





#### How does an Energy Co-op work?

- ▶ IPS for Benefit of the Community
- Renewable technologies owned by the community through purchase of shares by local individuals or organisations
- Technologies located locally, often (though not necessarily) on community building or land.
- FiT provides income to repay investors with interest & for further community benefit.
- Tried & tested model for renewable energy generation

#### Distribution of Income

#### Income from FiTs used:

- to pay interest to members
- of members' outstanding money in full
- cost of administering the project
- to provide additional community benefits
- further energy saving and generating measures.



#### Gloucester Resource Centre

▶ Total system

44.46 kWp

Yearly generation

38,600 kWh

Cost of system

£85,890

Management costs 15%

£12,880

► VAT @ 5%

£4,295

Interest for shareholders

5.0% currently

Inverter Replacement

£8,000 after 10 years

Annual Insurance

£420







#### Gloucester Resource Centre

#### Community Shares:

- ▶ Aimed to raise £105,000 in 5 weeks
- Individual investment £240 to a maximum of £20,000
- Average investment £2,100 Range £240 £10,000
- ▶ Option of 12 monthly payments of £20
- The maximum investment for commercial organisations is also £20,000 but no limit for other cooperatives.
- ▶ 49 investors
- Almost all from Gloucestershire



# Resource Centre first year performance

- 37,474 kwh electricity generated (just under prediction)
- £12,800 in FiTs
- ≥23 tonnes carbon saved



## Sharing the value

- Co-operative model
- Building/land owner could get subsidised electricity/heat
- Investors become members of Co-op
  - Own the Assets
  - Make the decisions
  - Receive interest on investment
- Community benefit
  - ► Reduced energy costs
  - Energy generated locally
  - Potential for additional community energy saving projects
  - Social as well as financial and environmental benefits



## Shared Aims - GCC & GCEC

- Encouraging energy saving
- Installation of Energy efficient measures
- Installation of renewable technologies
- Reducing fuel poverty
- Reducing carbon emissions



# This would help GCC:

- Meet the objectives of the Climate Change strategy by reducing carbon emissions
- Meet the targets of the Affordable
  Warmth Action Plan especially Aim
  4 "identify and help people at risk of fuel poverty"
- Contribute to national targets



# This would help GCEC:

- Identify suitable projects
- Identify key players in those projects
- Have council endorsement/commitment
- Help to identify funding
- Help to identify new investors



### Case Study -Barton & Tredworth

- Proximity to Resource Centre
- Lower Super Output Area multiple deprivation
- High incidence of fuel poverty
- ▶ Older solid wall properties hard to treat
- Active & Identifiable Community Groups
- Owner occupiers & private landlords
- ECO Funding available Energy Companies Obligation



### GCEC Suggested Model

- Identify local community groups and activists
- Engage organisations working in the area e.g. FairShares
- Identify pilot household/property
- Energy companies cold calling has had the negative effect of disengagement
- We plan to engage with locals to overcome language and cultural barriers - TRUST
- Pay a referral fee
- Partnering with Energy Saving Co-op
- Possibility of solar pv on suitable roofs



# What is now needed to move the project forward...

- Engage with interested parties networking
- Explain the Project and Community benefits
- Engagement, assistance and endorsement of the Council
- Engagement, assistance and endorsement of the Community
- Ensure a fit with Council strategies

