Community Power – Europe and beyond

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Energy Community
Summary

Community Power in Europe

Access to information and finance

Towards new business models
Citizens participations in RES projects

Art. 14. Directive 2009/28/EC: inform citizens of the benefits and practicalities of developing and using energy from RES. In addition:

1. Pursue explicit recognition of community power and its benefits

2. Encourage citizen participation through community energy

3. Develop effective business models for community financed energy projects
**EU energy policy is a highly shared competence**

- Principle of subsidiarity + Article 194(2) TFEU: MSs retain significant control on energy;
- High diversity of legal contexts in Europe, a one-size-fits-all community power model not possible;


- The EU framework lacks an EXPLICIT and ELABORATE legal basis for community power and a fully optimized low-carbon IEM;
- Imperative for the new RE Directive (2020-2030) to be recalibrated to reflect this;
EU Community energy projects have different legal forms, e.g.:

- **Partnerships**: small group of people in a relatively equal position who share profits and responsibilities equally. Transparent decision making plus often enjoying tax advantages;

- **Cooperatives**: usually based on the *one-member one-vote principle*, equitable contribution and limited compensation, if any. Surplus goes to the cooperative development. Autonomous from government, they provide training for their members.

- **Community Foundation**: usually intended as vehicles for return of investments to be used for specific local needs or community purposes.
**Partnership: Dardesheim, Germany**

**Location:** Dardesheim, Germany, Saxony Anhalt, 1000 people.

**Legal Form:** limited partnership with a private limited company (*Dardesheim, Windpark Druiberg GmbH & Co. KG*)

- Only local residents allowed to purchase shares and engage as limited partners (over 90% of locals involved)
- Finance based on initial capital from shareholders

**Objective:** Self-sufficiency! Profits to expand RES capacity into PV (currently 19 large photovoltaic rooftop systems), biomass, e-vehicles storage system and social projects.

**Results:** 40 times more electricity than needed, and 10 times the need for electricity heat, cooling and mobility.

**Effective policies in place:** FiT with 100% interconnection guarantee.

**Challenge:** get everybody on board!
Cooperative: Brixton Energy, London (1)
Cooperative: Brixton Energy, London (2)

Location: Brixton, South London, UK (neighbourhood under Lambeth local authority)

Legal Form: not-for profit cooperative society (regulated by the Industrial and Provident Societies Act, IPS, 1965). Mainly to benefit the cooperative members, with equal voting rights (min. investment 50 £).

• Most of surplus reinvested into 1) continuation of the project and 2) Community Energy Savings Programme, to assist vulnerable members of the community.

• Members able to qualify for tax relief such as the Seed Enterprise Investment Scheme (SEIS).

Objective: clean, local energy generation; tackling energy poverty; employment for locals.

Results: purchased and installed 200 solar panels; generated around 40,000 kWh each year – enough to power 12 homes; employment to 10 young people; avoided over 18 tonnes of CO2 emissions/year, the equivalent of almost 2.5 times round the earth! delivered home energy audits and energy efficiency measures to help tackle fuel poverty; Community Fund for the future activities.

Effective policies in place: tax relief; income through government’s FiT; sale of energy used on-site to Lambeth Council.

Challenge: future income generation and continuation of the project after the first 20 years.
Community Foundation: Hvide Sande, Denmark

**Location:** Hvide Sande, small port village, 3,000 people, west coast of Denmark. Popular tourist region.

**Legal Form:** community foundation, regulated by the Commercial Foundation Act, 1985. Local unions, tourism association and utilities.

- Finance based on initial capital (min. 40,000 EUR) from local associations and businesses, with NO ownership rights.
- Profits to the community purposes for which it was established.

**Objective:** support the development of the Hvide harbour and tourism by production of RE.

**Results:** 3MW wind turbines installed; led by the Community foundation. 1.2 MLN EUR revenue to spend into local community.

**Effective policies in place:** premium tariff and loan guarantee.

**Challenge:** resist recent trend toward pvt-developer led wind farms.
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Cities play a key role in providing information on rules and procedures for community power. **Freiburg (DE)** launched **FREE SUN**, an internet based tool which:

- Identifies available roof space for solar installations (GIS technology) – solar PV and thermal;
- Provide free information on:
  1. suitable buildings for the installation of solar equipment
  2. how to concretely realize the project (regulation, permits, finance, etc.)
Crowdfunding for community power

Why using crowdfunding as funding model:

- Easy (online campaign) and accessible to all community power associations;
- Direct access to the funds necessary for the initial investments;
- Avoid bank loan and administrative/financial burden linked to it;
- Provide an energy and monetary benefits to investors and democratize energy!
RENEWABLE ENERGY CROWDFUNDING MAP

USA
- Divvy
  - Since 2014: 4 Projects, £11,500 Raised
- Clean Reach
  - Since 2014: 6 Projects, £5,980 Raised
- Collectivesun
  - Since 2015: 5 Projects, £325,593 Raised
- Re-volv
  - Since 2011: 3 Projects, £111,786 Raised
- SunFunder
  - Since 2011: 21 Projects, £637,500 Raised
- MOASIC
  - Since 2013

