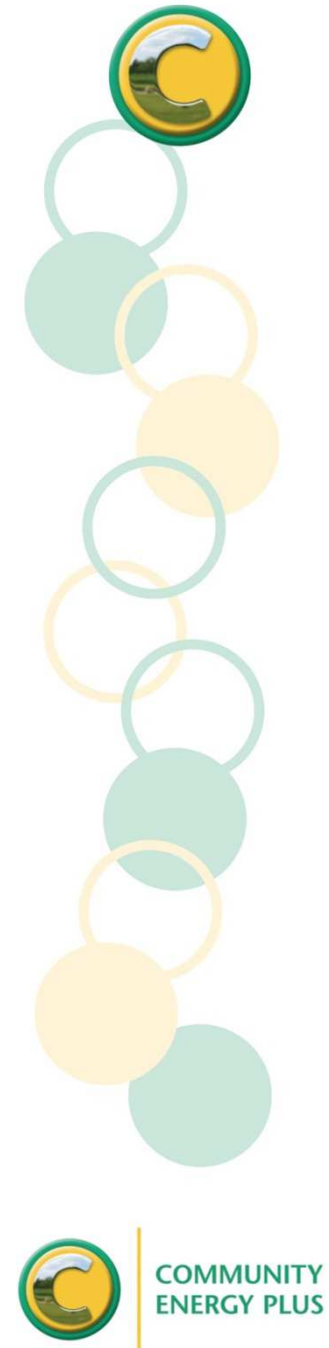


# Co-operative Community Action for a Sustainable Energy Future

Community Energy Plus

Neil Farrington





COMMUNITY  
ENERGY PLUS

# Introduction to Community Energy Plus



- Sustainable Energy and Fuel Poverty Charity founded in 1997
  - Advised over 157,000 households across Cornwall and Devon
  - Worked on community projects contributing to over 1MW of installed capacity across Cornwall
  - Secured over £1.4m worth of funding for community projects contributing to a total value of over £3.8m
- Presented to South Hill Parish – 1<sup>st</sup> February 2014



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# Average returns from renewable energy installations

Technology	Example type	Average return p/a
Solar PV	Domestic 4kWp	16-17%
Solar Thermal	Domestic	5-6%
Very small wind	Aircon 10kW	9%
Small wind	Endurance E-3120	20%
Non domestic biomass	100kW system	20%
Non Domestic PV	100KW - 200KW, System	17-25%

- Return based on average system performance with FiT/RHI and on site use.
  - Not including recently predicted 20% year on year electricity cost rise from 2015
- Presented to South Hill Parish – 1<sup>st</sup> February 2014



# Some benefits of a Co-Operative Approach

The ability to retain Environmental, Economic and Social benefits of renewable energy generation within the local area for the benefit of the local community.

- Local empowerment
- Community led and designed renewable energy schemes
- Taking responsibility for local energy use and its generation
- Retention of economic benefits supporting individual members of the community whilst providing accessible revenues for wider community needs
- Increased local energy security



# Key links to the National Planning Policy framework

'93. Planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development.

96. In determining planning applications, local planning authorities should expect new development to:

- comply with adopted Local Plan policies on local requirements for *decentralised energy supply*....

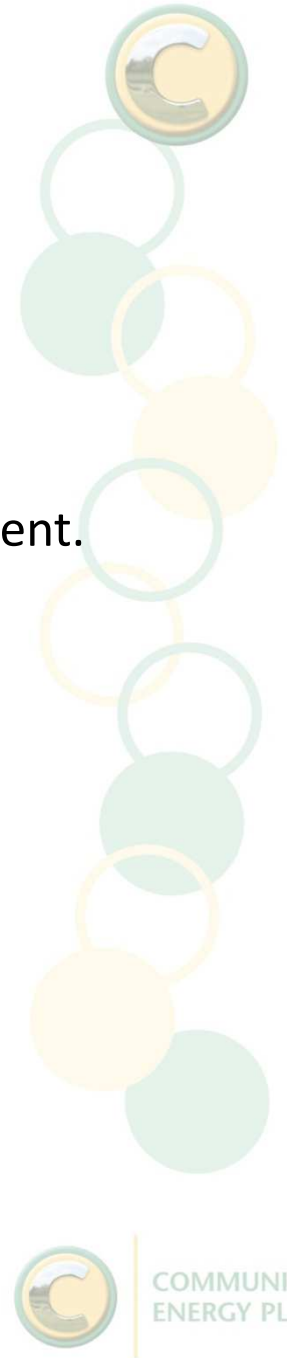
97. To help *increase the use and supply of renewable and low carbon energy*, local planning authorities should recognise *the responsibility on all communities to contribute to energy generation from renewable or low carbon sources*. They should:

