



UNLEASHING THE POWER

OF COMMUNITY RENEWABLE ENERGY



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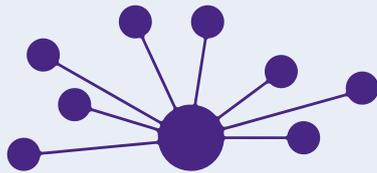
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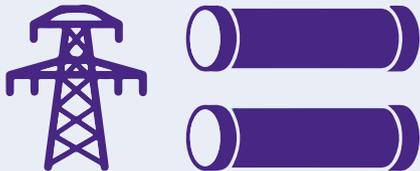
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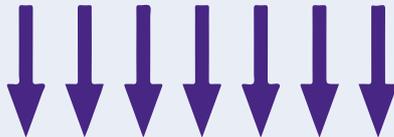
FEW LARGE POWER PLANTS



CENTRALISED, MOSTLY NATIONAL



BASED ON LARGE POWER LINES AND PIPELINES



TOP TO BOTTOM



PASSIVE ONLY PAYING

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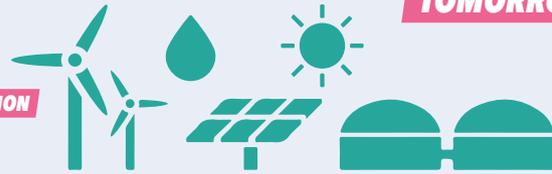
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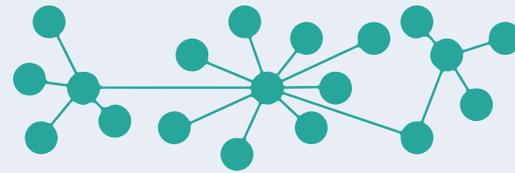
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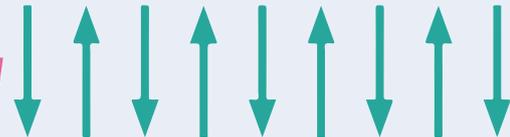
MANY SMALL POWER PRODUCERS



DECENTRALISED, IGNORING BOUNDARIES



INCLUDING SMALL-SCALE TRANSMISSION AND REGIONAL SUPPLY COMPENSATION



BOTH DIRECTIONS



ACTIVE, PARTICIPATING IN THE SYSTEM

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THE GROWING MOVEMENT FOR COMMUNITY RENEWABLE ENERGY

INTRODUCTION

In a world facing climate emergency, transforming fairly towards a fossil-free energy system in Europe has never been more urgent. Communities across the world are already feeling the impacts of climate breakdown. Europe, as one of the world's richest regions and the birthplace of the industrial revolution, has the responsibility to lead the fight to fix it.

A socially fair energy transformation means putting renewable energy into the hands of communities and people – taking back power from the fossil fuel industry, which has consistently blocked action that threatens its own financial interest, at the expense of people and the planet.

All over Europe, the energy revolution is gaining momentum. Individuals, communities, cities and local authorities are at the vanguard of Europe's energy transition: they are increasingly controlling and producing their own renewable energy, and fostering the transition to fairer, democratic and decentralised energy. It was citizens who built Europe's first wind turbines by joining together in cooperatives (or 'renewable energy communities').

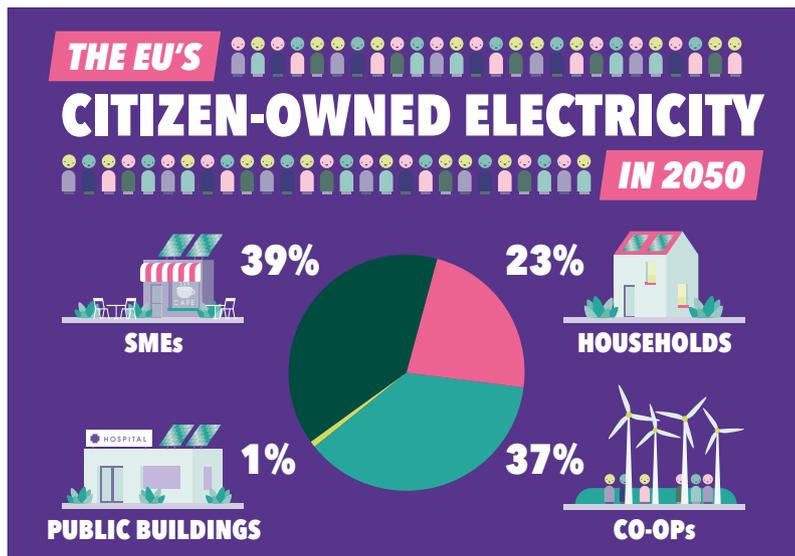
People and communities all over Europe are installing their own renewable energy projects and energy storage systems, and taking the lead on insulating homes and buildings. Community energy has the power to achieve an energy transformation more quickly, fairly and with added social benefits.

The community energy movement has recently received a boost, in the form of improved EU legislation which newly gives communities and individuals the right to generate, store, consume and sell their own energy. But these must now be put into practice in EU Member States.

