



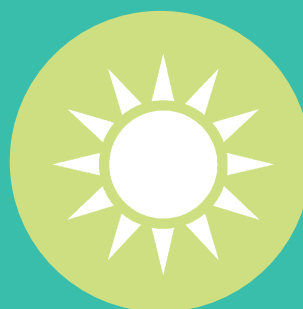
# ANNUAL PERFORMANCE SUMMARIES 2022/23



**Solar 2014  
Solar 2016**



**Sandford  
Hydro**



**ONCORE  
A&B**



**Community  
Energy Fund**

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# LOW CARBON HUB AT A GLANCE



## PLANET

**55** renewable energy installations\*

Together they can:



generate  
**23.70 GWh**  
green electricity  
a year



power  
**8,171**  
typical homes\*\*



save  
**5,002**  
tonnes  
of CO<sub>2</sub>



## PEOPLE



**1,758** investor members who between them have invested £10.19 m to finance the costs of our projects and whose investments bring energy into community ownership



**45** host organisations – the schools, businesses, and community organisations that host some of our energy projects



**41** community shareholders – the low carbon community groups who share our aims and have a stake in us



## PROSPERITY

**£10.05 m** equity capital invested

Our portfolio of renewable energy installations is anticipated to deliver the following benefits over their lifetime:

**£4.12 m** interest to investors

**£1.99 m** savings on electricity bills by hosts

**£2.74 m** community benefit income



## PERCEPTION

We are committed to developing a sustainable energy system for community benefit.

And our stakeholders agree...

**97%**

believe we are committed to the creation of a low carbon, locally owned renewable energy system

**95%**

trust our expertise around local, renewable energy and low carbon

\* Includes IPS- and CIC-owned installations commissioned by 31 March 2023.

\*\* Based on Ofgem typical domestic consumption figure of 2,900 kWh annual electricity use.

Metrics calculated as of 31 March 2023 and reflecting the combined work of The Low Carbon Hub IPS Limited and Low Carbon Hub CIC. Lifetime benefits are nominal values modelled over a project lifetime. Perception statistics based on 125 responses to the 'How are we doing?' Low Carbon Hub stakeholder survey May 2023.

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## Dear Member

Welcome to your Annual Performance Summary for the financial year 2022/23. It has been an incredibly busy year at Low Carbon Hub, and the generating assets your investment have funded have been at the heart of the action.

Work continued on Ray Valley Solar, with generation starting in August 2022, with encouraging initial results. Our portfolio of rooftop solar arrays also grew by 745 kWp installed capacity. Together, they have made a huge step change in the contribution we can make to locally generated green electricity.

2022/23 was the final year of OxFutures, a collaboration made possible by £4.2 m of investment from the European Regional Development Fund. Through a combination of energy efficiency and innovation grants, energy assessments, and knowledge transfer workshops, the programme supported hundreds of local organisations, more than a quarter of them not-for-profits.

It was also the final year of Project Local Energy Oxfordshire (LEO), the £40 m collaboration seeking to accelerate the UK's transition to a zero carbon energy system. Our solar arrays took part in new flexibility market trials, and, although Sandford Hydro had a disappointing year in terms of generation, it was none the less able to contribute to significant learning for smart energy systems through the trials.

Another important focus for our innovation in LEO was six Smart and Fair Neighbourhood trials we ran in partnership with some of our community group members. These were trials right at the grid edge, where the voltage steps down from primary to secondary substations, and down again to the 240 volts that comes into each house and each business. Action here is vital to achieving our legally binding carbon targets and can deliver large amounts of local benefit at the same time.

All of our programmes are delivered through close collaboration with communities and organisations across Oxfordshire. It was wonderful therefore to have our combined efforts recognised with a number of awards. Project LEO won Utility Week's Collaborative Excellence Award and we were also delighted to win Social Enterprise UK's Environmental Social Enterprise of the Year.

Though Project LEO ended in March 2023, our work on community-led innovation at the grid edge continues. The UK's transition to a zero-carbon energy system by 2050 requires drastic energy demand reduction in all households and businesses, and collective efforts to manage demand and provide flexibility to the distribution network. We are now working with LEO partners on new opportunities to address some of the key barriers we all face in addressing energy efficiency in buildings, and fully participating in smart and flexible energy systems.

While these partnerships are still in development, we continue to support three partnership programmes with energy efficiency at their heart: Cosy Homes Oxfordshire (CHO) for householders, Energy Solutions Oxfordshire (ESOx) for local organisations and businesses, and Action on Carbon and Energy in Schools (ACES) for schools in the county.

The cost of energy crisis in the winter of 2022/23 saw us increase our focus on fuel poverty. Working with our community groups, we trained and supported a team of volunteer energy champions and advisors to deliver energy advice within their communities. This work would not have been possible without the community benefit funding generated by the projects you have invested in. Thank you.

Finally, as Members you will be aware that we ended the year streamlining our organisation, including transferring all staff into the IPS for the start of 2023/24, and consolidating our funding – loans, grants, equity – to leave us in a stronger financial situation. Consolidating our work into just one organisation has created a great platform from which we can start a discussion about the big questions we want to tackle going forward, and we very much look forward to doing so with your support and input.

With warm wishes,



**Barbara Hammond**  
CEO, Low Carbon Hub



September 2023



# Solar 2014 investment portfolio

Investment in the Low Carbon Hub 2014 share offer allowed the first wave of Low Carbon Hub solar projects to be built. This report provides a performance summary of that first wave of solar projects for the 2022/23 financial year.

## Performance review

The Solar 2014 portfolio performed as expected over the year, generating 1.01 GWh, just over 100% of the target amount. Many of these installations have undergone inverter upgrades as part of our inverter replacement programme so should see reliable performance going forward with these new pieces of equipment.

The income we receive is made up of three key components, the Feed-in Tariff, export payments, and sales to host organisations. The Feed-in Tariff is index-linked to the Retail Price Index (RPI) and increased by 7.5% on 1 April 2022. For most of the financial year, the payments we received for energy exported to the grid remained the same as in 2021/22. For the final quarter from January 2023, there was a significant increase in the price paid for export rates. However, as our arrays are sized to maximise use on site, very little of the energy we generate is exported, and the price paid per kWh still remains very low, despite the significant percentage increase in the rate. The price of what we sell to most hosts is directly linked to their main supplier contract rates. Many were still tied into long-term contracts, so did not see significant price increases during the 2022/23 financial year. Our income from those that did renegotiate their main supplier contract increased, as did the value of the discount we give them. This helped us offset some of the increases we have been experiencing in operations and maintenance costs.

## Performance

### Electricity generation

Total generation this year	1,007,978 kWh
As a percentage of predicted output	100.4 %
CO <sub>2</sub> savings	213 tonnes
CO <sub>2</sub> savings based on UK electricity CO <sub>2</sub> intensities of 0.2111 kgCO <sub>2</sub> e/kWh (2022)	

## Projects in this portfolio

- Banbury Academy (*two installations*)
- Bure Park Primary School
- Charlbury Primary School
- Cheney School
- Chilton County Primary School
- Edward Feild Primary School
- Fir Tree Junior School
- Larkrise Primary School
- Norbar Torque Tools
- Owen Mumford (*four installations*)
- Oxford Bus Company
- Stonesfield Primary School
- The Warriner School
- Thomas Reade Primary School
- West Kidlington Primary School
- Wheatley Park School (*two installations*)

