



Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd Share Offer Document

February 2014

690,000 Shares at £1 a Share

SEIS Offer open: 17 February 2014 – 3 March 2014

EIS Offer open: 4 March 2014 – 30 April 2014

Shares still available!

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WORKING IN PARTNERSHIP WITH:

lgvVentures



Photographs courtesy of Steve Sharp and TGV Hydro Ltd

SUPPORTED BY:



Cronfa Datblygu
Cynaliadwy

Sustainable
Development Fund

DIRECTORS' LETTER

6 February 2014

Dear potential Member,

Small-scale hydro, known as micro hydro, is a tried and tested way of producing electricity. Here in the Brecon Beacons, where we have plenty of rain and lots of steep mountain streams, it's the natural choice for generating local renewable electricity. This is our second offering, following the successful full subscription of our first share offer last autumn.

The project we are inviting you to join now comprises four micro hydro schemes – Nant y Gadair (30.2kWp), Gargwy Fach (27.5kWp), Nant yr Hafod (13.4kWp) and Blaen Dyar (29.7kWp). Together these schemes will produce more than **355MWh** of renewable electricity a year – enough to power **90** average Welsh homes. And because this electricity is produced without burning fossil fuels, it will help reduce the community's carbon footprint.

Better still, the schemes will generate income. Under the Government's Feed-in Tariff scheme, which encourages production of renewable energy, the Co-operative will receive a payment for every kWh of electricity produced, plus there will be additional revenue from the sale of this electricity to a supply company.

Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd has been set up specifically to build and run these schemes. It also enables people to buy Shares in the project, and to thereby share in the financial, environmental and social rewards.

By becoming a Member of this Co-operative, you'll help reduce carbon emissions, boost the production of local renewable energy and support more local ownership of our energy supplies.

You'll also earn a fair return on your subscription, because once the schemes are commissioned and generating an income, any surplus will be divided equally between Members and a special Community Fund. Based on predicted performance, the share of surplus payable to Members is calculated to provide an Internal Rate of Return of **5%**, averaged over the 20-year life of the project.

Furthermore, we have received advance assurance from HM Revenue & Customs that the project qualifies in principle for the Seed Enterprise Investment Scheme and the Enterprise Investment Scheme, both of which offer significant tax relief benefits for Members who are qualifying UK tax payers.

Meanwhile, the share of surplus should provide some **£550,000** for the Community Fund over the life of the project. This money will be used to support other projects that contribute to the prosperity of the local economy and help create a more sustainable future – a win all round!

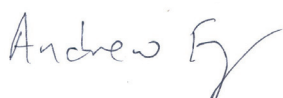
You'll find full details of the proposal in this document. We hope you'll join us in this exciting venture.

The Directors

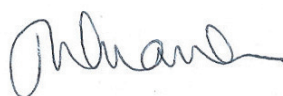
Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd

DECLARATION

Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd and each of its Directors whose names are set out below hereby declare that having taken all reasonable care to ensure that such is the case, the information contained in this Offer Document is, to the best of his/her knowledge, in accordance with the facts and contains no omission likely to affect its import.



Andrew Fryer



Jackie Charlton



Michael Butterfield



Stephen Sharp



Simon Walter

1. SUMMARY OF OFFER

This is a summary of the offer to acquire Shares in Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd (also referred to as 'the Co-operative').

1.1 Introduction

The purpose of this Share Offer is to raise the capital needed to install four high-head micro hydro schemes on the south-eastern side of the Brecon Beacons National Park. The four sites are as follows:

1. Nant y Gadair, Grwyne Fechan
2. Gargwy Fach, Grwyne Fechan
3. Nant yr Hafod, Clydach Gorge
4. Blaen Dyar, Clydach Gorge

This Share Offer, and the construction and operation of the four schemes, will be managed and administered by a new Co-operative set up for this purpose.

This project and the Co-operative are the result of the inspiration and effort of LGV Ventures, which is a trading subsidiary of Llangattock Green Valleys (LGV). Both of these organisations are community interest companies (CICs), dedicated to reducing carbon emissions and building sustainability in Llangattock and the surrounding area.

1.2 Important information

The Directors of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd have prepared this document and are responsible for its contents. Full details on its legal compliance, the terms of the offer and how to subscribe are set out in the main body of the document. Technical and other words and phrases that have a particular meaning in the context of this document are defined in the **Glossary** (see pages 25-26).

This summary is an introduction only, and any decision to subscribe should be made on the basis of the document as a whole.

1.3 The project

The purpose of this project is to generate as much renewable electricity as possible through the four schemes, and to thereby reduce the area's reliance on national grid electricity, which is generated mostly from fossil fuels. The Co-operative aims to make the most of the renewable energy resource available at the four sites, on a cost-effective scale.

In-depth feasibility studies commissioned by LGV Ventures show that the four schemes should produce a combined total of more than 355MWh of renewable electricity a year – enough to power 90 average homes and displace more than 158 tonnes of CO₂ a year*.

In addition, LGV Ventures has already secured option agreements with the landowners for the Nant y Gadair and Gargwy Fach schemes, and is finalising agreements for the other two schemes.

To date, this development work has been funded wholly by LGV Ventures, using risk capital comprising grants from the Welsh Government's Ynni'r Fro programme, the Brecon Beacons Trust and the Brecon Beacons National Park Sustainable Development Fund, along with some of the £100,000 prize money awarded to LGV in 2011 as winner of the British Gas Green Streets competition. This money was awarded specifically for the development of community micro hydro projects.

LGV Ventures will continue to underwrite the development costs (and thereby accept all risk), until the schemes receive all the necessary consents. With the exception of subscriptions made under the Seed Enterprise Investment Scheme (see below), money raised through this Share Offer will not be used prior to consents being granted, so if construction does not go ahead for any reason, applicants' money will be returned in full and the Co-operative will be wound up.

If the project proceeds as planned, the share capital will be used to fund the construction works and repay the development costs to LGV Ventures. This will enable LGV Ventures to re-use its risk capital to develop additional micro hydro schemes in Llangattock and the surrounding area.

Once the schemes are commissioned, the Co-operative will generate income by selling the electricity to a supply company and securing Feed-in Tariff (FIT) payments (the Government incentive for generating renewable electricity). This will enable the Co-operative to pay for the ongoing operation and maintenance of the schemes, with the surplus being divided equally between Members and a special Community Fund managed by LGV Ventures to further the aims of the CIC. It should also enable the gradual return of share capital to Members over the life of the project, which is 20 years, based on the duration of the FIT.

Full details of the FIT scheme for micro hydro are available from Ofgem, the energy industry regulator – go to ofgem.gov.uk.

* Based on average annual electricity consumption of 3,916kWh/ Welsh household (DECC, *Sub-national electricity consumption and household analysis*, March 2012), and the UK Government's current carbon factor for electricity of 0.44548 (June 2013).

1.4 The Offer

Through this Offer Document, the Co-operative seeks to raise sufficient cash by the issue of Offer Shares at £1 (payable in full on application) to cover the development and construction costs of the four schemes. The total cost of this work is estimated to be £690,000, based on feasibility work carried out by our supplier, TGV Hydro Ltd.

The minimum share capital needed is £550,000, and if the Share Offer raises this minimum the project will proceed, with the balance being raised through loan finance. Additional share capital will reduce the amount of loan finance required and boost the amount of money available for the Community Fund. Ideally the project will rely on 100% share capital.

The Directors have received advance assurance from HM Revenue & Customs (HMRC) that the Share Offer qualifies in principle for both the Seed Enterprise Investment Scheme (SEIS) and the Enterprise Investment Scheme (EIS). These schemes allow Members who are also UK taxpayers to claim tax relief of up to **50% (SEIS)** or **30% (EIS)** of the value of their subscription.

SEIS and EIS tax relief boost the effective rate of return for eligible tax-paying Members as follows:

- Projected Internal Rate of Return (IRR): **5%**
- Effective rate of return with SEIS: **9.8%**
- Effective rate of return with EIS: **7.7%**

Further information about these two schemes can be found in **Sections 4, 5 and 7** of this document, but essentially they split the Share Offer into two phases:

1. SEIS (Pioneer Investor) period – 17 February to 3 March 2014. This higher-risk phase is to raise the first £150,000 and in the first instance will be open only to:

- members of our first co-operative, ie Llangattock Green Valleys Micro Hydro (1) Co-operative Ltd
- applicants who missed out on shares in our first co-operative because the offer was oversubscribed
- members of LGV.

2. EIS period – 4 March to 30 April 2014. This lower-risk phase is open to everyone.

Please note, the Directors retain the right to extend the deadline for applications for both phases, as the EIS offer cannot start until the SEIS phase is fully subscribed and at least 70% of the SEIS subscriptions have been spent. In the event that the SEIS offer is not fully subscribed by 5pm on 3 March 2014, the remaining SEIS Shares will be made generally available.

Conversion of Application Forms to Shares will be carried out in the order in which they are received. The 150,000 Shares in the SEIS phase will be issued strictly on a first-come, first-served basis, with any applicants who miss out automatically being allocated to the EIS

phase. Shares in the EIS phase will also be issued on a first-come, first-served basis, and if all 690,000 Shares are sold before 30 April 2014, the Offer will close early. Any applications received after the Share Offer has closed will be returned to applicants.

Individuals can subscribe for a minimum of 250 and a maximum of 20,000 Shares at their £1 par value. Charities and other organisations can buy Shares on the same basis, while Industrial and Provident Societies are allowed to buy more than 20,000 Shares. Subscribers must be aged 16 or over and should regard the Offer Shares as a long-term investment. If you wish to subscribe on behalf of a child or grandchild aged under 16, please see **7.10** for details.

The Directors have decided to run the Share Offer ahead of final permitting so that funds are available and construction can begin as soon as the necessary consents are obtained. This will ensure that the schemes are built and commissioned as soon as possible. If any scheme fails to obtain the necessary permits, the Board reserves the right to substitute a different scheme. LGV Ventures has several equivalent sites for which it is currently negotiating landowner agreements, planning permission and environmental permits.

Once the schemes are generating income, any surplus will be divided equally between Members and a special Community Fund set up to support the work and aims of LGV. Based on the predicted performance of the schemes, the share of surplus payable to Members is calculated to provide an IRR of 5% per annum, averaged over the 20-year life of the project.

Shares in the Co-operative will not be traded on a recognised stock exchange and are not transferable. Members can apply to withdraw Shares after the end of the third year of trading but Share withdrawal is at the discretion of the Board. The Co-operative intends to repay Members' share capital (ie buy back shares) gradually throughout the 20-year life of the project, subject to financial performance and available funds.

Each Shareholder, whatever their stake, automatically becomes an equal Member of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd on a one-member, one-vote basis.

1.5 Risks

All investment and commercial activities carry risk. Potential Members should take appropriate advice and make their own risk assessment while bearing in mind the social and environmental benefits of this project.

