

# COP26 Focused Briefing

November 2021 — No.2



## 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 the second 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 our 'demonstrator' project.**

Project LEO is redesigning the energy system at a local level to facilitate the transition to a zero-carbon energy future. It is a collaboration between ten project partners, each operating within different areas of the wider energy ecosystem. This Focused Briefing takes a look at some of our activities in and around the recent **UN Climate Change Conference (COP26)** and the place that Project LEO has in the Climate Change agenda on a national and international level.

## Project LEO on stage at COP26

**31st October to 12th November, Glasgow proudly hosted the UN Climate Change Conference 2021 (COP26). A critical week in "Uniting the World to Tackle Climate Change" by accelerating actions towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change.**



Project LEO was proud to be strongly represented, with one of the project partnership, SSE, being a major COP26 partner. Five people from the Project LEO team spoke at the various events held throughout the conference, sharing their insight and knowledge on a range of key topics.

We believe being given these opportunities reflected a wider understanding of the need for Climate Change action to be focused at finding **local solutions**, particularly when addressing the reduction of carbon emissions in the electricity system. This is why several of Project LEO's partners are now part of a new International Community for Local Smart Grids that was launched as part of this momentous conference.

# International Community for Local Smart Grids

The 2nd November saw the launch at COP26 of an 'International Community for Local Smart Grids'. The launch was part of a Blue Zone session titled *Collaborating for Net Zero Networks: Building an International Community for Local Smart Grids*.



The session, supported by Chris Burchell (SSEN), Malcolm McCulloch (University of Oxford) and Barbara Hammond (Low Carbon Hub), discussed how delivery of a net zero energy system will require significant change at a local level, with participatory smart grids helping people and communities maximise the benefit of renewable and flexible energy solutions. It explores how electricity networks, and the shift to smart grids, will be fundamental in achieving a secure, cost-effective, net zero future, and in realising the ambitions of COP26.

The International Community for Local Smart Grids (ICLSG) aims to share local learnings on a global stage and help create a net zero future for us all. As learnings and information develops this will be shared through the new ICLSG website [www.communitysmartgrids.org](http://www.communitysmartgrids.org)

**"Communities and distribution networks are the unsung heroes of the decarbonization challenge. Most of the difficult challenges in decarbonising mobility, heating and increased cooling requirements are addressed by these groups. Oxford University is excited to be able to bring together a global partnership focused on sharing the learnings and best practices in providing a smart, resilient and just transition."**

**PROFESSOR MALCOLM MCCULLOCH, UNIVERSITY OF OXFORD**

The ICLSG is a University of Oxford-led initiative that brings together electricity networks and community energy groups from across the world to remove barriers to delivering net zero at a local level. Electricity distribution companies from the UK, Australia, Italy, and Japan have all joined forces to revolutionise and support communities to engage with electricity grids of the future.

Founding Partners [Scottish and Southern Electricity Networks \(SSEN\) \(Distribution\)](#), [Ausgrid](#) and the [Enel Foundation](#) (research partner) have joined with the University to launch the **ICLSG**. Key Project LEO partner, and leading UK community energy social enterprise, [Low Carbon Hub](#) is the founding community member of the ICLSG. This initiative will see community energy groups and electricity networks share key learnings from innovation projects, facilitate discussions around challenges and support a collaborative transition to a decarbonised future.



You can watch a recording of *Collaborating for Net Zero Networks: Building an International Community for Local Smart Grids* [https://youtu.be/t88s8K8\\_EiE](https://youtu.be/t88s8K8_EiE)

As part of the COP26 session there was a ICLSG video shown which you can also watch, which explains more about Smart Grids and how by collaborating internationally they can help us reach a net zero outcome <https://vimeo.com/640026896>

## All aboard to tackle climate change as SSE's COP26 bus stopped in Oxford

**At the end of October, leading up to COP26, the Project LEO team were delighted to welcome the COP26 bus to Oxfordshire to celebrate local energy innovation.**

The fully electric double decker bus arrived into Oxford city centre as the first stop of what was a two-week 'Road to Renewables' nationwide tour that ended in Glasgow ahead of the landmark COP26 summit. The bus showcased some of the most innovative energy projects across the UK, including Project LEO, celebrating our work in leading the transition to net zero energy system.

The COP-branded bus was welcomed into the city by representatives from Project LEO, Oxford City Council, Oxfordshire County Council, Oxford Bus Company, Oxford University, SEN and Oxford Brookes University (pictured).

The electric bus stopped overnight at Oxford Bus Company's Cowley depot to charge up for the next stage of its journey. **Oxford Bus Company's on-site batteries took part in the very first Project LEO trial, exploring how energy storage can benefit and operate within a local market for energy flexibility.**

*"The Road to Renewables tour was a reminder that we are all part of COP26 and have a role to play in its objectives to reduce global emissions. In Oxfordshire, Project LEO is a beacon initiative that puts communities and partnerships at the heart of the energy transition."*

**TIM SADLER, CHAIR OF THE LOW CARBON HUB**



**You can hear from all the team who welcomed the bus into Oxford by watching our 'Road to Renewables' Project LEO video**

**<https://vimeo.com/643514369/ee1a56a797>**



As well as our main session in the Blue Zone launching the *International Community for Local Smart Grids*, we also presented at other sessions on 4th November 2021.