## Returns

### This financial year:

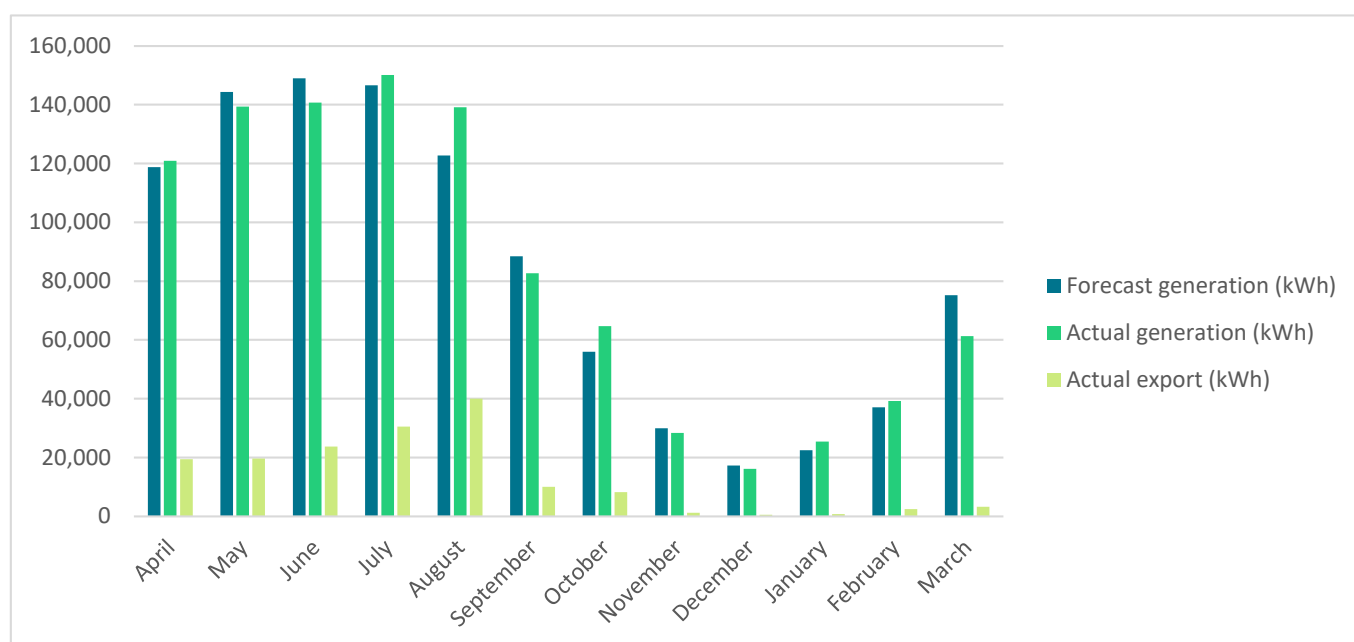
Interest declared per £ invested	5.60p
Total interest due to investors	£89,733
Capital released for return	£90,197
Savings on electricity bills by hosts	£56,616
Total IPS community benefit donation*	£35,117

### Cumulative to date:

Interest to investors	£687,506
Savings on electricity bills by hosts	£304,851
Total IPS community benefit donation*	£601,477

\* Community benefit donations are based on Low Carbon Hub IPS operating surplus, rather than at portfolio level. This figure represents the total community benefit donation made by the IPS to Low Carbon Hub CIC, plus any expenditure directly supporting community benefit activity delivered by the IPS itself.

## Monthly generation results



### Key facts

#### Projects

Number of installations	21
Total installed capacity	1.215 MW

#### Funding

Total number of shareholders	344
Number of Class A investors	334
Number of Class B investors	10
Amount initially invested	£1,844,000
Capital returned to date*	£241,151
Remaining investment capital	£1,602,849
Current debt funding towards capital costs	£0

\* Excludes capital released for return this financial year.

#### Lifetime anticipated benefits\*

Interest to investors	£1,490,344
Savings on electricity bills by hosts	£1,122,440
Community benefit income from this portfolio	£1,012,745

\* Expressed as nominal values and based on current equity levels. Excludes benefits derived from the working capital element.

### Community benefit

The community benefit donation figure just reflects spend directly funded by IPS surpluses this year. A summary of the total community benefit delivered by the Low Carbon Hub CIC and IPS is set out on p17–18.

### About investment in this portfolio

Class A shares are in the form of 'withdrawable' shares that cannot be sold, traded, or transferred between members. They cannot increase in value.

There were ten pioneer investors who hold Class B transferable shares to the combined value of £133,257. Their investment was through a private placement in 2013 and enabled us to install our first solar PV array at the Oxford Bus Company. As set out in the 2014 Share Offer Document this installation has been incorporated into the 2014 portfolio and their return has been aligned to the terms set out in the 2014 share offer, so all payments to these investors are made on the same basis as Solar 2014 investors.

### Anticipated returns

In the first year of their investment, investors eligible for the Enterprise Investment Scheme (EIS) were able to claim back 30% of their initial investment as tax relief. Investors eligible for Seed EIS were able to claim back 50% of their initial investment.

Interest was forecast to start to accrue from the end of the second full year of operation, a target that has been successfully met.

As set out in the original Share Offer Document we anticipate that for every £10,000 you invest, you could get back £21,123 after 20 years: your £10,000 initial capital; £3,000 as EIS tax relief; and £8,123 as interest.

### Capital returns

It was anticipated that capital would be gradually returned to investors from year 4, with a number of shares being bought back each year such that all shares are bought back 20 years after installation. We returned our first tranche of capital to investors in 2019 in line with our original model. Interest payments and capital repayments are not guaranteed.



# Solar 2016 investment portfolio

Investment in the Low Carbon Hub 2016 share offer funded the Low Carbon Hub's second major wave of solar PV projects across Oxfordshire. This report summarises the performance of the portfolio over the 2022/23 financial year.

## Performance review

The sites in this portfolio showed good performance throughout the year, achieving 1.58 GWh, or a little over 103% of the generation target. As with the Solar 2014 portfolio, many of these sites have undergone inverter replacements as part of our inverter replacement programme so should see reliable performance going forward with these new pieces of equipment. Inverters are important as they convert the direct current (DC) generated by the panels into alternating current (AC) that our host organisations then use when they plug in electrical equipment.

The Feed-in Tariff is index-linked to the Retail Price Index (RPI) and increased by 7.5% on 1 April 2022. For most of the financial year, the payments we received for energy exported to the grid remained the same as in 2021/22. For the final quarter from January 2023, they increased by 71% due to the nationwide increase in energy prices. However, as our arrays are sized to maximise use on site, very little of the energy we generate is exported, and the price paid per kWh still remains very low, despite the significant percentage increase in the rate.

## Performance

### Electricity generation

Total generation this year	<b>1,579,132 kWh</b>
As a percentage of predicted output	<b>103.7%</b>
CO <sub>2</sub> savings	<b>333 tonnes</b>
CO <sub>2</sub> savings based on UK electricity CO <sub>2</sub> intensities of 0.2111 kgCO <sub>2</sub> e/kWh (2022)	

## Projects in this portfolio

- Botley School
- Crompton Technology Group Ltd
- Didcot Girls' School
- Langtree School
- Long Furlong Primary School
- Middle Barton Primary School
- Nettlebed Community School
- Orchard Fields Community School
- Prodrive
- Rose Hill Primary School
- Sir William Ramsay School
- Windmill Primary School
- Wood Green School

## Returns

### This financial year:

Interest declared per £ invested	<b>5.49p</b>
Total interest due to investors	<b>£38,781</b>
Capital released for return	<b>£32,742</b>
Savings on electricity bills by hosts	<b>£34,689</b>
Total IPS community benefit donation*	<b>£35,117</b>

