

# CONTENTS



# **OUR GUIDING PRINCIPLES**

#### **Ethos**

- Community-focused
- Inclusive
- Collaborative

#### Impact

- Maximise leverage
- Tangible
- Visible
- Replicable
- Scalable
- Lasting

## The way we power our lives must change. And here in Oxfordshire, we are showing the world how it's done.



To prevent runaway climate change we need to find a way to meet our energy needs whilst keeping fossil fuels in the ground. To do this, we need more renewable generation, greater capacity to store energy, and to find ways to shift our energy demand to better match times of surplus renewable energy generation.

We also need the green electricity we generate to work harder for us. We have to improve the energy efficiency of our buildings and free up capacity in the system so we can electrify our transport and heating.

The drive to decarbonise the grid in recent years is already having a significant impact on the average carbon intensity of the UK's electricity. This means that the reduced carbon savings per unit of green electricity we generate are actually a cause of celebration. As the technologies and markets that underpin our energy system change, we want everyone to be able to benefit from the new opportunities that arise, and for no one to be left behind.

The Low Carbon Hub continues to work within a growing ecosystem of community, commercial, public sector, and academic partners. Together we are seeking equitable and practical real world solutions that put people and their needs at the heart of the energy system.

This is just the start of what is possible. If we succeed, we can build a beacon for an alternative future. An example for the world to follow.

In this, our *Social Impact Report 2020*, we share our progress towards this goal. Thank you to our members and partners for your extraordinary support over the last 12 months. Together we can continue to put Oxfordshire at the forefront of the energy revolution.



#### We want to protect our warming planet both by creating renewable energy projects and by reducing energy demand.

The year has seen a modest growth in our renewable energy portfolio, with four more solar installations, and we have continued to ramp up our support for energy efficiency. However, poor river conditions impacted on Sandford Hydro's generation, reducing our annual overall generation.



## In 2019/20 we:

CAPACITY





GENERATED

**GWH ACROSS ALL OUR LIVE PROJECTS** 



This brought our total installation portfolio to:



## Together, each year, they have the potential to...

+ 0.2



<sup>1</sup> CO<sub>2</sub> savings based on UK electricity CO<sub>2</sub> intensities of 0.2733 kgCO<sub>2</sub>e/kWh (2019).

<sup>2</sup> Typical household annual electricity usage based on Ofgem typical tier 1 domestic medium user of 3,100kWh.

<sup>3</sup> Total energy used to power Oxfordshire's homes and organisations each year, divided equally between the county's residents.

**PEOPLE** 

Community energy is a grassroots, people-centred movement for change. The success of Low Carbon Hub is due to the phenomenal support of individuals and organisations. Everyone can play a part in making the shift to a sustainable energy future. Those who support our work include:

## **Our members**

I,040 INVESTOR MEMBERS 14

Who help finance the upfront costs of our projects and whose investments bring energy into community ownership.

**26 COMMUNITY SHAREHOLDERS** Low carbon community groups who

share our aims and have a stake in us.



## **Our partners**

# 40 HOST ORGANISATIONS

The schools, businesses, and community organisations that host our energy projects.



## **Our ecosystem**

The individuals and organisations who collaborate with us to deliver innovative projects and services, share our stories, and follow our progress.



Our growing ecosystem reflects the importance of collaboration with individuals, groups, and organisations across our work. Expansion of our renewables portfolio is only possible due to our investor members and host organisations. Our energy efficiency programmes for households, organisations, and schools are all delivered in partnership, and we are proud to be part of Project LEO, a collaboration of nine organisations working together to accelerate the transition to a net zero energy system.



# PROSPERITY

## **Distribution of benefits**

The Low Carbon Hub IPS Limited's renewable energy installations deliver:

By pooling energy, enthusiasm, knowledge, and expertise our projects create collective wealth, and keeps more of the money we spend on energy in the local economy.

The benefits of our installations are then shared:

- Investors get a **return on their investment** in return for helping fund the upfront costs of our projects.
- The host organisations schools, businesses, and organisations – get **discounted electricity** and a cost-effective way to reduce their carbon footprint.
- Low Carbon Hub has a **sustainable income stream** to support further local action to tackle the global issue of climate change through grants and practical help.

