

Community Energy Workshop, October 2013



# Progress in Fal Energy Partnership

Lorely Lloyd  
and  
Charmian Larke



## Transition Falmouth launched in 2006

- ❖ at start of Transition Towns movement
- ❖ aimed at creating resilient communities
- ❖ taking local action in response to the three challenges
  - ❖ climate change
  - ❖ depleting resources
  - ❖ fragile global finances



## Transition Falmouth main specific aims

- ❖ make local partnerships
- ❖ draw in a wide variety of local bodies
- ❖ work to make their issues move towards resilience
- ❖ be the oil in the local political scene



Central to Transition Falmouth is  
the pathway to a carbon neutral energy system  
as part of increasing resilience



## Fal Energy Partnership

- ❖ set up 2011
- ❖ off shoot and extension of Transition Falmouth work
- ❖ made the local informal partnerships into a formal body
- ❖ specific aims to
  - ❖ increase locally owned renewable energy
  - ❖ increase local energy efficiency and reduce demand

### Purpose of FEP

*To work in a collaborative and inclusive way within the Network area, as a catalyst to make our area resilient, energy efficient and sustainable over the next 25 years and beyond*

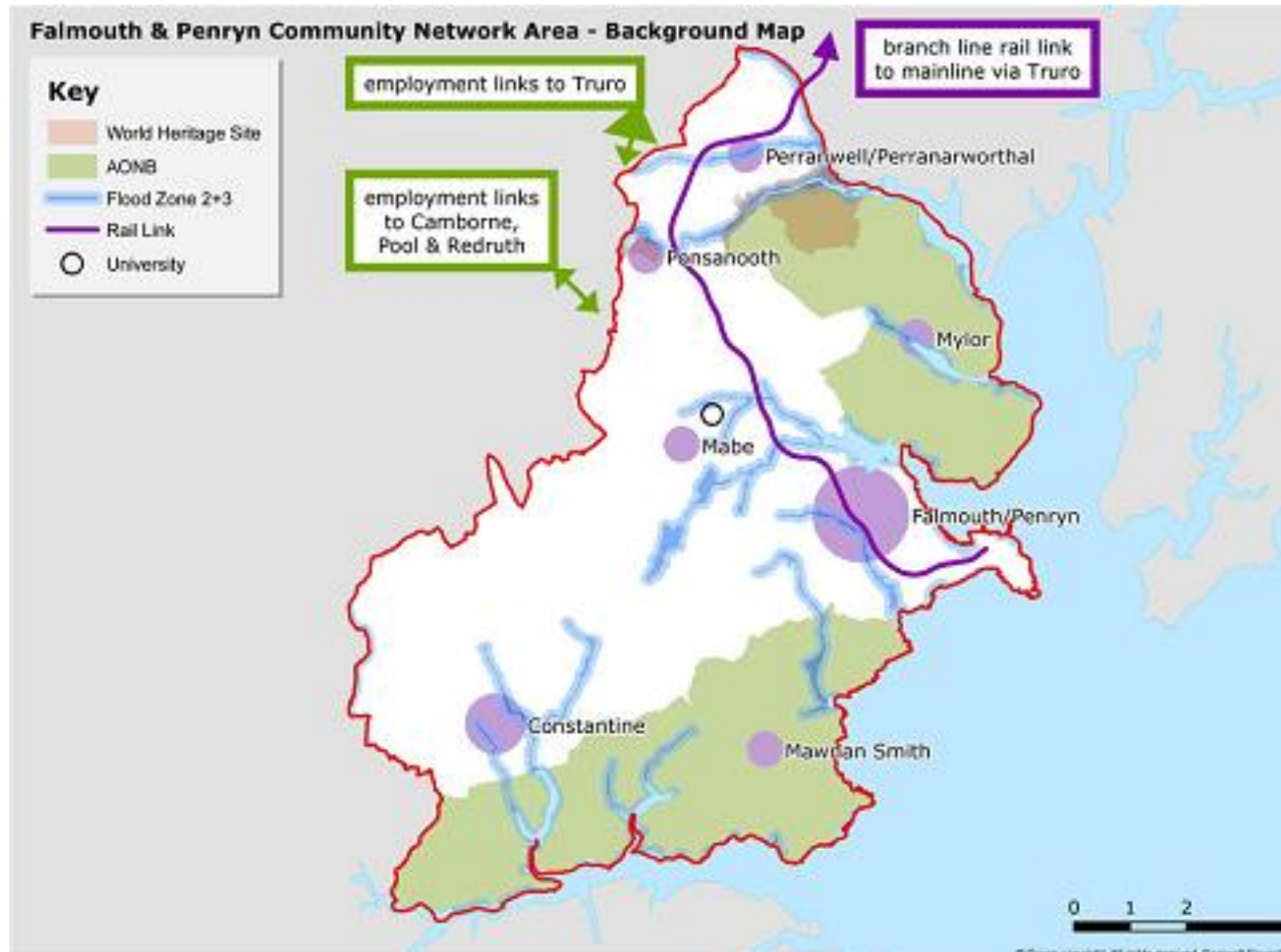


# Fal Energy Partnership

2 Town Councils  
7 Parish Councils

mainly south Carrick  
with some of Kerrier

population  
40,800



## Fal Energy Partnership

First main project: LEAF project 2012

- ❖ FEP formally registered as a social enterprise after stress testing by Kabin
- ❖ research for Leaf report revealed some unexpected energy issues for the area



## ❖ local energy use

<b>GWh</b>	<b>non-domestic</b>	<b>domestic</b>	<b>transport</b>	<b>total</b>	<b>%</b>
<b>Coal</b>	2	10		12	<b>2%</b>
<b>Oil</b>	53	122	259	434	<b>56%</b>
<b>Gas</b>	47	146		193	<b>25%</b>
<b>Electricity</b>	40	96		136	<b>18%</b>
<b>RE</b>				11	<b>1%</b>
<b>Totals</b>	<b>142</b>	<b>375</b>	<b>259</b>	<b>776</b>	<b>100%</b>
<b>%</b>	18%	48%	33%	100%	

Highest demands are

- ❖ oil for transport & home heating