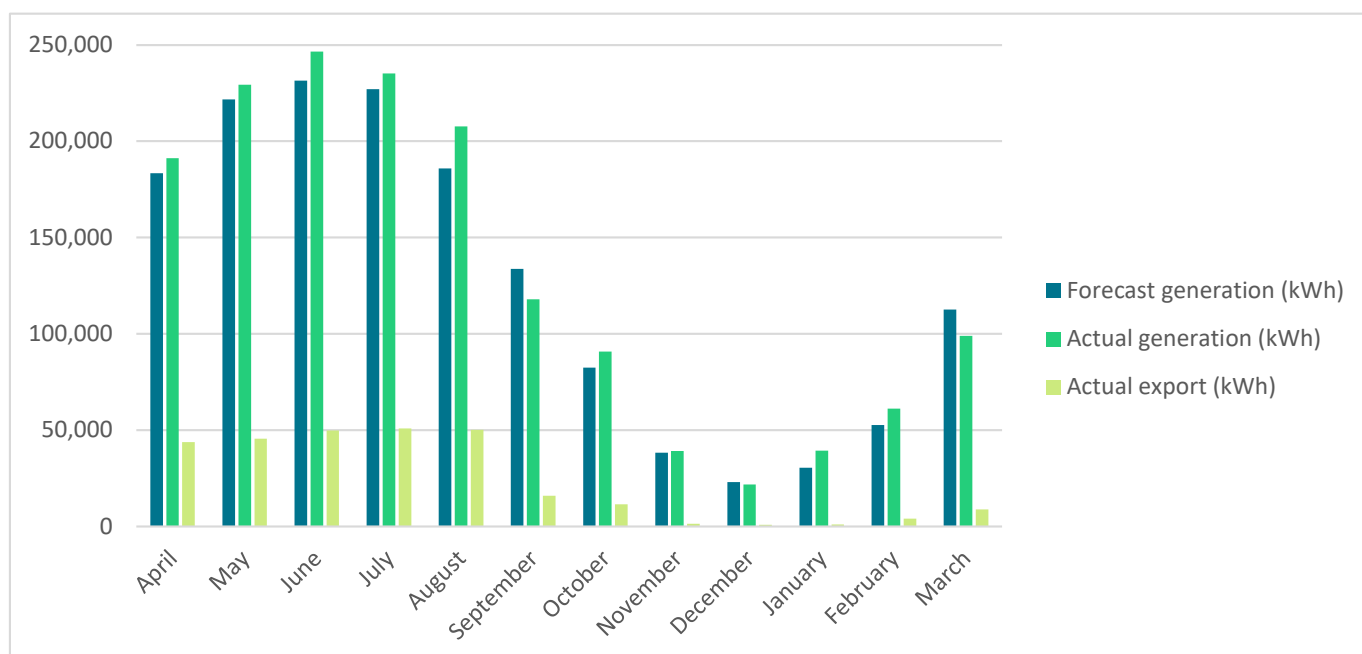
### Cumulative to date:

Interest to investors	<b>£208,134</b>
Savings on electricity bills by hosts	<b>£146,989</b>
Total IPS community benefit donation*	<b>£601,477</b>

\* Community benefit donations are based on Low Carbon Hub IPS operating surplus, rather than at portfolio level. This figure represents the total community benefit donation made by the IPS to Low Carbon Hub CIC, plus any expenditure directly supporting community benefit activity delivered by the IPS itself.



## Monthly generation results



### Key facts

#### Projects

Number of installations	13
Total installed capacity	1.868 MW

#### Funding

Total number of shareholders	237
Number of Class A investors	237
Amount initially invested	£793,100
Community Energy Fund investment	£1,320,084
Capital returned to date*	£87,094
Remaining investment capital	£2,026,090
Current debt funding towards capital costs	£0

\* Excludes capital released for return this financial year.

#### Lifetime anticipated benefits\*

Interest to investors	£605,453
Savings on electricity bills by hosts	£490,912
Community benefit income from this portfolio	£596,848

\* Expressed as nominal values and based on current equity levels. Excludes benefits derived from the working capital element.

### Anticipated returns

We are forecasting a 5% internal rate of return on your investment, which includes your capital being paid back over the 20-year life of the investment, and annual interest on the outstanding balance of Retail Price Inflation (RPI) plus 3%.

Interest was forecast to start to accrue from the end of the second full year of operation, a target that has been successfully met.

As set out in the original Share Offer Document we anticipate that for every £10,000 you invest, at the end of the 20-year project lifetime, you will have received back £19,409: your initial capital and £9,409 as interest.

The amount of interest paid will vary depending on the actual rate of RPI for any given year.

### Capital returns

It was anticipated that capital would be gradually returned to investors from year 4, with a number of shares being bought back each year such that all shares are bought back 20 years after installation. To this end, we have started returning capital to investors. Interest payments and capital repayments are not guaranteed.

### Community benefit

The community benefit donation figure just reflects spend directly funded by IPS surpluses this year. A summary of the total community benefit delivered by the Low Carbon Hub CIC and IPS is set out on p17–18.

## About investment in this portfolio

Class A shares are in the form of withdrawable shares. They cannot be sold, traded, or transferred between members. They cannot increase in value.



# Sandford Hydro investment portfolio

Investment in two Sandford Hydro share offers enabled this project to be built. It was connected to the grid in August 2017, operational in February 2018, and fully commissioned in October 2018. This report summarises the performance of the portfolio for the 2022/23 financial year.

## Performance review

This year proved to be particularly challenging for Sandford Hydro. With an extremely dry summer the river flows were too low to operate until mid-November 2022, well into our normal generating season. The investigation into an incident at Sandford Weir during the summer resulted in a delay in restarting until early December.

Subsequent high water levels in the winter, including periods of flooding, have also meant that the windows for generation between there being too much or too little flow have been more variable this year, limiting operating time.

Further time was lost in the new year due to the telemetry system used by the Environment Agency changing. This change required us to install a new data link to ensure that their Waterways team has the necessary information to manage flow and river levels for everyone's safety.

Due to this unfortunate combination of events, this financial year's total generation was a very disappointing 224 MWh, just 14% of the target. The Feed-in Tariff is index-linked to the Retail Price Index (RPI) and increased by 7.5% on 1 April 2022. Export prices were the same as for the previous year with our Power Purchase Agreement (PPA) having been renewed in July 2021 with higher prices.

On a more positive note, Sandford Hydro continued to take part in trials for Project LEO to test demand response energy flexibility. It has helped test ways to 'store up' the flow of the river Thames to be used to generate maximum energy at times when energy use is at a peak for the local grid. In this way, we can either maximise or 'turn down' the amount of electricity generated, creating a flexible supply that can be traded.

During the year, we paid back half of the current loan with Charity Bank. This is part of a longer-term aim to restructure the financing of the project and optimise production. Given this year's generation performance, and the forthcoming financial restructuring it was decided not to return capital this year.

## Performance

### Electricity generation

Total generation this year	<b>223,795 kWh</b>
As a percentage of predicted output	<b>14.2%</b>
CO <sub>2</sub> savings	<b>47 tonnes</b>

CO<sub>2</sub> savings based on UK electricity CO<sub>2</sub> intensities of 0.2111 kgCO<sub>2</sub>e/kWh (2022)

### Returns

#### This financial year:

Interest declared per £ invested	<b>4.1p</b>
Total interest due to investors	<b>£59,703</b>
Capital released for return	<b>£0</b>
Savings on electricity bills by hosts	<b>N/A</b>
Total IPS community benefit donation*	<b>£35,117</b>