We report on the total benefits that our portfolio of installations is projected to deliver over its lifetime, as well as actual benefits achieved to date.

## Total investment in the Low Carbon Hub: £5,809,044<sup>°</sup>





#### COMMUNITY BENEFIT INCOME



Our renewable installations have now delivered savings on electricity bills, interest to our Members, and community benefit incomes.

<sup>6</sup> Community benefit donation from The Low Carbon Hub IPS Limited to Low Carbon Hub CIC.

 $^4\,$  The decrease in investment is due to capital returns and no investment raise being completed in the 2019/20 financial year.

<sup>&</sup>lt;sup>5</sup> Nominal values modelled over a 20-year lifetime and based on investment equity levels as of 2018/19 year end.

## **Delivering community benefit**



We use 100% of the surplus from the Low Carbon Hub IPS Limited, along with grants, donations, and other sources of funding, to encourage community energy to flourish in Oxfordshire and beyond.

A full financial report of our community benefit activity can be found in the Low Carbon Hub CIC Annual report on our website. On p14-17 we highlight the impact of one of our partnerships – OxFutures.

This year, our community benefit work (including OxFutures) has resulted in:



## 2 **211** hours of Helpdesk support

advice and support to **T** individuals and organisations

**IS** schools signed up for energy efficiency workshops

through the Ashden LESS  $\mathrm{CO}_{_2}$  school energy efficiency programme

## Financial support:

community grants



small business innovation grants

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## **Our Community Benefit Programme**

#### LOCAL ENERGY PROGRAMME - £1,375,047

Our Local Energy Programme has two key themes. First, we provide advice and practical and financial support to encourage the flourishing of community energy in Oxfordshire and beyond. Secondly, we support innovation, either through undertaking research and pilots ourselves, or funding the work of others to help explore new business models for community energy.

£9,319	Helpdesk service supporting further community energy projects
£18,852	Next Generation funding to support new community energy projects nationally
£13,103	Community building energy audit grants scheme
£12,450	${\rm LESS}~{\rm CO}_{_2}$ school energy efficiency programme support
£426,119	OxFutures project supporting energy efficiency and innovation for SMEs
£117,712	BEIS retrofit Cosy Homes Oxfordshire project
£352	People's Power Station, an online interactive map showcasing Oxfordshire's efforts to reduce use of fossil fuels
£752,876	Project LEO (Local Energy Oxfordshire) smart-grid trials
£24,264	Energy Solutions Oxfordshire (ESOx) developing a new business model to encourage take up of energy efficiency amongst small and medium-sized enterprises (SMEs)

#### COMMUNITY BENEFIT MANAGEMENT - £2,900

We believe that investing in good management of our community benefit spend is important to ensure its effective use. This cost includes strategy development, monitoring, reporting, and internal project costs.

#### COMMUNITY GRANTS PROGRAMME - £30,805

Large Grants Programme

**£5,000** Low Carbon Oxford North

A continuation of their Healthy Streets and Active Travel project to lower emissions in Oxford streets.

- **E5,000 Transition Eynsham Area (Green TEA)** Setting up an Inspiration Panel to advise communities on low carbon housing development.
- **£5,000** Sustainable Didcot Planning and carrying out a town-wide energy audit.

#### **Small Grants Programme**

£550	<b>Rose Hill and Iffley Low Carbon (RHILC)</b>
	To create a promotional video for a 'brand the bus' campaign.

- **Solution Osney Lock Hydro** Towards on-site landscaping to enable public access.
- **EI,000** Low Carbon West Oxford and West Oxford Community Renewables Insulation and renovation work at Hogacre Eco Park Pavilion.
- **£500** Sustainable Didcot Top-up grant for their Didcot town-wide energy audit.
- **ESOO Transition Eynsham Area (GreenTEA)** Public workshops and publication of instruction manuals on using solar thermal.
- **EI,500** Westmill Sustainable Energy Trust, Westmill Solar Co-op, and Westmill Wind Farm Co-op Consortium Towards the installation of an all-weather insulated yurt to be used as a visitors' centre.

