Written evidence submitted by Ofgem (COM0157)

Thank you for the opportunity to provide evidence to the committee's inquiry. As you will know, Ofgem is Great Britain's independent energy regulator. We work to protect current and future energy consumers, especially those in vulnerable circumstances, by ensuring they are treated fairly and benefit from a cleaner, greener environment. We believe the community energy sector has important roles to play in supporting those most in need, in championing the energy transition in their localities, and making home-grown renewables work harder still by stimulating local economies.

How should the energy market and licensing regulations be reformed to enable community energy projects to sell the electricity that they generate to local customers, without the current barriers, and be properly remunerated for doing so? What lessons can be learnt from other jurisdictions?

As a regulator, Ofgem wants to enable innovative products and services that allow consumers to benefit from cleaner, greener and cheaper propositions that are tailored to their needs. This includes removing barriers to community energy (CE) projects that sell the electricity they generate to local customers.

Barriers to CE selling electricity to local customers

Ofgem recently consulted[1] on how we could remove barriers to innovation. Stakeholder feedback indicates that there are a range of barriers to CE projects with key issues including the limited price signals to reward CE projects for the benefits they provide. Some of these are common barriers that other innovators face (e.g. the rollout of data/technological enablers). However, the regulatory route to market is a specific problem for many CE projects that want to "supply" electricity to local consumers.[2]

Potential solutions

Building on existing arrangements, there are a range of options to better enable CE projects to sell locally generated electricity to consumers:

Licensed supply

- Electricity "supply" is a licensable activity. Most parties must be licensed by Ofgem to supply electricity to consumers. A licensee must comply with all the conditions of the supply licence.[3] Licences are awarded on a GB-wide basis, although a party could apply for a restricted supply licence (by geography and/or premises type).
- A CE business can apply for a supply licence. However, CE stakeholders have told us that becoming a licensed supplier is too onerous for a stand-alone, small-scale, geographically-specialised business. In response to our recent consultation, stakeholders told us that introducing flexibilities in licensing arrangements may enable larger CE schemes. However, becoming a licensed supplier may still not be a realistic option for small-scale CE schemes.

[1] The consultation is available here: Innovation in the energy retail market | Ofgem
[2] The Electricity Act 1989 defines supply as "supply to premises in cases where - (a) it is conveyed to the premises wholly or partly by means of a distribution system…". Most supply occurs over licensed networks (operated by Distribution Network Operators (DNOs) and Independent DNOs).
[3] Some obligations only apply once a supplier has more than a certain number of customers.

Licence-exempt supply

- Legislation allows supply to be undertaken without a licence up to certain thresholds (e.g. MWs of electricity supplied, making this particularly relevant to small scale-schemes) and in particular circumstances.[4] The scope of an exempt supplier's role is determined by the relevant class of exemption.[5] Licence-exempt suppliers are subject to fewer regulatory obligations than licensed suppliers (e.g. they do not have to comply with supply licence obligations). In 2021, government issued a call for evidence on the licence-exemption regime[6] to consider, for example, what consumer protections and obligations are appropriate for licence-exempt suppliers.
- Some CE projects already supply electricity under the licence-exemption regime. However, the exemption regime was not specifically designed to facilitate CE and many schemes do not meet the exemption criteria. We therefore support Government to continue its review of the exemption regime to better facilitate CE and ensure the regime delivers good outcomes for customers.
- The exemption regime alone may not provide an appropriate route to market for all CE projects. For example, in some situations, exempt suppliers need to partner with licensed suppliers to access critical industry services and upstream energy markets.

Partnerships between CE and licensed suppliers

- A CE project can partner with a licensed supplier to supply locally generated electricity to consumers by agreeing a bespoke commercial contract. There are different commercial models (e.g. white label[7] and sleeving arrangements[8]). A partnership enables CE projects to sell locally generated electricity, whilst ensuring consumers retain the protections of a licensed supplier.
- Some CE projects already partner with licensed suppliers (e.g. Energy Local's[9] model). However, some CE stakeholders have highlighted challenges agreeing partnerships: e.g. being unable to find licensed suppliers that want to offer services, the high cost of agreeing partnerships, and the ability of suppliers to dictate commercial terms.
- We are considering how Ofgem can better enable partnerships between licensed suppliers and CE projects. To do this we need to understand why these arrangements are not happening more regularly on a voluntary basis. For example, if cost is the main barrier, then Ofgem could work with government to reduce costs (e.g. standardising commercial arrangements or enabling shared access to relevant expertise). Alternatively, CE stakeholders have championed a "right to local supply" that would require licensed suppliers to provide services at a regulated price (proposed by the Local Electricity Private Member's

