



ECC Environment Team

Community energy

Community-owned renewable energy projects present a powerful opportunity to create significant income that can be invested in locally-agreed priorities, and to connect individuals with their own energy use.

Aside from the obvious benefits to the environment, these projects can also act as a catalyst for other community-led initiatives.

Government schemes such as the [Feed-in tariff](#) and the [Renewable Heat Incentive](#) offer communities the opportunity to have a real stake in one of the most central services in their lives – the provision of their heat and power.

There is no reason why communities cannot develop and own decentralised energy generation facilities. [Plenty of communities](#) have already achieved exactly this when fewer incentives existed and the barriers to success were perhaps more numerous. Now that the policy framework and the [financial support](#) are being put in place, establishing successful community-owned renewable energy projects should be easier than it ever has been.

This guide provides a list of [case studies](#) and 16 [funding opportunities](#) to inspire communities in Essex to set up their local renewable energy projects. Please give us the chance to help with your project by filling in this short survey:

<http://www.surveymonkey.com/s/78JXG9Q>

Further information on community energy projects is available on various websites:

<http://www.planlocal.org.uk/planlocal-community-renewables>

<http://www.energysavingtrust.org.uk/Communities>

<http://www.co-operative.coop/join-the-revolution/our-plan/clean-energy-revolution/community-energy/>

<http://www.forumforthefuture.org/project/community-energy-coalition/more/about-community-energy-coalition>

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Green Energy Nayland (GEN)

<http://www.greenenergynayland.org.uk/>

Green Energy Nayland (GEN) is an Industrial and Provident Society aimed at generating renewable energy in and for the community of Nayland through funding renewable energy installations from community investment. Their first project was to install solar panels on Nayland Primary School to generate at least 30% of the school's electricity.

The installation consisted of 84 panels with a peak capacity of 15.54kW. The capital cost was raised through a community share offer. The income generated through the Feed-in tariff scheme is used to pay an annual return to investors. The school is charged for electricity, but at a lower rate. This translates into savings of around £700 per year. Following the success of this project, GEN is now developing two other similar projects.

Benefits: The school buys the electricity from GEN at about 1/3 of the cost of buying from a typical supplier and gets a valuable teaching aid. At the end of the term agreed with Green Energy Nayland, the school will also receive ownership of the solar PV system. Investors receive interest on their investment and the whole community has benefited from a reduction in CO₂ emissions.

GEN has produced a complete guide on how to set up similar projects, including their [finance model](#), which can be accessed at their [website](#).



CoRE NW

<http://www.corecoop.net/>

Eight farms and a social enterprise (CoRE NW) have joined forces to progress plans for a 1,000kW anaerobic digester. All the farms are located in Silloth, Cumbria within 2.5 kilometres of the chosen site for the plant. Farmers will deliver around 30,000 tonnes of slurry and silage each year – producing around 26,000 tonnes of digestate. For every tonne they put in, they will receive back about 0.8 of a tonne of digestate – this is worth about £4 a tonne.

The plant should produce around 7 million kW hours per annum – enough to power about 1,500 homes. The total cost of the project is expected to be around £3.7million. The scheme has received funding in the form of bank loans, investment from the farmers, private equity investments and a grant from the North West Development Agency.

The energy farm will create 7 jobs, safeguard 19.5 and double the number of farmer's children staying in farming. Over its 25 year life it will reduce greenhouse gas emissions by 146,000 tonne of CO₂e and generate enough electricity for 2000 households. The intention is to sell the heat to the four large chicken sheds on site and to an adjacent cement block manufacturer. The project also has plans for setting up a hydroponic unit to produce grass and other crops such as tomatoes fertilised by the liquid digestate.



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They also envisage linking this unit to the development of a major tourist attraction with a cafe in the hydroponicum and the development of the hangar buildings into an interactive visitor attraction.

