

OxFutures Social Impact Report

The legacy story



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Cover photo: Energy Superhub Oxford (ESO) features Europe's most powerful EV charging hub. (Photo: EDF Renewables UK)

Photos throughout, where not credited, are from OxFutures Interim Summative Assessment Report May 2020, or sourced from organisation websites



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BROOKES
UNIVERSITY



EUROPEAN UNION
European Regional
Development Fund



Cherwell
DISTRICT COUNCIL
NORTH OXFORDSHIRE



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OxFutures Legacy Story

The OxFutures programme has created a step-change in the growth of Oxfordshire's low-carbon economy, driving a pioneering transformation at a business, academic and innovation level. Using the skills, knowledge, and resources of its six partner organisations in concert has led to powerful local impacts, which provide solutions to how the county will reach net zero. We have created an engine of ambitious zero-carbon innovation and a legacy that will transform our region with a local vision for our global future.

The expertise of our two globally renowned universities has been utilised to facilitate knowledge exchange and drive innovation in the energy sector. Our efforts to develop a smart grid for Oxfordshire have culminated in a successful bid for £42m of Innovate UK funding, leading to the establishment of Project LEO (Local Energy Oxfordshire). As a result, we have gained a deeper understanding

Our amazing legacy has been delivered for an investment of only £4.2m of European Regional Development Fund money.

of the necessary adaptations at the low-voltage grid edge to effectively manage and balance the shift towards electric heating and transportation. Furthermore, we have forged strategic partnerships to ensure the successful implementation of these initiatives.

Fourteen knowledge transfer workshops attracted 643 business, academic, and local government participants, from 398 different organisations and transferred the expertise and ideas from our universities into the commercial sector.

Six electric vehicle business breakfasts accelerated the adoption of EV vehicles and charging infrastructure and led to the first EV Summit, which is now a national annual two-day conference at the Saïd Business School. In turn, the EV Summit has helped facilitate conversations for new EV projects in the city, including Energy Superhub Oxford, a £41m decarbonisation project which saw the installation of Europe's most powerful EV charging hub at Redbridge Park & Ride.

Oxfordshire Greentech is a low-carbon business support and networking organisation spun out of OxFutures. It is now brokering relationships between hundreds of smaller dynamic innovators, academics, large corporates, and green finance investors, promoting pan-regional opportunities across the Oxford Cambridge Arc with its sister organisation Cambridge Cleantech. Together they are working to develop a climate tech super-cluster of innovative businesses. One hundred and fifty people attended Greentech's recent Access to Finance Conference in March 2023.

OxFutures introduced Retrofit Works, a pilot domestic retrofit model, into Oxfordshire from its launch-bed in London. This led to a successful local pilot, which secured funding from BEIS (the then Department for Business, Energy and Industrial Strategy) to scale up and develop as a commercial business. Cosy

Homes Oxfordshire is now delivering retrofit services to over 400 able-to-pay homeowners and landlords.

Urban neighbourhood-scale change was investigated through renewable and waste-heat feasibility studies in Rose Hill, Oxford. This has led to the Clean Heat Streets programme which is piloting the roll-out of heat pumps at street scale and an investment-ready district heat network proposal. The successful rural neighbourhood-scale project established a new Community Land Trust organisation in Hook Norton, which is building 12 Passivhaus homes and a community building for local people, also including a micro-grid and an EV charging point for a shared car. OxFutures introduced the Trust to Greencore, their carbon-positive building partner, and Oxford Advanced Living, their loan provider, and was instrumental in funding consultancy, architectural plans, and prestart on-site project management and de-risking the project to secure Board approval.

OxFutures has funded eight new start-up businesses, all of which have survived the pandemic. Our pre-commercialisation feasibility funding has allowed Duffin Associates and Electrogenic to go on to win significant Innovate UK funding to scale their work. Electrogenic is now retrofitting electric motors to Land Rovers as well as other classic cars, and has spun out an additional company, Green Narrowboats, to electrify pleasure boats. A further nine new low carbon products and services have been funded, two thirds of which have been successful. Between them, these early-stage companies and products are saving 880 tonnes of CO₂ a year and have potential to save more as they grow.