Those interested in subscribing should do so only after reading this document in full and taking appropriate financial and other advice.

Further details of the risks specific to this project are discussed in **Section 5**.

2. PROJECT BACKGROUND

This section explains the background to the project, its purpose and who is involved.

2.1 Project aims

Through this project the Co-operative aims to:

- Support the cost-effective production of local renewable energy through the construction of four community micro hydro schemes.
- Help reduce the community's reliance on fossil fuels, thereby reducing carbon emissions.
- Give people a chance to share in the financial, environmental and social rewards of the project.
- Generate an income stream that will be used to:
 - (i) pay the running and maintenance costs of the schemes
 - (ii) pay back Members' share capital gradually over the life of the project
 - (iii) pay Members a fair return
 - (iv) provide money for a Community Fund to support projects that build local resilience and aid the community's transition to sustainability.

2.2 How the project came about

In November 2009, Llangattock Green Valleys (LGV) was chosen to take part in the British Gas Green Streets competition, a year-long project aimed at encouraging communities across the UK to find ways to save energy and generate renewable energy.

LGV secured £137,000 of funding for a raft of projects (see **page 30** for details), including feasibility studies for five potential micro hydro schemes in Llangattock and the surrounding area.



The Nant y Gadair stream in late summer

In July 2011, LGV was named winner of the Green Streets competition and awarded £100,000 by British Gas specifically to develop community micro hydro schemes as part of a broader plan to make Llangattock a carbon-negative community by the end of 2015.

In autumn 2013, LGV's trading arm, LGV Ventures, launched its first co-operative share offer, with Llangattock Green Valleys Micro Hydro (1) Co-operative Ltd (LGVMH1) successfully raising the full £270,000 needed to install two micro hydro schemes. Construction of these schemes is on track to begin in late spring this year.

Meanwhile, further feasibility work commissioned by LGV Ventures has pinpointed a number of other viable schemes, four of which are the focus of this project.

2.3 Why micro hydro?

There are three very good reasons for choosing micro hydro technology:

1. The Brecon Beacons National Park is an area with good annual rainfall and plenty of steep mountain streams, making micro hydro the natural choice of technologies for generating renewable energy.
2. Micro hydro is small-scale, so it has a very low visual and environmental impact – essential in the National Park.
3. Micro hydro uses tried-and-tested technology, proven over many years.

LGV Ventures has identified several possible micro hydro sites in the area and aims to develop these under a rolling programme as part of the organisation's overall carbon-reduction strategy.

2.4 Project partners

LGV and LGV Ventures have developed this project in partnership with three other organisations:

Sharenergy (sharenergy.coop) – a Shrewsbury-based co-operative that specialises in helping community groups set up renewable energy co-operatives. Sharenergy has provided development support for the Co-operative, is managing the administration of the Share Offer and will provide ongoing Member administration once Shares are issued.

TGV Hydro (tgvhydro.co.uk) – a Brecon-Beacons based micro hydro supplier. The company has pioneered and championed the emerging micro hydro market in Wales and has built and run numerous similar schemes in the Brecon Beacons and other parts of Wales.

Hydrolite – a Swansea-Valley based company that designs, manufactures and installs Turgo turbines and is part-owned by TGV Hydro.

2.5 Why a co-operative?

Co-operative ownership of renewable energy has grown rapidly in the UK and Europe over the past 16 years. The UK's first renewable energy co-operative was Baywind Energy, established in Cumbria in 1997, its first share offer raised £1.2 million to buy two wind turbines, and the following year it raised another £670,000 for a third turbine.

Ten years later, Torrs Hydro in Derbyshire became the UK's first hydropower co-operative, and there is now a thriving network of co-operatives across the UK using solar, wind, micro hydro and biomass technologies to generate renewable energy and provide income to fund community projects and pay members a fair return on their investment.

Co-operative societies are democratic structures with the legal ability to raise money directly from the public. With a one-member, one-vote system and a board elected from the membership, they offer a fair and transparent way to operate a community-owned renewable energy business. They are registered with the Financial Conduct Authority (FCA).

2.6 Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd

The Co-operative has five Directors and was incorporated and registered with the FCA as an Industrial and Provident Society (number 32276R) on 20 December 2013. It is domiciled in Wales and its registered office is the Crickhowell Resource &

Information Centre (CRiC), Beaufort Street, Crickhowell, Powys NP8 1BN.

An Industrial and Provident Society is a legal form providing the structure of a co-operative. It is owned by and operated for the benefit of its members and/or the community. Members elect directors and each member has one vote in a members' meeting, regardless of the number of shares held. Members are protected by limited liability and are only obliged to contribute the initial cost of their shares.

Industrial and Provident Societies are governed by rules, largely in standard form, which are approved by and registered with the FCA. The Rules for this Co-operative are available online at llangattockgreenvalleys.org/shareoffer or from the Co-operative (see **back cover** for contact details).

2.7 Area of operation

Part of the purpose of this project is to provide an income to the partner organisations, LGV and LGV Ventures, to enable them to develop further renewable energy schemes and, through the establishment of a special Community Fund, support other projects that will deliver carbon reductions and help build a more sustainable and resilient community in Llangattock and the surrounding area.

The articles and memoranda for these organisations define their area of operation as 'Llangattock and the surrounding area'. The Co-operative will therefore operate within this same broadly defined area.

Likewise, the Co-operative will support a policy of localism, and in keeping with this will seek to procure as many elements of the project as possible through local and Welsh suppliers.

2.8 Project timeline

This is an indicative timeline showing planned progress along a realistic path – but dates are subject to change as required.

17 February 2014	SEIS (Pioneer Investor) offer opens to restricted audience*
3 March 2014	SEIS offer closes**
4 March 2014	EIS offer opens to everyone
30 April 2014	EIS offer closes**
30 June 2014	Planning and environmental permitting applications submitted
30 November 2014	Planning consents and abstraction licences obtained
December 2014	Construction begins
Spring 2015	Final scheme commissioned

* SEIS offer open in the first instance only to members of LGVMH1, applicants who missed out on shares in LGVMH1 because the offer was oversubscribed, and members of LGV. ** The Directors anticipate a rapid uptake of Shares, which may mean early closure for both phases of the Offer. However, the Directors also retain the right to extend the deadlines for both phases if necessary.

3. PROJECT OVERVIEW

The sole planned activity of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd is the ownership and management of micro hydro installations in the Brecon Beacons National Park.

3.1 The sites

The following four sites are the preferred options for development. TGV Hydro has carried out full feasibility studies on these sites and has estimated the construction costs and power outputs that can be expected. This Share Offer is based on the results of these studies. If any of these schemes cannot be developed for any reason, or it becomes apparent that any of the schemes would not be viable, the Board reserves the right to substitute an equivalent scheme from the pool of schemes currently under consideration by LGV Ventures.

Site 1 – Nant y Gadair (30.2kWp)



The proposed scheme is based in the Grwyne Fechan valley above Llanbedr, near Crickhowell.

Ownership and landowner agreement

The scheme is located on property belonging to one local landowner. An option has been signed with the landowner that will provide the right to a lease once planning permission and environmental licensing are obtained.

Grid connection

There is no existing grid connection at the proposed site of the turbine house, so a new pole and transformer will need to be installed, with a cable run to the nearest split-phase overhead line. A firm quote has not been obtained from the DNO, but the cost for the electrical connection has been estimated at around £28,000 based on similar schemes constructed elsewhere.

Scheme capacity

The scheme would involve a penstock (pipeline) route of 1,710 metres, attaining a head (the height difference between the intake and the turbine) of 52 metres.

A fish pass at the intake will also be required.

Peak abstraction would be about 87 litres per second. This would provide peak electrical power of 30.2kW, with this maximum being attained for around 20% of the year. Total annual generation is predicted at 99,371kWh.

These figures include an efficiency factor of 70% to account for the losses resulting from water friction in pipes, turbine efficiency, generator efficiency and resistive losses.

Consents and permits

The scheme would need planning permission from the Brecon Beacons National Park Planning Authority and licences from Natural Resources Wales (NRW). LGV Ventures is currently at the pre-application stage for this scheme and awaiting feedback from NRW ahead of making a formal application.

The NRW licences would limit the maximum amount of water that could be taken from the stream and set a constraint that no water could be taken when flow falls below a set threshold.

Construction access

Access for construction of the intake, the penstock route and the turbine house has been assessed and is considered acceptable.

Financial modelling

The current FIT rate for schemes over 15kWp is 20.21p/kWh. However, Ofgem has announced a 5% depression in the micro hydro FIT from 1 April 2014, with the new rates in force until 31 March 2015. The projections for this scheme are therefore based on the new FIT rate of 19.2p/kWh, adjusted for RPI.

In addition, the electricity will be sold to a supply company for around 5.5p/kWh, resulting in a combined income for the scheme of around £25,021 per year. Further details of the financial modelling are given in **Section 4**.

Site 2 – Blaen Dyar (29.7kWp)

The proposed scheme is based above the Clydach Gorge, in Monmouthshire.

Ownership and landowner agreement

The scheme is located on property belonging to two local landowners. Options are currently being finalised with the landowners that will provide the right to a lease once planning permission and environmental licensing are obtained.

Grid connection

The proposed site for the turbine house is near a dwelling, so the system would be connected to the existing split-phase electrical connection. A firm quote has not been obtained from the DNO, but the cost for the electrical connection has been estimated at around £15,700, based on similar schemes constructed elsewhere.

Scheme capacity

The scheme would involve a penstock route of 1,100 metres, attaining a head of 175 metres.

Peak abstraction would be about 24 litres per second. This would provide peak electrical power of 29.7kW, with this maximum being attained for around 15% of the year. Total annual generation is predicted at 100,771kWh.

These figures include an efficiency factor of 75%* to account for the losses resulting from water friction in pipes, turbine efficiency, generator efficiency and resistive losses.

Consents and permits

The scheme would need planning permission from the Brecon Beacons National Park Planning Authority and licences from NRW.

The advice from TGV Hydro is that permits are likely to be granted. The NRW licences would limit the maximum amount of water that could be taken from the stream and set a constraint that no water could be taken when flow falls below a set threshold.

Construction access

Access for construction of the intake, the penstock route and the turbine house has been assessed and is considered acceptable.

Financial modelling

The current FIT rate for schemes over 15kWp is 20.21p/kWh. However, Ofgem has announced a 5% depression in the micro hydro FIT from 1 April 2014, with the new rates in force until 31 March 2015. The projections for this scheme are therefore based on the new FIT rate of 19.2p/kWh, adjusted for RPI.

An estimated 5% of the electricity generated will be used by the dwelling, with the remaining 95% being sold to a supply company for around 5.5p/kWh. This will result in a combined income for the scheme of around £25,097 per year. Further details of the financial modelling are given in **Section 4**.

