

Project LEO Newsletter



June 2020, Issue 4



Local Energy Accelerating Net Zero

Project LEO aims to test how opportunities can be maximised and unlocked from the transition to a smarter, flexible electricity system, with a focus on renewable and low carbon energy.

Celebrating a LEO milestone

We are excited to announce we have passed a milestone Innovate UK assessment, which allows us to progress to the next stage of the Local Energy Oxfordshire (LEO) project.

Project LEO has brought together significant local, academic and industry experience and expertise, to undertake one of the most wide-ranging and holistic 'smart grid trials' ever conducted in the UK. The Project is trialling how renewable energy technologies such as hydro, wind and solar, can be enabled to contribute flexibly to meeting electricity demand at a local level now and in the future.

In the first year of the project, we have developed trials that allow the controlled management and monitoring of specific low-carbon technologies' impact on the electricity network and how they can contribute to the network during, for example, periods of peak demand. The trials that have been completed so far, tested a range of scenarios that the UK will likely experience in the transition to a smarter electricity system. These tests will continue throughout the project, in an increasingly large and more complex fashion.

Innovate UK, who part fund the LEO project, has announced that following an assessment of the first year, LEO's project partners have successfully demonstrated

strong progress, evidenced through a comprehensive assessment submission for the first year. Passing this assessment allows Project LEO to go on to develop larger energy trials, building on its learning.

Rob Saunders, Challenge Director, Prospering From the Energy Revolution, UKRI said: "The demonstrator projects form a vital part of the PFER challenge of delivering cheaper clean energy through intelligent local systems. The insights and innovations gained from their trials and modelling help to shape the evidence for the UK's strategy for clean energy in the future. Project LEO is showing just what can be achieved by creating a holistic and flexible approach to energy sources, demand and usage within a local system and, after a rigorous assessment of their progress, we are pleased to be able to continue our support of their work. Smart and adaptable local energy systems will be a huge part of the UK's future plans for net zero, and Project LEO's findings will be key to their design and implementation across the UK over the coming years."

Melanie Bryce, SSEN's Oxfordshire Programme Director was delighted with the news and said "It is fantastic to see Project LEO's partners' hard work being recognised by Innovate UK. What we learn from

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Celebrating a LEO milestone



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this project in Oxfordshire will help develop a route to net zero that supports local communities taking an active role in the energy system that serves them, right across the UK."

Barbara Hammond MBE, CEO of the Low Carbon Hub emphasised the local importance of the project.

"We are thrilled that we have been given the go-ahead to continue the important work and trials of Project LEO. It has been and continues to be, an incredible opportunity for us to develop an energy system for the future which is sustainable and which involves and benefits our local communities. We're excited to see the next steps come to fruition."

Investing in green energy for Oxfordshire's future



Are you looking for an investment opportunity that puts your money to work delivering local projects to tackle climate change and that pays you interest in return for your support?

This spring, the **Low Carbon Hub** wants to raise £1.5 million of new investment into the Community Energy Fund. This will allow it to develop its portfolio of renewable energy generation projects to support Project LEO and replace £200,000 of debt-funding for Sandford Hydro.

For more info visit <https://www.lowcarbonhub.org/invest/>

Local Energy 'Ecosystems'

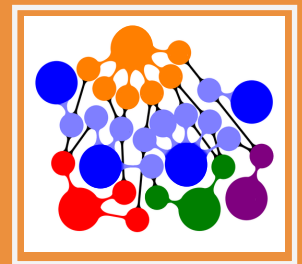
To really understand how a Local Energy System can take root and flourish we need to have a good understanding of energy provision and demand: how energy is generated, distributed and consumed.

LEO has been working hard this year at better understanding this and is looking at the interaction between people and technology (a sociotechnical view). This means energy use is understood as being an outcome of the routine practices and habits of daily life: how people work, keep warm, wash, cook and move around etc.

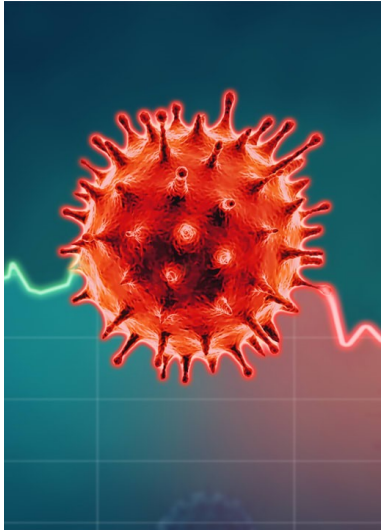
To help facilitate conversations on this topic, we are using the analogy of an 'ecosystem'.