Building energy audit reports have been delivered to 182 businesses, charities, and social enterprises across Oxfordshire. These contain impartial low carbon recommendations, representing an average 31,000 kWh of potential energy savings per organisation. A third of those assisted applied for our follow-up implementation funding (£1,000 to £10,000 grants) to make changes to their buildings.

Evaluation of 507 of the recommendations (out of a total of more than 1,200) showed that 44% had been completed and 17% were partially completed, saving 996 tonnes of CO₂ a year and significant operating costs. Organisations reported that only 15% of recommendations would not be carried out. Of those receiving advice, 52 were not-for-profit organisations, who can now deliver additional social-benefit activities, due to reduced utility bills. This work led to a successful bid to BEIS, to establish a commercial SME retrofit service, Energy Solutions Oxfordshire, which is looking to scale its impact. In 2022 it created £1.8m of investment in low carbon technology and helped a further 72 businesses.

And this amazing legacy has been delivered for an investment of only £4.2m of European Regional Development Fund money.



Planet

OxFutures created significant carbon savings, by reducing energy demand from organisations implementing the advice in its building energy audits. It also created new low carbon businesses and innovative new products and services that save energy. This included AI devices to stop empty rooms being heated, such as the Roommate app, Electrogenic's conversion of cars from fossil fuels to electric motors (image below), and a Passivhaus community housing scheme in Hook Norton.

Energy audit savings

- 2,209,957 kWh of electricity and gas
- 5,799,619 kWh potential
- 976 CO₂ savings

Innovation savings

- 875 CO₂ savings



People

The phenomenal teamwork and collaborative spirit that OxFutures partners developed during the project built trust and understanding. This led to a series of successful bids for much larger-scale funding which leveraged the £42m Project LEO and two new retrofit services, Cosy Homes Oxfordshire and Energy Solutions Oxfordshire. Hundreds of people came to the 17 events run across the county, which fostered further business collaborations, and thousands were inspired to low carbon action via social media.



People

- 6 partners
- 648 delegates from 398 organisations attended 17 events

Spin-out events

- » 54 Greentech events between April 2020-March 2023 which 3,386 people attended
- » 1 national EV Summit at Saïd Business School

Photo: The launch of Oxfordshire Greentech in February 2019 was held at the Saïd Business School, and was well attended.



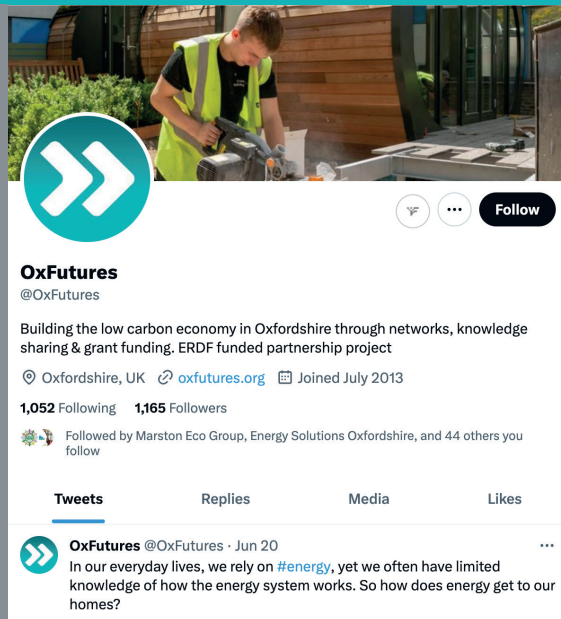
Support given

- » 182 organisations benefitted from a low carbon building assessment
- » 38 organisations received 12 hours or more of professional support
- » Eight new low carbon start-up businesses founded
- » Nine new low carbon products or services developed

Photo: Oxfordshire Greentech team

People influenced

- » 514 people received 28 newsletters
- » 1,169 followers received 1,129 tweets, resulting in 826 engagements and 2,979 clicks



