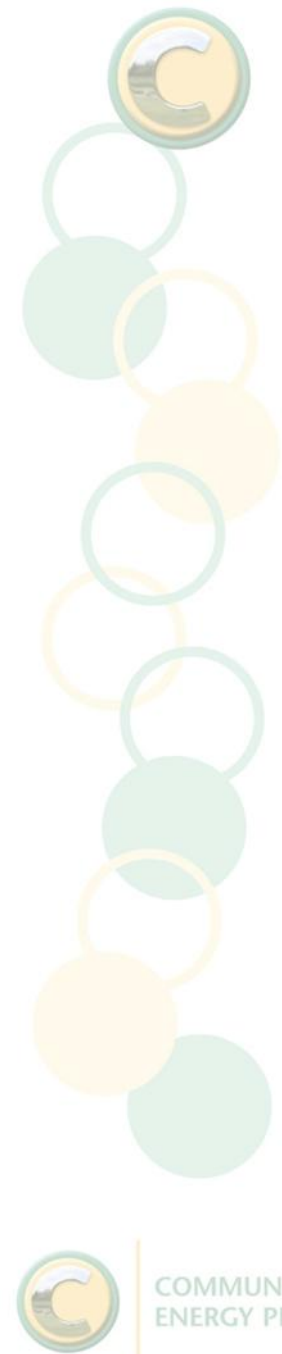
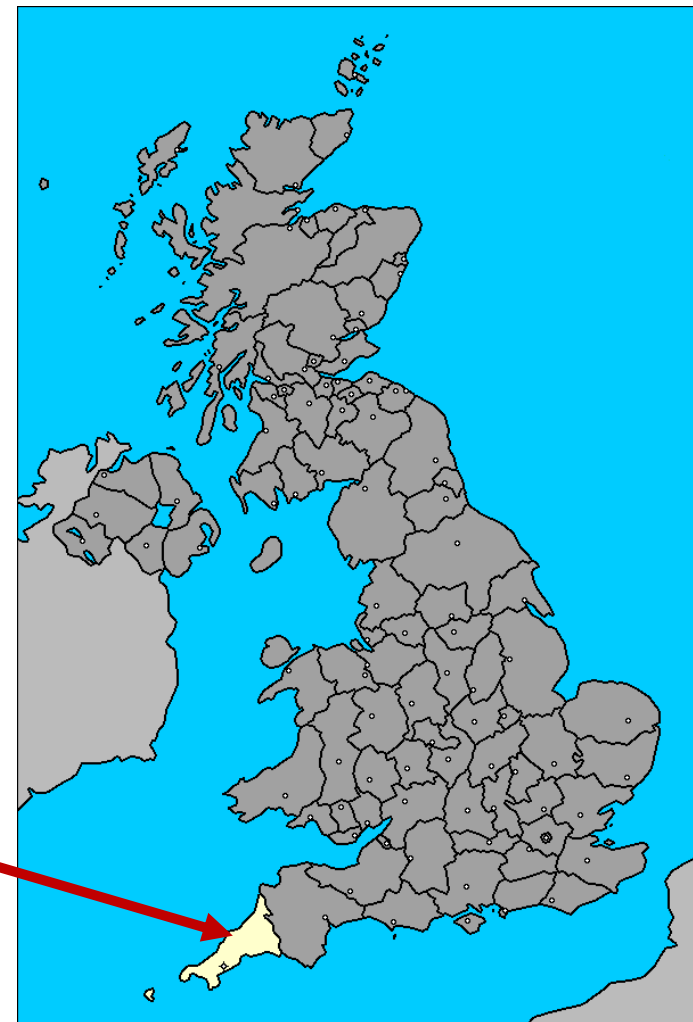


Experiences from Cornwall in building local co-operation for a low carbon economy

Neil Farrington
Senior Manager Renewables & Communities
Community Energy Plus





Drivers for Change

- Community Demand
- Planning Policy – National & Local
- Strategies – National & Local