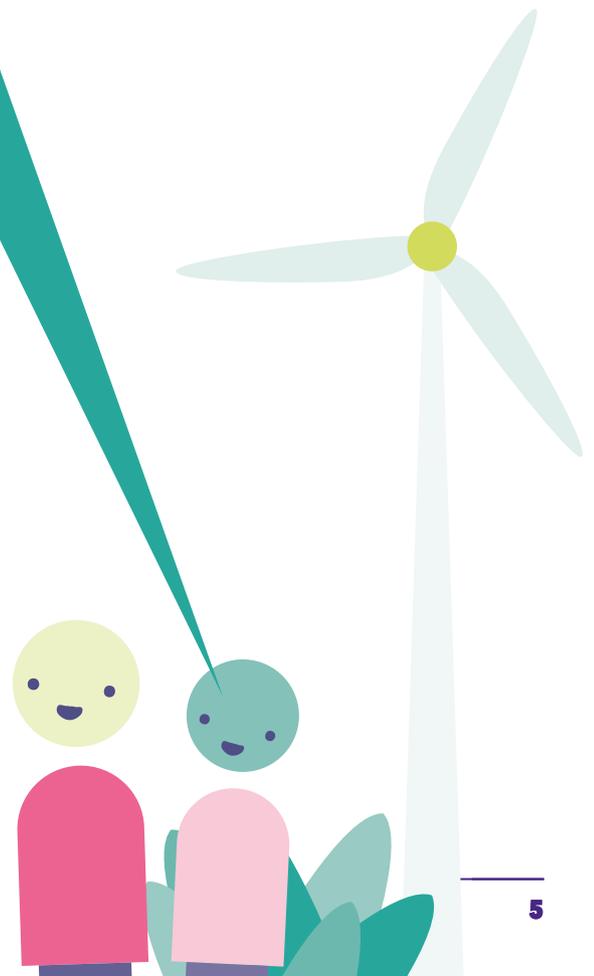
Community energy production in Europe has huge potential. A recent study found that half of EU citizens – including local communities, schools and hospitals – could be producing their own renewable electricity by 2050, meeting 45% of their energy demand.¹ Now, building on new EU community and citizen energy rights, the potential must be fully unleashed, to put Europe on the path to the needed energy transformation.

This booklet is mainly for national and local energy campaigners across Europe, municipal members, local environmental groups, members of planned or existing energy cooperatives, and active citizens.

It aims to explain what the EU's new renewable energy legislation means. Bringing examples from across Europe, it shows how the EU legislation can help to remove barriers to community and citizen renewable energy. Chapter 2 explains the provisions and new rights for community and citizen energy. Chapter 3 lays out the implications for national and local governments. Chapter 4 suggests practical steps and resources for action.



¹ The study, performed in 2016 by Dutch consultancy firm CE Delft, evaluates for the first time the potential of decentralised power generation across the continent. <https://bit.ly/2GLYnov>



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NEW EUROPEAN RIGHTS BOOSTING RENEWABLES

- THE SITUATION TODAY (6)

- NEW EU LAWS AND WHAT
THEY MEAN FOR PEOPLE (10)

THE SITUATION TODAY

Up until now, citizens who wanted to be involved in renewable energy production have found little to assist them in EU legislation, and have largely only found support in some local and national policies. Thanks to these, community energy initiatives are becoming prevalent in some parts of Europe.

Yet community energy is still relatively undeveloped in Southern, Central and Eastern Europe, mainly due to a lack of supportive frameworks, despite strong interest from communities and local authorities.

This is not to say that the significant changes in EU energy policy over the past two decades have not provided some opportunities. The liberalisation of the electricity market has, for example, made it possible for community-owned renewables projects to start supplying energy to their members. Earlier directives also encouraged the provision of national support measures for renewables, translating into some incentives for some citizens and communities to set up energy projects.

FROM RENEWABLES PRODUCTION TO SUPPLY – THE STORY OF ECOPOWER

Ecopower is a renewable energy cooperative, or 'REScoop', from Belgium. It was established by citizens around a kitchen table in Rotselaar in 1991. The origins of the Ecopower story date from 1985 when a watermill was bought as part of a co-housing project. In 2003, following the liberalisation of the electricity market in Belgium, the general assembly voted to become an energy supplier in the region of Flanders.

Today, the cooperative is both an electricity producer and a supplier operating in Flanders. With its 40 staff members Ecopower offers over 57,000 citizens the opportunity to get a grip on their energy production and supply. Projects in recent years include the development of wind turbines, solar and hydropower energy production, cogeneration, and a factory where wood pellets are produced. Together these installations produce about 100 million kWh per year. Through initiatives focused on energy efficiency, Ecopower's members have reduced their electricity consumption by an average of 50% over the past 10 years. Ecopower also enters into direct partnerships with local municipalities to support economic and social value creation for the citizens and the municipality.

However, the lack of any mention of citizen involvement in the energy system in EU policies has left a policy blind spot. **Regulation currently lags far behind the growing number of smaller, decentralised participants** such as households and small businesses, participating in the energy market.

EU energy market rules were originally designed for large, centralised, multinational energy companies peddling in dirty fossil fuels. Until now, they have not acknowledged citizens or communities as distinct market actors, nor supported fair rules for them. As renewables have become more market-driven, this blind spot has contributed to effectively forcing citizens and communities out of the market.



In **Germany** in 2014, for instance, the revision of the EU's State Aid fixed guidelines for energy resulted in the removal of feed-in tariffs, instead favouring auctions as a way to support renewables. This has not only resulted in a significant reduction in the number of new registered renewable energy cooperatives, it has all but halted the number of community-driven projects receiving support.



Furthermore, in many countries, citizens investing in renewable technologies have been subjected to abrupt policy changes and the withdrawal of support (sometimes retroactively) at the behest of larger market actors.