[4] The Electricity (Class Exemptions from the Requirement for a Licence) Order 2001
[5] Classes A, B and C cover supply to domestic consumers, but only Class A operates over licensed (DNO and IDNO) networks; Classes B and C occur on private (licence-exempt) networks. Class A allows supply of up to 5MW (2.5MW to domestic consumers) of self-generated power to consumers; Class C allows supply (capped at 1MW to domestic and up to 100MW for non-domestics) of self-generated power (exclusively or combined with Class B) to consumers on the same site. Class B allows for the resale of electricity from licensed supplier by a "reseller" (eg, a landlord or park home operator) to its customers. The Maximum Resale Price to domestic consumers is the same price as that paid by the reseller.
[6] Exemptions from the requirement for an electricity licence: call for evidence - GOV.UK
[7] A CE project offers local supply tariffs, but the actual "supply" of energy is handled by a partner, licensed supplier.
[8] A licensed supplier offers a service to help energy consumers and energy generators trade electricity over the public network
[9] Energy Local is a Community Interest Company (CIC) that works with renewable generators and communities to create Local Energy Clubs, with supply sleeved by licensed suppliers like Octopus Energy and 100 Green.

Bill and tabled amendments to the Energy Security Bill in 2023 which were rejected). We consider that any solution needs to take account of the underlying costs and the commercial viability of requiring licensed suppliers to provide services at a regulated price.

Other countries

CE projects are increasingly prevalent in other countries. Whilst there is diversity in how these projects operate, most seek to increase local generation and consumption. For example, new technologies are being used to enable peer-to-peer trading in Australia and in Spain collective ownership models sell renewable energy to local members.

Way forward

Alongside our work to remove barriers to innovation, we are working with the Department for Energy Security and Net Zero (DESNZ) as requested by the Secretary of State to support on the governments' work on barriers to community energy and the development of the Local Power Plan. We are keen to continue working with DESNZ to design solutions to create a more accessible, liquid and competitive market for licensed suppliers to offer local supply services to CE projects, in ways which are compatible with government's overall future vision for energy consumers and the retail sector. We want to gather more information on the barriers to commercial partnerships and assess which solutions best address these issues. We will continue to work with, and learn from, other jurisdictions about how we can unlock more CE products and services.

How could existing government support mechanisms, such as the Smart Export Guarantee, provide community energy projects with more financial certainty?

Government's Smart Export Guarantee (SEG) policy was developed to create a competitive marketplace for small-scale generators (maximum capacity of 5MWs) to sell low-carbon electricity by requiring suppliers to offer at least one export tariff. DESNZ is responsible for the programme, with Ofgem performing administrative roles, assessing suppliers' compliance, publishing guidance, and producing an annual report. We recently published the 2023/24 SEG report[10], showing an increase in the number of tariffs available and significant growth in the volume of exports: from 77.3 GWh in 2022/23 to 283.1 GWh in 2023/24.

While legislation[11] stipulates SEG licensees must offer at least one tariff to any generator with an eligible installation, there are no requirements on the rate, contract type or term length for this tariff except it must be greater than 0p/kWh at all times. We are aware CE schemes have raised the lack of longer-term tariffs and income uncertainty as a barrier to raising finance from investors.

Government may wish to consider whether to set additional requirements for the SEG to deliver its ambitions as set out in the Local Power Plan, such as how best to provide longer-term contracts and investment certainty. The SEG deals with the wholesale treatment of exports, while the "right to local supply" focusses on retail sale. The two mechanisms deal with the same electricity output and can mutually reinforce the case for CE, and any proposed reforms should be looked at in the round.

[10] SEG annual report (year 4, 2023/24) available here: https://www.ofgem.gov.uk/publications/smart-export-guarantee-annual-report-april-2023-march-2024

[11] Smart Export Guarantee Order 2019: https://www.legislation.gov.uk/uksi/2019/1005/contents/made

What are the regulatory solutions needed to minimise the high costs and long delays incurred in securing a grid connection for community energy projects?

Introduction

Generators and end-consumers can connect to the transmission or distribution network; and NESO and Distribution Network Operators (DNOs) must provide connection offers upon request on a first-come first-served basis. CE will be predominantly distribution connected,[12] and if above a certain size (currently 1MW in England and Wales and 200kW in Scotland), the DNO engages with NESO to assess the transmission impact and incorporates transmission requirements into the connection offer. Ofgem regulates the companies that design, construct, maintain and operate the networks, while government sets the legislative and policy framework to ensure the connections process supports energy, economic growth and clean power objectives.

The current connections process is not fit for purpose. The total queue is oversubscribed at more than 700GW; many generation and storage schemes will never connect because they are ultimately not needed by the energy system, leading to crucial net zero-enabling projects facing significant delays. Ofgem, DESNZ and the NESO are driving substantive changes ("connections reform") so vital net zero projects that are ready and needed can connect faster. Ofgem expect to make a final decision on connections reform in Q1 2025.