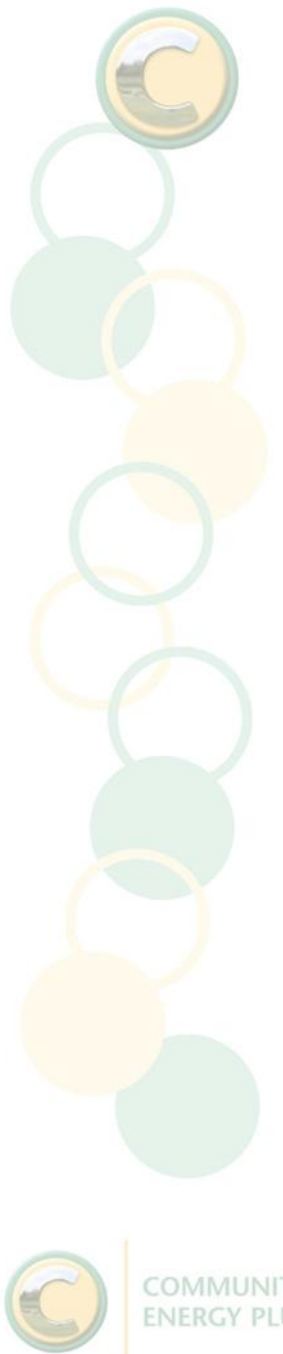
Facilitation mechanisms

- Feed in Tariff Community concessions
- Social Enterprise Investment Support
- Local Energy Markets
- Direct Purchasing
- The Low Carbon Society

Success

- Community Power Cornwall
- Ladock

What has this meant for Cornwall?



Driver for change: Community demand to create a sustainable future

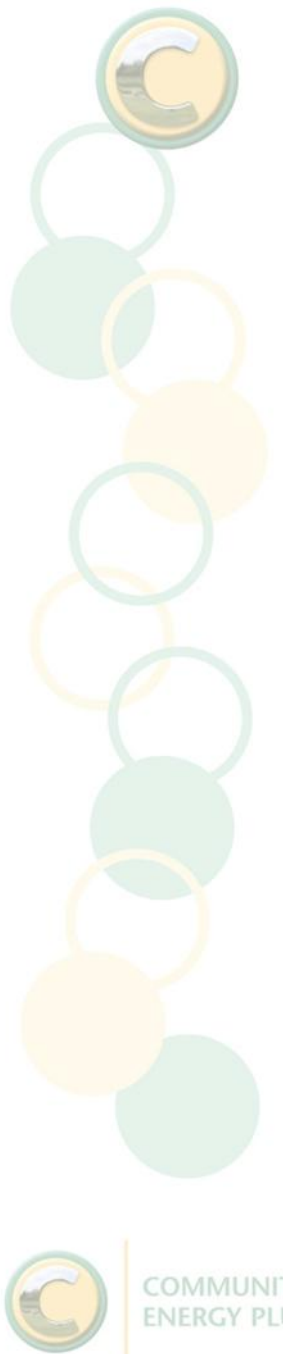
- Aims & Aspirations

Reduce carbon emissions and environmental impact in the local community.

Develop a secure, sustainable energy supply

Generate and retain sustainable revenue streams for the community and its residents.

There are over 5,000 community energy groups in the UK (2014)



Community energy in Cornwall

Our solar, wind, wave, tidal, hydro, geothermal and biomass resources in Cornwall provide an exciting opportunity for communities to meet the challenges of rising energy prices.

Renewable energy technologies offer the opportunity for communities to earn an income while helping reduce carbon emissions that contribute to climate change.

Community Energy Plus works with communities, helping them develop and deliver their own energy efficiency and renewable energy projects, providing the level of support needed to develop and manage all stages of community projects.