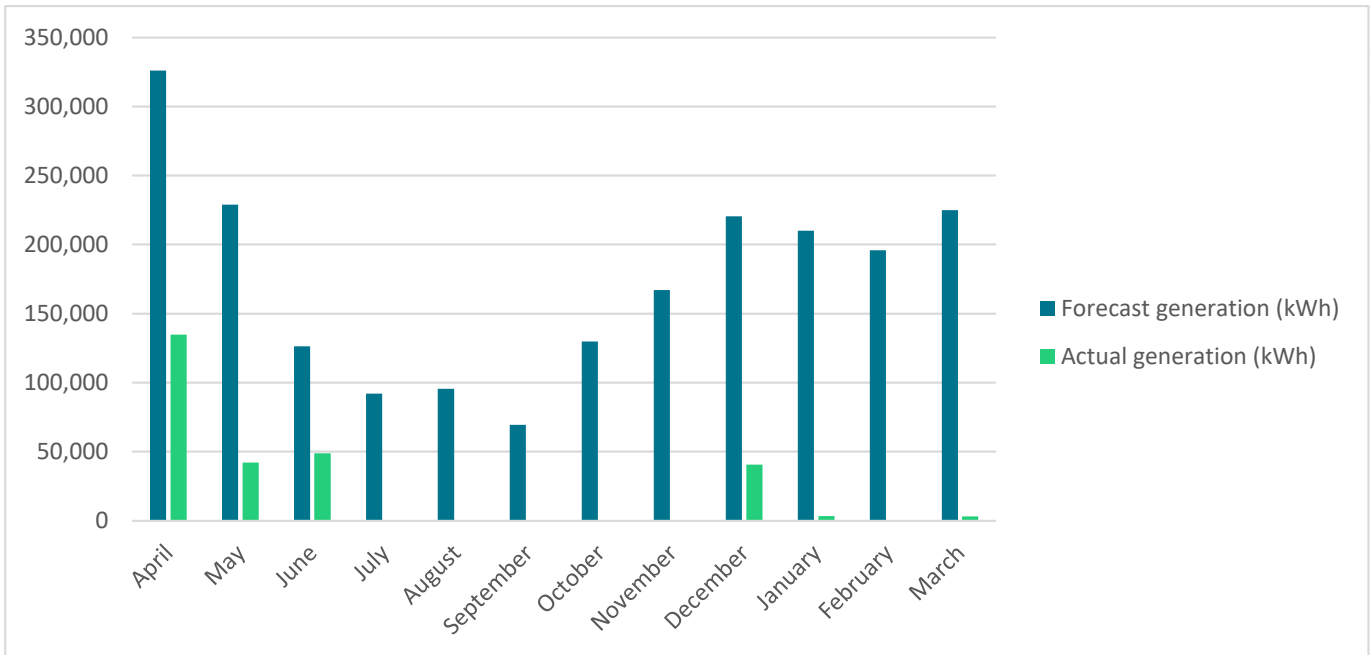
#### Cumulative to date:

Interest to investors	<b>£289,989</b>
Total IPS community benefit donation*	<b>£601,477</b>

\* Community benefit donations are based on Low Carbon Hub IPS operating surplus, rather than at portfolio level. This figure represents the total community benefit donation made by the IPS to Low Carbon Hub CIC, plus any expenditure directly supporting community benefit activity delivered by the IPS itself.



## Monthly generation results



### Key facts

#### Projects

Number of Archimedes screws	3
Total installed capacity	440 kWe

#### Funding

Total number of shareholders	463
Number of Class A investors	463
Amount initially invested	£1,474,177
Capital returned to date*	£18,000
Current CEF investment in this portfolio as a loan	£950,000
Remaining investment capital	£2,406,177
Current external debt funding towards capital costs	£909,270
Internal working capital	£200,000

\* Excludes capital released for return this financial year.

#### Lifetime anticipated benefits\*

Interest to investors	£1,524,052
Savings on electricity bills by hosts	N/A
Community benefit income from this portfolio	£765,775

\* Expressed as nominal values and based on current equity levels. Excludes benefits derived from the working capital element.

### About investment in this portfolio

Class A shares are in the form of withdrawable shares. They cannot be sold, traded, or transferred between members. They cannot increase in value.

### Anticipated returns

We are forecasting a 5% internal rate of return on your investment, which includes your capital being paid back over the 20-year life of the investment, and annual interest on the outstanding balance of Retail Price Inflation (RPI) plus 3%.

Thirty-nine angel investors who invested in the early stage of the project development received interest during the early construction period. Once the site was commissioned, their shares reverted to the same terms as those for all other investors in the project.

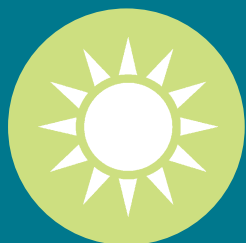
We anticipate achieving the returns set out in the original Share Offer Document, i.e. for every £10,000 you invest, at the end of the 20-year project lifetime, you will have received back £19,409: your initial capital and £9,409 as interest. The amount of interest paid will vary depending on the actual rate of RPI for any given year.

### Capital returns

It was anticipated that capital will be gradually returned to investors from 2022, with a number of shares being bought back each year such that all shares are bought back 20 years after installation. Interest payments and capital repayments are not guaranteed.

### Community benefit

The community benefit donation figure just reflects spend directly funded by IPS surpluses this year. A summary of the total community benefit delivered by the Low Carbon Hub CIC and IPS is set out on p17–18.



# ONCORE investment portfolio



In 2011, Low Carbon Oxford North set up Oxford North Community Renewables (ONCORE) to install solar panels on large roofs in North Oxford. The first share raise funded the installation of solar panels at The Cherwell School (North site).

The second share raise funded a second site at The Cherwell School (South site) and an additional installation at St. Barnabas CoE Primary School.

In June 2018, ONCORE transferred its leases over to the Low Carbon Hub and we have been delighted to welcome ONCORE investors to the Low Carbon Hub. This report summarises the performance of ONCORE A and B for the financial year 2022/23.

## ONCORE: Portfolio A

### Performance review

The Cherwell School (North site) again showed a strong overperformance compared to the model, with 42,267 kWh generated – 22% above target. The reasons for such a high overperformance are two-fold. First, the weather was good, particularly in March and then late summer 2022. Second, the portfolio was modelled using the old version of the Standard Assessment Procedure (SAP), the UK government's recommended system for measuring energy performance, which has more conservative forecasts than the updated version.

The Feed-in Tariff is index-linked to the Retail Price Index (RPI) and increased by 7.5% on 1 April 2022.

### Projects in this portfolio

- The Cherwell School (North site)

### Performance

#### Electricity generation

Total generation this year	<b>42,267 kWh</b>
As a percentage of predicted output	<b>122.2%</b>
CO <sub>2</sub> savings	<b>9 tonnes</b>

CO<sub>2</sub> savings based on UK electricity CO<sub>2</sub> intensities of 0.2111 kgCO<sub>2</sub>e/kWh (2022)

\* Community benefit donations are based on Low Carbon Hub IPS operating surplus, rather than at portfolio level. This figure represents the total community benefit donation made by the IPS to Low Carbon Hub CIC, plus any expenditure directly supporting community benefit activity delivered by the IPS itself.

\*\* Includes interest to investors paid prior to transfer of assets from ONCORE to Low Carbon Hub IPS Limited.