- *support community-led initiatives for renewable and low carbon energy*, including developments outside such areas being taken forward through neighbourhood planning; and

# Barriers to progress

## 1. Securing planning permission

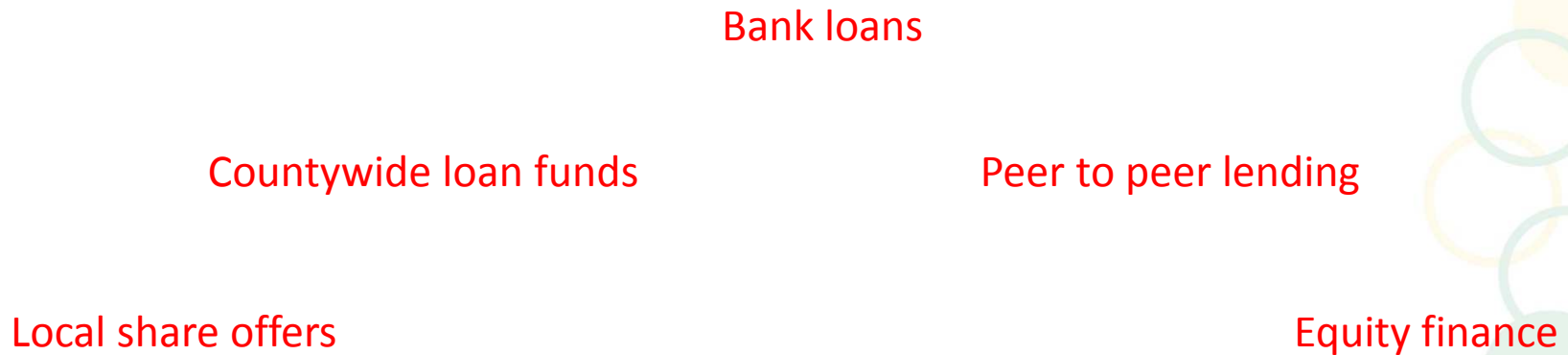
- Recognition for real community led and supported development.
- Consistent advice and support across the County.
- Funding:
  - Development agreements.
  - At risk loans.
  - Grants.
  - Pioneer Share Offers.



