Ofgem may not always align with the resource requirements of providing a thorough response. One theory posited during the evaluation is that this may be in part due to the setting of expectations via the naming convention: Fast, Frank Feedback.

[9] 2017 appears to be an outlier due to the two sandbox application windows in that year causing a surge in demand for the service. Many Sandbox applicants went on to receive FFF.

> Ofgem has helped the innovator "every step of the way" by directing them to appropriate resources and holding regular meetings. During these meetings, Ofgem confirmed whether their propositions were appropriate and provided responses from specialist teams, such as Ofgem lawyers. "This type of relationship was really helpful. We could move, step by step, with confidence."
>
> Anonymous interviewee

In Section 3 we offer suggestions for how Ofgem may be able to (1) better manage innovators' expectations *ahead* of receiving their enquiries, and (2) meet those expectations *once* an enquiry is received.

2.4. The Innovation Link's impact on innovators and energy customers

Both interviewees and survey respondents highlighted ways in which the Innovation Link has favourably impacted their innovations. This includes helping innovators to:

- understand and contextualise their proposal;
- ensure their proposal can work within the rules;
- have confidence in their proposal, and translate that confidence to other stakeholders; and
- prioritise and benefit customers through enhancing and accelerating energy innovation.

2.4.1. Helping innovators understand their own proposals

We received many positive reviews on how well the Innovation Link helps innovators to better understand their own innovation and how it can work within the market.[10] In many cases, what case officers were able to provide was a holistic and well-informed sector perspective, better enabling innovators to identify the gap that their innovation was positioned to fill, and the associated regulatory treatment.

- In one case, a respondent started off seeking derogations which they ultimately found, through interactions with the Innovation Link team, that they did not need. This engagement did not result in changes to the innovation itself, but rather, it re-framed the innovative proposal so that it could work within regulation. The respondent described the service as providing them with "a new way of looking at the business".
- This kind of understanding can help to build confidence, as demonstrated by another respondent who indicated that, via the engagement with the Innovation Link, they realised they "didn't need external financing, but the advice… gave me the confidence to use my own resources".
- There were several examples in the survey and interview responses of the Innovation Link successfully connecting innovators with the necessary internal policy teams. One respondent found sight of the specialist input the Innovation Link had obtained from the Ofgem legal team to be most valuable, while recognising that they would not have had the opportunity for that engagement and insight without the Innovation Link.

2.4.2. Regulatory guidance

The team's guidance regarding upcoming regulation was consistently seen by respondents as a strongpoint of the service. The process of bringing an innovation to market is resource-intensive and takes time. The willingness to invest those resources is predicated upon a belief that there will be a market for the innovation. As

[10] The extent to which this insight is a reflection of response bias and whether it applies to the wide population of innovators that engaged with the Innovation Link is unclear – see limitations of our methodology in Section 2.3.

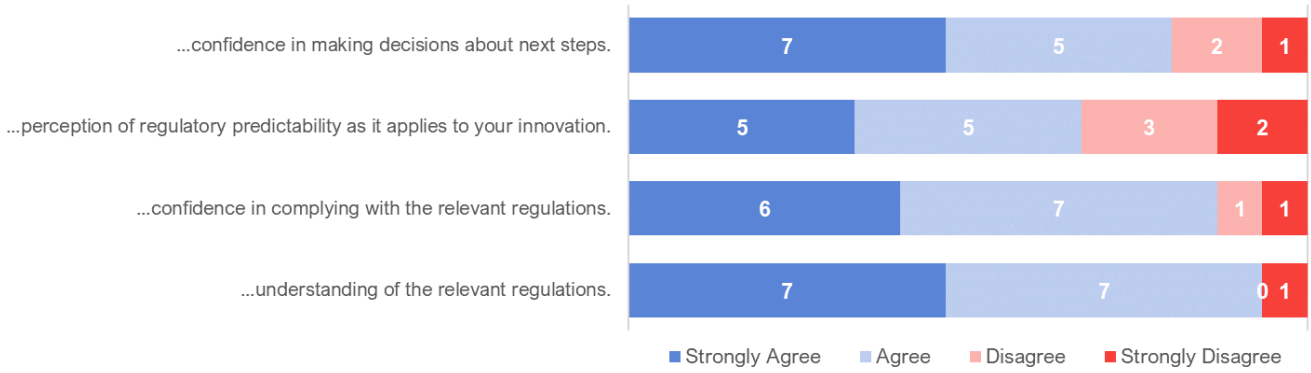
such, this type of forward-looking feedback better enabled innovators to design their proposal in a way that was more resilient and adaptive to possible regulatory changes, and has been described by an innovator as one of the most valuable aspects of the support they received.