CE schemes and connections

Like other customers, some CE projects face connection challenges with long connections timescales and high costs. The most significant challenges are typically felt by those that are developing standalone generation or storage assets, and particularly larger projects where transmission-impacts are identified. For these projects, connections reform, detailed below, should significantly improve timelines for projects that are ready and needed.

Smaller projects (currently those below 1MW or 200kW in Scotland) are not impacted by transmission-level delays and may only have distribution network reinforcement requirements, which is typically much quicker. Schemes where generation is added to existing sites with capacity and behind-the-meter schemes are unlikely to be affected by connections issues: an example of this is Hackney Council partnering with Emergent Energy[13] to pilot a scalable microgrid solution installing solar on social housing blocks.

Connection-linked challenges that some CE schemes face are similar to other small-scale projects: costs of connection (especially where transmission reinforcement is required), lack of clarity on where capacity is available, and inconsistencies between DNO processes. These issues are being addressed through the joint Ofgem and Government Connections Action Plan (CAP), with solutions being brought forward in 2024 and 2025, which will consider all project sizes. Some characteristics of CE mean that they may face additional challenges with the connection's regime in comparison to other actors.

[12] The majority of community energy projects will be connected to the electricity network system at the distribution network level, rather than the transmission network level.

[13] Emergent Energy - Solar is for everyone. Council tenants to see lower bills as pioneering solar energy pilot begins. The pilot Hackney Council and Emergent Energy entails installing 1MW of solar panels on 28 social housing blocks (800 flats). Residents consume on-site solar and imported power, with a targeted 15% bill reduction. The Emergent Energy microgrid model was enabled by the Ofgem Sandbox. See: Regulatory Sandbox: Emergent Energy Systems Ltd - 2023 | Ofgem.

Reforming the connection process for all

There are a significant number of material reforms either recently implemented or in train, which should alleviate the barriers CE schemes face:

- Connections reform - 'first ready and needed': To secure a position in the connections queue, proposed connections reforms will require projects to be ready to connect. If they are transmission-level, or at distribution level *and* large enough to require transmission impact assessment (TIA), NESO have proposed that initially they must be within the technology capacity ranges set out in the Government's Clean Power 2030 Action Plan[14], which has distribution-level information but no specific provision for CE, and in future, the Strategic Spatial Energy Plan. This will remove speculative applications and those not contributing to required technology caps, which will remain outside of the queue with only provisional connection dates. Assuming Ofgem approves the reforms, the oversubscribed queues at transmission and distribution will be restructured in 2025. This should alleviate some of the challenges larger CE schemes in the queue face, should they satisfy the new requirements. Smaller projects not reliant on the TIA will benefit from the removal of speculative applications from the distribution queue.
- TIA thresholds: Projects connecting at distribution and over a certain size must be assessed for transmission impact by NESO. Work is underway that proposes to increase this threshold from 1MW to 5MW in England, meaning more distribution level projects progressing more quickly without NESO assessment, benefitting CE projects in this size range. We understand from stakeholders that a large proportion of CE are likely to be below 5MW.
- Technical limits: In 2023-24, DNOs implemented reforms to their interface with the transmission system to allow a greater number of larger projects to connect at distribution network without relying upon transmission reinforcement. This has resulted in much improved connection dates, particularly important for larger projects.[15]
- Improving connections customer service: The Connections End to End Review[16] is investigating the quality of information and customer service provided by DNOs, Transmission Operators (TOs) and NESO, and considering changes to improve connections data and customer service, helping projects understand where to connect and how to get the best connection that works for them. Ofgem is currently consulting on phase one findings.
- Access Significant Code Review (SCR): In 2022, Ofgem's Access SCR of the distribution connection charging regime concluded and decided[17] to:

    a) socialise distribution reinforcement costs at the voltage levels above that which a generation customer is connecting to; and
    b) removed all distribution reinforcement costs for demand connections.

    This reduced the connection costs for all generation, including CE, projects that trigger reinforcement at higher distribution voltage levels.

[14] Clean Power 2030 Action Plan - GOV.UK

[15] Grid Supply Point Technical Limits for accelerated non-firm connections – Energy Networks Association (ENA)

[16] The Connections End-to-End review covers the incentives, obligations and requirements as they relate to connections. The intended outcome of the review is a strengthened regulatory framework for DNOs, TOs and NESO to ensure both improved quality of service and more timely connection outcomes. Connections end-to-end review of the regulatory framework | Ofgem

[17] Access SCR - Final Decision

- Strategic planning and anticipatory investment: Under the current price control, DNOs can already invest in an anticipatory manner ahead of network need. The introduction of Regional Energy Strategic Plans (RESPs) is an opportunity for local authorities and CE practitioners to inform strategic capacity needs where anticipatory investment is needed. Following our consultation last year, we are finalising the detailed policy framework which underpins RESPs and ensuring accessible and structured engagement and governance channels enable local voices to shape RESPs. As part of this we're considering the interactions with GB Energy.