Prosperity

OxFutures has saved money that was being wasted on buying fossil fuels and has allowed it to be put to better use in the local economy. It has created employment and resulted in more financially resilient organisations that spend less on their running costs. The financial savings of energy reduction are on-going, lasting for years:

- » £165,056 of grants awarded to implement energy efficiency measures.
- » £65,632 was for not-for-profits, charities, and social enterprises who can now use the money saved to do more of their core community work.
- » On average businesses cut their energy bills by 19% a year, saving them £2,500 on bills annually.
- » £410,833 of grants awarded to boost low carbon innovation.
- » £117,571 of innovation grants for not-for-profit organisations.



“Our gas bills have plummeted and our electricity bill has hardly budged upwards, so it is both financially sensible as well as environmentally beneficial.”

Giles Dobson, owner of [The Folly Bridge](#)

[Flo's in the Park](#) reduced its carbon footprint by installing OxFutures-funded solar panels.

“We're reducing our CO₂ emissions by roughly 3.52 tonnes/year and save around £5,000/year on energy bills. This means we'll be able to invest more in what we love doing – supporting families, running community events, and working with the OX4 food crew to tackle food insecurity in OX4.”



Perception

OxFutures set out to grow Oxfordshire's low carbon economy in a way that was good for people and the planet. This is what those supported said about the project:

"Thank you very much! Everyone at the charity and the beneficiaries are looking forward to a much warmer future! I would like to extend my heartfelt thanks to you and the team. The building is looking transformed by these changes."

Emmy O'Shaughnessy,
Director of Ark-T

"The Energy Audit is excellent. There is some really good, practical advice and a lot we had not considered. It will be a good roadmap for us to make the recommended changes."

Jake Backus, Common Ground Workspace

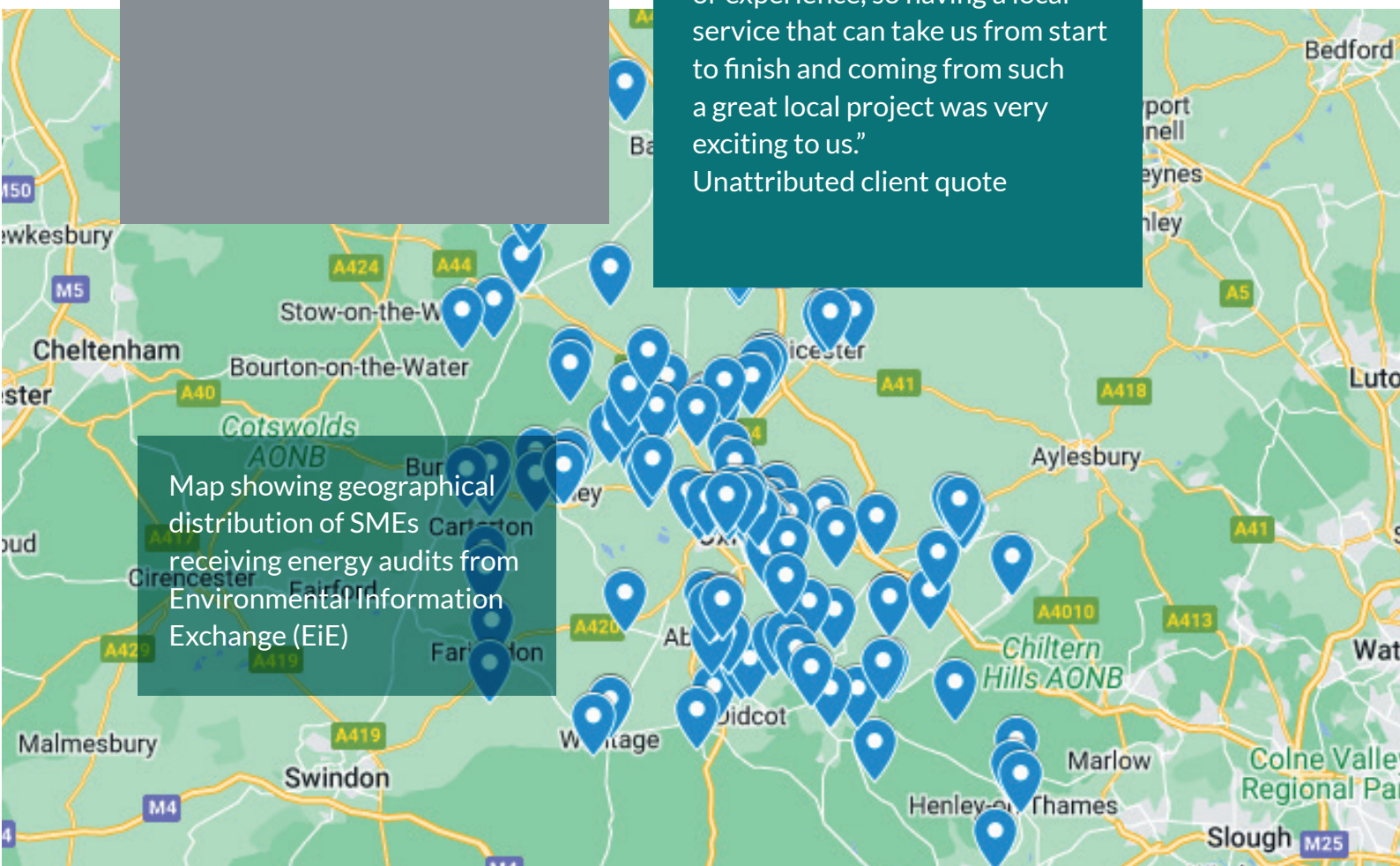
"Now we've got a nice comfortable office to work in."