* For schemes with over 150 metres of head, the efficiency factor rises from 70% to 75%.

Site 3 – Gargwy Fach (27.5kWp)

The proposed scheme is based in the Grwyne Fechan valley above Llanbedr, near Crickhowell.

Ownership and landowner agreement

The scheme is located on property belonging to one local landowner. An option has been signed with the landowner that will provide the right to a lease once planning permission and environmental licensing are obtained.

Grid connection

There is no existing grid connection at the proposed site of the turbine house, so a new pole and transformer will need to be installed and a cable run to the nearest split-phase overhead line. A firm quote has not been obtained from the DNO, but the cost for the electrical connection has been estimated at around £24,500, based on similar schemes constructed elsewhere.

Scheme capacity

The scheme would involve a penstock route of 1,070 metres, attaining a head of 93 metres.

Peak abstraction would be about 46 litres per second. This would provide peak electrical power of 27.5kW, with this maximum being attained for around 20% of the year. Total annual generation is predicted at 107,559 kWh.

These figures include an efficiency factor of 70% to account for the losses resulting from water friction in pipes, turbine efficiency, generator efficiency and resistive losses.

Consents and permits

The scheme would need planning permission from the Brecon Beacons National Park Planning Authority and licences from NRW. The advice from TGV Hydro is that permits are likely to be granted. The NRW licences would limit the maximum ►

► amount of water that could be taken from the stream and set a constraint that no water could be taken when flow falls below a set threshold.

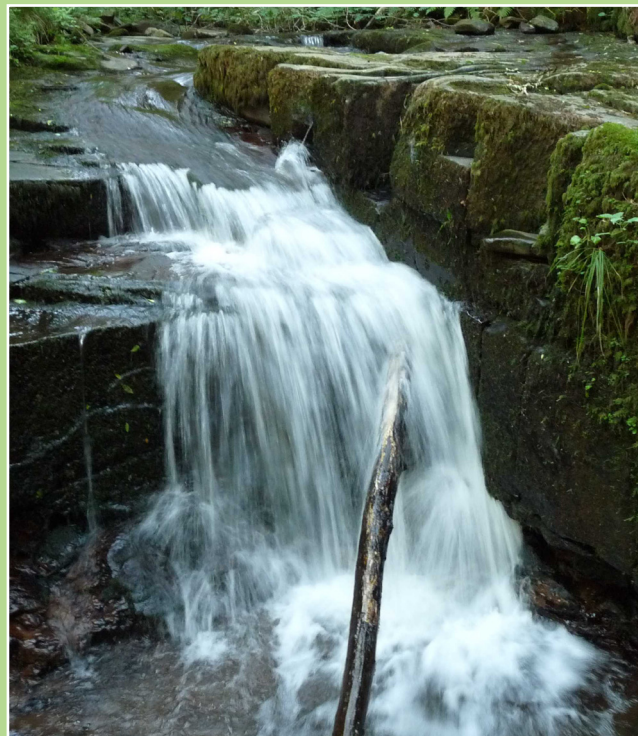
Construction access

Access for construction of the intake, the penstock route and the turbine house has been assessed and is considered acceptable.

Financial modelling

The current FIT rate for schemes over 15kWp is 20.21p/kWh. However, Ofgem has announced a 5% degression in the micro hydro FIT from 1 April 2014, with the new rates in force until 31 March 2015. The projections for this scheme are therefore based on the new FIT rate of 19.2p/kWh, adjusted for RPI.

In addition, the electricity would be sold to a supply company for around 5.5p/kWh, resulting in a combined income for the scheme of around £27,083 per year. Further details of the financial modelling are given in **Section 4**.



Site 4 – Nant yr Hafod (13.4kWp)

The proposed scheme is based above Clydach Gorge, on the Monmouthshire/Blaenau Gwent border.

Ownership and landowner agreement

The scheme is located on property belonging to one local landowner. An option is currently being finalised with the landowner that will provide the right to a lease once planning permission and environmental licensing are obtained.

Grid connection

The proposed site for the turbine house is near a dwelling, so the system would be connected to the existing single-phase electrical connection. A firm quote has not been obtained from the DNO, but the cost for the electrical connection has been estimated at around £7,500, based on similar schemes constructed elsewhere.

Scheme capacity

The scheme would involve a penstock route of 690 metres, attaining a head of 86 metres.

Peak abstraction would be about 24 litres per second. This would provide peak electrical power of 13.4kW, with this maximum being attained for around 15% of the year. Total annual generation is predicted at 47,706 kWh.

These figures include an efficiency factor of 70% to account for the losses resulting from water

friction in pipes, turbine efficiency, generator efficiency and resistive losses.

Consents and permits

The scheme would need planning permission from the Brecon Beacons National Park Planning Authority and licences from NRW.

The advice from TGV Hydro is that permits are likely to be granted. The NRW licences would limit the maximum amount of water that could be taken from the stream and set a constraint that no water could be taken when flow falls below a set threshold.

Construction access

Access for construction of the intake, the penstock route and the turbine house has been assessed and is considered acceptable.

Financial modelling

The current FIT rate for schemes under 15kWp is 21.65p/kWh. However, Ofgem has announced a 5% degression in the micro hydro FIT from 1 April 2014, with the new rates in force until 31 March 2015. The projections for this scheme are therefore based on the new FIT rate of 20.57p/kWh, adjusted for RPI.

An estimated 15% of the electricity generated will be used by the dwelling, with the remaining 85% being sold to a supply company for around 5.5p/kWh. This will result in a combined income for the scheme of around £12,287 per year. Further details of the financial modelling are given in **Section 4**.

3.2 Scheme components

Micro hydro schemes have four basic components:

- The **intake**, at the top of the stream, where water is directed into...
- The **penstock**, or pipeline, which takes water from the intake downhill to...
- The **turbine house**, which contains...
- The **turbine** and other equipment needed to generate electricity and feed it into the grid.



A typical intake with fish pass during construction

The intake

The intake comprises:

- A dam, with a weir section across the stream.
- A forebay tank, to allow bubbles to dissipate and sediment to settle before the water enters the penstock.
- An intake screen. The turbine could get damaged if debris were to travel down the penstock, so the intake is fitted with a self-cleaning screen.
- A fish pass (if needed), to ensure that fish and other aquatic life can pass safely over the weir.



The intake shortly after completion. Vegetation soon grows back, ensuring the installation blends seamlessly into the environment

The penstock

The penstock carries water from the intake to the turbine house. Unlike the uneven stream bed, the penstock has a smooth bore. This allows the water to travel smoothly through the pipe, with minimal resistance.

The penstock for these schemes will be high-pressure polyethylene pipe between 180mm and 400mm in diameter, depending on the size of each scheme. It will be delivered in short lengths, which makes it easier to get on site, then butt-welded in situ and either laid on the surface and secured with pins or shallow buried, depending on the terrain. The penstock will be trenched and buried across any fields, roads or rights of way.



Penstock is surface laid in woodlands to minimise damage to tree roots and is soon obscured by vegetation

The turbine house

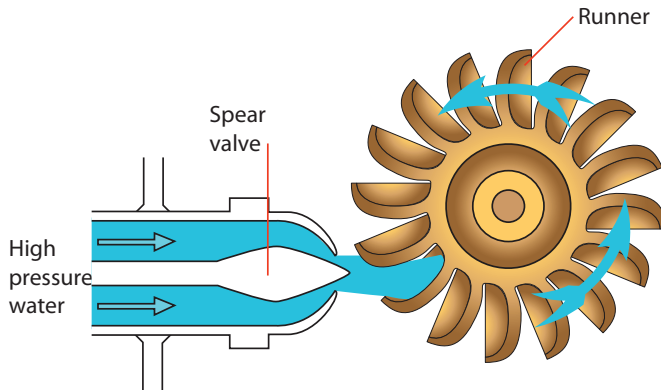
The turbine house contains the turbine and other equipment needed to generate electricity and feed it into the grid. The turbine houses for these schemes will be shed-like structures, around 3m x 3m, built on reinforced concrete foundations using materials in keeping with vernacular design.



Inside a typical turbine house, with, from left to right, the turbine housing, generator, pipework and switch gear

The turbine

All four schemes will use Turgo turbines. Patented in 1920, the Turgo turbine is a development of the classic Pelton Wheel, which was invented in the 1870s. Cheaper to manufacture and highly efficient, Turgo turbines are ideally suited to smaller high-head, low-flow installations and are in widespread use around the world.



The above diagram shows the basic design of a Turgo turbine. It involves a rotor (called the runner), which has 'buckets' attached around the perimeter. A high-pressure water jet is directed at the

buckets from one side through a spear valve, causing the runner to turn.

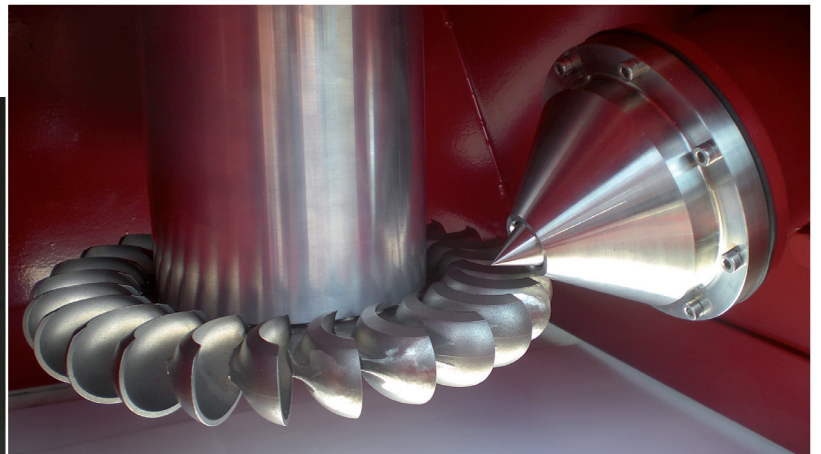
The buckets are specially designed so that almost all of the kinetic energy of the water is transferred to the runner. Because of this, Turgo turbines can achieve very high efficiencies of up to 90%.

3.3 Microgeneration Certification Scheme

To be eligible for the FIT there is a general requirement that equipment and installers are registered under the Microgeneration Certification Scheme (MCS). However, due to delays in creating an appropriate standard for hydropower, this requirement has been waived for micro hydro. This situation will be monitored and, if certification becomes necessary, the Co-operative will ensure that all requirements are met so that the schemes are FIT-compliant.

3.4 Electricity sales

The electricity will be exported to the local grid and the Co-operative will seek the best commercial price available. This is likely to be around 5.5p/kWh.



A typical Turgo turbine, left, with a close-up of the spear valve and runner, above

4. FINANCIAL PROJECTIONS

This section explains the financial projections for the schemes, including 20-year income and expenditure projections for two funding scenarios and the assumptions behind these calculations.

