

Energy Local

An introduction with
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Club Development Manager

Energy Local

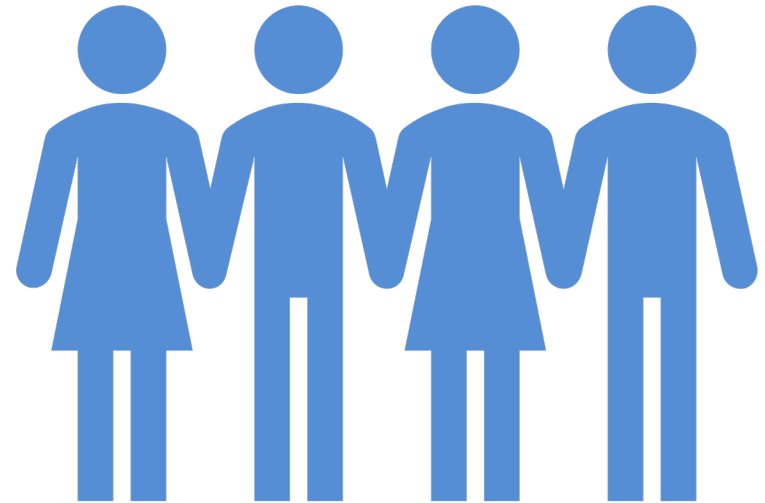


Energy Local is a Community Interest Company that is transforming the electricity market for local communities and small-scale renewables. We work in partnership with many types of organisations.

Our Vision

Energy Local's aim is to help 1000's of communities to get more value from renewable generation by using it locally. By sharing local generation we can

- reduce the cost of electricity,
- tackle fuel poverty,
- give local renewables a fair price for their power,
- keep the financial benefit local to build stronger, fairer, more resilient communities.



Key ingredients

- Small- scale renewable generator
- On same primary substation
- Metered same voltage
- Smart meters
- Licenced Supplier

Clubs

- Bridport, Wind
- Corwen, Hydro
- Bethesda, Hydro
- Machynlleth, Hydro

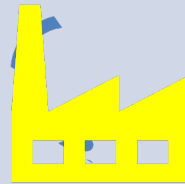
- In development, PV, Anaerobic Digestors

Two types of Clubs

We will focus on Low Voltage Clubs involving households



Low voltage generation Clubs householders, small businesses, small community centres – buy at low voltage



11kV generation sells to 11kV users – medium sized industry.

How it works now



Windy Millar sells to Big Energy Retail for 5p kWh

Money to shareholders.

Maintenance

Payback capital

Some benefit to general community?