If you want to watch recordings of these sessions then click on the different links below.

## Supporting an inclusive and just transition to net zero

**This session highlighted the need for the net zero transition to be fair and inclusive for all and explored the theme of social justice in the future energy system.**

These are important issues for Project LEO and our last Focused Briefing was on this topic – [you can read it here](#).

The session included roundtable discussions to shape future thinking and decision-making, and an expert panel including representatives from consumer organisations like Citizens Advice, the Centre for Sustainable Energy and academia.

You can watch the recording of the session.

<https://bit.ly/3qxoa96>

## Communities, Cars and Flexibility

**This session brought leaders from the innovation field together to showcase and explore the key projects unlocking the UK's net zero future.**

The Project LEO team were widely represented at the event (pictured below are members of LEO - Melanie Bryce, Professor Rajat Gupta and Dr Barbara Hammond MBE) and joined by experts from Baringa, Energy Systems Catapult and Disabled Motoring UK.

Together they explored and discussed opportunities and challenges during three panel events focused on the themes of Communities, Cars and Flexibility.

You can watch the recordings of the 3 sessions.

Communities <https://bit.ly/3om5oP5>

Cars <https://bit.ly/3n8rGVd>

Flexibility <https://bit.ly/3c21KEu>



Thank you to everyone in Project LEO who did such a superb job of giving the project so much positive coverage at COP26 across all the sessions we were part of

## Voices from COP26

We were fortunate to have some of our Project LEO team up in Glasgow for COP26. Here's what they had to say about their experience of this momentous event.



**Rajat Gupta**  
**Oxford Brookes**  
**Professor of Sustainable**  
**Architecture & Climate Change**

"The Communities, Cars and Flexibility event in SSEN and the Buildings and Adaptation panel in the Buildings Pavilion at COP26 were well-attended by policy-makers, business and voluntary sectors. Interestingly both panels had a strong focus on localisation and human aspects of energy systems and climate change adaptation.

The LEMAP tool for local area energy mapping drew considerable interest from the audience for preparing local roadmaps for achieving net zero."



**Melanie Bryce**  
**SSEN**  
**Oxfordshire Project Director**

"Local to global, was the themed launch of the International Community of Local Smart Grids. With videos from Italy's Enel and AusGrid, Laura Sandys chaired a panel, including SSEN MD Chris Burchell, Barbara Hammond (Low Carbon Hub), and Malcolm McCulloch (University of Oxford) discussing the global perspective on the power of the 'small and many' assets at the edge of our networks.

Mark Carney and Justin Trudeau were spotted in the vicinity and the event was truly international with indigenous headdresses meeting city suits in an eclectic mix of Green Bonds and Polar Bears – what a day!"



**Malcolm McCulloch**  
**University of Oxford**  
**Associate Professor in Engineering**  
**Science**

"The Blue Zone felt like a trade conference for politicians! There were lots of panel discussions going on. The launch of the International Community of Local Smart Grids, a spin-off of Project LEO, was very well received. As of 10/11 it was the second most trending video of the UK pavilion [https://youtu.be/t88s8K8\\_EiE](https://youtu.be/t88s8K8_EiE).

The SSEN event on the Thursday was excellent, and some new exciting projects were conceived exploring the just transition."



**Dr Barbara Hammond MBE**  
**Low Carbon Hub**  
**CEO**

"It was very good to be in sessions on both the Tuesday (2nd Nov) in the Blue Zone and at the SSEN Decarbonisation Day (4th Nov) talking with people who really get that working together in communities will be important, if not crucial, to meeting the climate emergency. Taking the focus off individual behaviour change and onto how we all work together at local level, supported by long-term policy frameworks at national and local level is what is needed. "

# ZCOP Workshop on Flexibility Market Trials

In the lead up to COP26, Project LEO engaged with partners in the [Zero Carbon Oxford Partnership \(ZCOP\)](#). This is a group of Oxford's largest and most significant organisations, including a number from the Project LEO consortium. They have come together to collaborate on carbon reduction and tackle the climate emergency.



The week before the start of COP26 we ran a workshop introducing opportunities for the ZCOP partners to take part in our [Energy Flexibility Market Trials](#) which will be running until spring 2023. As part of ZCOP's commitment, all its partners are asked to seriously consider participating in the trials. We are now working closely with the various partners to help identify any opportunities or barriers to their individual participation. Thanks to all the partners who took the time to attend the workshop.

## A Letter from Oxford.....

**As leaders from around the world met in Glasgow, key organisations and businesses across Oxford issued a letter to the President of COP26.**

The letter highlighted the need for concentrated action from Government. The "Letter from Oxford", which was sent to COP26 President, Alok Sharma by the [Zero Carbon Oxford Partnership \(ZCOP\)](#), welcomes the Government's leadership on climate change and the need for commitments to unlock faster decarbonisation at a local level.

The letter asks the government to build on the commitments made in the Government's Net Zero Strategy and highlights the need for a number of actions which need to be taken, including the need for;

**Coordinated market mechanisms for local flexibility and network reinforcement to allow significant electrification of heat and transport, learning from innovative projects such as Local Energy Oxfordshire.**

You can read the letter in full here <https://www.oxford.gov.uk/news/article/2016/>



If you want to find out more about Project LEO then please visit our website [www.project-leo.co.uk/](http://www.project-leo.co.uk/)

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