4.1 Projections

The expected total cost for the four micro hydro schemes is £690,000. The Co-operative will be liable for all ongoing operating costs associated with the installations and will negotiate the sale of electricity to a supply company and benefit from the FIT and any other current or future incentives.

This Share Offer is being made to fund the construction of the installations and to repay the development costs to LGV Ventures. Currently these costs (including feasibility studies, landowner agreements, planning and permitting applications and other costs) are being underwritten by LGV Ventures, using risk capital funded by grants and the Green Streets prize money. LGV Ventures will continue to fund these costs and accept the risk this entails until each scheme is granted the necessary consents. The Co-operative will only adopt the schemes once these permissions are in place.

By funding the development work ahead of the Share Offer, LGV Ventures aims to reduce the risks to subscribers and to be in a position to proceed with construction works as soon as consents are received.

However, this also means that LGV Ventures has been liable for significant risks during this development phase, including the cost of feasibility studies for schemes that have ultimately not proved viable. Recouping the development costs through the Share Offer will enable LGV Ventures to re-use its risk capital to develop further micro hydro projects.

Financial projections prepared and approved by the Board are summarised on pages 14-15. The figures are based on contracts entered into and estimates received by the Co-operative. The Directors take responsibility for the reasonableness of the projections in this Offer.

The Co-operative will commence trading when electricity generation begins. The strategic objective is to optimise returns from the installations while promoting renewable energy and energy efficiency. The projections are based on a project life of 20 years.

After 20 years, income will drop significantly because FIT payments will cease, the equipment will be fully depreciated and the landowner leases will terminate. The ownership of the turbines will be transferred to the landowners and the Co-operative may choose to continue in business or close down, as appropriate.

Returns to Members are calculated according to projected income and expenditure over the life of the project. The interest payable to Members is projected to provide an average annual return of 5% over 20 years, subject to the schemes generating sufficient surplus.

Interest is paid out of the surplus produced once the schemes are commissioned and generating electricity. This means that interest will not be paid until the schemes are commissioned and producing an income. The calculations for IRR assume that the schemes will be commissioned about 12 months after Shares are issued.

4.2 Tax relief

This Share offer is designed to be eligible for SEIS and EIS tax relief. These Government-backed schemes allow Members who are UK taxpayers to apply for income tax relief worth up to 50% (SEIS) or 30% (EIS) of the value of their subscription once the Co-operative is trading – ie generating electricity – or, in the case of SEIS only, when at least 70% of the money raised through the SEIS offer has been spent.

Your personal tax circumstances will affect the amount of tax relief available. You must be liable for at least as much tax as the amount you are claiming in relief, and you must hold your Shares for at least three years from the start of trading – ie from the point the Co-operative starts producing electricity, rather than from the date of subscription.

Both SEIS and EIS make provision for losses, so if, when you withdraw your Shares, they are worth less than you paid for them, you can set this loss (minus the initial relief) against income for tax purposes in that year (or the previous year). The schemes also allow for Capital Gains Tax relief or deferral under certain circumstances.

Only the first £150,000 of Shares applied for and paid up by Members specifying that they wish to be considered as Pioneer Investors will qualify for SEIS tax relief. The higher rate of tax relief available under SEIS reflects the higher risk for these Shares, because under the scheme rules 70% of this money must be spent before the remaining Shares can be allocated.

In this instance, the Directors will use the Share capital raised through Pioneer Investors as a deposit on the penstock required for the four schemes. At least £105,000 (70% of the £150,000) will be paid

Only the first £150,000 of Shares applied for
and paid up by Members specifying that they wish
to be considered as Pioneer Investors
will qualify for SEIS tax relief.

The 50% rate of tax relief available under SEIS
reflects the higher risk for these Shares,
because under the scheme rules
70% of this money must be spent before
the remaining Shares can be allocated.

to TGV Hydro for this purpose as soon as possible after the end of the SEIS period.

For Pioneer Investors, this means there is an extra degree of risk for their share capital, because if the Share Offer as a whole fails to reach the £550,000 minimum required and/or the schemes do not go ahead for other reasons, their money will have been spent. In the event that this happens, the Directors will make every effort to retrieve the money, but this may take a considerable time, and the money may be returned in part or not at all.

The remaining £540,000 worth of Shares will be made available only once the SEIS phase is fully subscribed. Please note, in the event that the SEIS phase is oversubscribed, Shares will be issued strictly on a first-come, first-served basis, with any applicants who miss out automatically being allocated to the EIS phase.

The Directors anticipate that the remaining Shares will be eligible for EIS tax relief at 30% for Members who are UK taxpayers. The lower rate of tax relief reflects

the lower rate of risk for these Shares, because subscribers' money will not be spent until the Share Offer has been successfully completed and the schemes have received all necessary consents.

If the Share Offer fails to reach the £550,000 minimum required, and/or the schemes do not go ahead for other reasons, all monies raised under this phase of the Share Offer will be returned to applicants in full.

The Directors will endeavour to ensure that this Share Offer qualifies for both SEIS and EIS tax relief. Based on a draft of this Offer Document, HMRC has already given the Directors advance assurance that the Offer qualifies in principle for these schemes. However, the Directors are not in a position at this stage to guarantee qualification, and applicants who wish to take advantage of SEIS or EIS tax relief should seek appropriate professional advice.

Further information about SEIS can be found in **Section 7** of this document.

How SEIS and EIS tax relief work

Example 1 – SEIS

Jenny subscribes £20,000 in the tax year 2013-14 in SEIS qualifying shares. The SEIS relief available is £10,000 (£20,000 at 50%). Her tax liability for the year (before SEIS relief) is £15,000, which she can reduce to £5,000 as a result of her subscription.

Example 2 – EIS

Jenny subscribes £20,000 in the tax year 2013-2014 in EIS qualifying shares. The EIS relief available is £6,000 (£20,000 at 30%). Her tax liability for the year (before EIS relief) is £15,000, which she can reduce to £9,000 as a result of her subscription.

- For further details about SEIS and EIS, including application procedures, please visit the dedicated pages of the HMRC website, [hmrc.gov.uk/seedeis](https://www.hmrc.gov.uk/seedeis) and [hmrc.gov.uk/eis](https://www.hmrc.gov.uk/eis)
- There is also a short, informative video about SEIS on the Government-backed **SEIS Window** website – go to seiswindow.org.uk

4.3 20-year income and expenditure projections

The following tables show the financial projections for two scenarios: capital raised entirely through the Share Offer, and capital raised through a combination of the Share Offer and loan finance. Please note that the tables start from the point of commissioning – so Year 1 represents a full year of electricity generation.

Scenario 1 – 100% of capital raised through Share Offer								
(Figures correct as of 6 February 2014)								
Year	1	2	3	4	5	Years 6-10	Years 11-20	Years 1-20
Generation (kWh)	355,407	355,407	355,407	355,407	355,407	1,777,035	3,554,070	7,108,140
Income								
FIT income	70,611	72,376	74,186	76,041	77,942	419,929	1,012,655	1,803,739
Export income	18,877	19,537	20,221	20,929	21,661	120,224	312,377	533,827
Operating income	89,488	91,914	94,407	96,969	99,603	540,153	1,325,032	2,337,566
Expenditure								
Depreciation	34,500	34,500	34,500	34,500	34,500	172,500	345,000	690,000
Operating and maintenance	22,859	23,455	24,067	24,695	25,339	136,979	333,244	590,638
Loan interest	0	0	0	0	0	0	0	0
Expenditure (including depreciation)	57,359	57,955	58,567	59,195	59,839	309,479	678,244	1,280,638
Surplus (excluding bank interest)	32,129	33,959	35,840	37,775	39,764	230,674	646,788	1,056,928
Bank opening balance	0	34,500	69,000	40,000	40,000			
Loan repayments	0	0	0	0	0	0	0	0
Operating income	89,488	91,914	94,407	96,969	99,603	540,153	1,325,032	2,337,566
Expenditure (excluding depreciation)	-22,859	-23,455	-24,067	-24,695	-25,339	-136,979	-333,244	-590,638
Bank interest	833	1,718	2,604	1,903	1,928			
Share interest to Members	-16,481	-17,839	-19,222	-19,839	-20,846	-120,357	-334,593	-549,176
Community Fund	-16,481	-17,839	-19,222	-19,839	-20,846	-120,357	-334,593	-549,176
Repayment of share capital	0	0	-63,500	-34,500	-34,500	-172,500	-385,000	-690,000
Bank closing balance	34,500	69,000	40,000	40,000	40,000			

Based on the predicted performance of the schemes,
the share of surplus payable to Members
is calculated to provide an IRR of 5% per annum,
averaged over the 20-year life of the project.

Scenario 2 – £550,000 raised through Share Offer with £140,000 balance from loan equity at 8% interest, repaid over 15 years (Figures correct as of 6 February 2014)

Year	1	2	3	4	5	Years 6-10	Years 11-20	Years 1-20
Generation (kWh)	355,407	355,407	355,407	355,407	355,407	1,777,035	3,554,070	7,108,140
Income								
FIT income	70,611	72,376	74,186	76,041	77,942	419,929	1,012,655	1,803,739
Export income	18,877	19,537	20,221	20,929	21,661	120,224	312,377	533,827
Operating income	89,488	91,914	94,407	96,969	99,603	540,153	1,325,032	2,337,566
Expenditure								
Depreciation	34,500	34,500	34,500	34,500	34,500	172,500	345,000	690,000
Operating and maintenance	22,859	23,455	24,067	24,695	25,339	136,979	333,244	590,638
Loan interest	11,200	10,788	10,342	9,861	9,341	37,335	16,475	105,342
Expenditure (including depreciation)	68,559	68,743	68,909	69,056	69,181	346,814	694,719	1,385,980
Surplus (excluding bank interest)	20,929	23,171	25,498	27,914	30,422	193,339	630,313	951,586
Bank opening balance	0	29,344	58,275	40,000	40,000			
Loan repayments	-5,156	-5,569	-6,014	-6,495	-7,015	-44,446	-65,305	-140,000
Operating income	89,488	91,914	94,407	96,969	99,603	540,153	1,325,032	2,337,566
Expenditure (excluding depreciation)	-34,059	-34,243	-34,409	-34,556	-34,681	-174,314	-349,719	-695,980
Bank interest	628	1,385	2,132	1,699	1,724			
Share interest to Members	-10,779	-12,278	-13,815	-14,806	-16,073	-101,178	-325,844	-494,773
Community Fund	-10,779	-12,278	-13,815	-14,806	-16,073	-101,178	-325,844	-494,773
Repayment of share capital	0	0	-46,761	-28,005	-27,485	-128,054	-319,695	-550,000
Bank closing balance	29,344	58,275	40,000	40,000	40,000			

4.4 Assumptions

The projections are based on the following principal assumptions:

1. Annual electricity production for the four installations will be in line with the estimates stated. In the event that production falls below the projected levels, the revenues of the Co-operative will be reduced. Warranties and/or insurance will be taken out to cover any losses incurred due to system failures.
2. Current expectations relating to the global energy market, the UK electricity industry, UK Government policy and the desirability and promotion of electricity from renewable sources will remain reasonably consistent and reasonably favourable to micro hydro

installations over the next 20 years, resulting in continuing demand for their electricity and related environmental attributes.