Possible benefits



Mrs Jones buys from Biggly Energy Company at 14p kWh

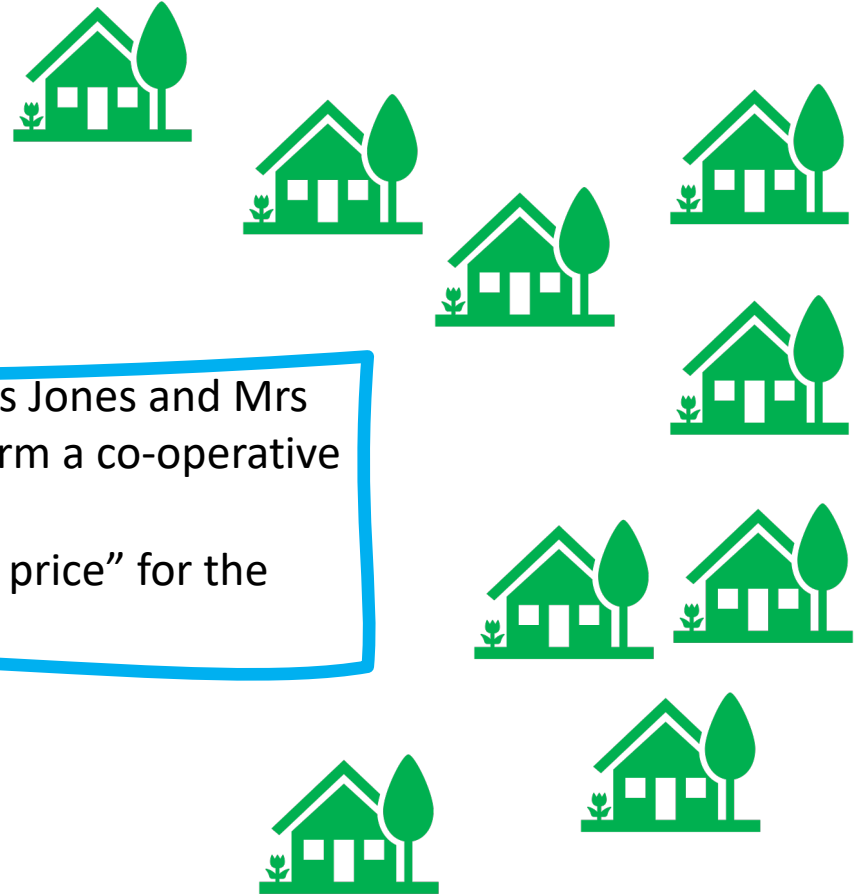
Mrs Jones gets no direct benefit from Windy Millar's turbine.

In fact she opposed it at the planning process for that reason

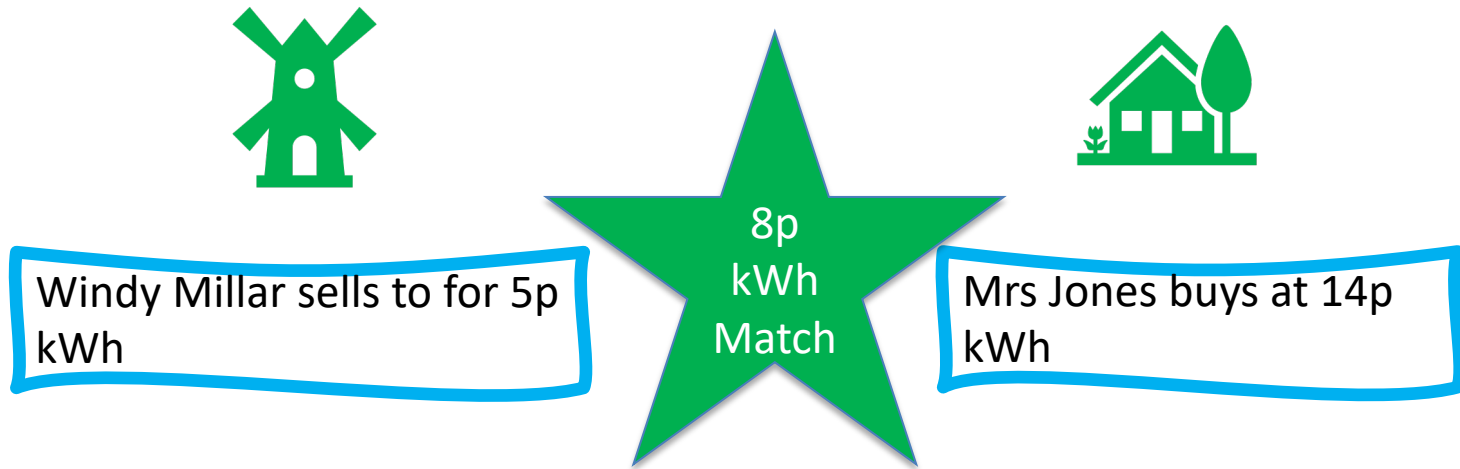
Energy Local Club



Windy Millar and Mrs Jones and Mrs Jones' neighbours form a co-operative Energy Local Club
They agree a "match price" for the local generation



The match price



Match price – the price of renewable electricity used by the club at the time of generation.