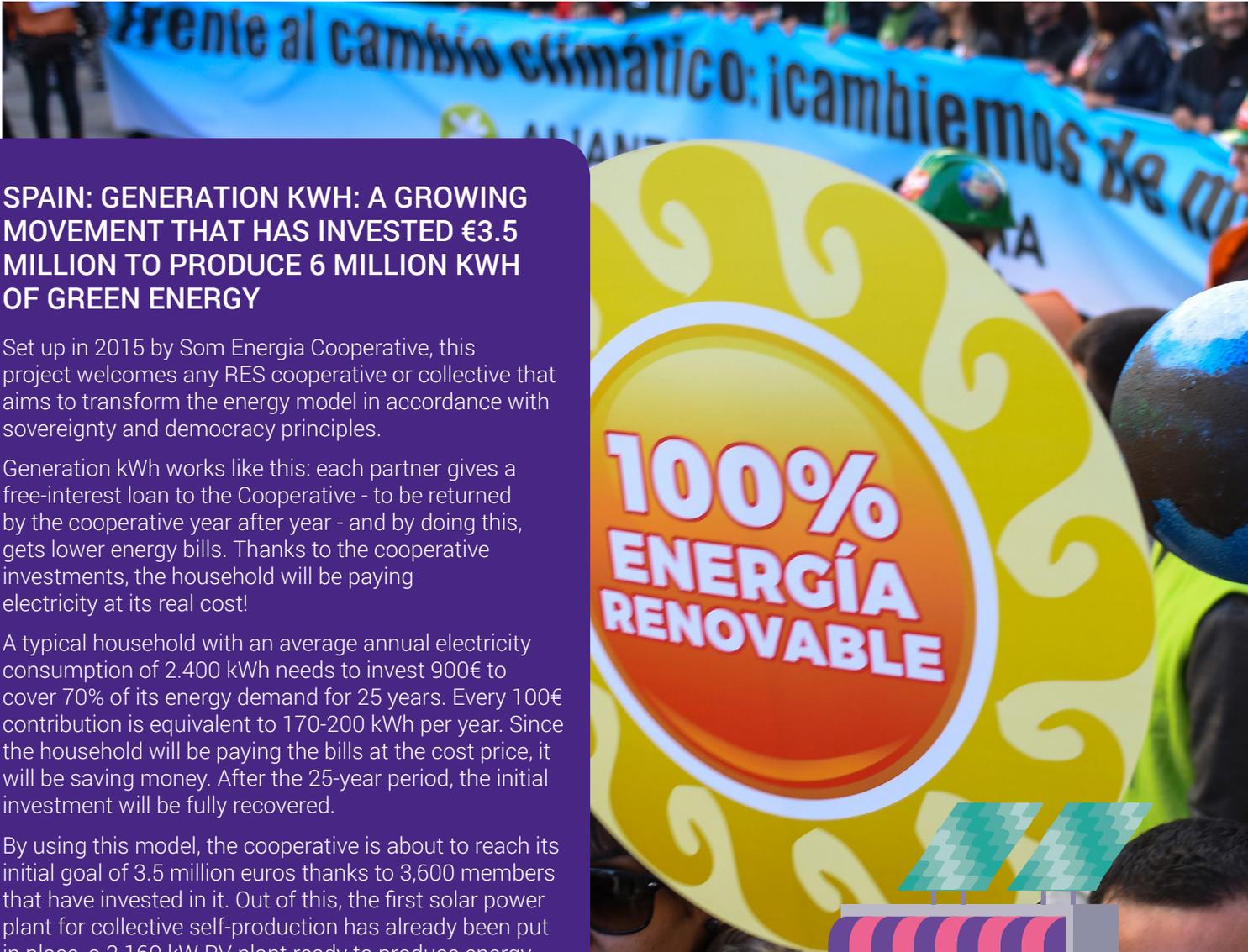


In **Spain**, for instance, rooftop photovoltaic (PV) systems were, until recent government changes, penalised by draconian measures to disincentivise self-consumption in households.

OLD ENERGY: EUROPE'S 15 LARGEST ENERGY RETAILERS

Sales in terawatt hours, 2015, and Germany's citizen electricity sales for comparison, 2016





SPAIN: GENERATION KWH: A GROWING MOVEMENT THAT HAS INVESTED €3.5 MILLION TO PRODUCE 6 MILLION KWH OF GREEN ENERGY

Set up in 2015 by Som Energia Cooperative, this project welcomes any RES cooperative or collective that aims to transform the energy model in accordance with sovereignty and democracy principles.

Generation kWh works like this: each partner gives a free-interest loan to the Cooperative - to be returned by the cooperative year after year - and by doing this, gets lower energy bills. Thanks to the cooperative investments, the household will be paying electricity at its real cost!

A typical household with an average annual electricity consumption of 2.400 kWh needs to invest 900€ to cover 70% of its energy demand for 25 years. Every 100€ contribution is equivalent to 170-200 kWh per year. Since the household will be paying the bills at the cost price, it will be saving money. After the 25-year period, the initial investment will be fully recovered.

By using this model, the cooperative is about to reach its initial goal of 3.5 million euros thanks to 3,600 members that have invested in it. Out of this, the first solar power plant for collective self-production has already been put in place, a 2.160 kW PV plant ready to produce energy equivalent to 1,300 households

More info: <https://www.generationkwh.org>



NEW EU LAWS AND WHAT THEY MEAN FOR PEOPLE

The new Clean Energy Package, agreed by the EU in 2018, starting with the revised Renewable Energy Directive (REDII), is a game changer for citizens.

Citizens and energy communities across the EU now have a number of guarantees that ensure they are able to invest in renewables and benefit from the energy transition. Acknowledgement of their role, support, and new citizens the right to produce, consume, sell and store renewable energy are all now enshrined in EU law.

This is a new and important opportunity to promote people-powered renewables to help achieve a 100% renewables future. But what does this mean in practice?

A) IT ACKNOWLEDGES CITIZENS AND COMMUNITIES ARE STAKEHOLDERS IN THE ENERGY SYSTEM

The REDII* contains several new definitions that acknowledge different ways that citizens can get involved in renewables:

- **Individually:** People, families and SMEs (small and medium-sized enterprises) will be able to install their own renewable energy system on their roofs or premises.

- By **acting jointly** in a building: the directive recognises that for the over 40% of Europeans living in apartment blocks, acting together to install renewable technology may be the best way to benefit from renewable energy.
- Through a **renewable energy community:** People, local authorities and SMEs can set up a legal entity in order to collaborate in the production of renewable energy. Through an energy community, citizens can now generate financial resources in order to provide services or to meet local needs. The directive also gives the option for companies to install renewable energy technologies on private houses.
- **Aggregators**, a market participant that can pool smaller independent producers together, can help to optimise the use of their installations, and advise them on when it is best to consume, sell or store the generated electricity.
- **Peer-to-peer trading:** This system allows consumers to trade renewable energy among themselves without a middleman, resulting in higher payments and quicker payback periods.