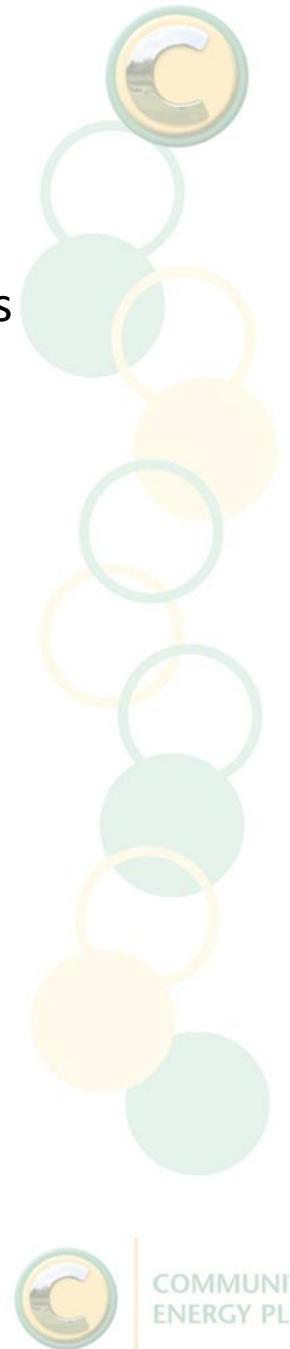
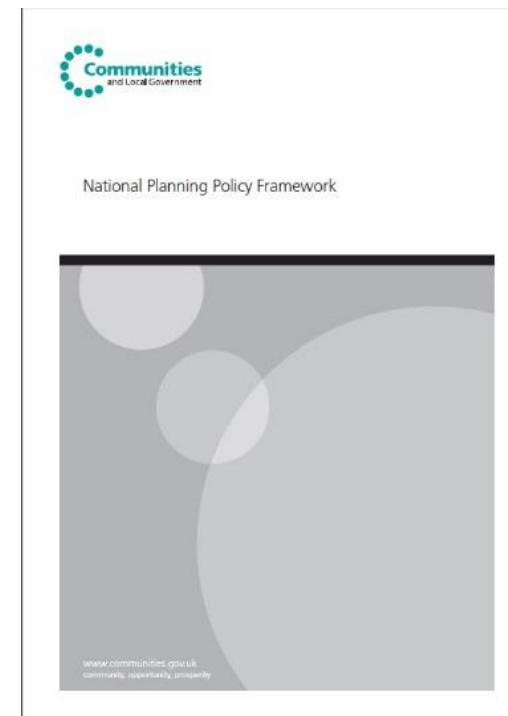
COMMUNITY ENERGY PLUS

Driver for change: Planning Policy - national

The National Planning Policy Framework highlights the responsibility on all communities to contribute to energy generation and also contains specific support for community –led initiatives for renewable and low carbon energy.

'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:

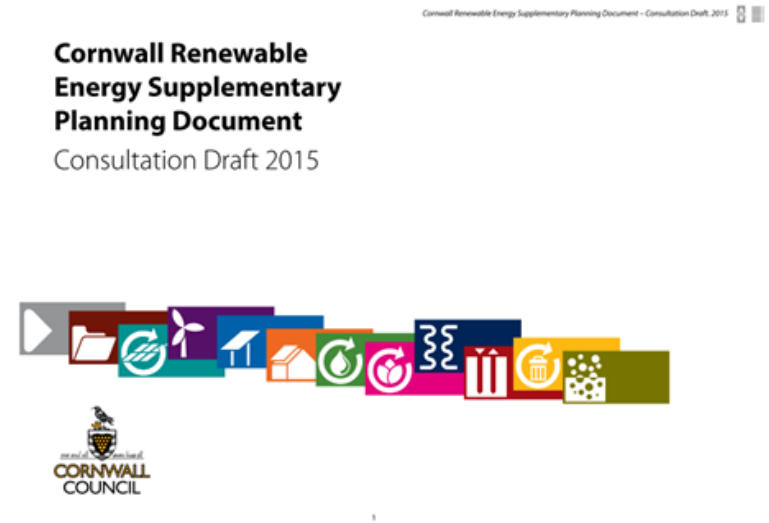
- have a positive strategy to promote energy from renewable and low carbon sources;...
- *support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning;...* (NPPF)



Driver for change: Planning Policy - local

Cornwall Renewable Energy Supplementary Planning guidance 2015:

Offers planning guidance on the specific planning weight that should be given to Projects that are 'Led by' or meet the needs of Communities



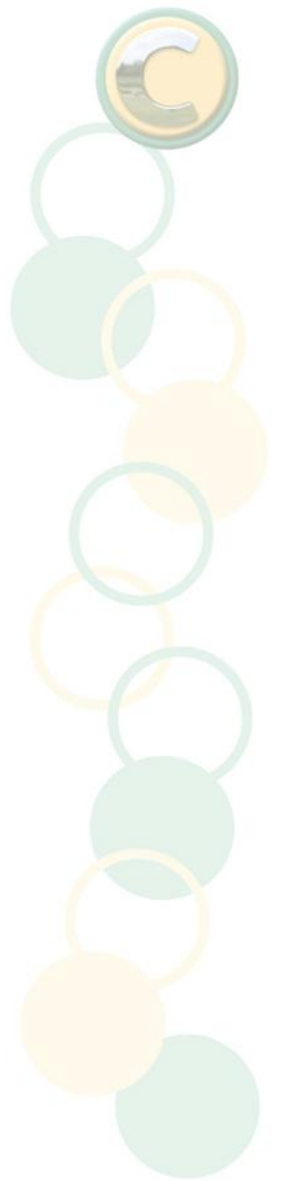
Driver for change: Strategies – local & national

Community Energy strategy 2014 – Department for Energy and Climate Change (DECC)

- Strategy aims to help these existing groups grow and to inspire more to set up and expand.
- Some themes:
 - Communities are central to meeting our energy and climate change challenges
 - Community energy can help maintain energy security and tackle climate change
 - Community energy can save money on bills
 - Community energy can have wider social and economic benefits.