This is for both the consumer AND the generator.

With an Energy Local Club



Windy Millar gets 8p kWh
'matched' to the Club
Sells spill to Chosen Energy
supplier at 5p kWh

Spill – the renewable electricity not used in the Club



Mrs Jones buys "matched" at
8p kWh
Buys the rest at Chosen Energy
supplier Time of Use Tariff

With an Energy Local Club



Windy Millar gets 8p kWh
'matched' to the Club
Sells spill to Chosen Energy
supplier at 5p kWh

Increases income
Supports local economy
Re-invests in more renewables
Faster return on investment

Possible benefits



Mrs Jones buys "matched" at
8p kWh
Buys the rest at Chosen Energy
supplier Time of Use Tariff

Reduces energy bills
Alleviates fuel poverty
Changes energy behaviour
Uses 100% renewable energy
Supports local renewables
Improves local economy

How it works



Windy Millar moves his Power Purchase Agreement to Chosen Energy supplier

He has a half hourly metering and a live feed

Chosen Energy supplier settles in half hour blocks calculating what is used by the Club and the “spill”.

Chosen Energy supplier calculates Windy’s remittance and pay for his renewable energy



Mrs Jones moves her electricity supply to Chosen Energy supplier

She has a Smart Meter fitted and a live feed device

She is given a online dashboard to help her choose when is best to use power

Chosen Energy supplier calculates what Mrs Jones has used when and issue her bills