The plant is the first of a cluster of 15 Energy Farms to be built over the next 10 years, which will bring huge social, economic and environmental benefits. The project is led by CoRE NW, which works with interested communities to set up and own renewable energy systems.



Hockerton Housing Project

<http://youtu.be/qiRk7TqgO90>

Hockerton is a small village in Nottinghamshire which had discussions around sustainability and decided to buy and install their own second-hand wind turbine.

The turbine – which is 30m tall, with blades of 29m in diameter – cost £70,000 and was paid for by Sustainable Hockerton's investors.

The entire cost of the project was estimated to be around £235,000. The aim was to use profits from the feed-in tariff to pay back the investors – and they've given themselves 15 years to do this – and to invest in further sustainability initiatives.

The turbine supplies enough electricity annually to power around 50 houses – which

equates to around 300kWh a year and makes money through the feed-in tariff.

In the first year alone, they estimated they would generate £50-£60,000 – with £20-£30,000 going back into village sustainability initiatives. Potential CO² savings were expected to be at around 150 tonnes a year.

Cotteridge Friends Meeting House

www.cotteridge.quaker.eu.org

Five years ago, the Quaker community in Cotteridge decided it was time to do something about their draughty old meeting house. Their main hall was difficult to heat and their electricity bills were sky-high.

The transformation of their meeting house was done step by step, from using low energy light bulbs all the way up to generating their own electricity. The group learned early on that good insulation is one of the best ways to save energy so one of the first measures was replacing their old plate glass windows with double-glazing. After an energy audit the group also decided to generate their own energy through air source heat pumps and 60 solar panels (11.1kWp).

Funding was secured from various grant schemes and trusts. The group also raised a massive £30,500 just from their own members. Income from solar panels through the Feed-In tariff is estimated at £3,000 per annum.

St Paul's Church, Gulworthy Cross

<http://youtu.be/2CuLIWnz-wY>

The church heating system was expensive and contributing to the deterioration of the building. Along with the local primary school and the parish hall, the church first investigated a biomass-fuelled district heating system. After the parish hall and school pulled out at the project, the church went ahead and installed a wood pellet boiler.



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The full costs were met by grants and donations – split roughly fifty-fifty. A new radiator system was also fitted. Biomass allows the church to be kept at a constant low temperature which helps to maintain the fabric of their building.

Hoathly Hill, Sussex

<http://youtu.be/4bmuYS2m6VI>

Hoathly Hill is a community in the rural landscape of the High Weald AONB. It comprises 27 units, ranging from single person flats to 4-bedroom detached family houses inhabited by around 65 people of all ages. Concerns about energy costs and climate change contributed to the decision to move into biomass heating. After a feasibility study in 2004, they decided to install a modern, low maintenance wood chip boiler system.

The old heating situation consisted of an LPG network piped to 75% of the houses with associated gas boilers, ranging from efficient combi-boilers to older and less efficient standard gas boilers. The other homes were using a mixture of electric storage heaters and wood stoves, plus electric immersion heaters.

The project has cost nearly £400k. The community raised £160k in grants from a number of sources, among them:

- South East England Development Agency supplied a grant because of the predicted job creation as a result of the woodchip supply.
- The Forestry Commission helped get a grant from High Weald AONB due to better woodland management
- The suppliers, Wood Energy Ltd, also obtained a grant from the Bio-energy Lottery Fund

From feasibility study through to installation had taken approximately two years for Hoathly Hill, who finally opened its woodchip

boiler in 2007. Each house has a unit which allows them to measure how much heat they use and the billing is measured according to the kWh.

Finding a woodchip supplier was easy as the community turned to the local Balcombe Estate, who was searching for a market for their thinnings. This link-up has been especially advantageous for the estate, enabling them to invest in equipment, create at least one job and secure others.

Woolfardisworthy, Devon

<http://youtu.be/dhRXG0SZBxY>

Around a decade ago, the community in Woolfardisworthy began to plan a new community building for their village. Their start point was to save costs and build something that would be an asset for their children – not a millstone. The whole community was very supportive of the plans – but there were concerns over the running costs of the new building and whether they would be able to maintain it.