> One respondent who contacted the Innovation Link in 2019, signalled that "without engagement [with Innovation Link,] introduction to the UK could have been delayed or not proceeded at all". The innovator now plans to initiate the first installations of their innovation by early Q3 2021. Prior to their engagement with the Innovation Link, "it was unclear whether UK legislation might block [their innovation] in the UK."
>
> Anonymous FFF respondent

2.4.3. Improving confidence in regulation

The Innovation Link enabled greater confidence in many respondents' proposals. Beyond developing the confidence of the innovators themselves, the engagement supported a similar sentiment in wider stakeholders. Although the specific feedback is not intended to be made public, we were told that stakeholders were more confident and forthcoming once they were aware that the innovators were engaging with Ofgem.

Figure 2.5: Responses to the question "Please state your agreement with the following statements. 'Engagement with the Innovation Link helped improve our internal stakeholders' (e.g. yours and colleagues') …"



Source: CEPA analysis of FFF survey responses

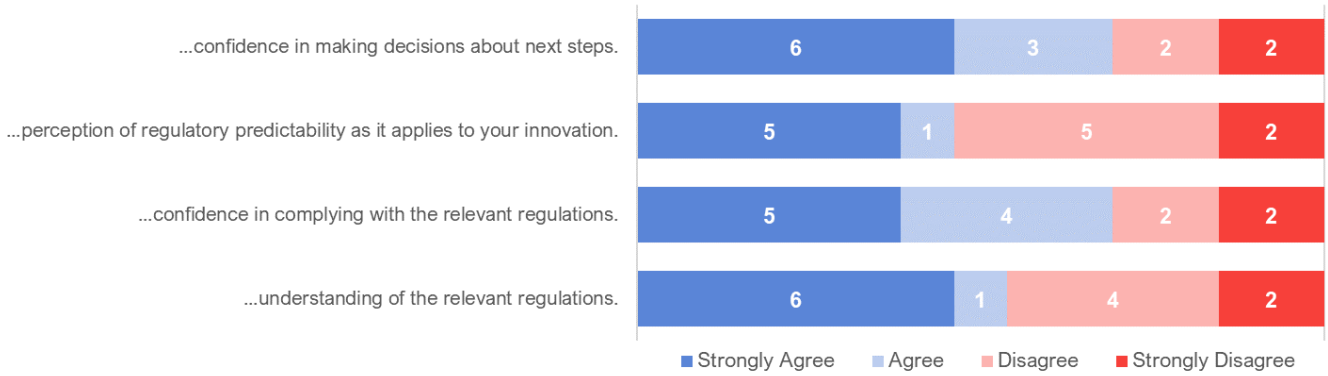
The improved market confidence obtained through engaging with the Innovation Link, in certain cases, helped innovators to raise funding (e.g. from government competitions) and finance from investors, as well as obtain necessary legal documentation.

- In one example, the respondent felt they and other stakeholders could "move step by step with confidence" after the support received from the Innovation Link. This respondent continues to reference their engagement with the Innovation Link, as they believe that stakeholder knowledge of this engagement will inspire confidence in the proposal.
- Another respondent felt that, by being granted a Sandbox, their innovation had been "elevated". The ability to obtain this support from the Innovation Link bolstered not only awareness, but also the status and respect of the project within industry.

2.4.4. Improving investor confidence

In some cases, innovators found that their innovation was more attractive to investors having been through the process with the Innovation Link. There were, however, examples where FFF clients voiced frustrations at not being able to share the results of their Innovation Link engagements with investors. This led to requests of allowing steers to be made non-confidential.

Figure 2.6: Responses to the question "Please state your agreement with the following statements. 'Engagement with the Innovation Link helped improve our external stakeholders' (e.g. funders') …"



Source: CEPA analysis of FFF survey responses

The survey responses indicate that the Innovation Link helped innovators to raise finance by assuring funders of the proof of concept, providing evidence of engagement with Ofgem and the innovators' regulatory understanding, as well as informing financial projections. We found that the iterative process of engagement was important to achieving this. All survey respondents who indicated the Innovation Link helped them raise finance had had more than one engagement.

The restriction on sharing Ofgem's responses with external stakeholders was challenging for some respondents, but others managed to communicate general messages without breaking the confidentiality agreement:

> "confidentiality of guidance meant that we did not directly share it. However we were able to say that there did not seem to be any regulatory game-stopper and that getting [the required] certification for the UK market looked very worthwhile."
>
> Anonymous FFF respondent

2.4.5. Ensuring consumer-focus

A number of respondents agreed that the Innovation Link helped to ensure their innovation is focused on improving customer impacts.