COMMUNITY
ENERGY PLUS



Cornwall Council's Green Cornwall programme

Green Cornwall is Cornwall Council's overarching programme to coordinate our efforts to reduce our carbon emissions and strengthen our wider leadership role within Cornwall.

- Green Communities - Supporting communities to become more resilient, promote education and increase renewable energy production.
- Green Economy - Providing the infrastructure, investment, and requisite skills to create the conditions for a measurable transformation towards a low carbon economy.



Facilitation mechanism: Feed in Tariff – Community Concessions

- Removal or set energy performance requirements for non-domestic buildings
- Extended pre-accreditation opportunities



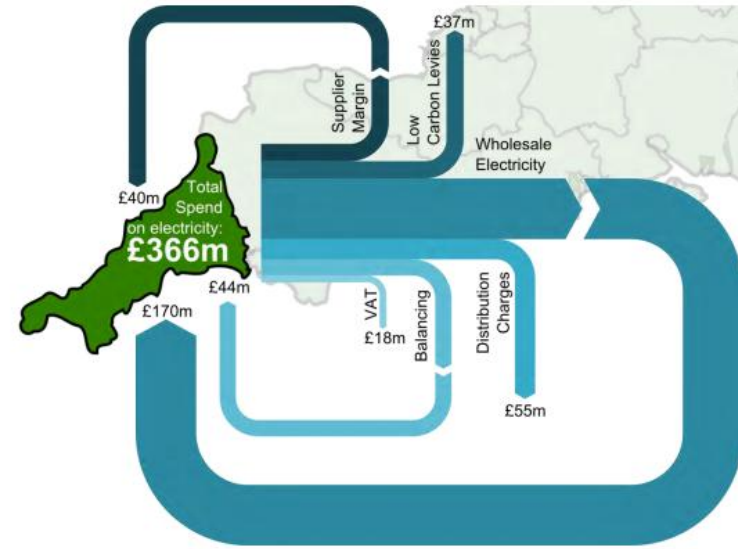
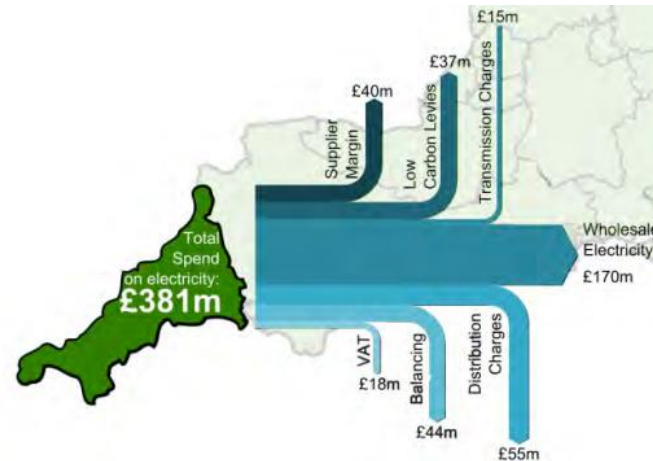
Facilitation mechanism: Social Enterprise Investment support

- Enterprise Investment Scheme (EIS) & Social Investment Tax Relief (SITR).
- Ability to recoup 30% of your investment through an income tax reducer



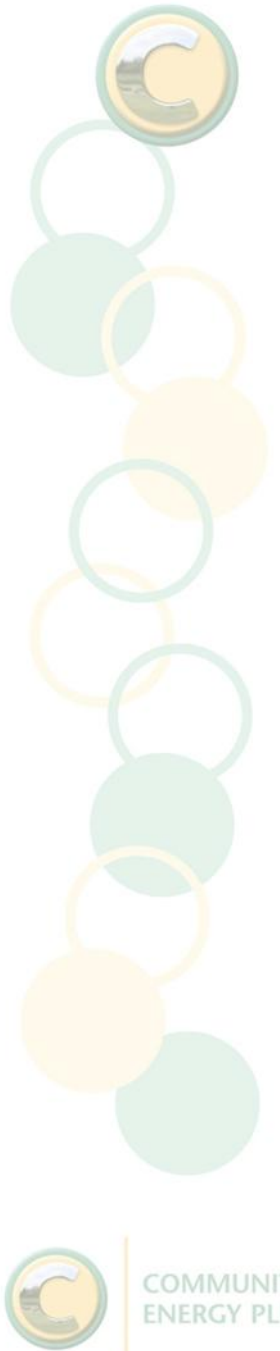
Facilitation mechanism: Energy Security – Stable Supply & controlled cost (Local energy Markets)

