

Focused Briefing

March 2021 — No.1

Local Energy Accelerating Net Zero

Project LEO is an ambitious, innovative energy system project helping the country achieve net zero emissions by 2050 and a smart, local balanced energy system that benefits us all.



Welcome to our first Project LEO (Local Energy Oxfordshire) Focused Briefing.

These briefings take an in depth look into specific activities, outputs and research being generated as part of the demonstrator project.

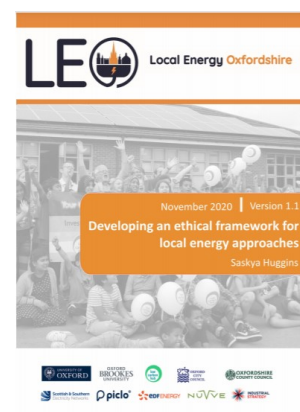
Project LEO is redesigning the energy system at a local level to facilitate the transition to a zero-carbon energy future and is a collaboration between ten project partners, each operating within different areas of the wider energy ecosystem. This Focused Briefing provides an update on the work we have been doing focusing on the need for smart local energy systems to be ethical, fair and equitable to enable and support everyone taking a part and sharing in the benefits of a new energy system.

Developing an Ethical Framework for local energy approaches

LEO has published 'Developing an Ethical Framework for local energy approaches'. This document and the approaches set out in it are our first step to supporting the ethical delivery of our local energy trials and the design of a smart local energy system that is both equitable and fair. This document sets out why addressing energy equity is a key driver in accelerating the transition to a zero carbon energy system, and outlines how we will be exploring issues of equity through our trials.

We are gathering evidence on the interactions between our current governance and operation of the broader energy system and proposed new local energy services. We are then assessing how these interactions may impact on the ability for smart local energy services to thrive and meet the energy needs of people in an equitable way, with a view to making proposals for future changes.

You can find 'Developing an Ethical Framework for local energy approaches' on our website [here](#).



What does Project LEO mean when we talk about an energy system that is fair, equitable and ethical?

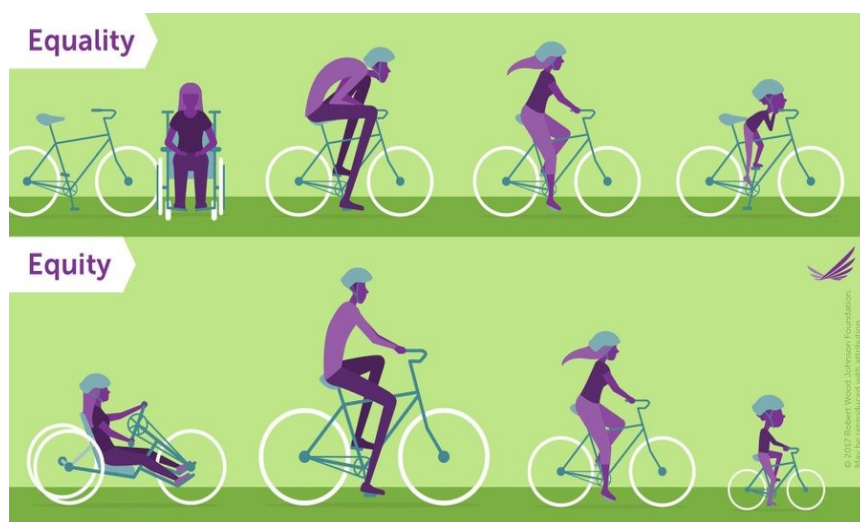
Before starting working on our Ethical Framework document we had to decide what LEO meant when it talked about an energy system that was 'fair, equitable and ethical'.

The recently published Energy White Paper says that **fairness** should be at the heart of a clean energy system so that everyone is confident that we are all paying our fair share of the cost of transition. This means ensuring it is done without negatively impacting on energy affordability, particularly for the vulnerable, or giving any other person or group of people an unjust advantage or disadvantage. LEO sees fairness as needing to underpin every aspect of the transition, not just in terms of sharing the cost, but also enabling everyone to participate and benefit from the new opportunities presented by a smart local energy system.

The World Energy Council considered energy **Equity** as being one of the key considerations in the '[Energy Trilemma](#)'. It defined it as being 'universal access to affordable, fairly priced and abundant energy'. LEO however, believes equity should also be considered in terms of fairness of outcome, fairness of process and fairness of treatment.

LEO also does not see energy equity as being the same as equality. It isn't about offering everyone access to the same thing, but what is right for their own needs and circumstances to enable them to take part. This is explained in the diagram to the right.

Along with these concepts LEO believes an ethical system is one where the participants are engaged and communicated with honestly and transparently, with 'the rules' for participating and benefiting clear and understandable.



Why are these things important to LEO?

We need to take everyone on the journey to a smart local energy system. No one should be left behind.