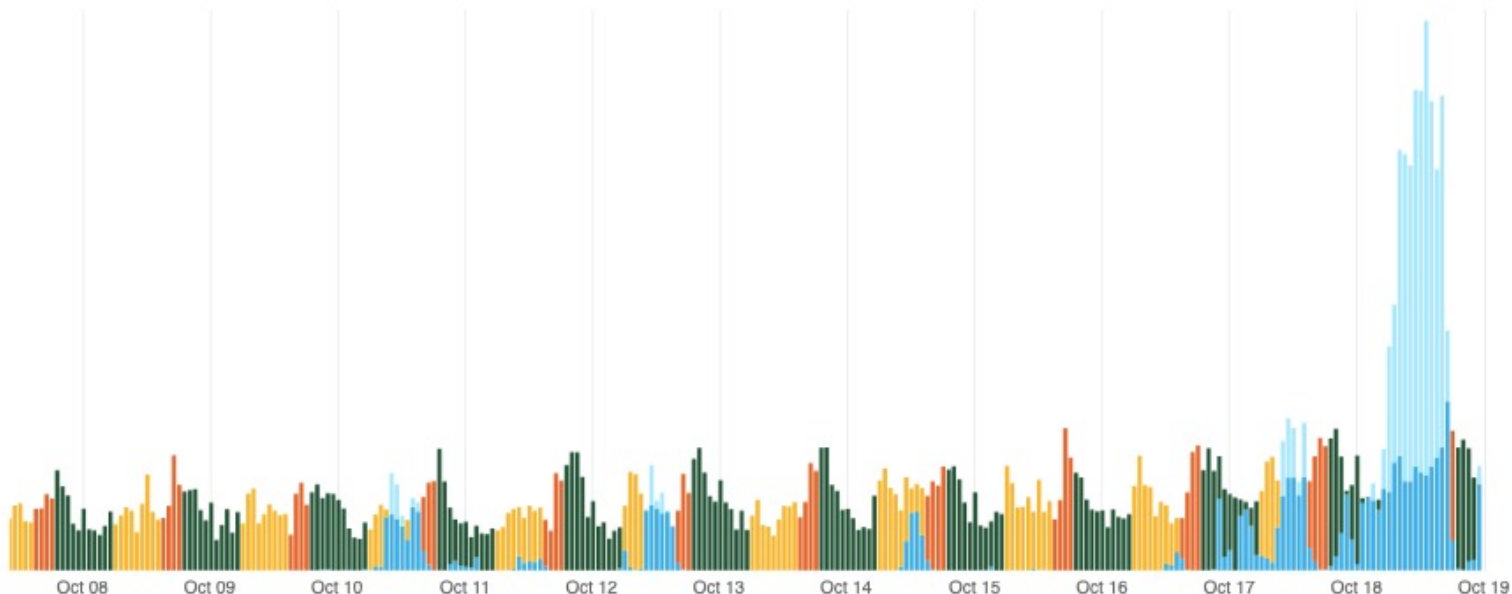
Club Dashboard

- Each Club has its own dashboard to help consumers know when is a good time to use energy.
- The best time is always when there is local generation available
- The next slide shows Bridport wind as an example

HIGH

Generating 0 kW now

■ Overnight
 ■ Daytime
 ■ Evening
 ■ Wind



Wind output is currently exceeding club consumption
 Show average club price

Your prices for power ▼

	Wind	Extra electricity
Overnight Price 8pm - 7am	9.98p	10.50p
Daytime Price 7am - 4pm ⚡	9.98p	15.75p
Evening Price 4pm - 8pm	9.98p	24.15p

Unit prices include VAT

Understanding the dashboard

- The graph shows the prices for the times of day and the match for the wind in coloured blocks.
- Club use is in red/amber/green for the different timed prices
- The wind is in blue bars
- The blocks represent half an hour.

You can see other dashboards on our website

<https://energylocal.org.uk/dashboard>

Levels of Engagement

- Join the Club
- Looks at live data on the dashboard - allows consumers to see when is a good time to use the generation
- Time of Use Tariff helps switch behaviour to cheaper times
- Use Internet of Things to programme charging/washing etc
- Sustain behaviour changes
- Become a committee member or volunteer

Modelling

- What area does the Club cover?
- How many houses should my Club have?
- How much is each house likely to benefit?
- How much is the generator likely to benefit?
- What should we set our “match price” at?

Modelling Output – Example from Hydro North Wales

generation	number of households	match price	savings for users	increased income for generator	projected income
150 kW		100 10 pence	16%	24%	£12,900
		100 9 pence	18%	14%	£11,800
		70 10 pence	18%	13%	£11,700
		70 9 pence	20%	5%	£10,900
135 kW		100 10 pence	16%	28%	£11,900
		100 9 pence	17%	16%	10,900
		70 10 pence	17%	16%	£10,850
		70 9 pence	19%	7%	£10,000
200 kW		100 10 pence	17%	15%	£15,900
		100 9 pence	19%	6%	£14,700
		70 10 pence	19%	5%	£14,500
		80 9 pence	20%	1%	£14,000

Club Advisors

- Local knowledge
- Trained by Energy Local
- Work with local partners
- Support the set up of the Club
- Model the size and area of the Club
- Lead on the recruitment of generators and customers
- Support the establishment of the Co-op

Energy Local's Role

- Advisor training
- Toolkit provided by Energy Local
- Club page and secure members' Portal
- Back-office admin of transfers with licenced supplier.
- Request Time of Use Tariffs from supplier
- Provides sponsorship for Co-op constitution
- On-going dashboard provision

Co-operative

- Each Club forms a Co-op
- The Co-op agrees the match price annually
- The Co-op has board members from the generator and the consumers
- The Co-op decides on any development or changes to the Club
- The Co-op is self-sustaining

Energy Local can



MATCH RENEWABLE
SUPPLY AND DEMAND



IMPROVE RENEWABLE
ENERGY PAYBACKS -
MAKE FEASIBLE



IMPROVE LOCAL
ECONOMY



ALLEVIATE FUEL
POVERTY



INCREASE SOCIAL
COHESION



CHANGE BEHAVIOURS
TO SAVE AND SHIFT
ENERGY USE



MAKE RENEWABLES
BENEFIT MORE OF THE
COMMUNITY



Energy Local
making energy work for you

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