The final building was very energy efficient and the plan was to introduce a range of appropriate renewable technologies when the time was right. In 2007, they sought funding from a variety of places including: the Low Carbon Buildings Programme, EDF and Renewable Energy for Devon.

They installed a small wind turbine, some solar panels and an 8kW ground source heat pump. Since installation the facilities have become exactly what the village wanted – an asset for the community. Running costs have been reduced, the building is busy with various groups using it, and the local school has visited to educate children about renewables. They have also installed a display panel in the foyer for users to show how much electricity the wind turbine and solar panels have produced.

Funding Opportunities

1. Rural Community Energy Fund (RCEF)

The £15 million Rural Community Energy Fund (RCEF) opened to applications on 28th June 2013. It is specifically targeted at helping rural communities access the money needed to carry out feasibility studies into renewable energy projects, and fund the costs associated with applying for planning permission. It is intended that projects will then be able to attract private finance to pay for the renewable energy system and get projects up and running. Funding can be used to support rural projects across the renewable and low carbon energy spectrum including wind, solar, biomass, heat pumps, anaerobic digestion, gas Combined Heat and Power and hydro.

<https://www.gov.uk/government/news/15m-fund-for-rural-energy-projects-opens-to-applications>

<http://www.wrap.org.uk/content/rural-community-energy-fund>

<https://www.gov.uk/government/news/15m-fund-for-rural-energy-projects-opens-to-applications>

2. ECC - Community Initiatives Fund

<http://www.essex.gov.uk/Health-Social-Care/Community-services/Pages/Community-Initiatives-Fund.aspx>

The Community Initiatives Fund (CIF) is a small grants scheme funded by Essex County Council (excluding Southend and Thurrock) which is designed to fund community projects that:

- create, procure or develop new community assets
- enhance existing community assets
- enhance or develop initiatives that strengthen a community

There are two strands to the fund:

- CIF (subject to a maximum application of £20,000 for any one project)
- CIF Response (subject to a maximum application of £10,000 for any one project).

Deadlines

In the case of the CIF, the timescales are:

- Receipt of completed expressions of interest - Friday 30 August 2013
- Receipt of completed application forms - Friday 27 September 2013
- Judging panels' decisions - Throughout November 2013

In the case of the CIF Response fund, applications will be considered against the criteria by a panel of officers and members who meet monthly.

- Receipt of completed expressions of interest - Friday 31 January 2014
- Receipt of completed application forms - Friday 28 February 2014

For further information, visit the [fund website](#) or email CIF@essex.gov.uk

3. Basildon Community Investment Fund

<http://www.basildon.gov.uk/cif>

Projects need to show how they further the council's vision to create opportunity by enabling community and voluntary groups deliver services meeting an unmet community need, and to promote and increase volunteering in the borough.

Local voluntary and community groups can apply for grant funding of £2,000 upwards. Grants of over £100,000 could be made available for the right projects. Applications for funding can be submitted up to 14 January 2014. Early submissions are encouraged as the CIF Panel will meet every other month to consider the latest applications received.

Projects must involve volunteers and members of your local community in the delivery and management of your project, and must fall into at least one of the following categories:

- Start-up of a new community project, initiative or service meeting the needs of the local community that are currently not available in the local area.
- Local projects that facilitate community involvement and / or volunteering.
- Improving accessibility and / or the level of community benefit delivered by a community asset.
- Refurbishment of a community building as part of a wider community project to increase usage.
- Expansion, adaptation or scaling up of a community initiative or service that meets a clearly evidenced need.