* EU Directive on the promotion of the use of energy from renewable sources 2018 <https://bit.ly/2FHtr6o>

B) IT PROVIDES RIGHTS FOR CITIZENS AND COMMUNITIES THAT WANT TO INVEST IN RENEWABLES

The REDII contains a core set of enforceable rights to ensure that citizens are protected in investing in renewables. Even governments or private market participants must guarantee these rights:

- **The right to produce, store, consume and sell renewable energy;**
- The right not to be unfairly charged for energy they produce themselves;
- The right to access all appropriate energy markets directly or through a third party;
- Protection against discriminatory procedures and certain charges that could dissuade or penalise involvement in renewables;
- Protection of consumer rights;
- The right to access appropriate remuneration or support for engaging in renewables production;
- A right to engage in peer-to-peer energy trading or energy sharing;
- A right to access the information that lets citizens know how to exercise these rights.



C) IT PROVIDES THE BASIS FOR DEVELOPING NATIONAL ENABLING FRAMEWORKS TO SUPPORT CITIZENS

The REDII requires EU Member States to put in place **enabling frameworks that support citizens and communities investing in renewables**. These frameworks need to be based on national assessments, which in turn give citizens an opportunity to engage with their decision makers on local opportunities and barriers.

The development of these national enabling frameworks is connected with the national planning process that EU Member States have to go through in order to communicate to the EU how they will contribute to renewables, energy efficiency and greenhouse gas targets. Governments are invited, but not required, to develop objectives for renewable energy produced by self-consumers and energy communities. This provides a **unique opportunity for citizens to advocate for a high level target for self-consumption, or for community ownership**.

D) IT REQUIRES GOVERNMENTS TO SIMPLIFY ADMINISTRATION AND PROCEDURES FOR CITIZEN- AND COMMUNITY-BASED PROJECTS

A number of provisions in the REDII are designed to make investing in renewable energy projects easier for citizens and communities. These include ensuring that citizens and communities only need to go to one place for permits, that they can easily submit documentation, that they have access to technical information, and that there are shorter, clearer waiting times to get projects approved. Furthermore, there are provisions exempting smaller projects from the permitting process altogether.





SCOTLAND'S COMMUNITY ENERGY TARGET

As part of its climate and energy strategy, the Scottish Government committed to developing at least 500 MW of community and locally-owned renewable energy by 2020. This non-binding objective has served as the basis for a number of supportive policies and financial measures that have been put in place. Seeing that they would surpass their target early, the Government updated the target to 1 GW of community and locally-owned renewable energy by 2020, and 2 GW by 2030. Furthermore, at least half of all newly-approved renewable energy projects will need to have some element of shared ownership with the local community.²

² <https://bit.ly/2TOZW3r>



IMPLICATIONS FOR EU MEMBER STATES

- **A) RENEWABLE ENERGY COMMUNITIES (14)**
- **B) HOUSEHOLDS (23)**
- **C) LOCAL AUTHORITIES (26)**

Now that the final Renewable Energy Directive (REDII) has been agreed between the European Union Institutions, the next stage is for EU Member States to begin transposing and revising their national laws to ensure they are consistent with the new EU legislation. While doing so, Member States will also deliver plans (also called 'national energy and climate plans', or 'NECPs') to the EU Commission containing objectives, policies and measures showing how they aim to meet their 2030 renewables, energy efficiency and greenhouse gas targets. These will include objectives, policies and measures to support self-consumption and renewable energy communities.

These processes provide **citizens and civil society with two chances to advocate for supportive national policies and legislation, and for governments to promote renewable energy communities and self-consumption.**

Both of these processes have deadlines:

- **By the end of 2019, national governments are expected to deliver finalised plans for their NECPs;**
- **By 30 June 2021, Member States need to transpose the laws (and the citizen energy rights).**

It is important to distinguish between A) renewable energy communities, B) households and C) local authorities - which we do for the rest of this chapter.

A) RENEWABLE ENERGY COMMUNITIES

There are several elements in the REDII that, together, form the basis for developing national policy and legal frameworks for renewable energy communities.

DEFINITION OF 'RENEWABLE ENERGY COMMUNITY'

The definition of '**renewable energy communities**' in the REDII is at the heart of the new EU legal framework for community energy, as it determines which types of community initiatives can benefit from support. Member States will have to define specific legal entities, or forms, that can be considered 'renewable energy communities', while complying with the definition that is in the REDII:

'RENEWABLE ENERGY COMMUNITY' MEANS A LEGAL ENTITY:

- (a) which, in accordance with the applicable national law, is based on open and voluntary participation, is autonomous, and is effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity;
- (b) the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities;
- (c) the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits;

THE DUTCH CLIMATE AGREEMENT AND COMMUNITY OWNERSHIP OF RENEWABLES

Throughout 2018, the Dutch government has been holding dialogues with stakeholders across the country in order to agree on goals for a climate agreement for The Netherlands including the value of local and community ownership of renewable energy projects.

The final agreement contains a non-binding objective stating that all new wind and solar projects should be 50% owned by the local community. The objective will serve as a basis for municipal planning of renewable energy development and feed into the planning permission process. This will guarantee that developers, when seeking permission for new projects, talk with communities to understand how they want to be involved.





Four key elements should be highlighted:

- 1) **Eligibility to participate:** regardless of the form chosen, only individuals, local authorities (including municipalities) or SMEs³ can participate as members. Excluding larger companies ensures that they are not able to unfairly take advantage of special rights or treatment.
- 2) **Control and democratic decision making:** the renewable energy community must be controlled by members that are in 'proximity' to the renewable energy projects carried out by the community. The definition of 'proximity' is determined by the Member State. It will be important to make sure it isn't defined too narrowly, or it will become a barrier. In addition, the renewable energy community must be 'autonomous': no individual member (in particular a company or financial institution) can exercise disproportionate influence over decision-making.
- 3) **Open and voluntary participation:** the community must be open to all potential members based on non-discriminatory criteria, and they must be allowed to leave. This is to ensure that local citizens are not prevented from joining the community, while also ensuring that they are free to leave and exercise their choice in the energy market.
- 4) **An alternative purpose to profit-making:** the renewable energy community must have as its primary aim to provide its members, or the local community in which it operates, with environmental, economic, or social benefits. Members of the community may receive a financial return on investment, but the community itself should not be profit-oriented.