This helps us to capture the idea of a network of stakeholders, each one having different roles and all needing to be present in the ecosystem for it to work, interacting with one another to create and exchange 'value'.

Critically, the ecosystem analogy suggests how the system is continually evolving and changing as the 'laws of the jungle' change and as new ideas, technologies and ways of doing things come into existence. The role of LEO is to help create the conditions in the ecosystem which encourage local energy systems to emerge, grow and ultimately thrive. Through workshops and interviews and the use of various tools, LEO is beginning to build a picture of the stakeholders needed to sustain a local energy ecosystem and the type of services they need to provide.



Covid 19 - Three month Project Extension



It's been difficult times for all of us. We hope at the time this newsletter is published, there will be clear signs of us winning the battle against the virus.

Since lockdown the LEO consortium has continued to work together through virtual channels and has taken the time to refocus on our priorities. We have however been unable to get out and engage with our stakeholders and communities as we had planned and some of our trials have also been delayed. Because of this Innovate UK has given us an **extension on the project of three months** to 'make up for lost time'.

We are currently looking at the impact CV19 has had to date on the project, revisiting some of our project timescales and considering how we can make best use of this extension.

Spreading the LEO news

Engaging with local (i.e. Oxfordshire based) and national stakeholders is key to LEO's success.

It is how we can ensure participation in LEO activities, facilitate improvement and most importantly enable the replication and scaling of the systems and procedures demonstrated by LEO.

Due to the number of different stakeholders in the project and so that we are engaging in a timely and relevant way, we have been carrying out research to support the development of a Stakeholder Engagement Framework.



The guiding principles for our stakeholder engagement and supporting documentation will be available on our website once complete.

In the meantime LEO has shared our project findings through a variety of channels and formats;

- **quarterly reports**
- **an annual report**
- **project website (where the above can be found)**
- **attendance at events and speaking opportunities including at the local community level**

LEO partners are also participating on national level working groups and committees to ensure what LEO learns is reflected in changes to policy and regulation that support the energy ecosystem.

What is demand side response?

One of the trials we have been carrying out this year is a **Demand Side Response (DSR)** trial. This is being run at the University of Oxford Sackler Library (pictured). Working closely with the University we have been looking at whether slowing down heaters and reducing energy demand for a limited period would be noticed by customers.

DSR is about the use of electricity, rather than generation. It is positive action taken by an energy user to flexibly alter their demand on the network at certain times. This could be at times of peak in demand, or in response to other events. This behavioral change can potentially be financially incentivised.



New member of the LEO team....



The project welcomed a new member of the team recently.

Charlotte Hewes has joined the LEO Project working for SSEN as a **Stakeholder Manager**.

Charlotte lives just across the border in Buckinghamshire and will be supporting engagement and communications for the project working closely with all the key partners involved and the wider Oxfordshire communities.

Charlotte said “The country has proved recently how capable it is of delivering the services we need to flourish in new innovative ways while maintaining safety as a priority. I hope once we all settle into the ‘new normal’ that we can harness some of this entrepreneurial spirit and can-do attitude into Project LEO”.

Charlotte will be based at the Wood Centre for Innovation in Headington—her email is charlotte.hewes@sse.com



Don't miss out on Webinars full of energy!

During the lockdown period our partners have been delivering our engagement in new ways. This has included different webinars on various topics that have been well attended. We have a couple coming up this month you are invited to join us.



June 9th 2020 - 6pm: A Network for Net Zero: the first year of Project LEO

Low Carbon Hub

Find out more www.lowcarbonhub.org/p/upcoming-webinars-on-the-future-of-energy/

June 16th 2020 - 4pm : How are Local Networks Enabling the Energy Transition

Energy Colloquia - Oxford University

Find out more <https://talks.ox.ac.uk/talks/id/c5c13136-df09-4e62-8b37-9013f8e0a043/>

Working together...



Project LEO is funded through £13.8m from the Industrial Strategy Challenge fund, managed by Innovate UK, and is supported by £26m of private funding from project partners.