- Just under half of survey respondents (six out of 14) said the engagement with the Innovation Link had improved outcomes for end users.[11] The benefits to consumers include reducing bills, service improvements, and providing a wider range of services. Other respondents either had innovations at the initial development stage or posed queries that were less related to end user impact.
- Ofgem's prioritisation of customer value and experience was generally clear to interviewees and could occasionally be the focal point of the engagement. For instance, in one case, the engagement process with the Innovation Link team is estimated to have guided and shaped about 20% of a proposal. Much of this was focused on ensuring that processes were customer-centric in order to achieve the desired outcomes. This ignited a stream of internal discussions within the clients' wider organisation about how to ensure the customer experience was consistently at the forefront of innovative propositions. This offers one clear example of the potential for positive spill-over effects from the services provided by the Innovation Link.

There were also examples of the Innovation Link improving customer impacts via the regulatory Sandboxes:

[11] For example, one respondent introduced "some more protections for consumers" as a direct result of the engagement with the Innovation Link.

Sandbox recipient A

The provision of a regulatory Sandbox for their trial, regarding the rules around billing, allowed one Sandbox recipient to gather additional customer insights on their innovation. This feedback helped increase the recipient's understanding of the innovation's customer impact by having a clearer billing structure. The innovator then incorporated additional changes to improve the customer experience and was better informed on how beneficial their innovation was. The recipient indicated that they would have had to trial their innovation with the less intuitive billing structure had they not received the Sandbox. The input and oversight from the Innovation Link and other Ofgem teams was of great help in enabling the innovation to be trialled in its most customer-friendly form.

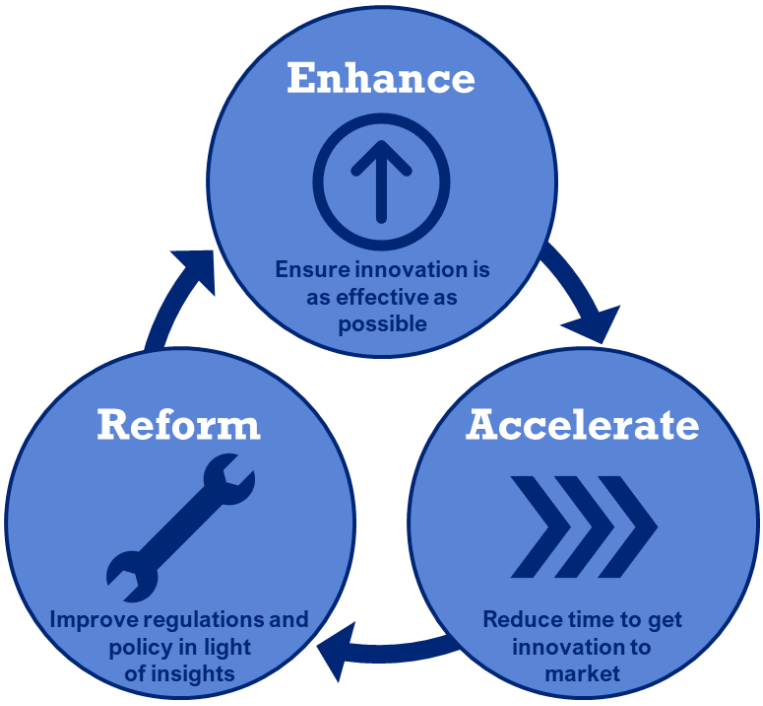
Sandbox recipient B

Another Sandbox recipient found that customer engagement was one of the Innovation Link's main areas of value-add. The Innovation Link helped ensure that the trial put customers first. This led to internal conversations within the recipient's organisation, looking to answer questions such as "will customers understand this innovation?" and "how is this innovation in the interest of the customer?". The discussion with the Innovation Link and these internal conversations helped focus the Sandbox recipient's proposition and led to a more customer-oriented trial design.

2.4.6. Attributing the Innovation Link's impact

In this evaluation it has not been possible to specifically attribute customer benefits (or disbenefits) from innovations that used the Innovation Link service.[12] As with any evaluation that considers outcomes and impacts, they are often long-term and diffuse in nature, making attribution and measurement challenging, notably more so where the services have only been provided over the past five years. However, guided by the Theory of Change, the insights gained from the evaluation allow us to characterise three main ways in which the Innovation Link is capable of having a positive impact on energy customers, as illustrated in Figure 2.7 and the discussion below. Our findings indicate that **these impacts are more likely to occur with the existence of the Innovation Link than would have been the case without it.**

Figure 2.7: Ways in which the Innovation Link can achieve a positive impact for energy consumers



Source: CEPA

[12] Further analysis on the expected outcomes of the Innovation Link and the value of those outcomes would be one area to explore in valuing the benefits of the scheme.