# Barriers to progress

## 2. Financing

### Retention of local ownership & benefit



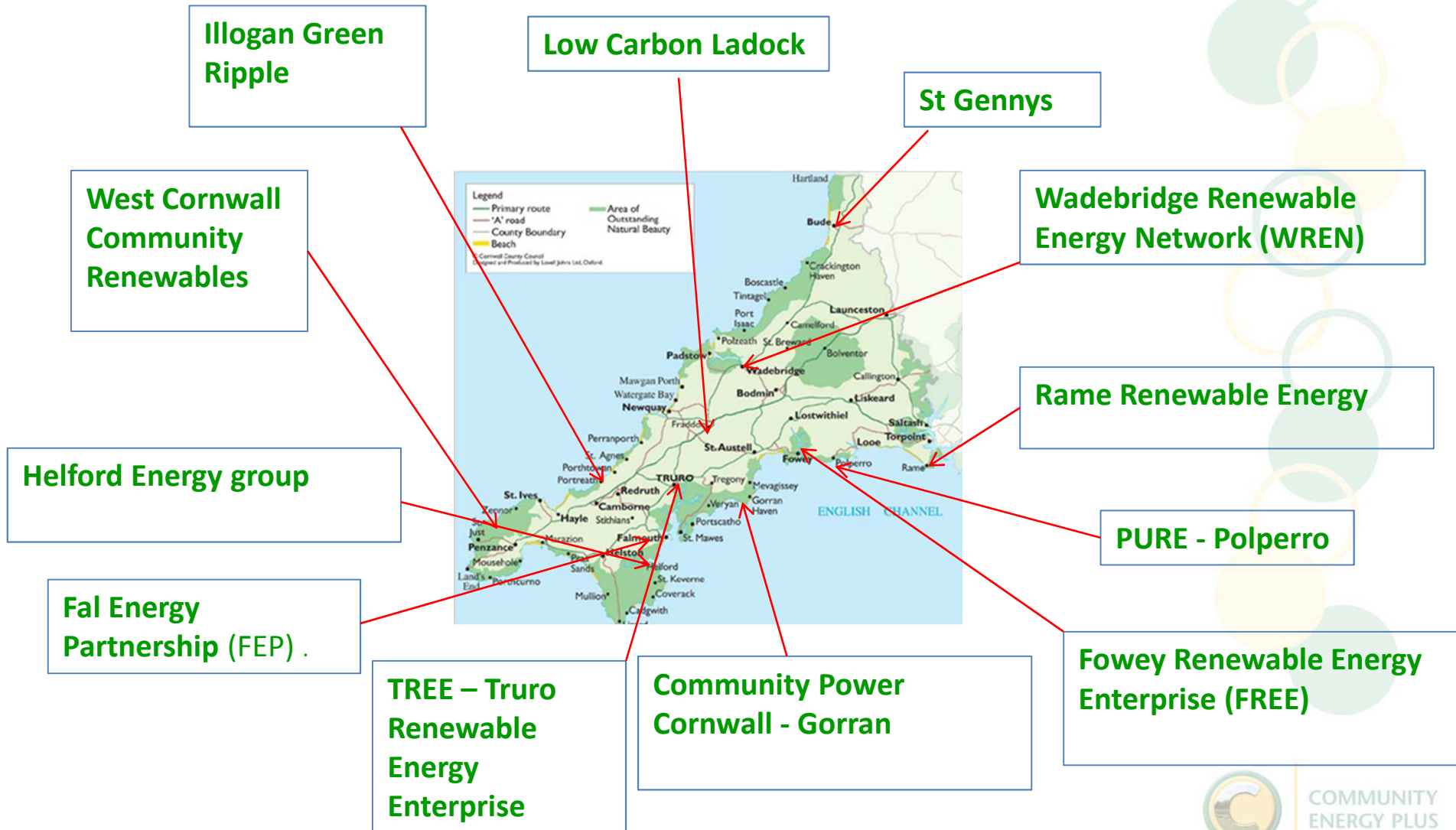
Complete local ownership  
& benefit

No local ownership  
or benefit



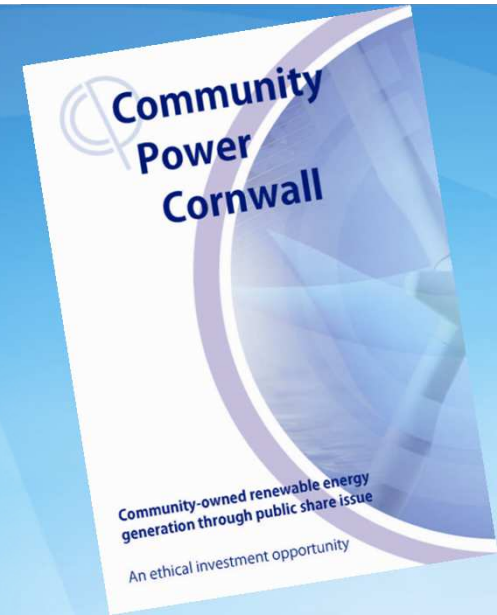
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# Increasing demand and capacity to deliver:





**COMMUNITY  
POWER  
CORNWALL**



## **A Community Ownership model**



Presented to South Hill Parish – 1<sup>st</sup> February 2014

## First Public Share Offer in Cornwall - Summer 2011

£80,000 raised from individual investors

£60,000 raised through underwriting of the share offer

£455,000 loan secured with £180,000 from the Low Carbon Society

First Community Development – Tregerrick Farm, Gorran

Two 80KW Endurance E-3120 wind turbines

Installation started 4<sup>th</sup> July 2011 - Complete September 2011

First 2 years performance

August 2011-August 2013

Produced over 750,000KWh

Saved 391tonnes of Carbon Dioxide

Enough electricity to meet the annual demand of over 166 average homes

*New Share offer coming soon!  
Join Us  
[www.communitypowercornwall.coop](http://www.communitypowercornwall.coop)*