Contact: Sustainable Community Services - Funding Officer; Tel: 01268 294406

4. Landfill Communities Fund

<http://www.entrust.org.uk/home/lcf/how-it-works>

<http://www.essexenvironmenttrust.org.uk/>

<http://www.coryenvironmental.co.uk/page/Essex.htm>

Generally speaking, aimed at not-for-profit projects within 10 miles of a landfill site, which aim to achieve one of six objectives, among them:

- Object D: to provide, maintain or improve a general public amenity.

A wide range of projects might qualify under this requirement. In the past these have included playgrounds, new or improved community or visitor centres, facilities for sports clubs, skate parks, disability access improvements, planting public gardens, enclosures at zoos and creating woodland boardwalks.

Examples of funded projects:

- £5,500 to install photovoltaic panels - West Oxfordshire Community Centre
- £2,000 for a replacement gas boiler - WREN to Rainow Institute, Cheshire

5. EDF Energy Green Fund

<http://www.edfenergy.com/products-services/for-your-home/our-services/green-energy-fund.shtml#>

Funding is provided to cover the costs associated with the installation of small-scale renewable technology. A proportion of the funding requested may also be used for educational purposes (up to 20 per cent) or for feasibility studies into the installation of small-scale renewable technology. It is open to non-profit or charitable organisations and/or organisations involved in education and/or work at a community level.

The EDF Energy Green Fund exists to help develop micro-generation technology through funding of schemes in organisations with a social purpose. These projects must be located within England, Scotland or Wales. Organisations which have benefited or could benefit from funding include:

- schools and universities
- local community buildings such as local authority meeting rooms and village halls
- museums
- churches

Green Fund application rounds close at the end of August and February every year. Applications for funding opened in June and closure date is 31st August.

Examples of funded projects:

- Care Kent – used funding to fit wind turbines, a ground source heat pump and solar panels that meet all its energy needs.
- Town Mill, Lyme Regis – funding will see this historic water mill produce electricity for the first time in 60 years.
- Ringmer Community College, East Sussex – staff and pupils used funding to install solar panels on the south-facing roof of their school.
- Gants Mill, Somerset – funding paid for the installation of hydro-generation equipment across the weirs at 10 mill sites to provide electricity for local communities.

6. PURE: The Clean Planet Trust

<http://www.puretrust.org.uk/page.jsp?id=107>

Low interest revolving loan fund - Offers low cost funding options to UK schools and charities to install solar panels, wind turbines and other zero/low carbon energy technologies.

On-going - expressions of Interest are collected and assessed on a quarterly basis.

Examples of funded projects:

- Sport in Desford - This community-owned sports centre benefitted from a PURE low interest loan to part-fund the installation of a 23kWp solar PV array.
- Fenham Swimming Pool - installed a 53kW (76m²) flat plate solar thermal system to provide direct heating to the swimming pool. This is predicted to deliver almost 30,000kWh solar heat energy per year, equivalent to over 60% of the energy required to heat the pool. The installation was part-funded with donations made by British Airways passengers through the PURE One Destination Carbon Fund.

7. The Co-operative Loan Fund

<http://co-operativeloanfund.coop/>

Loan applications are welcome from new and existing co-operatives based in the UK that need between £5,000 and £75,000 of loan finance to:

- Set up as a new co-operative
- Expand their size and scope
- Assist an employee buyout or company succession
- Purchase a property or business
- Purchase capital equipment or create working capital

Additionally, [The Co-operative Enterprise Hub](#) works as a one-stop shop for free advice, training and access to finance for new and existing co-operatives. Services are delivered throughout the UK by experienced co-operative development advisers free of charge.

8. Naturesave Trust

http://www.naturesave.co.uk/trust_naturesave_about.html

The Naturesave Trust will consider applications for specific projects from Charities, Companies or Organisations whose activities are based within the UK. Grants are made to projects which specifically address the promotion and implementation of sustainable development, environmental and / or conservationist improvement and or general 'green' issues. Applications for funding are dealt with on a rolling basis – there are no deadlines. Funded projects include installation of solar PV at community centres and a flights mill hydro scheme.