Additional measures for CE schemes

The proposals within the CAP and the resulting Connections Reform programme will have a material impact on improving connection dates for larger CE projects and will provide all CE projects with better data and an improved customer journey.

There are targeted solutions proposed by the CE sector which are not currently being progressed within the Connections Reform package, such as:

- Allocating a proportion of connection capacity to CE projects.
- Increasing the 3-month window to accept a connection offer.
- Enabling long-term payment plans rather than paying connection costs upfront.

Any targeted solutions would likely involve differential treatment of CE schemes in the connections process, which would require government intervention (working with Ofgem as needed) especially if solutions were to increase risks to other connecting customers or costs for other consumers.

What should be the role of Neighbourhood Plans and Local Area Energy Plans in building local support for community energy projects?

Making the transition to clean power by 2030 and net zero by 2050 requires action at national, regional and local levels across all facets of society. While this foremost involves how we power and heat our homes and businesses, it affects how we travel and transport goods, and how our built environments operate. A transition of such scale and reach requires coordinated, concerted efforts, reaching across all locations and sectors.

Significant changes are underway in how the energy system is planned and delivered with the GB-wide Strategic Spatial Energy Plan and Centralised Strategic Network Plan being produced by NESO, reflecting the Clean Power 2030 Action Plan. Ofgem is introducing the RESP framework, also to be produced by the NESO, which will ensure national energy objectives and local needs and ambitions are integrated into a regional vision and blueprint, showing where strategic and anticipatory investments are needed (mostly by DNOs) to meet forecast demand growth.

At the local level, Neighbourhood Plans, Local Area Energy Plans (LAEPs) and Local Heat and Energy Efficiency Strategies in Scotland, have roles to play in engaging stakeholders in producing evidence and insights to determine a local area's future capacity requirements and priority projects. These mechanisms can inform coordinated, place-specific plans which identify whole-system opportunities, inform the development of RESPs and DNO investment plans. They can provide inputs to determining the need for a CE scheme, but also a vehicle through which stakeholder support can be established.

What is the potential where for community energy to incentivise consumer demand flexibility at the scale needed to achieve the UK's net zero targets?

Increasing short-duration consumer-led flexibility from 2.5GW to 10-12GW is key to achieving Clean Power 2030.[18] Ofgem is progressing a range of measures to increase consumer-led flexibility, including Market-wide Half-Hourly Settlement, introducing a market facilitator[19], and developing the Smart Secure Electricity Systems Programme.[20] Ofgem is also working with government and NESO to develop the Low Carbon Flexibility Roadmap (due in 2025), to consolidate all actions to drive flexibility making the system more suited to renewable generation, including from CE schemes.

CE could increase incentives for consumers-led flexibility: e.g. if local supply was a more viable option (see question 2), consumers could receive price signals to consume local power. CE schemes with generation, storage and consumption (Smart Local Energy Systems), can provide flexibility by matching demand with available generation within a specific area.[21] Operators of these schemes could also coordinate assets and/or partner with aggregators to provide flexibility services for network constraints.

Government's ambition to increase local power by 8GW by 2030 could significantly increase the scale of CE and help engage consumers in providing flexibility to meet the Clean Power goals. This will require projects to focus on the right combinations of technologies, and there are many existing examples of flexible CE, such as the ReFLEX project in Orkney.[22] When developing the Roadmap and the Local Power Plan, government will want to ensure the CE schemes it supports can operate across both pillars of its policy ambition, harnessing CE projects to deliver flexibility at scale.

January 2025

[18] Clean Power 2030 Action Plan: A new era of clean electricity
[19] Market facilitator policy framework consultation | Ofgem. Ofgem has introduced the role of the market facilitator: a single, expert entity with a mandate to align local and national flexibility market arrangements, reduce friction and increase liquidity in flexibility markets. In July 2024, Ofgem confirmed that Elexon will be the market facilitator.
[20] Smart Secure Electricity Systems Programme: Energy Smart Appliances
[21] As shown in trials funded by the UKRI PFER programme: lessons-from-energyrev-final-to-upload-2-1.pdf
[22] About ReFLEX | ReFLEX Orkney: The ReFLEX project is aiming to create an integrated energy system in Orkney connecting local electricity, transport and heat networks into a digital system connecting distributed renewables to flexible demand.