Many of these are **operative principles of cooperatives or social enterprises**.⁴ As such, the definition provides a unique opportunity to advocate for renewable energy communities to take these types of legal forms so that our energy system can work for people and the planet.

³ <https://bit.ly/2boTaz7>

⁴ <https://bit.ly/2AOAsz6>

GREECE - A MODEL LEGAL DEFINITION FOR ENERGY COMMUNITIES

In January 2018, the Greek Parliament voted to pass the first dedicated legislation in Europe on community energy. Importantly, the legislation defines energy communities, who can participate, how they can be established and operated, and how profits may be used. Importantly, the legislation frames energy communities as cooperatives aiming solely to promote a social economy and innovation, addressing energy poverty and promoting energy sustainability, generation, storage, self-consumption, distribution and supply as well as improving end-use energy efficiency at the local and regional level. Profit making is limited to certain instances. The legislation also lays out a number of support measures to help energy communities flourish.



A BASIC SET OF RIGHTS

The REDII grants rights to both the energy community and its participants. These are automatic and enforceable in law. Once the Member State has put in place measures to ensure these rights can be exercised, they should be stronger and easier to defend than the policies and measures in enabling frameworks.

RIGHTS FOR CITIZENS

Every citizen has the right to participate in a renewable energy community without discriminatory conditions, and must be able to keep their consumer rights. This is important because as a member of an energy community, they are engaging in an economic activity and, as such, they could be vulnerable to losing energy-related consumer rights. All members should have equal standing within the community itself, meaning that there should be no discriminatory treatment among members. Citizens also have a right to information, awareness raising, guidance and training, to help them to exercise their rights.

RIGHTS FOR RENEWABLE ENERGY COMMUNITIES

Renewable energy communities have the right to engage in generating, storing, consuming (including self-consuming) and selling renewable energy. They also have the right to access suitable markets individually or through aggregation.

Significantly, energy communities now have the right to share energy. This is a new opportunity, as energy sharing is still illegal in most countries. As this provision is quite vague, citizens have the responsibility to come forward with detailed proposals (e.g. including virtual net metering, which is currently possible in Greece; peer-to-peer energy trading, etc.). For this to be effective, EU Member States need to ensure that grid operators cooperate with energy communities.

ENABLING FRAMEWORKS

EU Member States now have to support the development of renewable energy communities, by elaborating enabling frameworks. However, in order to develop them, Member States have to assess both the potential for developing energy communities and existing barriers to their development.

THE UK'S COMMUNITY ENERGY STRATEGY

In early 2014, the UK government released a comprehensive 'Community Energy Strategy', after an extensive effort by the Government to identify and learn about the various actors within the community energy sector, and the specific challenges they face. The Strategy was developed with input from a Community Energy Contact Group established by the Government. The resulting strategy laid out the Government's priorities and plans for developing greater support for community energy in the next years.

For more information, see:
<https://bit.ly/1erF1tY>





According to the directive, these enabling frameworks have to cover a number of points:

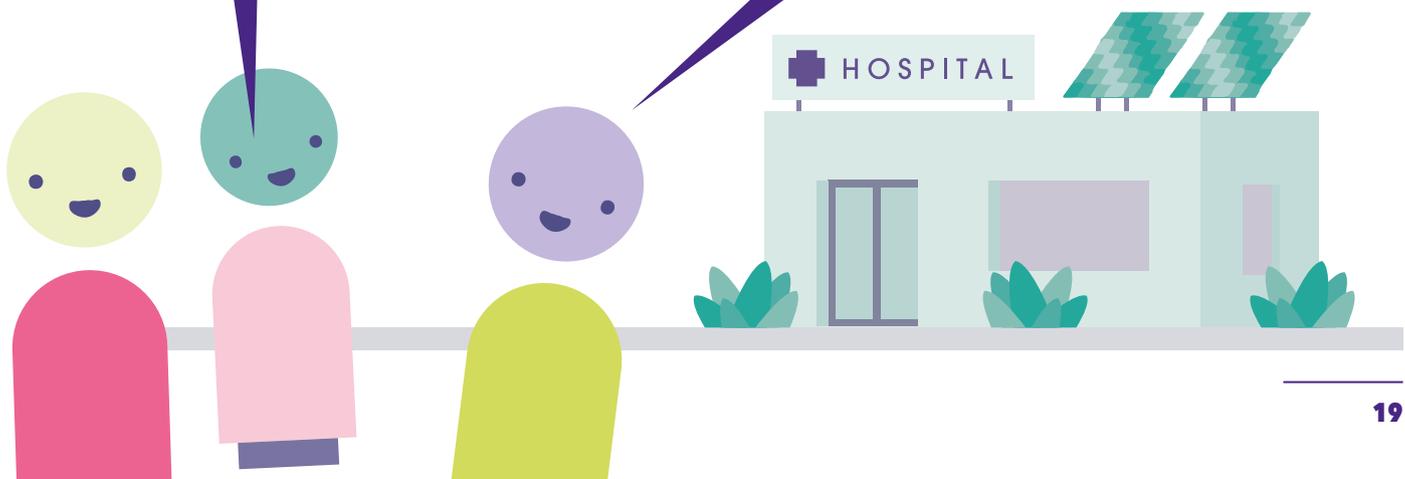
- **Reduction of unjustified regulatory and administrative barriers.** Once identified by an assessment, unjustified administrative and regulatory barriers to the development of renewable energy communities must be removed.
- **Non-discrimination.** Renewable energy communities must not be discriminated against in their activities particularly by other market actors (e.g. DSOs or utilities), but also by governments.
- **Fair, proportionate and transparent licensing and registration procedures.** When assessing licensing requirements and other rules for renewable energy communities, Member States must ensure that these do not disproportionately burden energy communities.
- **Fair, proportionate, transparent and cost-reflective network and other charges.** Member States must ensure that energy communities' contributions to network and other system costs are fair. These have to be determined through a cost-benefit analysis, which provides an opportunity to frame energy communities in terms of the benefits they can provide to the energy system and the community. If the national energy regulator conducts this analysis, it is governed by specific transparency, participation and accountability rules.
- **Access to finance and information.** Since many communities do not know where to start when it comes to technical and financial aspects of setting up an energy community, enabling frameworks should propose ways of ensuring that these issues are dealt with. In particular, many communities struggle to fund feasibility studies, which determine whether developing a project is possible. This is an opportunity for citizens to advocate for the establishment of funds or investment support such as favourable loans, grants, or tax reductions for members' investments.
- **Access for citizens that are vulnerable, energy poor, or tenants.** Energy communities must provide opportunities to ensure that vulnerable and energy-poor households can participate. Many REScoops also use renewables to address energy poverty. Ideally, Member States should put in place specific policies and measures to promote this, but it will be up to citizens to advocate for specific ideas.
- **Collaboration between municipalities and cooperatives.** Municipalities increasingly want to set up a cooperative or collaborate with existing energy communities. Local authorities are now able to ask for specific regulatory and capacity building support. To do this they should also be empowered to put in place local measures to support energy communities e.g. local planning, financial policies, or public procurement.