FRANCE
- Lendosphere.com
  - Since 2014: 12 Projects, €970,000 Raised
- Lumo
  - Since 2012: 6 Projects, €200,000 Raised
- Enerfit
  - Since 2015: 2 Projects, €7,900 Raised

GERMANY
- Econeers
  - Since 2013: 10 Projects, €410,000 Raised
- Belterves
  - Since 2013: 9 Projects, €170,000 Raised
- Greenvesting
  - Since 2009: 9 Projects, €180,000 Raised
- Greenmoney
  - Since 2014: 14 Projects, €311,500 Raised
- Solarplaza
  - Since 2013: 19 Projects, €4,000,000 Raised

PORTUGAL
- Coopemixo
  - Since 2013: 7 Projects, €327,000 Raised

UK
- Abundance
  - Since 2009: 14 Projects, £158,774 Raised
- Trillion Fund
  - Since 2011: 23 Projects, £104,397 Raised
- Microgenius
  - Since 2011: 18 Projects, £2,130,000 Raised
- Solarplaza
  - Since 2013: 65 Projects, €736,164 Raised

NETHERLANDS
- De Windcentrale
  - Since 2010: 9 Projects, €15,000,000 Raised
- Duurzame Investeren.nl
  - Since 2014: 7 Projects, €2,900,000 Raised
- Green Crow
  - Since 2012: 24 Projects, €1,832,600 Raised
- Solarplaza
  - Since 2012: 1 Project, €1,700,000 Raised

QUICK FACTS
- There's more than 1250 active Crowdfunding Platforms (CFPs) worldwide.
- 2015 Crowdfunding Volumes:
  - North America: $9.46 billion
  - Asia: $3.4 billion
  - Europe: $3.26 billion
- There are 25 crowdfunding platforms solely focused on renewable energy.
- Renewable Energy Crowdfunding raised over €165mn, funding more than 300 projects.
- Crowdfunding may supply rooftop solar projects with $5 billion of investments within five years, more than 50 times the amount raised to date.

NOTABLE PROJECTS OPEN FOR FUNDING

#1 Platform: Abundance Generation Project: Ecossol PV
- Raising target: £1,900,000
- Type project: Solar PV

#2 Platform: Trillion Fund Project: Whalley Hydro
- Raising target: £750,000
- Type project: Hydro

#3 Platform: Abundance Generation Project: Oakapple Two - Derbenture 2
- Raising target: £388,000
- Type project: Solar PV

This map was created using public sources from across the web. Have we missed an important platform? Or have we missquoted number or facts? Please let us know (info@solarplaza.com) and we’ll update accordingly.

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New business models in Europe: OVO Energy

Better Energy

Big savings and get fixed rates for a year

£83 a month
On average

33% renewable electricity
12 month fixed rates
£30 exit fee per fuel

Greener Energy

100% renewable electricity with fixed rates for a year

£88 a month
On average

100% renewable electricity
12 month fixed rates
£30 exit fee per fuel

Simpler Energy

Our most flexible plan with no contract, and no exit fees

£84 a month
On average

33% renewable electricity
No contract, variable rates
No exit fees

Electricity supplied by OVO Energy

53.1% RENEWABLE
46.9% NATURAL GAS

Average for UK

17%
24.3%
23.7%
32.3%

2.5%


Beyond Europe: Community Choice Aggregation

MCE - Clean Energy
My community. My choice.

Example Monthly Residential Electric Charges**

- PG&E
  - Electric Delivery (all customers)
    - $37.30
  - Electric Generation (all customers)
    - $45.12
  - Additional PG&E Fees (MCE customers only)
    - $5.71
  - Average Total Cost: $82.42

- MCE Light Green
  - 56%* Renewable Energy
    - $37.30
  - $37.97
  - $5.71
  - Average Total Cost: $80.98

- MCE Deep Green
  - 100% Renewable Energy
    - $37.30
  - $42.60
  - $5.71
  - Average Total Cost: $85.61

- MCE Local Solar
  - 100% Local Solar
    - $37.30
  - $65.75
  - $5.71
  - Average Total Cost: $108.76

*As reported in the Annual Report to the California Energy Commission Power Source Disclosure Program in June 2015 (www.energy.ca.gov/sb1305/labels).

**The above comparison is based on a typical usage of 463 kWh at PG&E’s rates effective as of March 1st and MCE’s current rates for the April 2015 to March 2016 fiscal year under the Res-1/E-1 rate schedule. Costs shown are an average of summer and winter rates in baseline territory X with gas heating; actual differences may vary depending on usage, rate schedule and other factors.
In a nutshell…

- New schemes **challenging the dominance of investor-owned utilities**; great examples of **bottom-up, local action to increase the share of RE in the electricity mix**;
- Profits are reinvested to meet the **needs of communities**: efficiency, poverty, education, job creation!
- Citizens increasingly perceived as **prosumers** and **energy citizens**, the driving force behind the low carbon transition;

*To achieve more:*

- Legal framework more supportive of local communities and jurisdictions (e.g. cities, counties, or collections of both) to generate or procure on the market the electricity to meet their own demands;
- Citizens to become **knowledgeable participants** and able to exercise their rights in the political, economic and social dimension of energy policy!
Thank you for your attention!

www.energy-community.org

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