- Secure supply
- Retained Economic benefit & export potential.
- Local socially minded Energy companies.
- Self reliance and freedom



Facilitation mechanism: Direct Purchasing

- Community Power Cornwall has been working with Open Utility who have joined forces with Good Energy to trial Piclo, the UK's first online marketplace for buying and selling renewable electricity –
- Enables businesses to buy renewable electricity directly from specific sites. Renewable generators will be able to sell their electricity directly to their neighbours, local businesses or schools for the best price.
- See more at: <http://www.nominettrust.org.uk/news-events/news/open-utility-joins-forces-good-energy-to-trial-piclo-uk%E2%80%99s-first-online-marketplace-#sthash.lsiPVEgV.dpuf>



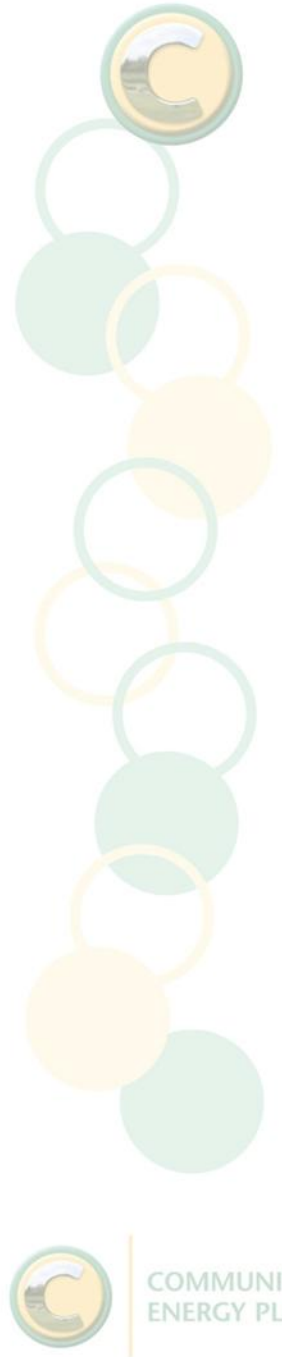
Facilitation mechanism: The Low Carbon Society

£2.5million (€3,454,951) revolving loan facility created by Community Power Cornwall with Cornwall Council to support community energy schemes in the County.

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

2nd Round open to applications February 2014. – 18 Applications exceeding value of £2.2m (€3,041,247)

2015 – Open rolling programme.

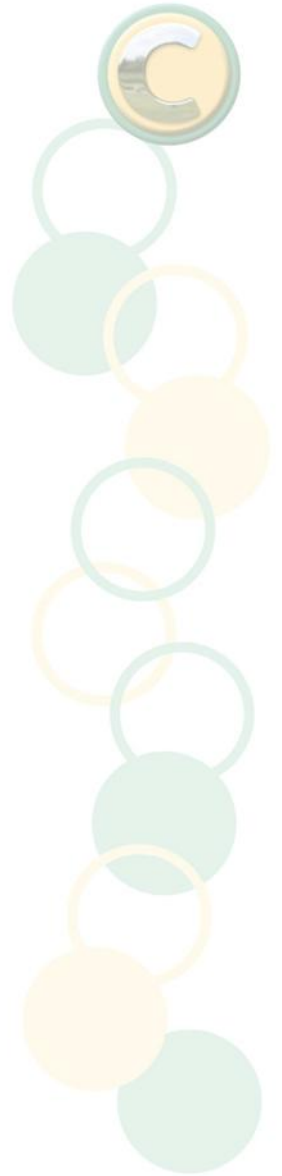


Success story: Community Power Cornwall



Community
Power Cornwall

The story so far
2008-2015.....