- ❖ gas in the home

**Energy bill £87m pa c 20% of local GVA**



## **Fal Energy Partnership**

### **long term aim of energy programme in Leaf project**

- ❖ reach carbon neutrality by 2050
  - ❖ reduce demand
  - ❖ long term programme of RE installations in area
  - ❖ increase local food resilience



## Housing and energy

- ❖ The statistics show very low heating energy in E7 homes
- ❖ Four case studies carried out in housing types covering >50% of local homes
- ❖ Shows large potential for energy saving especially in older houses
- ❖ Many opportunities to change to renewable energy heating eg ground source heat pumps, pellet boilers and stoves



## ❖ Local solar resource very large

PV	Potential		
	Using	Output GWh pa	% of 2050 energy
Domestic	30% of suitable	16	3%
Non Domestic	14% of roofs	64	14%
<b>Total buildings</b>		<b>80</b>	<b>17%</b>
<b>Land arrays</b>	10% of low grade land	<b>175</b>	<b>37%</b>

To meet this 54% of demand requires installation  
of interseasonal energy storage



## ❖ Large wind resource available

With no noise problems the local resource is

- ❖ large turbines installed at 1-2 pa can meet 28% of 2050 needs
- ❖ smaller turbines at 23 pa, sites to supply 12% of future demand
- ❖ excluding planning issues!



## Meeting carbon neutrality by 2050

- ❖ reduce domestic heating by 30% through efficiency gains
- ❖ halve transport demand & transfer to local electricity
- ❖ c+i demand stays level –increased efficiency and activity
  
- ❖ investment programme of £11.8m pa achieves aim
- ❖ starts at 13.6% of local energy bill
- ❖ down to under 5% by year 7 with 5% pa fossil fuel inflation
- ❖ pension investment of £289 pa/person in Network area



## **First steps to local energy independence**

- ❖ solar panel bulk buying – group activity
- ❖ development of programme in FEP of commercial and agricultural roof top PV
  - ❖ aim for 2MW
  - ❖ relatively low risk on planning
  - ❖ funding programme development underway
  - ❖ provides regular income for FEP relatively soon