Mike Foster, Managing Director of Chapman Robinson & Moore

"We are keen to move our business to carbon neutrality but do not have a lot of knowledge or experience, so having a local service that can take us from start to finish and coming from such a great local project was very exciting to us."

Unattributed client quote

Map showing geographical distribution of SMEs receiving energy audits from Environmental Information Exchange (EiE)



Innovation case studies

Hook Norton Community Land Trust



Hook Norton Low Carbon is spearheading an innovative and community-led housing project in Oxfordshire. Recognising the need for affordable and sustainable housing solutions, the project plans to build 12 Passivhaus homes and a community building.

With support from two OxFutures GreenFund innovation grants, the project engaged architectural expertise and employed staff to advance the development. Through extensive community input, the design and layout were shaped to reflect the desires of the residents, incorporating various sustainability measures, such as photovoltaics, and EV charging points, brought together into an exemplar microgrid with a community-scale battery to maximise the use of local renewable energy generation. The project is being progressed by a community land trust, Hook Norton CLT, set up in 2019.

“It would have been difficult to justify putting up £75,000 to set up a new organisation. But with the grant underwriting that, it helped to de-risk the community investment.”
Tim Lunel,
Hook Norton Low Carbon

Image from Hook Norton Housing Full Design Pack for Planning Submission

Duffin Associates

Duffin Associates developed a prototype solar tracking PV panel with OxFutures support. This enabled them to win much larger Innovate UK and Energy Entrepreneurs Fund grants to develop the individual design and work on field array optimisation. They now have a team of up to 9 part-time staff. The panels generate 27% more electricity than static ones and it is hoped to commercialise them in late 2025.

“OxFutures had a really clear, targeted market brief which meant I had to be specific about project goals and the financial aspects of the project. Being able to talk through the process and get feedback from Alison was great. Overall, it was an extremely valuable process.”

Tony Duffin, Duffin Associates



EcoSync

EcoSync was given an OxFutures grant to develop their innovative technology for optimising heating in commercial buildings by linking schedules to room occupancy. Their primary goal is to reduce energy consumption by 40%. They tackle the common problem of unoccupied heated rooms in larger organisations, which results in unnecessary energy waste. Thanks to the assistance of a £13,000 OxFutures GreenFund grant, EcoSync has developed radiator control technology that integrates occupancy detection through mobile phone signals. This advancement allows EcoSync to include additional rooms, like offices and shared areas, in zoned heating, creating better-controlled heated areas throughout entire buildings.