COMMUNITY
ENERGY PLUS



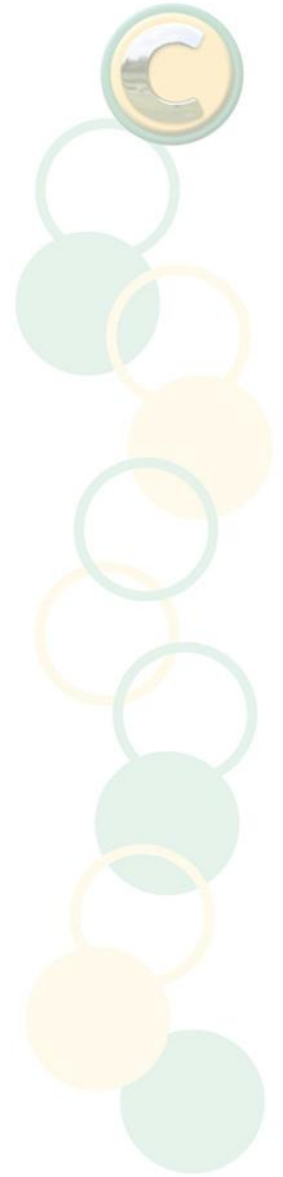
Community Power Cornwall

- Installation at Gorran August 2011
 - Two 80KW Endurance E-3120 wind turbines
 - 30th April 2015 reached total generation from installation of:1,332,684 KWh!
This has saved over 704 tonnes* of Carbon Dioxide (E) from being emitted into the atmosphere.

Enough electricity produced to provide the average annual electricity demand of over:
287+ UK houses
227 Cornish Houses

*calculated using annual Carbon equivalent grid mix figure DEFRA/DECC.

†Annual household consumption figures taken from Cornwall Council Renewable Energy Planning Guidance Note 3)

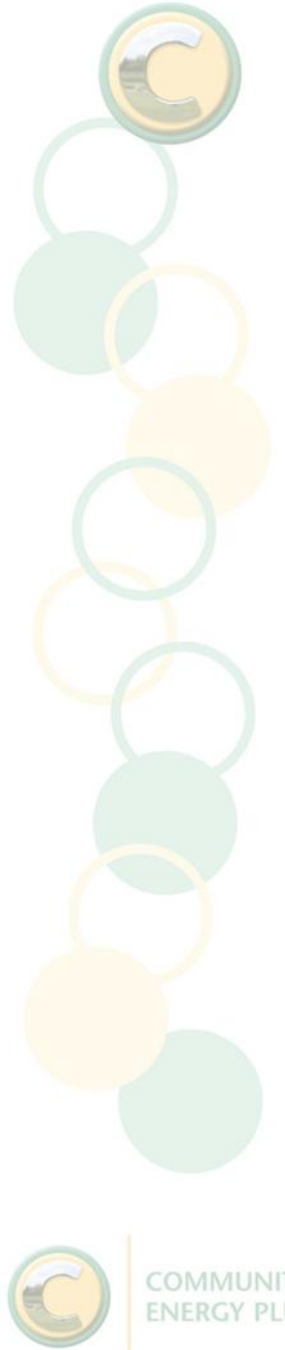




Adventure

BF Adventure and Community Power Cornwall

- “Inspiring, challenging and motivating people, especially young people, to develop their life skills to bring about positive change”
- Installation of an Aircon 10S wind Turbine March 2014
- BF Adventure benefit from a fixed term low cost electricity supply from the turbine at 4.5p/kWh supporting their further sustainable ambitions.





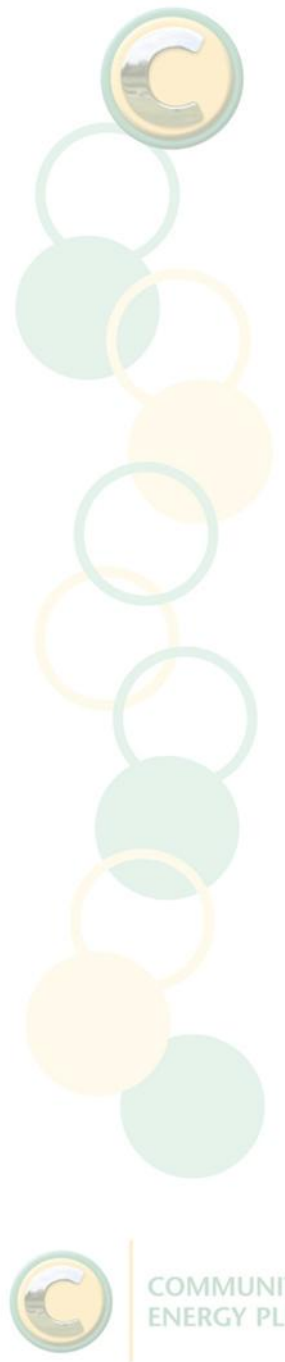
Community
Power Cornwall



“The mission of The Track’s management is to provide a professional family based riding centre dirt jumping experience and promote a friendly and social environment for dirt jumpers of all ages and abilities.” **Steven Tonkin** (Owner)

The Track has held National Racing and Freestyle competitions from 2005 offering a spectacular display of racing and professional dirt jumping. As well as ‘Tonkins Back Yard Jams’, a fun mix of competitions.