3. Costs and prices similar to those currently obtainable will be achieved throughout the life of the installations (after allowance for annual inflation).
4. Operating and maintenance costs will be incurred from the start of operations. Maintenance costs will continue to rise as the equipment gets older. It is assumed that operating and maintenance costs will rise no faster than income. It is known that debris collects above weirs and this will need occasional clearing. The financial projections include provision for manual debris clearance to be carried out as needed.

Any of these assumptions not being realised is likely to result in adjustments to the projections within the overall project plan. Projections and assumptions such as those above are inherently less reliable over longer time spans.

4.5 Notes on the financial projections

1. The total cost of £690,000 is based on capital cost quotes from TGV Hydro with 5% contingency built in.

2. Operating and maintenance includes insurance, maintenance, rent, rates and administration costs. Running and administration costs have been shared across the four schemes, and in practice many of these costs will be a single central payment.

3. Under Scenario 1 (100% share capital), the distribution of surplus to Members is calculated to produce an IRR of 5% per annum, averaged over 20 years. Under Scenario 2 (£140,000 loan equity), the surplus produces an IRR for Members of 5.2% per annum, averaged over 20 years. However, under this scenario the Community Fund receives some £54,000 less over the life of the project.

4. Payment of interest will begin only when income from the FIT scheme is received and the Co-operative has sufficient funds available in the bank. It is anticipated that the Co-operative will not be in a position to pay interest for the first two years after the Share Offer. Interest will be distributed after the end of each financial year, once the accounts have been approved.

5. In addition to paying Members interest on their Shares, the Co-operative intends to buy back Members' share capital gradually over the life of the scheme. There are two good reasons for this:

- (i) Cash goes back to Members for them to use or buy Shares in further co-operative schemes, rather than sitting untouched in a bank account for 20 years.
- (ii) Members' capital is not tied up for the whole period – useful if Bank interest rates rise above the projected returns for this Offer.

Please note that the distribution of surplus to Members and the Community Fund will take priority over buying back Shares. Share buy back will take place only when there are sufficient reserves in the bank, with the rate of buy back being set to maintain just a comfortable level of reserves. To comply with SEIS and EIS requirements, there will be no repayment of share capital until the end of the third year of trading.

6. The Community Fund will be managed by LGV Ventures. Five per cent of the income received by the Fund will go to support TGV Hydro's peat bog restoration work and other carbon reduction projects. The remaining 95% will be used by LGV Ventures and LGV to support projects that build local resilience and

aid the community's transition to sustainability. This support may take many forms, including direct grants, loans, joint working, and research and development with other local community groups. In time, LGV will be consulting with Members on the best way of doing this, to ensure the fund does not simply replicate existing sources of funding. If the project is fully funded by share capital and all other assumptions made in the forecasts prove to be correct, payments to the Community Fund are predicted to start in Year 1 at £16,481, rising year on year thereafter to provide almost £550,000 over the life of the project.

7. Inflation on all income and expenditure other than grid electricity is modelled at 2.5% per annum over the 20-year period. The inflation rate assumed for grid electricity is 3.5% per annum.

8. Income is based on the FIT, which is guaranteed for a 20-year period and linked to RPI, and on the electricity being exported and sold at the most beneficial rate the Co-operative can negotiate.

9. Depreciation of equipment is straight-line over the 20-year period and creates a fund to pay back Members' share capital. Capital will be returned to Members as cash flow allows, subject to the Co-operative generating a profit and maintaining a contingency reserve within the Co-operative.

10. Insurance costs are estimated at £1,000 per year per installation; this is an estimate based on similar schemes elsewhere. Competitive quotes will be obtained near the point of commissioning.

11. Administration costs for the Co-operative are estimated at £4,500 a year. This covers maintenance of the membership database, phone, email and postal support of Members, preparation of papers for the Annual General Meeting, the annual return and accounts, and FCA and other regulatory fees. The Co-operative will produce annual accounts and, as a small business, will apply for the exemption from audit.

12. Interest on cash in bank is set at 2.5%.

13. All profits are distributed to Members or gifted to either LGV Ventures or TGV Hydro, so the projections do not predict a liability for corporation tax. Note that Members are likely to be liable for income tax on the interest they receive on their Shares.

14. Normal monthly cash expenditure is expected to be small and will be covered amply by electricity sales and FIT income. The projections anticipate that the Co-operative will be cash positive from Year 1 of trading onwards.

15. Projections are based on a 20-year FIT period and the landowner leases will be set to terminate at approximately the same time as the FIT income.

5. RISK FACTORS

All investment and commercial activities carry risk, and potential subscribers should take appropriate advice and make their own risk assessment while bearing in mind the social and environmental benefits of the project. Attention is drawn to the following...

5.1 General risks

- The value of Shares can fluctuate according to the value of the underlying business.
- Offer Shares will not be traded on a recognised stock exchange and are not transferable.
- Members wishing to withdraw share capital will be able to apply to the Board after the end of the third year of trading. Withdrawal of share capital is at the discretion of the Board and will not be refused unreasonably.

5.2 Renewable energy industry risks

- Government policy towards renewable energy may change. However, throughout the operation of the FIT and similar previous schemes, the Government has maintained a commitment to 'grandfathering'. This ensures that the tariff a project is registered for at the start of operation remains the same for the duration of the incentive period. Therefore once the schemes are commissioned, the Co-operative's FIT income is unlikely to be affected by any changes to the FIT regime. The FIT is also linked to RPI, which ensures it is not eroded by inflation.
- That said, any changes to the FIT before the schemes are registered could result in changes to the projections, or, in the worst case, non-viability of the project. The projections are based on the FIT rates set by Ofgem for 1 April 2014 – 31 March 2015, adjusted for RPI.
- Technological developments may render certain technologies obsolete, though such applications require long lead times and are unlikely to render existing renewable energy projects redundant.
- Long-term changes in weather patterns could result in less rainfall and lower stream levels. Likewise, abnormal short-term weather conditions could affect levels of generation. However, overall patterns outside the anticipated parameters are unlikely.
- Operational costs may rise faster than expected during the life of the project.

5.3 Risks specific to the Share Offer

- The schemes may not obtain the consents needed. The Directors have tried to minimise this risk through robust feasibility studies and contact with the regulators. If the chosen schemes fail to

obtain permission, the Board reserves the right to substitute alternative equivalent schemes.

- The Share Offer may fail to raise the capital required. Based on the high level of interest in LGV Venture's first micro hydro co-operative share offer, and on the experience of other renewable energy co-operatives in the UK, the Directors believe that the benefits of this project and the projected return will ensure that the necessary sum is raised.
- Landowner agreements are already in place for Nant y Gadair and Gargwy Fach, and options are currently being finalised with the landowners for the Nant yr Hafod and Blaen Dyar schemes. These agreements grant the rights to lease the sites for the full 20-year term of the project and ensure that if the current landowners sell the sites, the installations can legally remain in place.

5.4 Risks specific to the Co-operative's long-term operation

- Warranties and insurance will be in place to cover loss of income in the event of system failures. Accidental and malicious damage and public liability will also be covered under insurance. However, equipment failure due to exceptional circumstances would increase maintenance costs and this would affect income.
- The Government has exempted micro hydro installers and equipment from MCS registration. Should this exemption lapse and our chosen installers or equipment not qualify, then the project might be ineligible for the FIT. As the installers and equipment are on the transitional MCS list, this is considered highly unlikely.

5.5 Risks specific to Pioneer Investors

- See 7.3 for an explanation of Pioneers.
- Pioneer Investors will receive their Share allocation before the end of the Share Offer period and their subscriptions will be spent in whole or in part before the conclusion of the Share Offer. If the Share Offer fails to raise the required funding, despite any extension, and the project does not proceed, this could result in a delay in Pioneer Investors getting their money back, or, in the worst case, a partial or complete loss of their capital. Pioneer Investors might not be eligible for SEIS tax relief under this circumstance.

6. MANAGEMENT AND ADMINISTRATION

This section gives details about the Board and the running of the Co-operative.



6.1 The Board

The current Board is a transitional board for the purposes of setting up the Co-operative, running the Share Offer and overseeing the installation of the micro hydro schemes. Board elections from the new membership will be held at the first AGM in June 2015.

ANDREW FRYER

Andrew is one of the founding members of Llangattock Green Valleys and is currently Chair of LGV CIC and LGV Ventures CIC. He is also a director of LGVMH1.

He moved to Llangattock from London in 2001 after 17 years with the Post Office in a variety of roles, including Director HR for International Business, Project Manager and Advisory Director HR for the South African Post Office.

For the past eight years he has run an award-winning environmentally friendly bunkhouse, which he built from scratch. He also works as a panel member on Employment Tribunals, as a Business School tutor for the Open University, and has a wide range of roles in not-for-profit and community organisations, mainly in the tourism, education and environmental sectors.

He has three school-age daughters, which keeps him focused on local issues. Andrew has been involved with Llangattock Green Valleys since its inception in 2009 and has a history in renewable energy going back (some decades!) to when, aged 18, he worked as a solar panel installer.

JACQUELINE (JACKIE) CHARLTON

Jackie is one of the founding members of Llangattock Green Valleys and is currently Company Secretary to LGV CIC and LGV Ventures CIC. She is also a director of LGVMH1.

She has lived in Llangattock since 1989 and her professional background is in equality and diversity consultancy. Jackie has served as a Non-Executive Director of a local health trust and a Non-Officer Member of a local health board. She also spent 10 years as a Welsh Assembly Member of the National

Park, during which time she developed a keen interest in local community-based social enterprises and community-based environmental entrepreneurship.

In 2009, this led her to set up a local woodland group, which is now a thriving concern with a growing membership and over 30 acres of local woodland under management. Llangattock Community Woodlands has recently attained charitable status and currently supplies the community with around 70m³ of sustainably grown woodfuel a year, along with other woodland products.

Jackie's broad experience has given her strong practical and management skills, as well as a thorough understanding of how community-based renewable energy schemes can bring people together to achieve a collective goal and share the benefits. She is committed to the Co-operative's success and to ensuring that it brings benefits to the whole community.

MICHAEL BUTTERFIELD

Michael is one of the founding members of Llangattock Green Valleys and is currently a director of LGV CIC and LGV Ventures CIC. He is also a director of LGVMH1.

Michael moved to Llangattock in 2002 with his wife and young family. His wife grew up in the village, and he had also spent time in the area as a child, so when the couple decided they wanted to raise their children in a rural community, Llangattock was the natural choice.