REVOLVING FUNDS FOR ENERGY COMMUNITIES: A GROWING TREND AROUND EUROPE

A growing number of EU countries are beginning to recognise the financing challenges faced by energy communities. Increasingly, they are putting in place revolving funds that communities can access in order to finance upfront project development costs (e.g. feasibility studies, obtaining permits). These funds often come in the form of grant-to-loan schemes in order to limit investment risks for communities. Denmark, Scotland, England and the Netherlands have all included revolving funds in their plans and policies.

ENERGY COMMUNITIES BROADENING ACCESS TO RENEWABLES FOR ALL LESSONS FROM EUROPE TO THE US

In a number of EU Member States, REScoops explicitly pursue social aims, such as fighting energy poverty. They do this by developing solidarity schemes to help vulnerable members with their energy bills, by providing services and education to their members on reducing their consumption, and using revenue from renewable energy generation to improve the living standards of vulnerable and low income households.



A MODEL FOR CO-INVESTMENT BETWEEN RENEWABLE ENERGY COOPERATIVES AND MUNICIPALITIES IN BELGIUM

Amel and Bülingen (Belgium) are two municipalities in the German-speaking region of Belgium that decided to start up a large wind farm on municipal property. 60% of the project will be public and owned by the municipalities (30% Amel and 30% Bülingen). The remaining 40% will be privately owned by two local energy cooperatives: 27% will be owned by Courant d'Air, and 13% by Ecopower. A Special Purpose Vehicle (SPV) will be put in place to accommodate this Public Public Civic Partnership Partnership.

INCLUSION IN RENEWABLES SUPPORT SCHEMES

The move towards auctions and tenders is having a clear negative impact on the ability for renewable energy communities to compete for, or access, available renewable energy support schemes. The REDII addresses this issue by **requiring EU Member States to take the specificities of renewable energy communities into account when they are developing support schemes**. This means that if a Member State fails to assess how the design of its support scheme(s) impact on energy communities, it could be subject to legal action.



In practice, Member States should provide measures to **ensure that energy communities can compete for support on an equal footing** with other market participants. Member States will have considerable discretion over exactly how they do this. However, the recitals of the REDII provide people with options to advocate for, including:

- The provision of information, technical and financial support;
- Reduction of administrative requirements;
- Community-based bidding criteria; and
- Tailored bidding windows for renewable energy communities.

CITIZEN-BASED CRITERIA FOR TENDERS IN BELGIUM

In Belgium, local authorities can tender out the development of renewable energy projects on publicly-owned land. In doing this, they often integrate policy or development objectives, including citizen involvement and public acceptance. The tendering criteria may be based on points, or specific criteria that the authority will take into account when assessing the bids. Here is an example:

Eeklo Tender for local wind development (20 MW) according to provincial wind plan

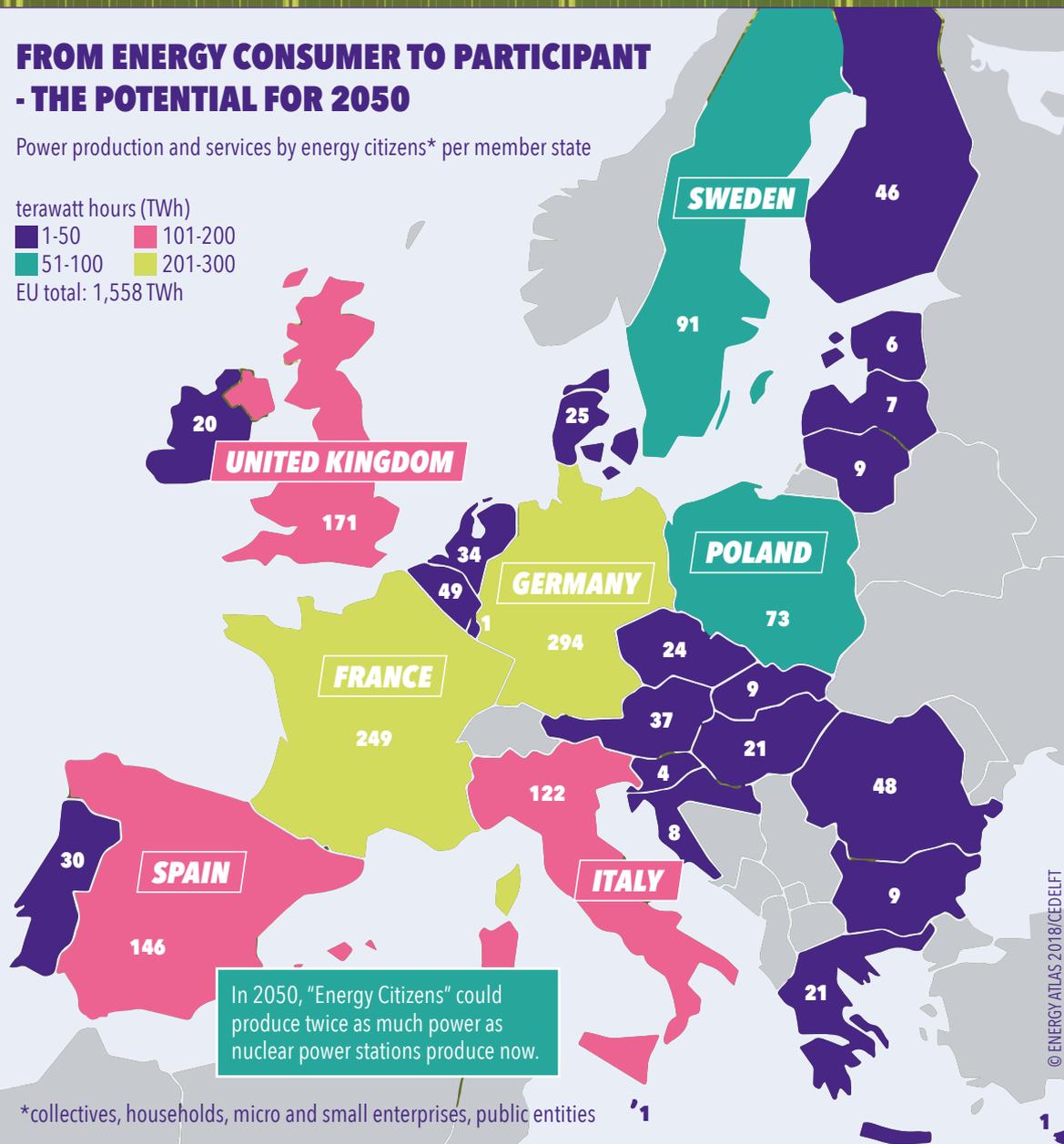
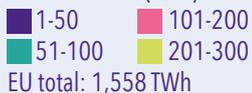
- Aiming for at least 50% direct participation for municipality and local citizens
- Contribution of 5,000€/year for each wind turbine (paid to a community benefit fund)
- Contribution of 5,000€/year for each wind turbine (paid to the municipality)
- Including social-societal criteria in the public tender (not only financial criteria)