Community Power Cornwall 10KW PV installation due spring/Summer 2015.
Grant funding secured through the Energyshare’s Energyfund Cornwall Fund.



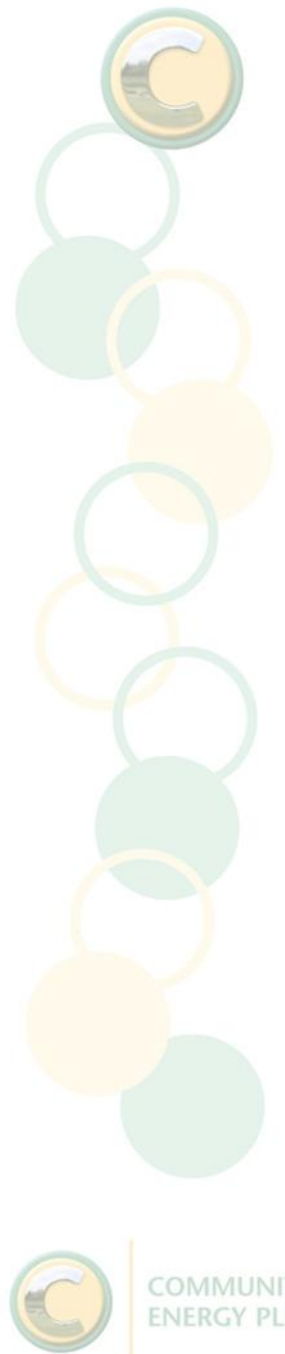
Success story: Low Carbon Ladock

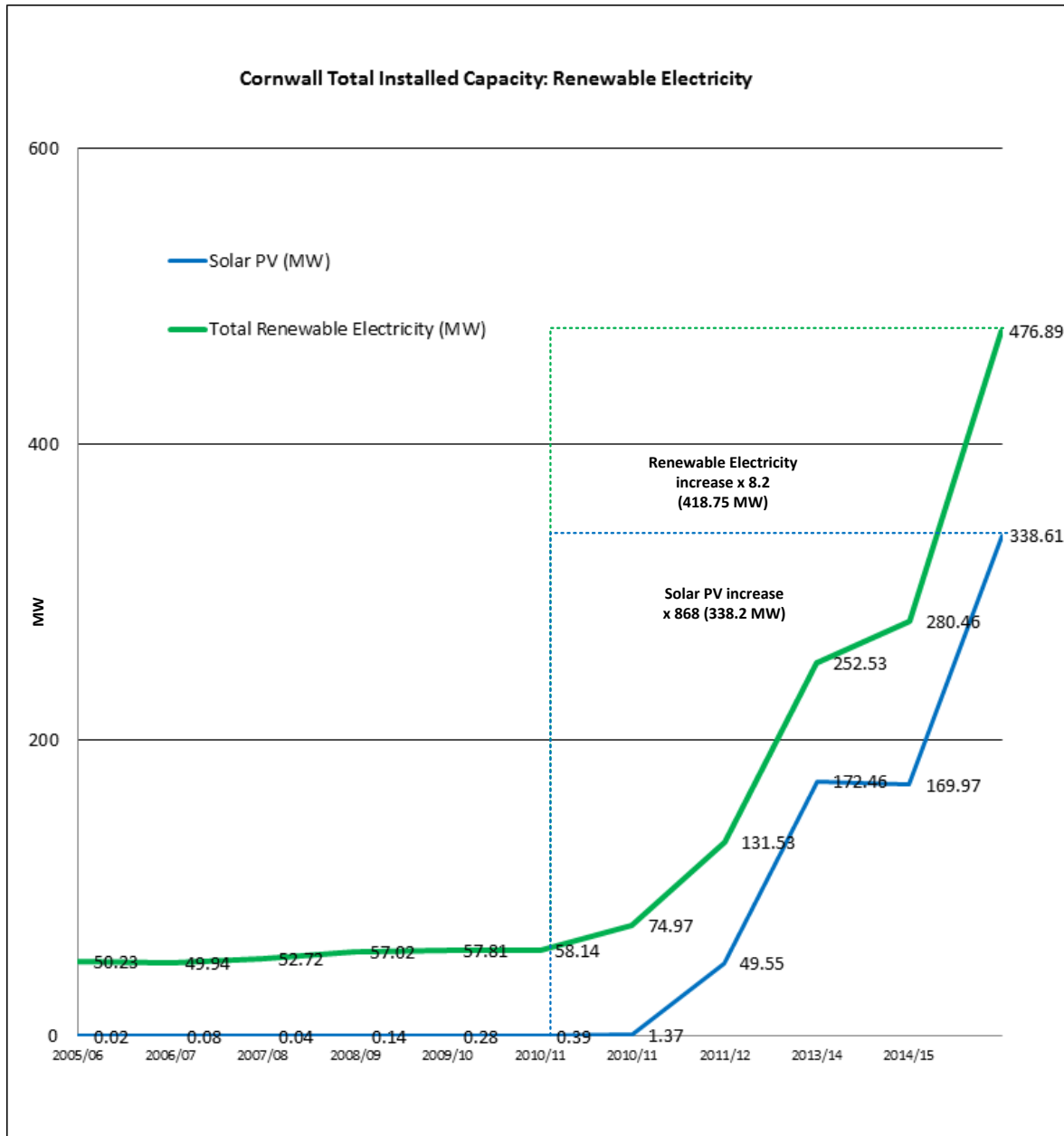
- Low Carbon Ladock secured £500,000 (€693,500) of grant funding
- The Low Carbon Living project plans to install measures in
 - 16 homes (from a mix of housing types, age, and occupancies)
 - 2 Schools
 - 5-6 local businesses
 - 2 Community Facilities
- Measures include:
 - A wind turbine, ground source 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. The investment fund for 2015 is £55k (€76,300).