Michael's background is in finance and banking, but when he moved to Llangattock he switched to property development and now manages a portfolio of rental properties.

This career change has given him the opportunity to get involved in a wide range of local community projects and in the process he has developed a keen interest in renewable energy and how it can help build sustainability in rural communities.

Through his director role with Community Energy Wales and contact with the Welsh Government and the Department of Energy & Climate Change, he has sought to highlight the challenges facing rural communities and to encourage decision makers to develop renewable energy policies that are fit for purpose and will meet the needs of communities both now and in the future.

Michael is also a founding member of Llangattock Litter Pickers, a volunteer group which, since its first community litter pick in November 2009, has removed over 3.5 tonnes of litter from road and canal-side verges in and around the community.

STEPHEN (STEVE) SHARP

Steve is a director of LGV CIC and LGV Ventures CIC. He is also Chair of LGVMH1.

Steve grew up in Surrey but has lived in Llangattock with his family since 1990. He has extensive experience in sales and project management, including roles for Thames Water and multinationals such as Unilever. He has also set up and run successful logistics and language services companies. He currently works as an export communications consultant for UK Trade & Investment, and he also runs a self-catering holiday let on Ffawyddog.

Steve has been involved with various local community organisations, including Crickhowell High School PTA, Crickhowell Tennis Club and the local Ffawyddog Common group.

He joined LGV in 2011 to further his interest in renewable energy and to put something back into the community. He has subsequently taken on responsibility for developing the organisation's micro hydro projects.

Steve is delighted that, after a long period of planning, four more schemes are now coming to fruition, and he is committed to seeing the schemes through to commissioning.

SIMON WALTER

Simon is one of the founding members of Llangattock Green Valleys and is currently a director of LGV CIC and LGV Ventures CIC. He is also director of LGVMH1.

Simon grew up in Llangattock but moved to London in his late teens to find work. His career has been varied. He started out in engineering, then worked in

construction, spent time with a plant hire company, moved into data logistics, then chucked it all in to become a despatch rider. He now runs his own web design and hosting company, with clients ranging from top London photographers to an international leadership development company.

He moved back to Llangattock in 2004 and has a keen interest in the practical application of renewable technologies. On the home front, both he and his partner are working steadily to make their home more energy efficient and environmentally friendly, including planting up a two-acre field with over 2,300 native broadleaf saplings – the start of a brand-new woodland.

He hopes that being a director and helping to develop a second renewable energy co-operative in Llangattock will benefit both Members and the community as a whole.

6.2 Current and intended Shareholdings of the Directors

The five Directors intend to subscribe no more than £1,000 each in Shares. This intention does not reflect lack of confidence in the scheme: rather it is to ensure that as many other people as possible are able to buy Shares and benefit from the project.

6.3 Disclosure

None of the Directors has, for at least the past five years, received any convictions (for any fraudulent offence or otherwise), or been involved in any bankruptcies, receiverships or liquidations, or received any public recrimination or sanction by a statutory or regulatory authority or designated professional body, or been disqualified from any function by any court.

6.4 Conflicts of interest

All of the Co-operative's Directors are also directors of LGV Ventures CIC, LGV CIC and LGVMH1. In time, it is expected that the Boards of all four organisations will develop different teams of directors, albeit with some overlap.

6.5 Remuneration

No remuneration has been paid by the Co-operative to the Directors. When the schemes are generating electricity, each Director will be entitled to claim fees and/or expenses not exceeding £50 per annum, in addition to travel expenses. Directors' Share applications will be met in full, but there are no pension schemes or Share option schemes and, except for the reimbursement of expenses, there are no other benefits for Directors of the Co-operative.

6.6. Board practices

Directors serve in accordance with the Co-operative Rules. There are no service contracts for them or the secretary. The Co-operative will have no employees and the business is not dependent on key individuals. Day-to-day operations will be managed by the Co-operative under the supervision of the Board. The Board will bear ultimate responsibility to the Members.

As an Industrial and Provident Society, the Co-operative complies with statutory requirements and those of the FCA. As Shares will not be listed, the Co-operative is not obliged to comply with The Combined Code on Corporate Governance.

The Co-operative will strive to promote co-operative values and principles, including:

- voluntary and open membership
- democracy and equality
- autonomy and independence
- economic participation by members
- opportunities for education
- concern for community
- co-operation among co-operatives

6.7 Accounts

The Co-operative was incorporated on 20 December 2013. Its financial year-end is 31 December. At the time of commencing the Share Offer, except for the issue of five Shares at par, no other transactions had taken place.

6.8 Dividend policy

Members' Shares will attract a payment of interest annually in arrears and there is currently no policy to pay dividends (see **Glossary**, pages 25-26, for the definition of dividends). Interest will vary according to financial performance.

6.9 Legal proceedings

There have been no governmental, legal or arbitration proceedings relating to the project or to the Co-operative and none are pending or threatened that could have a significant effect on the financial position or profitability of the Co-operative.

6.10 Rules of the Co-operative

Industrial and Provident Societies such as this Co-operative are governed by rules approved by the FCA (not by Memorandum and Articles of Association). The Co-operative's Rules are available online and in printed format (see back cover for details).

6.11 Further information

Any other documents mentioned in this Offer are available from the Co-operative (see back cover for contact details).

General information sourced from third parties in this Offer Document has been accurately reproduced and, as far as the Directors are aware and are able to ascertain from information published by that third party, no facts have been omitted that would render the reproduced information inaccurate or misleading.



The waterfall at the top of the Blaen Dyar stream. The drop can be gauged by the size of the dumped car body below. (Plans for this scheme incorporate steel guards to protect it from such debris)

7. THE SHARE OFFER

7.1 Reasons for the Offer and use of proceeds

This Offer is being made so that:

- The Co-operative can install four micro hydro schemes on local streams to generate renewable electricity.
- Members can be part of a local project that offers real community benefits and a financial return.
- Members can contribute to a local carbon-negative vision and support Welsh and Brecon Beacons National Park Authority objectives for producing renewable energy and reducing CO₂ emissions.
- Members can make a positive contribution to reducing the area's reliance on non-renewable energy sources, helping it to become more sustainable and resilient.

7.2 Offer Shares

Six hundred and ninety thousand (690,000) Shares of £1 are offered at par and payable in full on acceptance of an application on the terms and conditions of this Offer Document. The Shares, which will not be traded on any stock exchange, have been created under the Industrial and Provident Societies Act 1965.

Successful applicants will receive Share Certificates and their details and holdings will be recorded in a Share Register to be kept by the Co-operative at the Crickhowell Resource & Information Centre, Beaufort Street, Crickhowell, Powys NP8 1BN, or any successor business address. Each person or organisation issued with Shares becomes a Member of the Co-operative, with membership rights defined in the Rules.

The principal rights are:

- One vote per holding on resolutions of the Members, including in relation to the appointment of Directors.
- The right to receive a proportionate annual interest payment as a return on the subscription (subject to available profits).
- The right to the return of the original capital by the end of the life of the project (subject to available surplus assets and any new business of the Co-operative).
- Eligibility for election to the Board.

7.3 Pioneer Investors

To make sure that the project goes ahead as planned, the Co-operative anticipates the need to spend some funds before the conclusion of the whole Share Offer. Members applying are therefore asked on the Application Form if they would like to be considered as Pioneer Investors.

The first £150,000 worth of Shares applied for and paid up by Members who have asked to be Pioneer Investors will be issued as soon as this threshold is reached. In the first instance, these Shares will be offered to members of LGVMH1, applicants to LGVMH1 who missed out on shares due to the offer being oversubscribed, and members of LGV. The Directors expect a rapid take up of these Shares, but if any of this allotment of Shares remains at the end of the first two weeks, the Shares will be made generally available.

Once the full £150,000 is raised, the funds will be made available to the Co-operative to pay TGV Hydro a deposit for the penstock required for the four schemes. This money will be paid to TGV Hydro as soon as possible. At least 70% (£105,000) of Pioneer Investors' subscriptions will be spent before the remainder of the Shares are allocated.

Members wishing to be considered as Pioneer Investors may qualify for SEIS rather than EIS tax relief, although this cannot be guaranteed. Their funds are at higher risk than those of other subscribers because at least 70% of their monies will be spent before the end of the Share Offer period. If the Share Offer does not proceed to completion, it may take a considerable time to recoup Pioneer Investors' money, and this money may be returned in part or not at all.

There is no guarantee that any Member's wish to be considered as a Pioneer Investor will be fulfilled. In the event that the SEIS phase of the offer is oversubscribed, Shares will be issued strictly on a first-come, first-served basis, with any applicants who miss out automatically being allocated to the EIS phase.

Prospective subscribers should note that despite the different phases of the Share Offer, there are no separate Share classes. All Shares, whenever issued, are equivalent Member Shares carrying exactly the same rights. Similarly, all Members of the Co-operative will have equal status. The term Pioneer Investor is used only to denote a Member who is willing to have Shares allotted before the end of the Share Offer and to accept the additional risk that this entails.

7.4. Interest payment/dividend

Interest will be paid on the balance of each Member's account as explained in 4.5. Each Share also carries a right in theory to an equal part in any declared dividend, although it is not the intention to declare dividends in addition to annual interest payments. The date on which entitlement to interest (or any dividend) arises will be announced each year. It is envisaged that any interest (or dividend) unclaimed for a period of seven years will be cancelled for the benefit of all Members. There are no restrictions on interest and dividend payments and no special procedures have been established for non-resident holders.

7.5. Voting rights

Each Member has one vote, regardless of the number of Shares held. There are no pre-emption rights.

7.6 Rights to share in profits/surpluses

All Members are entitled to share in interest (and dividends) declared out of annual profits, with such payments divided equally between the total Shares in issue. This means that a Member with 10,000 Shares has a single vote but will receive interest or dividends on all 10,000 Shares. When the project comes to the end of its life, Members may choose to liquidate the Co-operative, in which case assets will be realised and the net proceeds applied in repaying any remaining share capital.

7.7 Withdrawal of Shares

Shares may be withdrawn in accordance with the Rules. Members do not have an automatic right to cash in their Shares but the Board has the power to permit Shares to be withdrawn by agreement between the Board and the Member. Members can apply to withdraw all or part of their share capital after the end of the third year of operation, and requests will not reasonably be refused, provided the necessary funds are available.

Please note that if you are planning to claim either SEIS or EIS tax relief, the rules for these schemes state that Shares must be held for at least three years from the start of trading – ie when the schemes are generating electricity. This is **not** the same as the date of subscription.

In addition, the Board has the power to return share capital to Members at its discretion. As outlined in 4.5 the Board intends to buy back Members' Shares gradually over the 20-year life of the project, subject to funds being available. Share buy back will begin only after the three-year SEIS/EIS deadline has passed.