A frequently noted impact by respondents has been the Innovation Link's role in **accelerating** the time it takes for an innovation to reach the market:

> "it probably would have taken us longer to get [to where we are now without the Innovation Link] … It would have been more of a struggle for us, resourcing wise"
>
> Anonymous interviewee

> "got to where are now in double the time by [The Innovation Link] helping us to navigate the systems and data access"
>
> Anonymous interviewee

> "It may have taken longer or been more costly to get confirmation that the business model was workable in the current regulatory regime."
>
> Anonymous FFF respondent

It was noted – particularly by Sandbox recipients – that the Innovation Link has had a role in **enhancing** the consumer impacts of innovations by enabling them to be implemented in their most effective form:

> "Would have gone ahead with the trial even without a sandbox, but it would have been pared down. Would have had to use a complicated bill structure. This would have made it very difficult to extract important insights from customers."
>
> Anonymous interviewee running a Sandbox trial

> "It was very important to have the regulator on board, otherwise it would just been a *virtual* trial. Many of the other trials done internationally are still in the virtual stage - often there is no supplier involved."
>
> Anonymous interviewee running a Sandbox trial

This evaluation focused predominantly on identifying impacts of the services themselves. However, an additional intended outcome of the Innovation Link is a contribution to policy development. We found evidence that the Innovation Link staff have been contributing to code governance working groups:

> Innovation Link representative attending code governance working groups "are very open in these workgroups, where [code changes] should be going. It's been really helpful."
>
> Anonymous interviewee

Identifying and measuring the impact of more formal feedback loops – i.e. how insights gained from innovators and/or from Sandboxes to feed into **reforming** policy and regulations to benefit consumers - is an area for further consideration in subsequent evaluations.

In Section 3 we consider how the Innovation Link may better the above impacts in future – particularly with regard to policy and regulatory reform.

2.5. The Innovation Link continues to be necessary

There is a broad consensus (albeit not unanimous) that the services offered by the Innovation Link are valuable to energy innovation, and that the service should continue to operate. Respondents were clear that if Ofgem were to scale down or disband the Innovation Link it would send a negative signal about Ofgem's commitment to innovation that benefits consumers (to the best of our knowledge Ofgem is not currently planning to scale down or disband the Innovation Link). As we discuss in Section 4, there will arguably be an even greater need for innovation support in the coming years as the energy system transitions to support a net zero economy.

At the same time, feedback from the evaluation paints a picture of the areas where the Innovation Link service would need to continue evolving in order to meet innovators' changing needs:

- Making all of the Innovation Link's services more **visible** to innovators, including those not currently active in the energy sector. A related point is maintaining relationships with innovators once their case has been closed.
- **Demystification:** setting out in a clear and accessible way the remits of Ofgem's regulatory functions, how that compares to other bodies within the sector, and the support the Innovation Link can offer.
- Helping to **bridge the silos** that exist in the energy sector – between key organisations as well as between different policy owners within Ofgem.
- **Timeliness** of the feedback to innovators, including managing expectations of the speed of response.
- Creating **feedback loops** between innovation insights (from Sandbox trials and more generally from the Innovation Link's team engagement with innovators) and policy/regulatory decision-making.

3. RECOMMENDATIONS

In this section we draw on the insights from the evaluation, our understanding of the energy sector, as well as discussions with the Innovation Link team, to present five recommendations for additions or changes the Innovation Link could make to its services, activities or features that could improve its impact.

3.1. FUTURE ISSUES

As the energy sector and the needs of its participants evolve, so too must the Innovation Link. Before we set out the recommendations, we highlight four interlinked issues which may impact the effectiveness of services available to support innovators in the energy sector going forward. Some of these considerations have been brought up by respondents as part of the evaluation, demonstrating that these issues are already beginning to come to the fore, while others reflect our general understanding of potential changes to the energy sector as part of the transition towards a net zero economy.

3.1.1. Data

Innovators across the economy are increasingly likely to require access to data in order to develop, prove and progress their innovations. In the energy sector, innovators who are contacting, using and benefitting from services such as the Innovation Link are often trying to launch products and services whose viability depends on accessing essential data (e.g. from consumer meters). A recent report for the European Commission found that lack of data for innovative product development was one of the key barriers to market entry and competition in the GB energy markets.[13]

Currently, data ownership may be fragmented across entities, both within and beyond the energy sector, making the process of identifying and accessing such information challenging and time-consuming. Once identified, innovators may find that data is subject to both commercial and regulatory restrictions (e.g. consumer protection).