Implications for Cornwall

- >22% Electricity & Heat (not including transport) provided from Renewable Energy.
- Cornwall is a net exporter of renewable energy in the summer.
- Community energy groups are creating revenues for reinvestment in local low carbon activity:
 - Insulating community buildings
 - Walking buses for schools
 - Planting community woodlands





Dataset name

Year

Release date

Units

Per capita Local CO2 emission estimates; industry, domestic and transport sectors

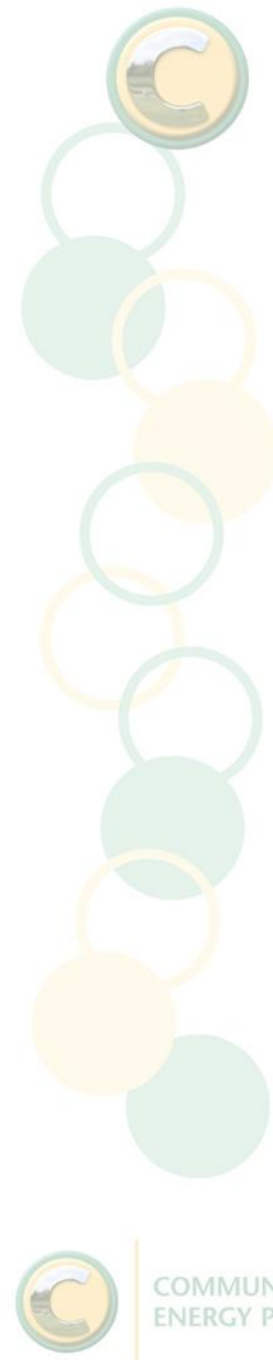
2005-2012

26/06/2014

t CO2 per person

Second Tier Authority LA Region Name LAD10CD
Year Industry and Commercial Domestic Transport Total

Cornwall	00HE	2005	3.0	2.6	2.2	8.0
		2006	2.9	2.6	2.2	7.9
		2007	2.8	2.5	2.2	7.7
		2008	2.6	2.5	2.1	7.4
		2009	2.3	2.3	2.1	6.9
		2010	2.5	2.4	2.0	7.1
		2011	2.2	2.1	2.0	6.4
		2012	2.3	2.3	1.9	6.7



Neil Farrington

Senior Manager – Renewables & Communities

01872 245566 / 07976 490953

neil@cep.or.uk



COMMUNITY
ENERGY PLUS