### Returns

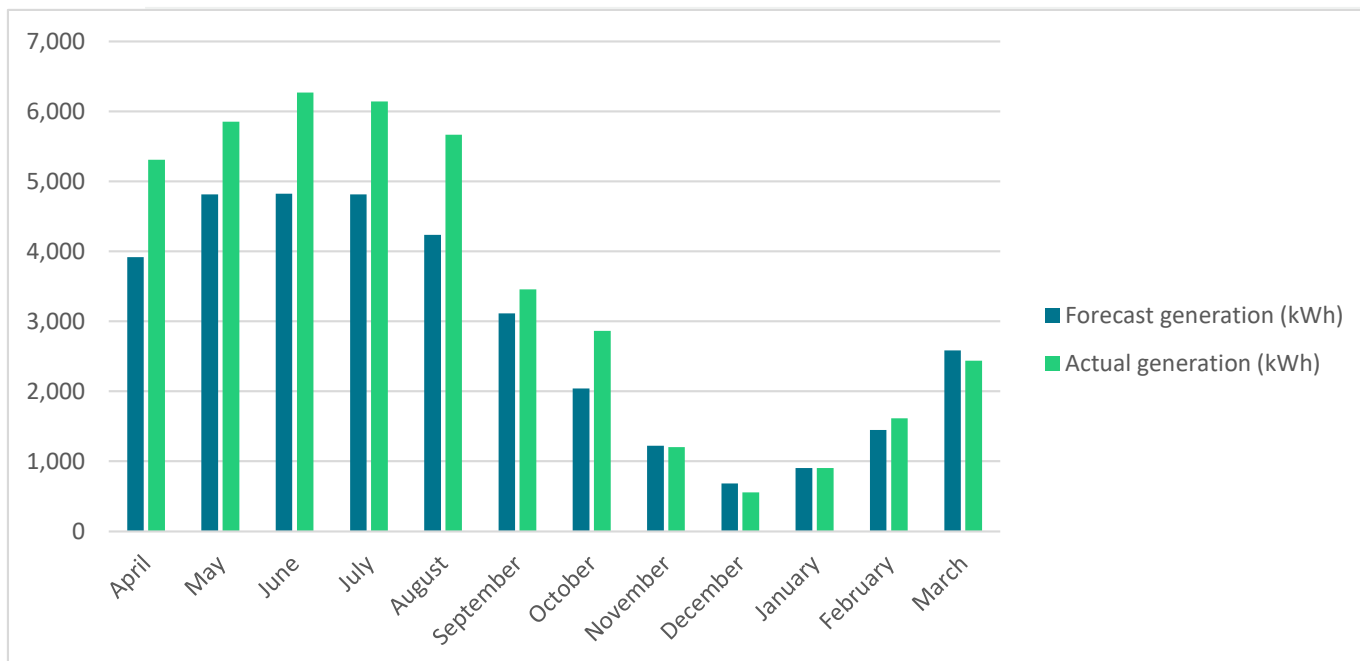
#### This financial year:

Interest declared per £ invested – 'Returnable shares'	<b>3.0p</b>
Interest declared per £ invested – '25-year pledge' shares	<b>4.2p</b>
Total interest due to investors	<b>£5,254</b>
Capital released for return	<b>£5,061</b>
Savings on electricity bills by hosts	<b>£948</b>
Total IPS community benefit donation*	<b>£35,117</b>

#### Cumulative to date\*\*:

Interest to investors	<b>£67,479</b>
Cumulative capital returned	<b>£22,638</b>

## Monthly generation results



### Key facts

#### Projects

Number of installations	1
Total installed capacity	46.4 kWp

#### Funding

Total number of shareholders	77
Number of 'Returnable' shareholders	13
Number of '25-year pledge' shareholders	64
Amount initially invested	£154,600
Capital returned to date*	£22,638
Remaining investment capital	£131,962

\* Excludes capital released for return this financial year.

#### Lifetime anticipated benefits\*

Interest to investors	£81,705
Savings on electricity bills by hosts	£11,603
Community benefit income from this portfolio	£75,982

\* Expressed as nominal values and based on current equity levels.  
Excludes benefits derived from the working capital element.

### Capital returns

All capital returns are subject to the availability of funds, Low Carbon Hub IPS Ltd Rules, the conditions in Appendix 1 of the original Share Offer Document, and the discretion of the Low Carbon Hub Board. Interest payments and capital repayments are not guaranteed.

### About investment in this portfolio

This share portfolio had two classes of shares: 'Returnable' shares and '25-year pledge' shares.

Returnable shares allowed shareholders to apply to have all of their capital returned to them at any time following year 3, and thereby completely exit their investment before the end of 25 years. The 25-year pledge shareholders, on the other hand, opted to have their capital repaid gradually over 25 years and they waived their rights to ask for it all back at once. In both cases, investors receive the same amount back over 25 years, but at different rates.

### Anticipated returns

As laid out in the original Share Offer Document, the anticipated interest rate on shares is different.

For the 25-year pledge, investors are anticipated to receive a forecast average 4.2% annual interest rate, though the actual interest rate will vary from year to year. From year 4 onwards, annual payments will comprise both interest and capital payments.

For Returnable shares it is anticipated that investors will be paid a forecast average 3% annual interest rate on their capital (assuming they do not withdraw their capital), though the actual rate will vary from year to year.

### Community benefit

The community benefit donation figure just reflects spend directly funded by IPS surpluses this year. A summary of the total community benefit delivered by the Low Carbon Hub CIC and IPS is set out on p17–18.



# ONCORE investment portfolio

## ONCORE: Portfolio B

### Performance review

The two projects in this portfolio showed very good performance this year, generating 55,504 kWh of renewable energy, thereby exceeding the generation target by over 7%. The reasons for the performance were good generating conditions, as well as inverter upgrades to the array at St. Barnabas School. Inverters are important as they convert the direct current (DC) generated by the panels into alternating current (AC) that our host organisations then use when they plug in electrical equipment.

The Feed-in Tariff is index-linked to the Retail Price Index (RPI) and increased by 7.5% on 1 April 2022.

### Projects in this portfolio

- The Cherwell School (South side)
- St. Barnabas CoE Primary School

### Performance

#### Electricity generation

Total generation this year	<b>55,504 kWh</b>
As a percentage of predicted output	<b>107.2%</b>
CO <sub>2</sub> savings	<b>12 tonnes</b>

CO<sub>2</sub> savings based on UK electricity CO<sub>2</sub> intensities of 0.2111 kgCO<sub>2</sub>e/kWh (2022)

### Returns

#### This financial year:

Interest declared per £ invested	<b>4.2p</b>
Total interest due to investors	<b>£3,400</b>
Capital released for return	<b>£3,353</b>
Savings on electricity bills by hosts	<b>£1,028</b>
Total IPS community benefit donation*	<b>£35,117</b>

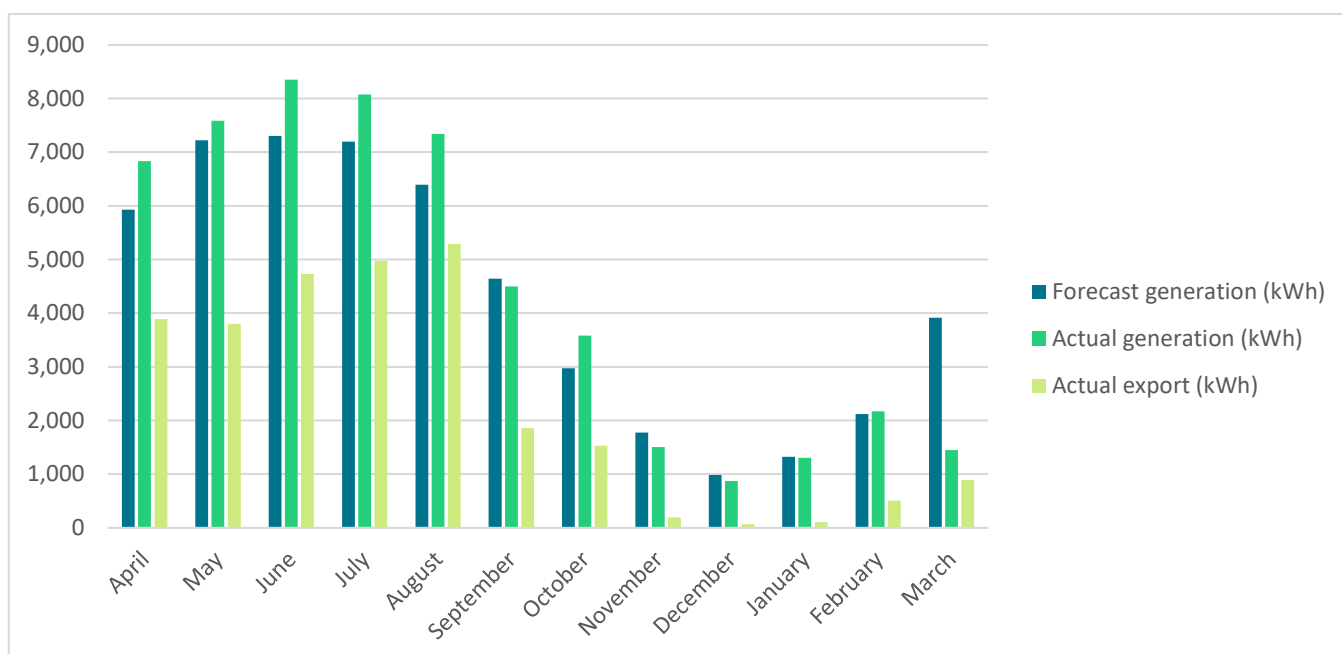
#### Cumulative to date\*\*:

Interest to investors	<b>£34,939</b>
Cumulative capital returned	<b>£12,796</b>

\* Community benefit donations are based on Low Carbon Hub IPS operating surplus, rather than at portfolio level. This figure represents the total community benefit donation made by the IPS to Low Carbon Hub CIC, plus any expenditure directly supporting community benefit activity delivered by the IPS itself.