FROM ENERGY CONSUMER TO PARTICIPANT - THE POTENTIAL FOR 2050

Power production and services by energy citizens* per member state

terawatt hours (TWh)



B) HOUSEHOLDS

Individual households also have won new rights to play an active part in driving Europe's energy transformation.

CHARGES

The new REDII says that home production of renewable electricity can be sold with some charges applied. However **any charges must be non-discriminatory and proportionate**.

This means network charges should only reflect the cost of injecting electricity to the grid. Governments will have to report the calculations and assumptions for setting charges and fees openly.

This is progress. In many countries, charges - in particular network charges - are not based on a true cost-benefit analysis, and often discriminate disproportionately against home energy production.

The Spanish government notoriously put in place a 'sun tax', which made investing in solar power unattractive and stifled the solar sector.

Community energy advocates have argued that charges and fees should not apply for electricity that is self-produced and consumed at home. The REDII endorses this principle. But it allows governments some exceptions where charges can be imposed:

1. If public schemes are in place to offer effective support to self-generated renewable energy.
2. From 2026, if installations for electricity self-generation and consumption exceed 8% of the total installed electricity capacity.
3. If the installations have capacity greater than 30 kW.

HOUSEHOLDS WILL HAVE TO BE REMUNERATED

Believe it or not, it has been quite possible to generate and share power from the solar panel on your roof and get paid nothing at all. The new EU rules change that. **They require governments to ensure that, from 2021, renewable self-consumers receive a fair payment for the electricity they sell to the grid.** This payment must correspond at least to *"the market value of that electricity and which may take into account its long-term value to the grid, the environment and society"*.

Ensuring the market price is already a big step. But governments should even go further, and recognise the long-term value of self-generated renewable energy to the environment and society when setting the level of payment.

In the US a methodology has already been used in Minnesota, Oregon, and Austin, Texas to set the price for privately-produced electricity sold to the grid, and has been used to inform policy decisions in California, New York and Texas. A recent study, using this approach in Europe for the first time, puts the benefits generated by a small household solar installation in Spain at €440 per year net (based on a value of solar of €59/MWh), or €1.77 billion overall.



APARTMENT BLOCKS AND ELECTRICITY SHARING

40% of people in Europe live in apartments and this proportion is higher for people from low-income backgrounds. **The benefits of participating in the energy transition must be available to everyone, not just the wealthy.**

Renewables have great potential to cut electricity bills, reduce energy poverty and even contribute to reducing income inequality. One way this can happen is by making sure that everyone, regardless of whether they own or can access a roof, can participate in the electricity market.

The new directive gives **people living in apartments the right to jointly set up renewable energy projects.**

Governments should put in place provisions tailored to the needs of people living in apartments - taking into consideration factors like the lack of roof space, multiple households sharing the installation, and the fact that many are tenants not owners.

The REDII also encourages governments to come up with electricity sharing schemes. These can increase the uptake of distributed solar energy by overcoming the problem of roof access or allowing vulnerable customers to benefit. One example of an established electricity-sharing scheme is **'virtual net metering'**, which allows credits to be assigned to the electricity generated in one location, and for the credits to be bought, sold and/or transferred to the bill of an electricity customer at another location. The consumers

do pay grid charges for the electricity transfer, but still it can greatly reduce the bills of those in need. It is already common practice in the US and Australia, yet in Europe, Greece is the only country that has adopted it so far.

GREECE: SOCIAL GAINS THROUGH ELECTRICITY SHARING

'Virtual net-metering' could make a huge difference in combating energy poverty in Greece, where well over 50% of people live in apartment blocks and 4 out of 10 households are struggling to pay energy bills.

Greenpeace Greece is proposing a 10-year social solar programme based on existing Greek energy laws on virtual net-metering. This would buy households struggling with energy poverty a small PV system to be installed on their roofs or in a nearby PV park. This would enable these households to become self-sufficient and stop relying on electricity consumption subsidies. Consumers benefiting from this programme could reduce their energy bills by €280-315 annually. At only half the cost of the current social tariff programme, social solar is a win-win for the climate, for efficient government spending, and reducing energy poverty.