**Renewable Generation Grants** 

**£8,200** Low Carbon Oxford North

**5** Transition Eynsham Area (GreenTEA)

### Communities we've supported

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#### BRAND THE BUS CAMPAIGN

Rose Hill and Iffley Low Carbon (RHILC) received a £550 grant to create a promotional video for the 'brand the bus' campaign. The venture brought together a consortium of Oxford's low carbon groups and went under the banner of 'Oxford Together on Climate Change'. The film was shot at Rose Hill Community Centre and people of varied ages and ethnicities talked about the simple ways they 'do their bit' about climate change. They didn't win last year but have re-submitted it this year. You can see it (and vote for it!) at: www.oxfordbus.co.uk/ competition/competitiongallery/



#### HOOK NORTON COMMUNITY-LED HOUSING

At a time of climate emergency when many new housing developments lack sustainable measures, the people of Hook Norton have generated an innovative community-led project of affordable homes that will have a positive impact on the environment and be fit for the future. Benefitting from an OxFutures innovation grant, Hook Norton Low Carbon have received planning permission and are moving forward with their exciting development! Read more at www.oxfutures.org

"RHILC was very grateful to the Low Carbon Hub for a grant enabling us to make a short video for the brand the bus competition. The winning charity gets to put publicity on an Oxford Bus Company bus. Although, sadly, we didn't win last year, we got into the final shortlist of ten. Please vote for it this year!"

Eleanor Watts, RHILC

PERCEPTION

We are committed to developing a sustainable energy system for community benefit. We aim to be a transparent and trusted partner, and to share knowledge and expertise openly. In April 2020 we conducted our fourth *'How are we doing?'* survey to see how our members, partners, and supporters think we're doing and to learn how we can improve.

## Percentage of respondents' who...

...have **quite high or high trust** in Low Carbon Hub's expertise around local, renewable energy and low carbon

97%

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... report Low Carbon Hub has made them **more positive** about the potential of community-owned solutions to energy issues



... perceive Low Carbon Hub to be **quite or highly committed** to the creation of a low carbon, locally owned renewable energy system

wable energy system

... report Low Carbon Hub had a moderate or substantial impact on their knowledge



... report Low Carbon Hub has contributed to their taking **some or substantial action** on energy or environmental issues



## What people say about us

"I am very excited by the next phase of Low Carbon Hub activity. I hope we can make a real difference to the future zero carbon world." Anonymous feedback from survey

"Low Carbon Hub is an important and trusted source of inspiration and information for climate related things." Anonymous feedback from survey "I am delighted to be a Low Carbon Hub investor – this is the second of their schemes that I've invested in. I'm



particularly impressed (though not entirely surprised) that they were able to reach their share raise target of  $\pounds 1.5$  million despite the difficult conditions we currently face. Local energy is only going to grow and Low Carbon Hub continue to be pioneers, inspiring other communities to act too."

Cara Jenkinson, Investor Member, on the 2020/21 share offer

"I really value the fact that I have money invested in Low Carbon Hub – it makes me think that money is really doing something worthwhile." Anonymous feedback from survey

"[The] energy audit report really hit the spot in terms of what we were looking for as a church. It highlighted some obvious, low-cost improvements that we can get on with quickly as well as addressing the bigger things that will make a significant difference to our energy usage and carbon footprint. It also gave us a really helpful insight into the bigger picture, especially the current state of air-heat source pumps and the alternatives to fossil fuels." John Chadwick, New Road Baptist Church, Oxford

Feedback on energy efficiency report

If you'd like to give us any feedback, drop us a line at **info@lowcarbonhub.org**.

## PROGRAMME **SPOTLIGHT:**





OxFutures is a pioneering partnership, transforming Oxfordshire into a world-leading example of how to create a thriving zero carbon economy.