3.1.2. New business models within existing, cross-sector regulation

Transitioning towards a net zero economy will rely on better sector coupling between energy and related sectors. Cross-sector innovation is key in achieving this, requiring innovators to rely upon regulations beyond those administered by Ofgem. For instance, transport affects innovators operating in the electrical vehicles space; building code regulations may affect the drive to decarbonise heat; and cooperative business models may require approval from the Financial Conduct Authority.

This means that, in addition to facing the cross-sector data access challenges as noted above, innovators may increasingly be faced with multiple regulatory barriers or grey areas, which they must not only navigate but also attempt to align.

3.1.3. Incumbency

The feedback throughout this evaluation has indicated that one of the key benefits of the Innovation Link is the flexible nature of the service. Innovators value establishing relationships with the Innovation Link team and being able to more informally follow-up on previous interactions. This benefit, however, may inadvertently favour those who have existing contacts within the Innovation Link team, or perhaps Ofgem more widely via the previous interaction with the Innovation Link – if this allows them to more easily access support relative to a new user of the service. Indeed, some survey respondents indicated that in future they would seek an informal route to engage with Ofgem on their innovations.

[13] European Commission (2021) 'European barriers in retail energy markets: Great Britain country handbook'

3.1.4. Policy changes and uncertainty

There are a wide variety of pathways that could be pursued in order to achieve net zero, each with a unique combination of policy and regulation, market structures and technologies. The precise path that the UK intends to take has yet to be defined; it continues to evolve, allowing it to respond to changes in the market to enable greater efficiency, but also creating a degree of uncertainty as to the future regulatory treatment of prospective business models and technologies. As in any business, uncertainty can limit the incentive to invest in innovation. Respondents consistently noted the value of the Innovation Link's feedback regarding current or forthcoming reform programmes and consultations. Obtaining the views of the Innovation Link staff in these areas also supported them in better understanding the 'regulator's perspective', or how the regulator might view sector trends and technologies. This helped innovators to shape and increase the resilience and adaptability of their innovation.

The Innovation Link is and will continue to be well placed to help the sector manage uncertainty and overcome this barrier to innovation. However, any guidance on future regulation needs to be balanced carefully against any implied responsibility from innovators who have staked their businesses on certain policy "bets". It is likely that this issue will be more prominent in certain areas, such as heat decarbonisation. Ofgem may need to consider the degree of regulatory certainty it is able and willing to provide in such areas.

3.2. Recommendations for the Innovation Link

We have identified five key recommendations for how the Innovation Link could magnify its impact. The recommendations are closely related to each other and are not designed to be stand-alone. These recommendations are informed by the feedback from the evaluation and by the forward-looking issues described above. We have tested our recommendations with the Innovation Link team before finalising them for this report.

Recommendation 1: Broaden innovators' understanding of what the Innovation Link can do

There are two components to this recommendation:

- improving the visibility of the Innovation Link services; and
- managing stakeholders' expectations ahead of them contacting the Innovation Link.

There are different ways in which the Innovation Link could become more visible. These include: being given more prominence on Ofgem's website and in Ofgem's email newsletters; presence in events (both in the energy sector and more widely in adjacent sectors and in the innovation space); and agreeing to be mentioned on the websites and in the newsletters of other innovation-supporting organisations. Improved visibility means that more innovators who would benefit from the service would be likely to approach the Innovation Link.

Managing expectations relates to:

- What the Innovation Link itself can do. The majority of respondents to our evaluation said they were referred to the Innovation Link, meaning they may not have been aware at the time of the guides to the FFF and Sandbox that set out the limits of each service.[14]
- Ofgem's remit *vis-à-vis* other organisations whose role may be relevant to the innovation in question. This is particularly relevant for approaches from stakeholders who are completely new to the energy sector – while they may view their innovation as inherently relating to energy, it may sit outside Ofgem's regulatory remit (e.g. home insulation).[15]

[14] See: 'What fast, frank feedback can and cannot offer' (October 2018) and 'Energy Regulation Sandbox: Guidance for Innovators' (July 2020).

[15] Further confusion may be caused by Ofgem's E-Serve entity, which plays a role in the delivery of various energy programmes. However, Ofgem's *regulatory* remit does not extend to those programmes.

Better managing stakeholders' expectations *before* they approach the service means that the Innovation Link would be spending less time engaging with innovators that it is unable to help.

Recommendation 2: Help innovators navigate the energy sector

A common theme from our evaluation is how complex the energy sector is for innovators to navigate, and how different actors in the sector operate in silos. Enhancing the Innovation Link's impact would likely require it to:

- Help innovators map the sector – who are the key stakeholders for the innovation in question? What data is available, who owns it and what are the terms for gaining access to the data? Innovators would have different levels of understanding of these issues when they approach Ofgem, and the Innovation Link can help them develop their understanding.
- Help innovators bridge the silos – the Innovation Link was created as a single access point to Ofgem, with its members navigating the teams within Ofgem on behalf of innovators. There is value in broadening that function to cover key stakeholders in the energy sector (e.g. Elexon, the DNOs, the ESO, etc.) to help answer questions that go beyond Ofgem's remit. Where the Innovation Link refers an innovator to another organisation, it could make the introduction.