\*\* Includes interest to investors paid prior to transfer of assets from ONCORE to Low Carbon Hub IPS Limited.

## Monthly generation results



### Key facts

#### Projects

Number of installations	2
Total installed capacity	63 kWp

#### Funding

Total number of shareholders	37
Amount initially invested	£93,750
Capital returned to date*	£12,796
Remaining investment capital	£80,954
Current debt funding towards capital costs	£0

\* Excludes capital released for return this financial year.

#### Lifetime anticipated benefits\*

Interest to investors	£53,045
Savings on electricity bills by hosts	£8,868
Community benefit income from this portfolio	£42,831

\* Expressed as nominal values and based on current equity levels. Excludes benefits derived from the working capital element.

### Anticipated returns

ONCORE intended for interest on investment to be paid from the first full year of operation. The portfolio offers projected returns to investors of 4.2%, plus any Enterprise Investment Scheme (EIS) benefits investors are entitled to.

### Capital returns

Capital will be returned to investors over the 20-year lifetime of the project, beginning in year 4. Interest payments and capital repayments are not guaranteed.

### Community benefit

The community benefit donation figure just reflects spend directly funded by IPS surpluses this year. A summary of the total community benefit delivered by the Low Carbon Hub CIC and IPS is set out on p17–18.

## About investment in this portfolio

This second ONCORE portfolio offered 20-year pledge shares in which investors waive their right to withdraw their capital at will.



# Community Energy Fund investment portfolio

The Community Energy Fund is the Low Carbon Hub's investment portfolio, created to enable investors to support a range of ventures to strengthen and grow our community energy projects.

## Annual Review

### Performance of rooftop solar projects

The fund's solar rooftop portfolio has again increased in size this year with the completion of two new large sites: We installed an array at Acro and an extension to the existing array at Norbar Torque Tools which is part of the 2014 Solar portfolio. The extension to Norbar makes it the second largest system for a single host in the entire Low Carbon Hub rooftop portfolio. During the year we also worked on two arrays on social housing at Ashhurst Way in Oxford, our first solar PV array partnership with a local authority. These will be added to the portfolio once we have formal completion of the project. In total, the CEF rooftop solar portfolio generated 493,181 kWh. All arrays are generating as predicted, or better. Only a faulty inverter at one of our new sites preventing us reaching 100% of our predicted target for the year, and this is now rectified.

A small number of the early arrays in the CEF portfolio qualify for the Feed-in Tariff. This is index-linked to the Retail Price Index (RPI) and increased by 7.5% on 1 April 2022. Export prices stayed the same as the previous year until January 2023, when they increased by 71% due to the nationwide increase in energy prices.

### Ray Valley Solar

2022 saw Ray Valley Solar, the UK's largest community-owned solar park, generate for the first time. From August 2022 to March 2023 it generated 9.04 GWh, about 3% above target. This is particularly encouraging given that the performance of the site in February and March has been affected by transformer replacement works.

Our expectations for what generation to expect from this solar park will develop as we learn more about the way the system operates in practice, once these ongoing commissioning works have been fully completed – which has now taken place in July 2023. Our review will include the addition of modelled generation from the underside of the panels, thanks to the bifacial solar PV technology that the site uses which have proved more effective than anticipated in the initial modelling.

Community Energy Fund investment has been instrumental in enabling us to deliver the project. Although the project is operational, the full costs have not yet been finalised as it has not yet been fully commissioned.

### Other impact achieved

One of the three key purposes of the fund is to enable us to replace debt with equity in existing projects. Whilst Ray Valley Solar project financing is being settled, we were able to take the opportunity to use CEF funds to reduce Low Carbon Hub's exposure to increasing interest rates. £750,000 was used to pay back part of a long-term loan which part-funded the construction of Sandford Hydro. Interest on the loan was linked to the Bank of England base rate, so paying back the loan has enabled us to reduce our debt financing costs.

## Investments held

### 100% CEF-owned solar rooftop installations

Acro, Brookside Primary School, CTG extension, Langford Village Primary School, Longfields Primary and Nursery School, Norbar Torque Tools extension, Sonning Common Primary School, Thames Travel, West Witney Primary School.

### Other projects supported

Solar 2016 portfolio	£1,320,084
Sandford Hydro (inter-company loan)	£950,000
Capital available for RVS and pipeline	£3,022,278



## Key facts

### Investors

Total number of shareholders **1,234**

### Funding

Total investment in fund at year end **£6,068,186**

Net change in investment this year **-£700**

Debt funding towards capital costs **£6,983,093**

### CEF rooftop solar projects

Number of installations **9**

Total installed capacity **1,052 kWp**

#### Lifetime anticipated benefits\*

Interest to investors **£369,312**

Saving on bills by host **£362,205**

Community benefit income from this portfolio **£208,154**

### Ray Valley Solar

Total installed capacity **19.2 MW**

#### Lifetime anticipated benefits\*

These will be reported on once the post-construction finance has been finalised.

\* Expressed as nominal values and based on current equity levels.

Excludes benefits derived from the working capital element.

## About investment in this portfolio

Class A shares are in the form of withdrawable shares. They cannot be sold, traded, or transferred between members. They cannot increase in value.

### Anticipated returns

The CEF is targeting an annual interest rate of 4% for investment in the first four years, going up to 5% per year in year five and beyond. Interest started accruing from day one of investments being accepted.

### Capital returns

The CEF does not automatically return capital; rather, it gives our members greater control as to when their equity is returned. There will be an annual opportunity for investors to apply to request the return of their capital after the fourth anniversary of their investment. Our ability to fulfil requests to withdraw capital is entirely dependent on the availability of sufficient funds at the time and is in no way guaranteed. Interest payments and capital repayments are not guaranteed.

### Community benefit

The community benefit donation figure just reflects spend directly funded by IPS surpluses this year. A summary of the total community benefit delivered by the Low Carbon Hub CIC and IPS is set out on p17–18.