7.8 Taxation

Interest payments made to Members will be subject to UK taxation. It is expected that payments will be made gross and subscribers will be responsible for declaring this income on their tax returns.

7.9 Provisions on the death of a Member

In accordance with the Co-operative Rules, if a Member dies their Shares can be left as part of their estate. The person who inherits the Shares can either keep them, apply to the Board to cash them in, or transfer them to any other person who qualifies to be a Member of the Co-operative.

7.10 Subscribing on behalf of children

In accordance with the Co-operative Rules, children under 16 years of age cannot become Members. However, parents, grandparents and any adult who meets the Offer eligibility criteria may subscribe as a trustee or nominee on behalf of child. Please note that the individual subscription limit of £20,000 includes any Shares purchased on behalf of a child, and that you may need to take advice on any tax implications. Shares issued to trustees or nominees can be transferred to the child when he or she reaches the age of 16. Please see the **Guidance Notes** on page 27 for further details.

Parents, grandparents and any adult who meets
the Offer eligibility criteria may subscribe
as a trustee or nominee on behalf of child.

Shares issued to trustees or nominees can be transferred
to the child when he or she turns 16.

8. TERMS AND CONDITIONS

8.1 Eligibility

The Offer is open to anyone over 16 years of age who meets the membership requirements set out in the Co-operative Rules.

8.2 Minimum and maximum holdings

The minimum number of Shares that can be applied for in this Offer is 250 and the maximum (save for other Industrial and Provident Societies) is 20,000.

8.3 Application procedure

- Anyone interested in applying for this Offer is strongly advised to take appropriate independent financial and other advice.
- Shares can be applied for using the **Application Form** that follows on from the **Guidance Notes**.
- By delivering an Application Form, an applicant offers to subscribe, on the terms and conditions contained in this Offer Document, for the number of Shares specified, or such lesser number as may be accepted.
- Once an application has been made it cannot be withdrawn.

- Multiple subscriptions will be admitted providing that they do not result in a Member (other than an Industrial and Provident Society) holding more than the statutory limit of 20,000 Shares.
- An applicant who receives Shares agrees to automatic membership of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd and to be bound by its Rules.

8.4 Consequences if the Offer is unsuccessful

If less than £550,000 is raised, the Board will not proceed with the project. Subscriptions will be returned to applicants as soon as is practical. It may take longer for the return of Pioneer Investors' subscriptions, and there is a risk that these monies may be returned in part or not at all.

If a sum between £550,000 and £690,000 is raised, the balance will be funded from loan equity.

Neither the Co-operative, nor its Directors or advisors will be responsible for any loss suffered by applicants as a result of this provision.

8.5 The Share Offer timetable

The SEIS offer will remain open until 3 March 2014 or until the first £150,000 worth of Shares have been sold to Pioneer Investors. The EIS offer will remain open until 30 April 2014 or until the remaining £540,000 worth of Shares have been sold, subject to a maximum time limit of three months.

If at the end of this time at least £550,000 worth of Shares have been sold, the Directors will seek loan capital to meet the full £690,000 required to fund the four schemes.

Subject to the Share Offer reaching the full target by 30 April, the Board expects the following timetable to apply*.

17 February 2014	SEIS (Pioneer Investor) offer launched
3 March 2014	SEIS offer closed
4 March 2014	EIS offer opened
30 April 2014	EIS offer closed
30 April 2014	Share certificates issued to Pioneer Investors
20 May 2014	Offer results published
20 May 2014	Monies returned on unsuccessful or scaled-down applications if the Offer is oversubscribed
20 May 2014	Share certificates issued to remaining Members
June 2015	First AGM and Board elections.

* Any extension to the Offer Period will have a corresponding effect on this timetable.



A section of the Gargwy Fach stream

8.6 Commitments and confirmations by applicants

On submitting an Application Form, each applicant or applicant organisation confirms that he/she/it:

- Meets the eligibility criteria.
- Is not (unless an Industrial and Provident Society) making multiple applications for a total of more than 20,000 Shares.
- Is not relying on any information or representation in relation to the Offer Shares, Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd, or the micro hydro installations that is not included in this Offer Document.
- Shall provide all additional information and documentation requested by the Co-operative in connection with their application, including in connection with taxation, money laundering or other regulations.

Any person signing an Application Form on behalf of another person or organisation undertakes that they are authorised to do so.

8.7 Procedures on receipt of applications

- Offer cheques/bankers' drafts will be presented on receipt and may be rejected if they do not clear on first presentation.
- Surplus application monies may be retained pending clearance of successful applicants' cheques.
- Applications may be rejected in whole or in part, or be scaled down, without reasons being given, pending clearance of successful applicants' cheques.
- Application monies in respect of any rejected or scaled-down applications shall be returned by crossed cheque, payable to the applicant, to the

postal address on the Application Form no later than one month after the end of the Offer Period (including any extension).

- No interest is payable on submitted application monies that become returnable.
- Applications on incomplete or inaccurate Application Forms may be accepted as if complete and accurate.
- The Co-operative reserves the right not to enter into correspondence with applicants pending the issue of Share Certificates or the return of application monies.
- Results of the Offer will be published on LGV's website, llangattockgreenvalleys.org, and by press release within one month of the Offer being closed.
- In the case of oversubscription, Directors' applications will be met in full and the remaining Shares will be allocated strictly on a first-come, first-served basis.
- Share Certificates will be issued to successful applicants one month after the end of the Offer Period.

8.8 Pricing, trading and dealing arrangements

The Board has resolved to offer Shares at their par value of £1. As the Co-operative intends paying interest on Members' Shares each year from such time that the schemes are commissioned and FIT payments are made, retained profits will not accumulate, the underlying asset value of each Share is likely to remain at £1, and any Share redemption will take place at par.

8.9 Governing law

This Offer Document and the terms and conditions of the Offer are subject to the law of England and Wales.

GLOSSARY

Applicant	An applicant for Offer Shares through submission of an Application Form.
Application Form	The form in this Offer Document, which must be completed and returned in accordance with the terms and conditions of this Offer and the Guidance Notes.
Application monies	The total gross sum realised by this Offer.
Board	The Board of Directors of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd.
CIC	Community interest company. CICs work like Limited companies, but have to pass a community interest test. They also provide an 'asset lock', which ensures that assets and profits are used for community benefit.
CO₂	Carbon dioxide, a natural gas emitted during the burning of fossil fuels and regarded as the main cause of global warming.
Community Fund	The special fund set up to receive a 50% share of the surplus income from the schemes. The fund will be managed by LGV Ventures and will be used to support projects that build local resilience and aid the community's transition to sustainability.
Directors	The Directors of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd.
Dividend	A discretionary allocation of profit paid to Members on the basis of their transactions with the co-operative rather than the amount of capital subscribed. Unlikely to apply to this Co-operative.
Distribution Network Operator (DNO)	An organisation responsible for electricity distribution in an area of the UK.
Enterprise Investment Scheme (EIS)	Government-backed scheme designed to help smaller companies raise finance by offering a range of tax reliefs to individuals who buy new shares in those companies.
Feed-in Tariff (FIT)	Incentive for microgeneration up to 5MW introduced by the Government on 1 April 2010.
Head	The height difference between the intake point of a micro hydro scheme and the turbine.
Hydrolite	A Swansea Valley-based company that designs, manufactures and installs Turgo turbines for micro hydro schemes. Part-owned by TGV Hydro.
kW (kilowatt)	A unit that measures power and is equal to one thousand watts.
kWh (kilowatt hour)	A unit that measures energy and is equal to the energy that can provide 1kW of power for one hour.
Llangattock Green Valleys CIC (LGV)	A community interest company (Registered No. 7255186) set up in May 2010 with the aim of reducing carbon emissions, generating renewable energy and creating a more sustainable future for Llangattock and the surrounding area.
LGVMH1	Llangattock Green Valleys Micro Hydro (1) Cooperative Ltd, LGV's first micro hydro co-operative, set up in autumn 2013.
LGV Ventures	A community interest company (Registered No. 7917807) set up as a trading subsidiary of LGV.
Micro hydro	Small-scale installations that use the natural flow of water to generate renewable electricity.
MW (megawatt)	A unit that measures power and is equal to one million watts.
MWh (megawatt hour)	A unit that measures energy and is equal to the energy that can provide 1MW of power for one hour.
NRW	Natural Resources Wales, the new body that brings together the work of the Countryside Council for Wales, Environment Agency Wales and Forestry Commission Wales. Responsible for environmental permitting and abstraction licences for micro hydro schemes.
NRW pre-application	The process of submitting plans for micro-hydro schemes to NRW ahead of the formal permitting applications. This ensures that any problems are revealed at an early stage, saving time and smoothing the way for successful applications. All four schemes in this Co-operative have been submitted for pre-application approval, with guidance received on three of the schemes and feedback pending on the remaining scheme.

Offer	The Offer of Shares in Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd contained in this Offer Document.
Offer costs	The expenses incurred by or on behalf of the Co-operative in issuing this Offer Document.
Offer period	The period during which the Offer will remain open (including any extension), as set out in the Share Offer timetable on page 23 of this Offer Document.
Offer Shares	New shares of £1 in Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd, offered at par on the terms and conditions of this Offer Document and payable in full on application.
Pioneer Investor	A Member who applies for a share of the first £150,000 worth of Shares in the Co-operative. These Shares carry a higher risk, but may also be eligible for SEIS tax relief at 50%. See 7.3 for details.
Project	The proposed ownership and operation by the Co-operative of the four proposed schemes.
Projections	The financial projections for the Co-operative set out in this Offer Document.
Rules	The Rules of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd, which are available online at llangattockgreenvalleys.org/shareoffer or via the contact details on the back cover of this Offer Document.
Seed Enterprise Investment Scheme (SEIS)	Government-backed scheme designed to help small, early-stage companies raise equity finance by offering a range of tax reliefs to individuals who buy new shares in those companies. It complements the existing Enterprise Investment Scheme (EIS) and is intended to recognise the particular difficulties that very early stage companies face in attracting investment by offering tax relief at a higher rate than that offered by EIS.
Shareenergy	Shareenergy Co-operative Ltd (shareenergy.coop). An Industrial and Provident Society. Registered No. 31237R. Registered Office: The Pump House, Cotton Hill, Shrewsbury SY1 2DP. Shareenergy specialises in helping community groups set up renewable energy co-operatives. Shareenergy is managing the administration of this Share Offer and will provide ongoing Member administration once Shares are issued.
Site(s)	The location(s) of the proposed micro hydro installations.
TGV Hydro Ltd	The Brecon Beacons-based supplier for the project's micro hydro schemes. TGV Hydro has pioneered and championed the emerging micro hydro market in Wales. (tgvhydro.co.uk).
Terms and conditions	The terms and conditions of the Offer contained in and constituted by this Offer Document.