“After having the EcoSync system installed, we saw our gas consumption fall by as much as 66% in some periods, which far exceeded our expectations. It’s made a quick and marked difference, saving us money as well as dramatically reducing our carbon footprint.”
Bart Ashton, Domestic Bursar,
Lady Margaret Hall



Energy Efficiency case studies

Thames Cryogenics

After receiving a free OxFutures energy audit, Thames Cryogenics discovered that replacing their fluorescent tubes with energy-efficient LEDs would result in annual savings of over £4,000 and a reduction of 15 tonnes in CO₂ emissions. To support this initiative, Thames Cryogenics applied for funding from OxFutures GreenFund and secured a grant of £3,611.

The remaining costs were covered by the company's own resources. In addition to financial and environmental benefits, the new lighting system requires less maintenance and enhances the quality of light in the working environment.



£4,000

Estimated annual savings from
led upgrades

15 tonnes

Estimated annual CO₂
emissions reduction

Lady Sew and Sew

This sewing and crafting company in Oxfordshire, has made great strides in reducing its energy consumption and carbon footprint. Thanks to a £10,000 OxFutures grant, they have implemented numerous energy efficiency measures including installing air source heat pumps, replacing old extractor fans and skylight panels with insulated units, and adopting energy-efficient LED lighting.

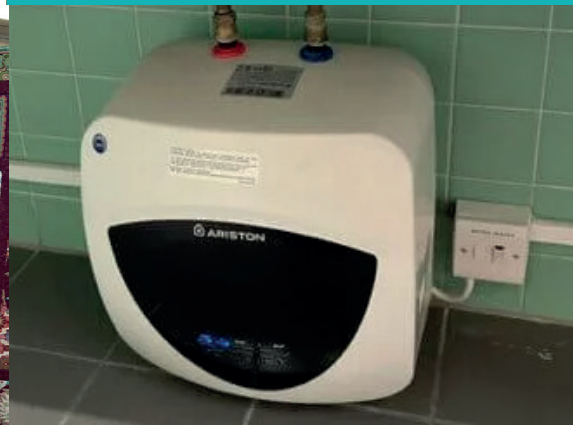
Lady Sew and Sew's transition from gas to electrical heating has led to a significant reduction in gas consumption, while the installation of insulated roofing panels and clear skylight units has helped minimise heat loss and maximise natural lighting. By following the recommendations of their energy audit, the company removed unnecessary extractor fans and replaced outdated lighting systems with energy-saving LED fixtures. These efforts have resulted in financial savings of around £1,000 a year and a 300% increase in energy efficiency compared to their previous gas heating.

£1,000

Financial savings

300%

More efficient than old gas heating



Dean Court Community Centre

Dean Court Community Centre, has successfully implemented sustainable energy solutions, supported by an OxFutures grant.

They installed 10kWp of Solar PV panels and a 13.5kWh Tesla storage battery. Since 2014, the Centre has served as the physical hub for Dean Court Community Association, hosting various groups.

The solar panels generated electricity equivalent to 82% of the Centre's consumption and their panels saved them £1,065 in year one. With plans to install an EV charging point, the Centre aims to utilise its solar panels for even more sustainable energy endeavours.

"We are delighted with the outcome, which will benefit all users of the Centre and hopefully encourage others to install solar panels in their own homes."

Derek Rawson, Treasurer,
Dean Court Community Centre



12,233 kWh

Of electricity generated by solar pv in first year

£1,065

Annual savings from solar electricity



Duns Tew Village Hall

Duns Tew Village Hall received a £3,440 OxFutures grant to install roof insulation, efficient LED lighting, and secondary glazing, which is saving them 3,474 kWh annually, and cutting their energy bill by £1,200 a year.

Thanks go to:

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