## Performance

### Rooftop solar electricity generation

Total generation this year **493,181 kWh**

As a percentage of predicted output **98.6%**

CO<sub>2</sub> savings **104 tonnes**

Savings on bills by hosts **£12,784**

### Ray Valley Solar electricity generation

Total generation this year **9,046,608 kWh**

As a percentage of predicted output **102.3%**

CO<sub>2</sub> savings **1,909 tonnes**

CO<sub>2</sub> savings based on UK electricity CO<sub>2</sub> intensities of 0.2111 kgCO<sub>2</sub>e/kWh (2022)

## Returns

#### This financial year:

Interest this year declared per £ invested (before fourth anniversary) **4p**

Interest this year declared per £ invested (post fourth anniversary) **5p**

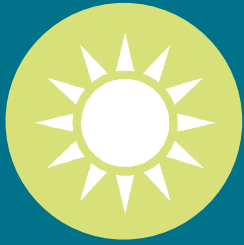
Total interest due to investors **£248,372**

Total IPS community benefit donation\* **£35,117**

#### Cumulative to date:

Interest to investors **£681,891**

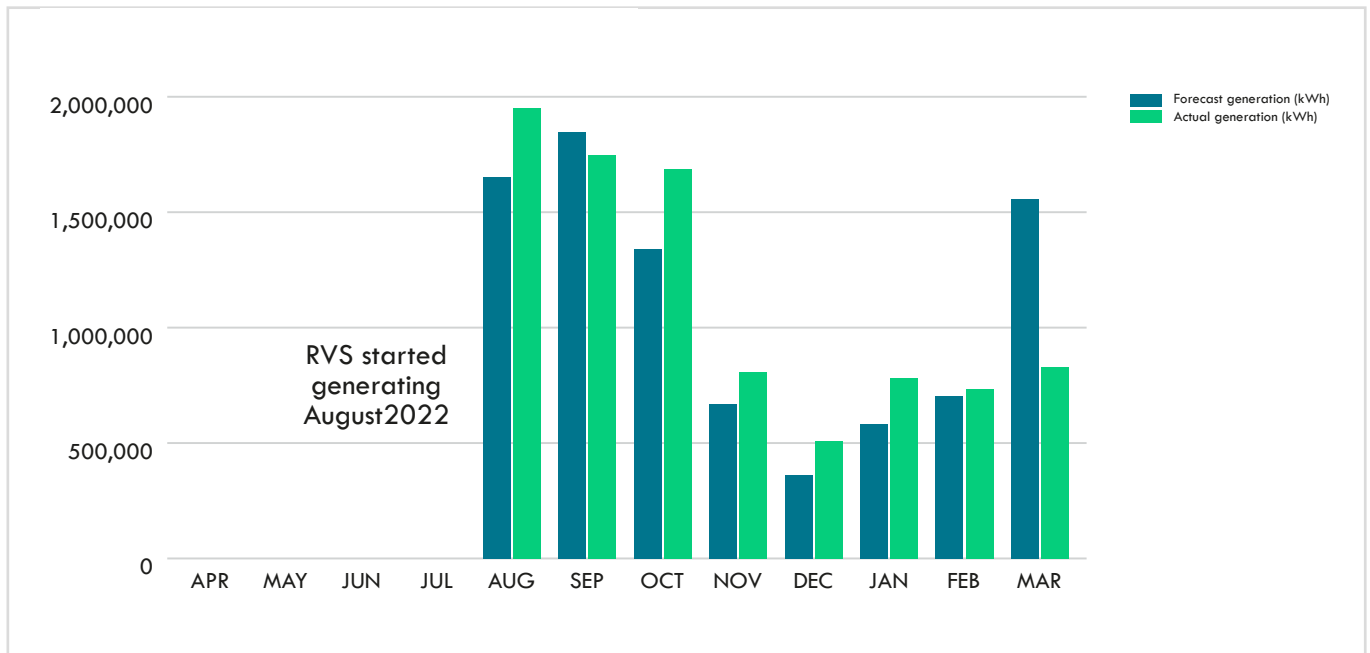
\* Community benefit donations are based on Low Carbon Hub IPS operating surplus, rather than at portfolio level. This figure represents the total community benefit donation made by the IPS to Low Carbon Hub CIC, plus any expenditure directly supporting community benefit activity delivered by the IPS itself.



# Community Energy Fund monthly generation results

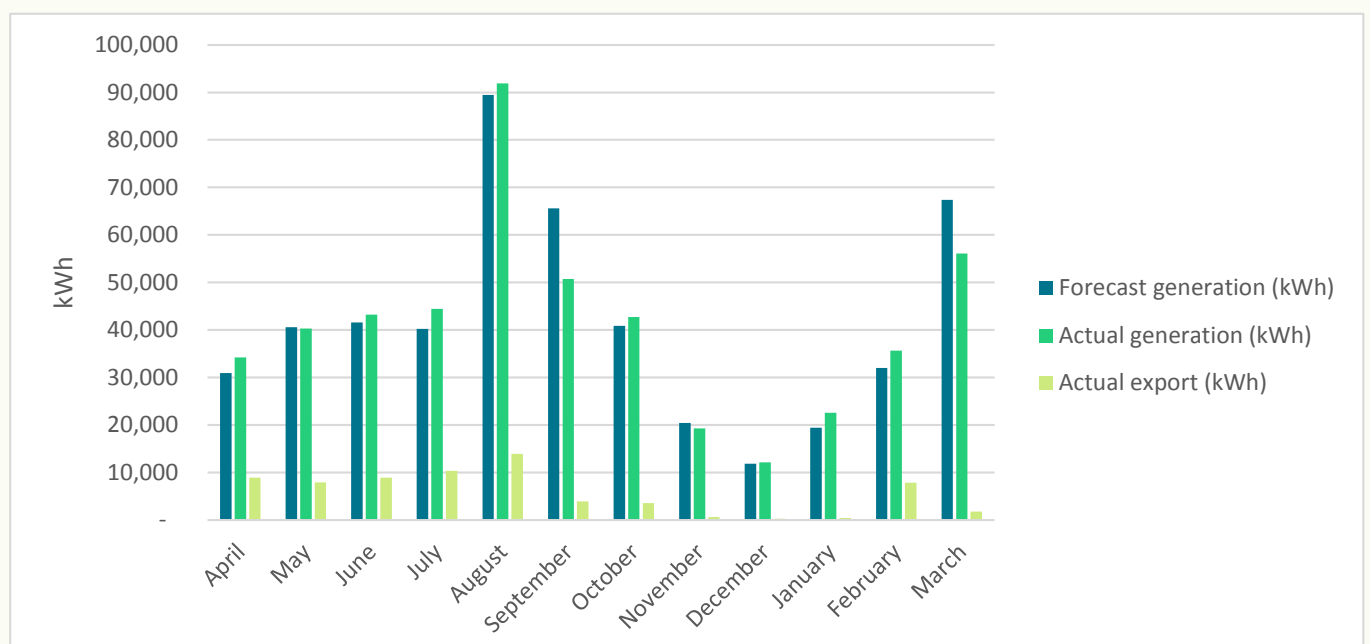
## Ray Valley Solar

### Monthly generation results



## 100% CEF-owned solar rooftop installations

### Monthly generation results





# Community benefit report 2022/23

Because the Low Carbon Hub IPS Limited is run for the benefit of the community, all of its profits are used to fund community-led action on climate change. We use these funds, along with surpluses from the Low Carbon Hub CIC, to leverage additional support, such as grants and contracts.

## Community benefit income 2022/23

This report sets out both the community benefit funded by the IPS and the activities carried out by the CIC. Please see Background notes (p.19) about how these organisations work together. We are most grateful to all our funders for their support of our work.

Our community benefit work is funded from a number of different sources:

- The surpluses of the Low Carbon Hub IPS Limited resulting from our renewable energy generation activities
- The surpluses of the Low Carbon Hub CIC (these are generated by the Eynsham renewable energy installation)
- Donations, grants, and contracts.

During 2022/23 our work to foster the development of community-led solutions to tackle climate change was supported by the following programmes:

- Innovate UK funding for Project LEO, a £40 m, multi-stakeholder partnership carrying out real-world energy system trials
- European Regional Development Fund support of OxFutures, a £3.2 m partnership to boost Oxfordshire's low carbon economy
- UK Community Renewal Fund, managed within Oxfordshire by Oxfordshire County Council, and with thanks to the Secretary of State for Levelling Up, Housing and Communities
- Westmill Solar Co-operative support enables our energy efficiency audits programme for schools and community buildings to continue
- Oxford City Council's Oxford Community Impact Fund, Community Energy England, Westmill Solar Co-operative, Westmill Wind Farm and everyone who supported the Warmer Winter Appeal for supporting our energy advice programme
- Oxford City's Economic Development Team Build Back Better assessment funding.