Site of the Blaen Dyar scheme – the steep drop means this scheme attains an impressive head of 175 metres

GUIDANCE NOTES

Applying for Shares

The Offer is open to individuals, Industrial and Provident Societies and other organisations. It is only possible to apply for Shares in Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd by completing the Application Form.

Before completing the Application Form you should consider taking appropriate financial and other advice, particularly in relation to any aspect of the Offer Document that is not clear to you.

Your attention is particularly drawn to:

- The Risk Factors section (**Section 5**), which describes risks relating to subscription in the Offer Shares.
- Terms and conditions of the Offer (**Section 8**), because by completing the Application Form you will make an irrevocable offer that may be accepted by Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd.
- The Rules of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd (available to download at llangattockgreenvalleys.org/shareoffer), because in buying Offer Shares you will become a Member of the Co-operative and will be bound by those Rules.

Amount to subscribe

The price of each Share is £1. You should decide how many Shares you want to buy and state the total amount you wish to subscribe on the form. The minimum subscription is £250 (250 Shares), and the maximum subscription is £20,000 (20,000 Shares), except in the case of Industrial and Provident Societies, where there is no upper limit on the allowed Shareholding. Annual interest payments will be based on the number of Shares you hold, but you will only have one vote, regardless of the number of Shares you hold.

Tax relief

This Share Offer is designed to be eligible for SEIS and EIS tax relief, so that Members who are UK taxpayers can claim tax relief on their subscription. Applicants who want to be considered as Pioneer Investors may be eligible for SEIS tax relief. Other applicants may be eligible for EIS. Please make sure you understand the risks and rules of these schemes if you tick any of the boxes in this section of the form.

Personal details

You may apply as an individual or, providing you are properly authorised, on behalf of an Industrial and Provident Society or other organisation. Please note that you cannot apply for Shares in joint names.

For legal reasons, persons under 16 years of age cannot become Members. If you wish to subscribe as a trustee or nominee on behalf of a child you may need to take advice on any tax implications. Please note that the maximum subscription of £20,000 includes any Shares purchased as a nominee for a child.

Shares issued in these circumstances can be transferred to a child when he or she turns 16, and the Board will endeavour to assist with that intention when confirmed at a later date. If you wish to take the Shares as a nominee or trustee for a child, please complete the relevant section of the Application Form.

Priority application

The number of Offer Shares you apply for will not necessarily be the number of Shares you will receive.

If the Offer is oversubscribed your application may be scaled down or rejected in its entirety. All applications are welcome, but in the event that the Offer is oversubscribed, Shares will be allocated strictly on a first-come, first-served basis.

Declaration

In signing the Application Form as an individual, you are personally making an irrevocable offer to enter into a contract with Llangattock Green Valley Micro Hydro (2) Co-operative Ltd. If you are signing on behalf of an organisation or on behalf of another individual, you are personally representing that this is in accordance with due explicit authorisation.

Non-UK residents must take responsibility for ensuring that there are no laws or regulations in their own country that would prevent them from subscribing to or receiving income from a UK co-operative. Under Money Laundering Regulations, you may be required to produce satisfactory evidence of your identity and it is a condition of the Offer that you do so as requested. You should note that if the Offer is unsuccessful, it will become necessary to return money to applicants.

Payment

Please attach a cheque drawn on a UK bank or building society, or make a bank transfer (using the account details overleaf), for the exact amount you have entered under the 'Amount to subscribe' section on the Application Form. If there is a discrepancy between the two, or if the cheque is not honoured on presentation, your application may be rejected without further communication.

You may apply as an individual or, providing you are properly authorised, on behalf of an Industrial and Provident Society or other organisation.

Please note that you cannot apply for Shares in joint names.

Share Offer – Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd

- Read the accompanying Offer Document.
- Pay special attention to the Risk Factors set out in the Offer Document.
- Consider whether you need to take financial or other advice in relation to the terms and conditions of the Offer contained in the Offer Document.
- Read the Rules of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd. These are available to download at llangattockgreenvalleys.org/shareoffer. Or call 0800 206 1915 to request a copy by post.

(The minimum investment is £250 and the maximum investment, with the exception of Industrial and Provident Societies, is £20,000.)

Other applicants: I wish to claim Enterprise Investment Scheme (EIS) tax relief.

Please tick if you do NOT wish to become a member. ☐

Postcode:

Position of authorised signatory:

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DECLARATION

I confirm my understanding that:

- This application may be withdrawn if a supplementary Share Offer Document is issued, but not otherwise, and if and when accepted by Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd forms a contract subject to English and Welsh law on the terms and conditions of the Offer Document.
- An applicant or applicant organisation who/that is not UK resident is responsible for ensuring that this application complies with any laws or regulations applicable outside the UK to which he/she/it is subject.
- If the Offer is oversubscribed it is possible that an otherwise eligible application will not be accepted in part or in whole.
- If the funds raised do not reach the minimum target of £550,000, application monies will be returned, except in the case of Pioneer Investors, where monies may be returned later, and in part or not at all.

I confirm that:

- I, the applicant, have read the Offer Document (including the Risk Factors and the Guidance Notes to this Application Form) and the Rules of the Co-operative.
- I am over 16 and the applicant meets the Offer eligibility criteria.
- The Co-operative is hereby authorised to make such enquiries as are deemed necessary to confirm the eligibility of this application.
- I am not (unless on behalf of an Industrial and Provident Society) making an application or multiple applications for a total of more than 20,000 Shares.
- I am not relying on any information or representation in relation to the Offer Shares, the Co-operative, or the project that is not included in the Offer Document.
- I shall provide all additional information and documentation requested by the Co-operative in connection with this application, including in connection with money laundering, taxation or other regulations.
- If signing this application on behalf of any person/organisation I am doing so with explicit authority.

I understand that the cheque supporting this application (unless paying by bank transfer) will be presented for payment upon receipt and I warrant that it will be paid on first presentation.

Signature:

(Applicant / on behalf of organisation as applicable)

Date:

Payment amount:

Payment

I wish to pay by: cheque ☐ bank transfer ☐ *(please tick as appropriate)*

If paying by cheque, please attach a single cheque or banker's draft for the amount shown above, payable to **Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd** and crossed A/c Payee.

You can also pay by bank transfer to:

Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd, account no. **65707351**, sort code **08-92-99**.

Please write the reference you have used for the transfer here: _____

If we need to return any or all of your monies because of oversubscription or cancellation of the project, please indicate whether you would like this returned by cheque or by bank transfer to the account specified overleaf.

Please return any monies to me by: cheque ☐ bank transfer ☐ *(please tick as appropriate)*

Please send your completed Application Form, along with any cheque/banker's draft to: LGV Micro Hydro (2) Co-operative Limited Share Offer, c/o Sharenergy, The Pump House, Coton Hill, Shrewsbury SY1 2DP.

Please tell us how you heard about this Share Offer: _____

This Application Form may be photocopied and is available as a download at llangattockgreenvalleys.org/shareoffer. You can also request additional copies by post by calling **0800 206 1915**.

For all other enquiries about completing this form, please call Sharenergy on **01743 277119** during office hours or email them at info@sharenergy.coop.

Data protection

The data provided by you on this form will be stored within a computerised database. This data will be used for the purposes of Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd only and will not be disclosed to any outside third party.

Thank you for applying for Shares in Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd.

About Llangattock Green Valleys

Llangattock Green Valleys came about in 2009, when a group of local residents got together to look at ways of creating a greener, more sustainable future for the community. Their aim was to harness natural local resources including water, woodfuel and solar power to help people save money and reduce their reliance on fossil fuels.

They also wanted to explore ways of working together to create a richer way of life, from growing more food locally, to helping people learn new skills and creating rewarding local jobs.

The organisation was formally incorporated as a community interest company in May 2010, with the key aim of making Llangattock carbon negative by the end of 2015. Since then, LGV and its trading subsidiary LGV Ventures have gone on to deliver a range of innovative energy-saving and renewable-energy projects in Llangattock and the surrounding area. To date, these include:



Through the British Gas Green Streets competition:

- 3.96kWp solar PV scheme plus energy efficiency improvements for the village primary school.
- 16kW air source heat pump for the community hall.
- Solar-powered borehole irrigation system for the Llangattock Area Community Allotment Society.
- Funding towards a firewood processor, chainsaw, tools and personal safety equipment for the Llangattock Community Woodland Group (now Llangattock Community Woodlands).
- Energy efficiency improvements for 38 homes, including 8 new boilers, 7 loft and/or cavity wall insulation upgrades, plus energy monitors, reflective radiator panels, energy-efficient kettles and PC/TV standby savers.
- 12 domestic solar PV installations, 1 combined solar thermal and biomass boiler installation, and 2 wood-burning stoves.
- Initial feasibility study for an anaerobic digestion facility on the Glanusk Estate.
- Initial feasibility studies for 5 potential micro hydro schemes in Llangattock and the surrounding area.
- £100,000 first prize fund, allocated for the development of local community micro hydro schemes.

Through the Local Energy Assessment Fund:

- Energy-saving voltage optimisation units for 125 homes, insulation upgrades for 54 homes, plus external wall insulation for 1 home and a 16kW air source heat pump installed in another as demonstration projects.
- Insulation improvements, an electricity sub-meter (for improved energy monitoring) and energy-efficient lighting for the community hall.
- Energy-efficient lighting for the primary school.

Through the Customer Led Network Revolution project:

- 5 domestic air source heat pumps.

Through Awards For All:

- Creation of an online energy audit tool, to help residents track their monthly energy use and renewable energy generation.

Through Ynni'r Fro:

- Full feasibility study for the Glanusk Estate anaerobic digestion facility. The scheme was designed to produce biogas, mostly from grass clippings produced on the estate, and the feasibility study was completed in February 2013 with the project being shown to be viable. Ultimately, however, the Estate decided not to proceed to the working up stage.

Through Reach For The Renewables, LGV's community group-buying scheme:

- Domestic and commercial solar PV installations, new boilers and insulation upgrades.

Through Llangattock Green Valleys Micro Hydro (1) Co-operative Ltd:

- Successful share offer to raise £270,000 to build two community micro hydro schemes with a combined output of around 208MWh electricity a year. Construction of the schemes is due to begin in spring 2014, and the two turbines should be turning by autumn.

Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd
is an Industrial and Provident Society registered with the
Financial Conduct Authority (Registered No. 32276R)

For enquiries about this Share Offer, please contact:

Tel: 0800 206 1915

or email shareoffer@llangattockgreenvalleys.org

Llangattock Green Valleys Micro Hydro (2) Co-operative Ltd
Crickhowell Resource & Information Centre
Beaufort Street
Crickhowell
Powys NP8 1BN

This Offer Document and the Co-operative Rules are available as PDF downloads on our website
– go to llangattockgreenvalleys.org/shareoffer

You can also request printed copies by post. Simply email or call us using the contact details above.

To contact Shareenergy, call 01743 277119 during office hours or email info@shareenergy.coop