

The logo features the text "(EC)²" in a large, white, sans-serif font centered on a dark green rectangular background. Below this, the full name "Edinburgh Community Energy Co-operative" is written in a smaller, white, sans-serif font.

(EC)²

Edinburgh Community Energy Co-operative

***Giving Edinburgh residents a vehicle to
promote and develop renewable and low-
carbon energy***

- 2007 set up to promote communal ownership of sustainable Energy Assets
- Allow local control and retention of economic benefits
- 2010 Secures £50,000 from the climate challenge fund to promote carbon saving initiatives

Energy Co-op background

- Promote a low cost insulation scheme, marketing and community events
- Investigate potential for community buildings to install solar PV panels to generate own electricity
- Investigate financial models for community ownership

**Leith Climate Challenge fund
project**

- Accesses Government subsidies (Carbon Emissions Reduction Target) to provide low cost loft and cavity wall insulation
- Close working with the Energy Saving Trust Advice Centre
- Access to council tax discounts

The insulation scheme



Domestic electricity producing solar panels - Craigleith



Timber Warehouse - Inverkeithing



Small Turbines – Sports Centre Dunbar



Solar Hot Water – Housing Association Wester Hailes



Solar PV - CIS Tower Manchester

Feed-in Tariffs

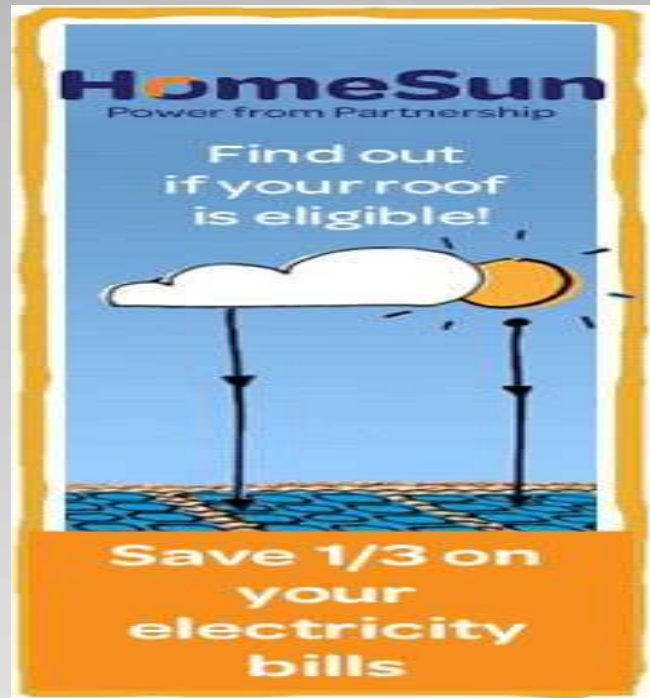
provide a financial incentive for home owners, landlords, communities and businesses to install electricity-generating technologies such as solar PV panels or wind turbines

Generation tariffs 1 April 2010 – 31 March 2013

Technology	Scale	Tariff level for new installations in period (p/kWh) (Note, tariffs will vary according to the Retail Price Index, a measure of inflation.)			Tariff (p/kWh)
		Year 1: 1/4/10 – 31/3/11	Year 2: 1/4/11 – 31/3/12	Year 3: 1/4/12 – 31/3/13	
Hydro	≤15kW	19.9	19.9	19.9	20
Hydro	>15–100kW	17.8	17.8	17.8	20
Micro-CHP pilot*	<2kW*	10.0*	10.0*	10.0*	10
PV	≤4 kW (new build)	36.1	36.1	33.0	25
PV	≤4 kW (retrofit)	41.3	41.3	37.8	25
PV	>4–10kW	36.1	36.1	33.0	25
PV	>10–100kW	31.4	31.4	28.7	25
PV	Stand alone system	29.3	29.3	26.8	25
Wind	≤1.5kW	34.5	34.5	32.6	20
Wind	>1–15kW	26.7	26.7	25.5	20
Wind	>15–100kW	24.1	24.1	23.0	20
Existing microgenerators transferred from the Renewables Obligation scheme (a precursor to FITs)		9.0	9.0	9.0	to



**41.3p/kwh + 3p for exports or
13p saved**



Up to £15,000 worth of panels free – but could lose £35,000 over 25 years.



Domestic Solar Example

4kW installed March 2011

Cost £13,500

Generated in six months 2,700kWh

Income from FiT £1,200

Electricity Bill Halved

Estimated income plus savings over 25 years –

£53,000 - £70,000



Solar Purchasing Scheme

Transition Edinburgh Solar Purchasing Scheme

<http://www.transitionedinburghsouth.org.uk/projects/community-solar-special-purchase-scheme>

Energy Saving Trust Home Renewables Loan Scheme
Up to £2,000 interest-free

<http://www.energysavingtrust.org.uk/scotland/Scotland-Welcome-page/At-Home/Generate-your-own-energy/Home-renewables-loan-scheme?gclid=CJLz7dCXz6sCFagntAodhE2STQ>



A Leith Community Solar Project?

Community Solar Renfrewshire Business Plan

12kWp Solar System on Golf Club
Cost £28,000

Estimated income for community from FiT
£3,150/yr

Electricity Bill Savings for Golf Club £1,150/yr

Plus 50% electricity exports = £144/yr

Total income & savings £4454/yr

Estimated income and savings over 25 yrs
£171,265

Raising money locally

**Advantage of local ownership
Lawyers fees could use up profits
Community Energy Scotland drawing up standard
contracts**



Finance

- 1. Solar Company Finances – still leaves £1,150 in electricity bill savings.**
- 2. Bank Loan**
- 3. Share Capital**
- 4. Donations/Fund raising**

- Long term ownership of community buildings with the right roofs
- Tenement properties
- Narrow timescales to access government subsidies (FITS) before they are cut
- Financial expertise and track record of the co-op – steep learning curve

Challenges

- A financial challenge rather than a technical one
- Community understanding and support is critical to the next stage of the project
- Part of wider strategy to promote grass roots community energy projects in Edinburgh?

Conclusions and discussion