## Low Carbon Hub community benefit income

	2022/23	2021/22
<b>IPS community benefit income</b>		
Surpluses allocated for community benefit	£35,117	£35,059
<b>CIC community benefit income</b>		
<b>Renewables-generated income</b>		
Surpluses from generation	£1,391	£1,783
<b>Unrestricted donations</b>		
Unrestricted donations	£840	£0
<b>Restricted grants and donations</b>		
Innovate UK – Project LEO	£3,417,651	£2,127,480
Westmill Solar Co-operative – energy audits	£8,220	£7,500
Warmer Winter Appeal and energy advice programme	£24,558	£0
European Regional Development Fund	£107,923	£101,570
<b>Service contracts</b>		
Third Party Marketing Cost for Project LEO	£19,142	£35,584
Energy Solutions Oxfordshire	£18,500	£67,006
UK Community Renewal Fund	£34,573	£31,825
Power to Change – Next Generation	£0	£682
Oxfordshire County Council – ACES programme	£27,480	£0
<b>Total</b>	<b>£3,695,397</b>	<b>£2,408,490</b>

## Community benefit expenditure for 2022/23

We use our community benefit income to deliver:

- Grants and support to community energy enterprises
- Funding, help, and advice to support community action on climate change
- Support to innovative initiatives, by providing seed funding for the development of new products and services that encourage carbon-cutting action.

The following table summarises the community benefit expenditure of the Low Carbon Hub. All expenditure was incurred by the CIC unless stated otherwise.

### Low Carbon Hub community benefit expenditure

	2022/23	2021/22
<b>IPS community benefit spend</b>		
Community grant programme	£35,117	£35,059
<b>CIC community benefit spend</b>		
Community grant programme	£5,162	£4,952
Local energy programme	£4,171,734	£2,932,632
Community benefit management	£3,267	£2,970
<b>Total</b>	<b>£4,215,280</b>	<b>£2,975,613</b>

### Community grants programme – £40,279

We have a number of grant streams which provide funding to support community action on climate change. Our large grants programme awarded five grants, totalling £22,296. Our community group members are also eligible for up to £500 funding each – and we awarded four £500 grants. The grants supported a wide range of activities from contributing towards the installation of solar arrays, batteries and EV charging points on community buildings, active travel, and community-led activities to help householders improve the energy efficiency of their homes. Once again we were delighted by the high level of collaboration between groups who pooled knowledge and resources to support cross-community activities such as the Oxford-city-wide Energy Saving Homes project.

Low Carbon Oxford North and GreenTEA continue to receive support from our long-standing generation grants to these communities. The IPS also contributed £2,500 towards the Low Carbon Hub's energy advice programme, which trained community energy champions and equipped them with energy

advice stalls to support people in their communities struggling with the energy crisis.

Grants are made by the IPS to beneficiaries, with the exception of the GreenTEA renewables grant. This grant was made by the CIC, which also funds the cost of running the programme.

### Local energy programme – £4,171,734

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. Second, 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.

#### 2022/23 spend

This year our local energy programme delivered:

- Helpdesk service supporting further community energy projects – £6,381
- Community building energy audit grants scheme – £13,929
- Energy Advice Programme – £12,307
- Action on Carbon and Energy for Schools (ACES) Programme – £19,106
- OxFutures project, supporting energy efficiency and innovation for SMEs – £107,923
- Cosy Homes Oxfordshire supporting domestic retrofit (excluding staff costs) – £481
- Project LEO smart-grid trials (including communications support to the project) – £3,962,020
- Energy Solutions Oxfordshire programme and Community Renewal Fund delivery supporting the take-up of energy efficiency amongst SMEs – £49,588

### Community benefit management – £3,267

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. In 2022/23 this cost was covered by the CIC.

# Background notes

## About Low Carbon Hub

For the first decade of its life, Low Carbon Hub operated as two separate organisations working in cooperation: The Low Carbon Hub IPS Limited (Low Carbon Hub IPS) and the Low Carbon Hub Community Interest Company (Low Carbon Hub CIC). The Low Carbon Hub IPS Limited is a Registered Society that operates for the benefit of the community. It is owned by you, our investor members, and generates income from the Feed-in Tariff and selling renewable energy. The CIC was part-owned by 41 local community groups.

Our energy-generating assets and investment are held in the IPS, including two wholly owned subsidiaries: Sandford Hydro Limited and Ray Valley Solar Limited. Up to the end of 2022/23, much of our community benefit work was delivered by the CIC, in part funded by the financial surpluses of the IPS. By then, Low Carbon Hub had grown considerably in size – both in terms of the size of our generation portfolio, and the number and scale of energy programmes we delivered. Operating the two entities was becoming increasingly complicated and draining of our resources, so shareholders in both the IPS and CIC agreed to consolidate to a simpler structure, with all activity taking place in the IPS from April 2023.

## About these figures

The results published in this document are based on our draft financial accounts for 2022/23 and are the most accurate figures available at the time of going to print. Any changes relating to our finalised accounts or the availability of updated generation data or modelling will be reflected in subsequent years' reports.

## Understanding Low Carbon Hub IPS share classes

The Low Carbon Hub IPS Limited has two share classes: 'A' and 'B'. They are shown in the table below.

Visit the investor pages at [www.lowcarbonhub.org](http://www.lowcarbonhub.org) for more information about investment in the Low Carbon Hub IPS Limited.

### Our IPS share classes

#### Class A

- Solar 2014
- Solar 2016
- Sandford Hydro
- ONCORE
- Community Energy Fund

#### Class B

Original 10  
'pioneer' investors

## Investment portfolios

Low Carbon Hub IPS Limited has run 12 successful share offers, enabling it to build renewable energy projects across Oxfordshire at schools, businesses, organisations, as well as on the Thames and at Ray Valley. All of its surplus goes to supporting local communities working to further cut carbon emissions. You can learn more about the projects we own and managed and those we've helped support through community benefit on our website.

## Interest payments

Decisions relating to annual interest payments will be based on a portfolio's performance during a financial year and will also take into account the Low Carbon Hub IPS Limited's overall financial situation. We aim to notify members of interest payments due by the August after financial year close, and to make interest payments within 60 days of notification.

Income from investment in Registered Societies is treated as interest payments, not dividends, for tax purposes.

## Capital repayments

Interest payments and capital repayments are not guaranteed and the decision to return capital will be made by the Directors.

Investors are reminded that any investment they make is an acknowledgement of their support for the development of renewable energy and, accordingly, a subscription for shares in the Low Carbon Hub IPS Limited should primarily be regarded as an investment for social and environmental purposes rather than one that will produce a significant financial return.

## Managing your investment

For any queries related to your investment, please contact us on:

**Email:** [members@lowcarbonhub.org](mailto:members@lowcarbonhub.org)

**Telephone:** 01865 246099

Please get in touch to:

- Notify us of any change in address, name, email address, or bank details
- Request a nomination of shares on death form.

Further information for investors can be found on our website: [www.lowcarbonhub.org/invest](http://www.lowcarbonhub.org/invest)

# Sign up to keep up to date with our news

Would you like to receive details of our community share offers, renewable project updates and news, and updates on community benefit projects?

Sign up to receive the Low Carbon Hub newsletter on our website: [www.lowcarbonhub.org](http://www.lowcarbonhub.org)



**Holywell House, Oxford OX2 0ES • [members@lowcarbonhub.org](mailto:members@lowcarbonhub.org) • 01865 246099**

**[www.lowcarbonhub.org](http://www.lowcarbonhub.org)**

The Low Carbon Hub IPS Limited is registered in England as a Registered Society under the Co-operative and Community Benefit Societies Act 2014. Registration number: 31903R, Holywell House, Oxford OX2 0ES

Nothing in this document constitutes investment, tax, legal, or other advice by The Low Carbon Hub IPS Limited, its Directors, or advisers.