Presented to South Hill Parish – 1<sup>st</sup> February 2014



BF Adventure and Community Power Cornwall

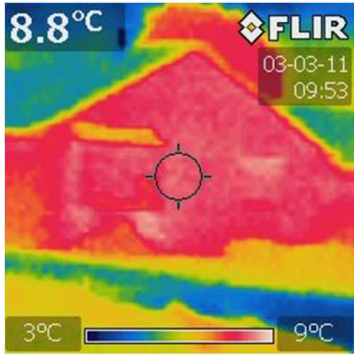
Join Us  
[www.communitypowercornwall.coop](http://www.communitypowercornwall.coop)

- Community Power Cornwall have planning permission to install a 10KW Aircon wind turbine at BF Adventure in Halvasso.
- Finance has been secured, Construction will be completed March 2014 and a public share offer will be coming soon.
- BF Adventure will benefit from a fixed term low cost electricity supply from the turbine at 4.5p/kWh supporting their further sustainable ambitions.

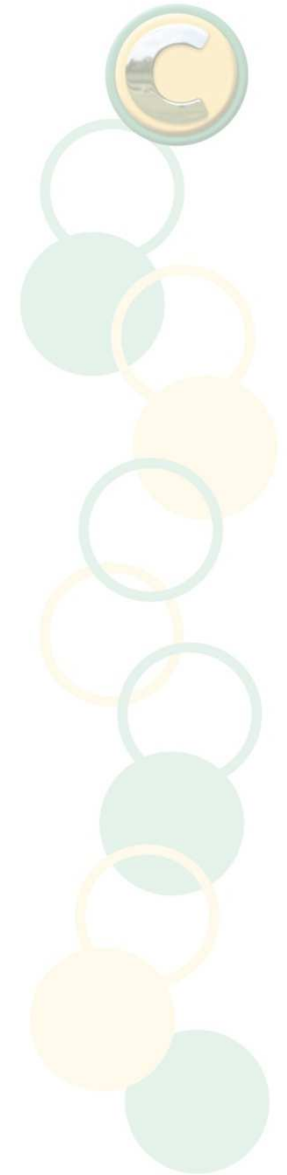
*"Inspiring, challenging and motivating people, especially young people, to develop their life skills to bring about positive change"*



Presented to South Hill Parish – 1<sup>st</sup> February 2014



# Illogan green ripple



Presented to South Hill Parish – 1<sup>st</sup> February 2014



Fowey Renewable Energy Enterprise (FREE!) was set up in 2010 to create community-owned renewable power for the benefit of the community.

Currently 8 Renewable energy schemes with full planning permission and a 9<sup>th</sup> under consideration. Includes a solar PV car port array for one of the Towns car parks, a solar allotment scheme, a PV array for the local primary school & Rugby club and 3 small wind projects.

Aim to reduce the Towns emissions by providing 10% of annual household electricity demand whilst securing a locally owned green energy supply and providing a sustainable income stream for the Town.

Join us? We need your support! Sign petition? Comment on website?

[www.freefowey.org.uk](http://www.freefowey.org.uk)

Presented to South Hill Parish – 1<sup>st</sup> February 2014



# Low Carbon Ladock



- **Grant funding** secured - £500,000
- The Low Carbon Living project plans to install measures in
  - 16 homes (from a mix of housing types, age, and occupancies)
  - 2 Schools
  - 5-6 local businesses
  - and 2 Community Facilities
- **Measures include :**
  - A wind turbine ,ground source heat pumps, air source heat pumps, biomass boilers, solar photovoltaic panels and solar thermal installations.
  - loft insulation and solid wall insulation.
  - An edible woodland and electrical vehicle charging point
- **The Set-up**

All funds created through FIT and RHI will be paid directly into a locally managed low carbon fund for the progression of low carbon activity in the area. These activities will be managed by the Ladock carbon Co-Op and Low carbon Ladock limited.



# Joint Ventures



IRR Over 20%

This proposed development will provide community benefit through three specific areas:

A local community benefit fund.

A local share offer and investment opportunity.

A community services package.