Any system considered fair and ethical is more likely to meet with social and political approval. This makes it more likely that local energy solutions will be supported and implemented by individuals and communities as well as by the policy makers and regulators who will consequently implement policy and regulation that is supportive of a (fair) local energy system. This is the only way we will achieve the mass participation required at a sufficient scale. So the pursuit of energy equity is not only a moral goal for LEO – but also the only way to achieve our aims.

As part of the framework, we have drafted the following ethical principles. Our trials are aimed at learning whether these are the right principles, what the barriers and challenges are to meeting these as well as recognising what benefits and opportunities they present.

| Principle | Description |
|---|--|
| Collaborative design | We will design service offerings in partnership with the community in which they are to be delivered, so everyone potentially impacted by the service can influence its design. |
| Inclusive offering | When we design a service offering we will seek ways to minimise the barriers to individuals benefiting from the offering. |
| Fair distribution of benefits and costs | The success of a service offering will depend on the efforts of many stakeholders. The value created by the service, and costs that arise should be fairly distributed amongst these stakeholders. |
| Minimise risk | No one should be materially worse off as a result of the service. This does not preclude individuals being exposed to some level of risk through their involvement in the trial (e.g. financial), as long as it is with full information regarding the risk, participation is their own free will, and should it arise, the risk does not cause significant or lasting harm. |
| Informed consent | We will ensure potential service users have adequate information, presented in a clear and accessible way, about the benefits, costs, and risks associated with using the service to make an informed decision about participation, including influencing decisions around the wider infrastructure. |
| Respect | We will treat all those affected by the service with respect and sensitivity. |
| Data fairness | We will be open and transparent about the data we are collecting through the use of a service, how it will be used, managed, owned and shared, and seek informed consent from service users. |

Smart and Fair Neighbourhood Programme

Our Smart and Fair Neighbourhood (SFN) trials have equity and fairness at their hearts. We are working with five different local communities in Oxfordshire to test different flexibility services. We will explore how smart technology and new commercial models can create opportunities accessible to everyone.

The five trials are being collaboratively designed with each community and will look at different approaches to harnessing the potential of energy users to deliver flexibility at the grid edge. The two-year trials will involve the setting up and testing of local, low carbon energy initiatives that use market mechanisms and smart technology to bring value to the electricity network and all the people connected to it.

Our SFN trials will also help us better understand social innovation that can lead to the development of a portfolio of successful energy service offerings.

The trials are also being used to test our 'Developing an Ethical Framework' toolkit which will be further developed iteratively from what we learn throughout the SFN trials.

The trials have a different focus relevant to the needs and profile of each community and are taking place in; *Westmill, Rose Hill, Osney Island, Deddington & Duns Tew and Eynsham*

How else is our *Ethical Framework* being applied?

Accessible communications

Although smart local energy systems can be technically complex, the language we use to talk about them and engage people doesn't need to be. We are working hard to ensure our communication is targeted at its audience—using plain English and cutting out the jargon when we are addressing a wider audience - talking a language everyone can understand and that resonates.

Understanding & creating value

We are exploring the potential for flexible energy to successfully contribute to the decarbonisation of the energy system in a way that is desirable to society, the energy system and the flex provider.

We will be using the concept of value propositions to explore this last point: How can we make selling flexible energy desirable, or valuable, to the flex provider such that they will participate in a sustainable and reliable way?

Our different markets will explore a range of potential strategies. This gives the opportunity to test a number of different value propositions throughout our trials. As well as understanding what benefits people value, we want to explore what might make someone unwilling, or unable to participate. As a result we aim to explore how approaches to flexible energy can be developed that better meet the needs and interests of different communities, organisations and individuals, making participation more accessible and equitable.

Simplifying access to flex markets

People can easily be put off by flexibility market models if they are overly complex. You should not need knowledge of commercial and technical concepts to take part. Our two Market Stimulation Packages offer a simplified market route to encourage people unfamiliar with these concepts to take part, giving a fixed rate for their flexible energy to remove the risk and uncertainty.

A fair local energy market

LEO is developing a local energy marketplace where power, energy and other network services can be offered, contracted for and their delivery verified and settled. The network's operational flexibility needs are procured through the "Neutral Market Facilitator" platform. This NMF platform integrates with third party market platforms where flex providers and other actors can bid for the required DNO services and also participate in other energy markets such as the national market for balancing services or local markets for power capacity and units of energy. LEO is developing both the NMF platform and, through our partner, Piclo, a local market platform where the actual trading can be conducted. Critically, the NMF and Piclo platform creates a level playing field for all energy technologies and services. This will offer transparency to everyone taking part with a clear set of rules for everyone to follow which should deliver market outcomes which are both fair and commercially viable.

If you want to find out more about Project LEO then please visit our website www.project-leo.co.uk/

To receive our newsletters, information on events and other updates please sign up to our mailing list www.project-leo.co.uk/stay-connected/