Moreover, the Innovation Link should explore the possibility of establishing an "alumni network" of innovators who have used the service. Any such network would need to be on an opt-in basis and be sensitive to any commercially confidential matters. But, by creating such a network, Ofgem would enable a positive feedback loops between the innovators who have been through the service.

Recommendation 3: Greater emphasis on impacting policy and regulation

A report for the European Commission on barriers in the GB retail energy markets observed, in the context for the regulatory Sandbox scheme, that "fully incorporating novel models into regulation will require explicit plans and commitment, especially given the complexity of the British energy markets".[16] This view was echoed in responses to our evaluation. While not a focus area for the evaluation, we noted ways in which the Innovation Link is informing policy – particularly the involvement of Innovation Link staff in code governance working groups. But from discussions with the Innovation Link team, it is clear that more can be done.

We think it is particularly important that the impact on innovation[17] is built-in to the major strategic reviews and programmes that are likely to shape the medium- to -long-term nature of the energy sector, such as:

- code governance reform;
- governance and ownership of the ESO;
- distribution system operator (DSO) roles, governance and ownership; and
- changes to the 'supplier hub' model.

Establishing more formal feedback loops between the services the Innovation Link provides and the policy decisions Ofgem (and other policy-makers) makes is essential for growing the Innovation Link's impact through the 'reform' aspect of Figure 2.7.

[16] European Commission (2021) 'European barriers in retail energy markets: Great Britain country handbook'

[17] This includes considering how proposed changes to governance would affect the ownership and access to the information the innovators need in order to develop their innovations and bring them to market.

Recommendation 4: Test ways to improve timeliness of feedback

Feedback to the evaluation has highlighted the value that respondents placed on the lengths to which the Innovation Link went to understand their innovation and offer tailored feedback. Doing so necessarily takes time.

To the extent that some innovators are looking for less in-depth help, there may be value in exploring ways for the Innovation Link to provide more immediate feedback on an informal basis. Clearly, doing so would need to be balanced against any governance / legal processes that the Innovation Link has to follow before it provides feedback to innovator.

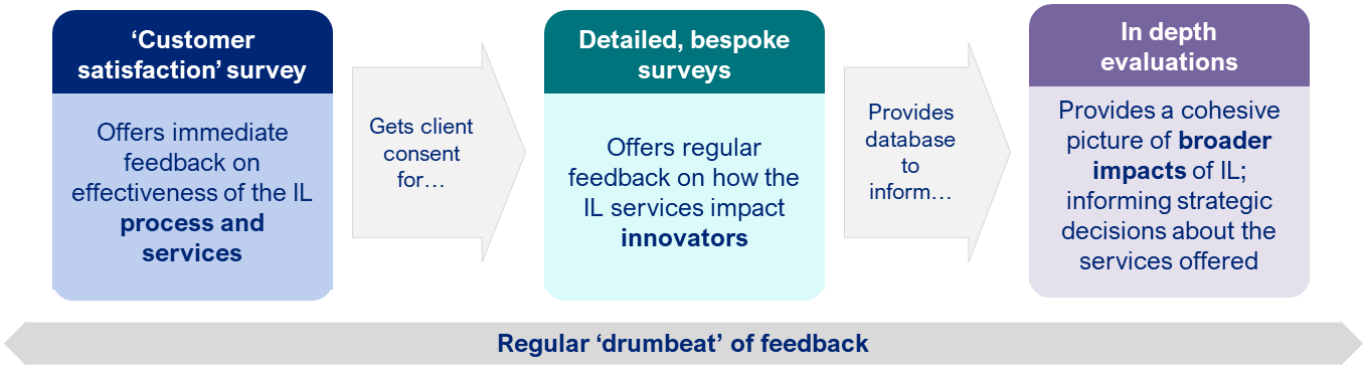
We also recognise that there is a tension between the timeliness of feedback to innovators and the other recommendations on this list:

- if Innovation Link staff are doing additional activities (participation in events, mapping the energy sector and making introductions, feeding into policy-making) they will have less time to manage their case load; and
- more visibility of the Innovation Link could result in the team having to process more queries from innovators.

Recommendation 5: Implement ongoing monitoring and evaluation tools

As part of this project, we developed a series of surveys that the Innovation Link could issue in order to collect feedback on ongoing basis, and use it in future evaluations. Our recommended approach to ongoing monitoring and evaluation is characterised in Figure 3.1.