Presented to South Hill Parish – 1<sup>st</sup> February 2014

# Private Equity Financing



**SOLAR COMMUNITIES  
2012**

Don't miss your chance to save up to £7,000 per year on your building's electricity bill

Cornish social enterprise Community Energy Plus has launched its Solar Communities 2012 programme with a multi-million pound fund to offer free solar PV installations to buildings in Cornwall, Devon and across the South West.

Buildings taking up the offer will benefit from:

- Free electricity, when consumed at times it is being generated by the system. \*
- The ownership of the panels will pass to the building after 20 years, at which time the panels are expected to be still generating at least 80% of their original efficiency.

For further information visit [www.cep.org.uk/solar-communities](http://www.cep.org.uk/solar-communities)  
call 01209 614975 or email [community@cep.org.uk](mailto:community@cep.org.uk)

\* certain conditions apply

- Local Equity investors
- Free Solar PV installation and electricity use for GP's surgeries, Schools, Community facilities and Businesses in Cornwall and Devon.



Presented to South Hill Parish – 1<sup>st</sup> February 2014



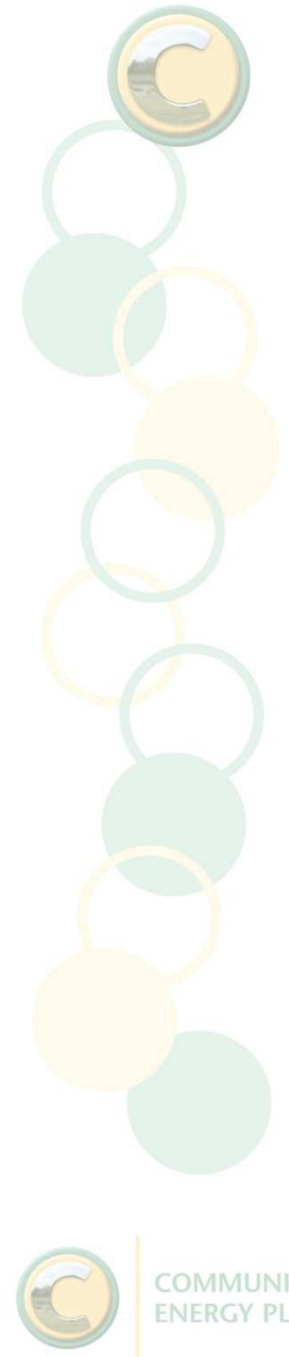
# The Low Carbon Society



£1.2million revolving loan facility created with Cornwall Council to support community energy schemes in the County.

1st Applications December 2012 – 4 Schemes received conditional loan offers.

2<sup>nd</sup> Round open to applications February 2014.





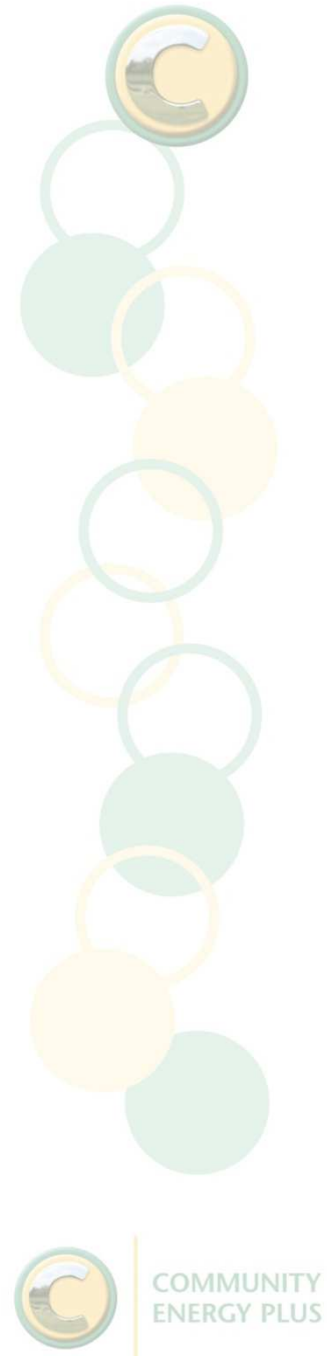
Community  
Energy Plus

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Presented to South Hill Parish – 1<sup>st</sup> February 2014