9. SITA Trust

<http://www.sitatrust.org.uk/community-funding>

Enhancing Communities is the name of SITA Trust's funding programme for community improvement projects. It supports projects that make physical improvements to community leisure facilities and historic buildings / structures.

Not-for-profit organisations including community groups, parish councils, local authorities and charities can apply. The project site must fall within one of 115 funding zones. A funding zone is anywhere within a three mile radius of a qualifying SITA UK waste processing location.

- The Fast Track Fund provides grants of up to £20,000, available to not-for-profit organisations with a community leisure amenity improvement project that has an overall cost of no more than £40,000.
- The core fund provides grants of up to £60,000, available to not-for-profit organisations whose community leisure amenity improvement project has an overall cost of no more than £250,000.

10. Garfield Weston

<http://www.garfieldweston.org/>

The foundation aims to support excellence and, rather than predetermining where funds should be given, prefer to respond on a flexible basis to organisations that can show that they are addressing a need and that their work is high quality. It accepts applications at any time.

11. The Tudor Trust

<http://tudortrust.org.uk/>

Tudor wants to help smaller, community-led groups which are supporting people at the margins of society. Grants go towards core organisational costs such as salaries and day-to-day running costs, as well as project grants, capital grants for buildings or equipment and grants to help strengthen an organisation.

The focus is on small forward-looking groups, led by capable and committed people. Some of the characteristics they are looking for include:

- Organisations working directly with people who are at the margins of society
- A focus on building stronger communities by overcoming isolation and fragmentation and encouraging inclusion, connection and integration
- Organisations which are embedded in and have developed out of their community – whether the local area or a 'community of interest'
- High levels of user involvement, and an emphasis on self-help where this is appropriate
- Work which addresses complex and multi-stranded problems in unusual or imaginative ways
- Organisations which are thoughtful in their use of resources and which foster community resilience in the face of environmental, economic or social change

12. Essex Community Foundation

<http://www.essexcommunityfoundation.org.uk/our-funds/our-funds>

Manage a diverse portfolio of charitable funds, over 90 in total, some of which have their own particular aim or restriction such as supporting children and young people's projects, environmental activities, etc.

13. Awards for All England

<http://www.biglotteryfund.org.uk/global-content/programmes/england/awards-for-all-england#>

Small Lottery grants of between £300 and £10,000. The project pays for activities that will benefit the community, including:

- putting on an event, activity or performance
- buying new equipment or materials
- running training courses
- setting up a pilot project or starting up a new group
- carrying out special repairs or conservation work
- paying expenses for volunteers, costs for sessional workers or professional fees
- transport costs.

14. Biffa Award

<http://www.biffa-award.org/community-buildings>

Biffa Award aims to provide and improve community buildings that will encourage communities to come together and engage in a variety of activities. Priority is given to projects that can demonstrate innovative use of a community amenity to enhance, maintain or introduce real, community-led social,

economic or environmental improvements. Projects must be based within 10 miles of a Biffa Operation and a licenced landfill site

15. Charity Bank

<http://www.charitybank.org/charity-loans>

The Charity Bank provides affordable charity loans and loans to social enterprises and other community organisations that benefit people and communities.

16. Community Generation Fund

<http://www.thefsegroupp.com/social-impact-funding/community-generation-fund>

The Community Generation Fund is a national fund created to provide a catalyst for the widespread development of community-owned renewable energy infrastructure. The Fund is designed to assist communities seeking to develop renewable energy generation infrastructure which will create renewable energy, social engagement and a long term income source to be recycled by the community into relevant social impact initiatives. In other words, the Fund is seeking to help communities create their own environmental, social and financial legacy.

It provides commercial but creative loan funding for communities at the pre-planning (development) stage of their projects, as well as the construction (post-planning) stage. The location of the main beneficiary group must rank within the top 50% most deprived locations, as listed in latest available Indices of Deprivation.