Figure 3.1: Approach to ongoing monitoring and evaluation



Source: CEPA

The approach depicted above reflects the different services offered by the Innovation Link, as well as the different forms of engagement that best draw out diverse types of insights (online surveys can provide quick feedback to simple questions but have low response rates; interviews can offer depth of perspective but draw heavily on Ofgem and interviewee's resources).

We believe this approach can help to bring out the strengths of the different forms of engagement while mitigating their weaknesses. Overall, this approach can meet Ofgem's requirements for both surface-level feedback at the time of completing cases and in-depth insights at the opportune time.

The recommendations set out above are likely to result in a greater draw on the Innovation Link's resources, which we realise and limited and need to exist within an overall budget envelope the Ofgem agrees with HM Treasury. Importantly, our recommendations involve the Innovation Link taking on a more proactive role, compared to the primarily reactive function it has served to date. Over time, that is likely to magnify the impact of the Innovation Link and improve its ability to bring about better outcomes for energy consumers.

Appendix A METHODOLOGY

We have used three main tools in conducting the evaluation of the Innovation Link scheme.

- Online surveys of FFF participants.
- Interviews with sandbox and select FFF participants.
- Workshop with innovation-supporting organisations.

We expand on each below. All participants provided their feedback on the condition of anonymity.

A.1. SURVEY

With around 350 organisations covering a variety of business models receiving FFF, we wanted to reach a wide range of innovators to ensure that the evaluation captures the breadth of the service. A proportionate and cost-effective approach, given the light-touch approach of FFF, was to use an online survey.

The goal of the survey was to gain insights from a wider set of Innovation Link participants beyond those selected for interviews. An online survey allowed us to gain feedback from organisations with varying levels of exposure to the Innovation Link scheme; we hoped to better understand the experiences of organisations that used a subset of the services[18].

Appendix B presents the full set of survey questions used. Below we briefly describe our approach to the survey.

Survey questions

The survey questions focused on capturing the outcomes and impacts of engaging with the FFF service.[19] As such, the questions follow a logic-line of:

- **Context** – baselining the organisation's position and expectations at the time it first engaged with FFF.
- **Outcome** – clarifying what the outcome of the FFF request was.
- **Actions** – what did the organisation do in response to the FFF outcome.
- **Impact** – where is the organisation now and what is different compared to when it contacted FFF.

The structure of the online survey was as follows:

- All respondents were asked to provide some identifying information, which was kept confidential – their responses are not be attributed to them/their organisation.
- Respondents were then asked to provide answers to four high-level questions – one on each of context / outcome / actions / impact.
- Respondents were then given the option to provide answers to more detailed questions. These questions were multiple-choice where possible but also included built-in logic to branch specific questions off of preceding answers.

Sampling methodology

We issued the online survey to 200 organisations that have used the FFF service, based on the following selection criteria:

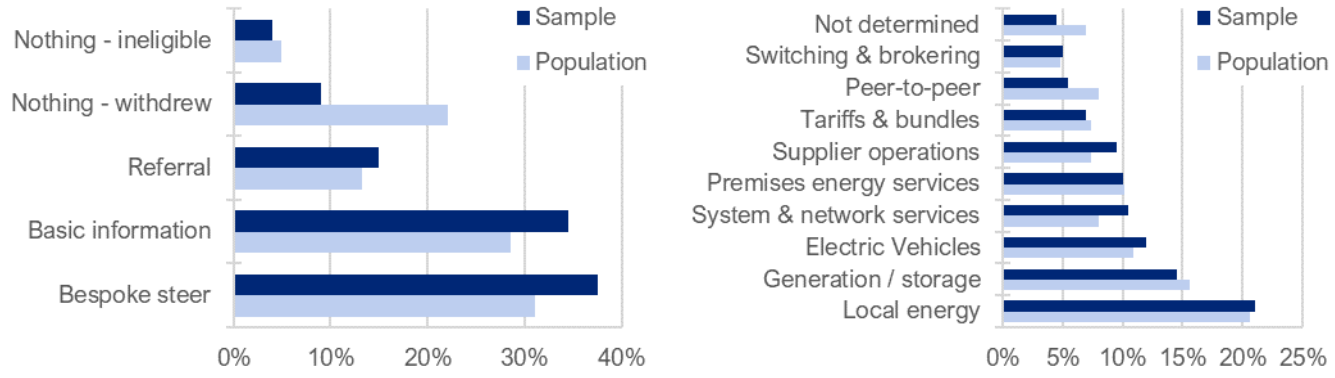
[18] Primarily the FFF, but also those who approached the first two Sandboxes and only received feedback

[19] We note that, as we are assessing the experience of the recipients, the definitions of Outcomes and Impacts for the survey differ from how they are considered within the ToC for the Innovation Link as a whole.