OxFutures started as a £3.2m three-year project to boost low carbon economic development in Oxfordshire. It is supported by the European Regional Development Fund and run through a collaborative partnership between the Low Carbon Hub, Oxford City Council, the University of Oxford, Oxford Brookes University, Cherwell District Council, and Bioregional.

Over the past three years OxFutures has achieved so much and in the next couple of pages we've illustrated just some of these achievements.

A recently approved extension of the programme means that it will be able to continue for a further three years (until March 2023). The extension will be continued by partners Low Carbon Hub and Oxford Brookes, who will be able to support the delivery of 45 additional energy audits for SMEs as well as new feasibility and implementation grants to support innovation.



## **Financial support**

OxFutures manages a grant programme to part-fund the installation of energysaving measures and support innovation growth in the low carbon sector.



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SMEs have received energy efficiency grants.

**£71.115** was awarded in support of projects totalling £294,294, which equates to an average value of £2,576 of grant subsidy per SME.

- SMEs have received feasibility grants to test and develop innovative products and services, with some going on to receive implementation grants.
- 86% reported having reduced CO<sub>2</sub> emissions and improving business performance because of the grant.



By the end of the project's first three years, we have delivered:



One third of all recommendations highlighted in the energy audit reports have been carried out so far.



COULD RE SAVED



PEOPLE

By providing practical support, energy-saving and innovation grants.

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## SMEs we have supported



#### **OXFORD RIVER CRUISES**

Oxford River Cruises received an OxFutures grant to convert their fleet to electric propulsion. They currently operate three passenger boats; two of these are 12-seat vessels and are already electrically powered.

"Converting our larger 50-seat vessel to electric propulsion is more challenging but the technology is now available to make it possible. By the end of the year we aim to have a fully electric fleet."

Giles Dobson, Oxford River Cruises



ECOSYNC

EcoSync is aiming, through innovative technology, to reduce the energy consumption and carbon footprint of buildings by 40%. Their solution: stop heating empty rooms.

The team applied to OxFutures for innovation grant funding and were successful in being awarded a £13,000 grant to develop the next phase of the technology. This development would integrate occupancy detection technology, using mobile phone signals, to allow EcoSync to add rooms to zoned heating which are not in the booking system to create better controlled heated areas in entire buildings.

"[The energy audit] is excellent. There is some really good, practical advice and a lot we had not considered. The layout is great, succinct, and effective, and will be a good roadmap for us to make the recommended changes (including processes)."

Jake Backus, Common Ground

#### The reach of OxFutures

So much has been achieved over the first three years of the project. One of the most important things about OxFutures has been the pathway it has opened for more Low Carbon Hub programmes.



**Project LEO**, a £40 million project trialling local energy solutions to accelerate the transition to a zero carbon energy system.



**Cosy Homes Oxfordshire**, a home retrofit service to improve energy efficiency in homes, reducing carbon emissions and improving comfort.



**Energy Solutions Oxfordshire**,

the complete energy efficiency service helping organisations lower their energy use while saving time and money.

"The collaborative work undertaken during the OxFutures programme has led to three major Low Carbon Hub programmes; LEO, Cosy Homes, and Energy Solutions Oxfordshire (ESOx). The OxFutures project has been invaluable in the creation and development of these new initiatives."

Alison Grunewald, Business Relationship Manager for Low Carbon Hub

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The Low Carbon Hub is two organisations working together: The Low Carbon Hub IPS Limited (registration number: 31903R) and the Low Carbon Hub Community Interest Company (registration number: 7583663).

The Low Carbon Hub IPS Limited is a Registered Society that operates for the benefit of the community. It generates income from the Feed-in Tariff and by selling renewable electricity. It aims to make a surplus that will enable the Low Carbon Hub IPS Limited and Low Carbon Hub CIC to lower carbon emissions across Oxfordshire by helping businesses, the public sector, and communities to develop renewable energy projects and reduce energy demand.

To the best of our knowledge, the information contained herein is accurate and reliable as of 31 August 2020.

Both are registered in England and Wales and the registered address is Wood Centre For Innovation, Stansfeld Park, Quarry Road, Headington, Oxford OX3 8SB