- Their initial query to Ofgem has been closed.
- They are not one of the organisations that we have approached for interview.
- We generally sought to have at least six organisations from each of the following business model classifications that had been coded by Ofgem in the original dataset:
    - Electric Vehicles
    - Generation & storage
    - Local energy
    - Peer to Peer
    - Behind the meter / premises energy services
    - Supplier operations
    - Switching & brokering
    - System & network operations
    - Tariffs & bundled products
- We then applied randomised selection that fulfilled the following conditions:
    - An even mix of years in which the organisations approached the Innovation Link.
    - A mix[20] of outcomes from the FFF process: Referral / Basic information / Bespoke steer / Client withdrew / Ineligible.

Figure A.1 shows how our sample of 200 organisations contacted for the survey compares to the overall population of organisations that approached the FFF service.

Figure A.1: Population and survey sample of innovators who contacted FFF



Source: CEPA analysis of data provided by Ofgem Innovation Link

A.2. Interviews

We considered that bilateral in-depth interviews with Sandbox organisations and select FFF participants would offer depth of insight to the evaluation. We conducted 30-minute interviews with members from two of the three organisations from the first and second Sandbox windows and progressed to trials. We also interviewed three organisations that received in-depth FFF advice.

[20] We used an oversampling of those organisations who received a bespoke steer. This ensured most participants receiving the survey were able to answer the survey questions in depth.

Interview questions

The interviews offered opportunities for targeted questions on specific aspects of the scheme, such as the quality of information provided by Ofgem staff or issues of cross-sector regulatory innovation.

The interviews focused on the outcomes and impact of the Innovation Link more so than questions on context.[21] The questions varied depending on the service the interviewee used (i.e. FFF or Sandbox) and were tailored to the individual organisation. We followed a question guide but remained flexible to ensure we explored topics of interest that came up in the course of the interview. Each interviewee was also given an opportunity to make more general comments about the Innovation Link.

Sampling methodology

We selected interviewees with significant experience participating in the Innovation Link scheme. The reason for this targeted approach was to ensure we received in depth feedback from organisations with a strong understanding of a given service. We have dealt with any bias risk resulting from these selections in the way we present and contextualise the responses in this report. Our sampling approach covers a diverse set of innovators in terms of their business model and the maturity of their service.

Table A.1: Interviewees for the evaluation

IL service received	Innovation type
Sandbox	Community energy / bundled product
Sandbox	Community energy / bundled product
FFF (frequent user)	Battery storage / Virtual Power Plant
FFF (frequent user)	Peer-to-Peer / Virtual Power Plant
FFF (frequent user)	Supplier / on-site generation

Source: CEPA

A.3. Stakeholder workshop

We facilitated a stakeholder workshop to increase our understanding of how other innovation-supporting organisations that are active in the GB energy sector perceive the Innovation Link. The workshop is unique to the other parts of the evaluation as it incorporates the views of non-participants in the Innovation Link's services. It has contributed to our overall understanding of the Innovation Link's impact and helped inform our recommendations.

Ahead of the workshop, we sent attendees slides covering the background and aims of the Innovation Link, as well as suggested questions for discussion at the workshop.

The points raised by workshop participants were:

- The other innovation-supporting organisations represented in the workshop all engage with the Innovation Link, albeit the level of cooperation differs between the organisations.
- Generally, innovator needs were seen to span across the different services that the innovation-supporting organisations provide.
- There remains scope for greater alignment between the innovation-supporting organisations, and to capitalise on well-timed opportunities.
- Having active networks of innovators is seen as important to fostering innovation.

[21] As above, the definitions of outcomes and impacts considered here are aligned with the survey section above, as opposed to the Theory of Change for the Innovation Link as a whole.

- It was noted that Innovation Link team members have been active participants in code modification industry working groups, and that they made valuable contributions regarding the impact of proposed modifications on innovation.
- One of the strengths of the Innovation Link was seen as its ability to help others to reframe innovative proposals (e.g. where another organisation may have been more inclined to reject an approach from an innovator because the innovation appeared too far outside that organisation's remit).

UK

Queens House

55-56 Lincoln's Inn Fields

London WC2A 3LJ

T. **+44 (0)20 7269 0210**

E. **info@cepa.co.uk**

www.cepa.co.uk

Australia

Level 20, Tower 2 Darling Park

201 Sussex St

Sydney NSW2000

T. **+61 2 9006 1307**

E. **info@cepa.net.au**

www.cepa.net.au

cepa-ltd @cepaltd