ENABLING FRAMEWORK

The REDII **obliges governments to put in place an “enabling framework” to facilitate the development of renewable self-consumption.**

REDII says governments must base the framework on *“an assessment of the existing unjustified barriers to, and of the potential of, renewable self-consumption in their territories and energy networks”.*

Governments are free to choose how they put this framework in place, but they must follow certain aims similar to the requirements for renewable energy communities. These enabling frameworks have to cover a number of points:

- Remove obstacles so that everyone can access renewables for self-consumption.
- Address financial and regulatory barriers and incentivise building owners to create opportunities for renewables self-consumption.



- Ensure prosumers’ non-discriminatory access to support schemes for the electricity they feed into the grid.
- Ensure that the system costs they are required to pay for electricity they feed into the grid are adequate and balanced.

In establishing a National Enabling Framework for renewable self-consumption two considerations must be taken up by national governments. **Firstly, the national assessment should be carried out in an objective way, following the correct methodology. Secondly, all the requirements set out in the REDII should be fully reflected.**



C) LOCAL AUTHORITIES

Local authorities are proving a key player for democratisation of energy. 9,000 local and city authorities across Europe have committed to ambitious renewable energy plans through the European Covenant of Mayors.

The new REDII could be a game-changer for local authorities to help drive forward Europe's energy transformation - if they can make full use of its new provisions. Local authorities both gain legal leverage to **support new business models** around community control and ownership of renewable energy. And they gain the right to **participate as shareholders** in renewable energy communities.

Involving local authorities can build trust and legitimacy for projects, and can link with broader political strategies and plans for decarbonisation and scaling up of renewables.

LOCAL AUTHORITIES AS BENEFICIARIES OF COMMUNITY ENERGY

Local authorities gain from supporting community energy and not only because they deliver renewable energy or efficiency gains. In many EU Member States, community energy projects **also help local authorities to tackle fuel poverty.** As cooperatively-owned projects are often mission- rather than profit-driven, they regularly offer more favourable tariffs to vulnerable households while reinvesting in energy efficiency.



**RENEWABLES
NETWORKING
PLATFORM**



**Covenant of Mayors
for Climate & Energy
EUROPE**



In the UK, **Nottingham** city council launched "**Robin Hood Energy**", a not-for-profit energy supplier fully owned by the local authority.

Cities are also doing this with **direct citizen involvement**.



Plymouth city council supported the launch of an energy community that has improved the efficiency of housing stock and helped over 11,000 low-income households. The cooperative helps households access grants to cancel energy debt, receive free and assisted insulation and provides advice on the best tariff options.

Another strong motivating factor is **generating local value**.



The district of **Steinfurt** in Germany made community energy central to all its activities after realising that it spent 1.5 billion euros a year on energy, which would otherwise have left the region.

Enhancing **social cohesion and civic consciousness** is another powerful driver especially in urban settings with weaker community ties. Community energy is also a way to translate aspirations for a new solidarity economy, which has resonated in municipal elections.



In **Paris**, the local authority is planning to create a cooperative supplier of renewable energy by 2020 that would foster a win-win partnership between the city and its regions.

Local authorities also benefit from the **technical expertise of energy cooperatives**.



In the city of **Gent, in Belgium**, the municipality provides support for citizens to invest in renewable energy and energy efficiency, and has tasked the local cooperative **Energent** to provide technical assistance to citizens.

Cities can also benefit from the skillset of energy cooperatives to **help define strategies**.



This was notably the case of the Belgian city of **Leuven**, which sought the help of the local Ecopower cooperative to develop its sustainable climate and energy action plan under the Covenant of Mayors.

Lastly, cities are increasingly experimenting with inclusive and collaborative governance models such as **participatory budgeting and planning**. **Shared energy ownership and decision-making** is another game changer, as deciding on new energy infrastructures and services with citizens helps reinvent local democratic governing systems.

LOCAL AUTHORITIES AS POLICY ENABLERS

Local governments have significant influence when it comes to supporting the growth of community-owned and controlled energy.

During the 2015 Paris COP21 climate negotiations, hundreds of local governments committed to a fully renewable or decarbonised energy supply by 2050. This ambitious goal will require large amounts of private capital to be mobilised, public support for new installations, and innovative local partnerships, all of which call for increased community involvement. In this context, European cities are already adopting concrete policy instruments.



The **Mayor of London**, Sadiq Khan, has made civic energy a crucial pillar of his 2050 strategy. With the objective of increasing local solar capacity to 2GW, he has set up a dedicated Community Energy fund. The Mayor also pledged to supply a quarter of London's energy from decentralised sources by 2025.

As urban planners, local authorities can make sure that **new neighbourhood settlements or large refurbishment projects have a community energy dimension.**



In **Lyon**, one of the largest urban renewal projects in France, the **Lyon Confluence** project, will test the new business model of collective self-consumption from rooftop PV systems.

Cities can also play an instrumental role in **procuring energy** in ways that offer new market opportunities for community energy projects, while empowering groups of consumers. This includes public procurement criteria that specifically target community energy projects or bulk buying schemes that pool the purchasing power of local households and businesses.



In **Brussels**, three local municipalities have integrated criteria favouring cooperatives into the awarding of public contracts.



In the province of **Antwerp**, a group-buying programme helped boost the local solar market, after subsidy cuts had caused a deep decline.

LOCAL AUTHORITIES AS PROJECT FACILITATORS

Local authorities are increasingly becoming direct partners of energy cooperatives, as they act as catalysts and matchmakers for new projects.

At the pre-development phase, there is no shortage of examples of local authorities organising targeted workshops and information campaigns to reach out to the local community, landowners and other key stakeholders.

Local authorities are providing access to public sites and facilities for new renewable projects. Sophisticated tools are being developed by municipalities to help citizens identify potential locations.



In **Gent**, the local authority created a solar and heat map to help residents see whether roofs throughout the city are suitable for the installation of solar panels and learn about heat demand and supply opportunities.

Bristol in the UK, and **Freiburg** in Germany have also developed instruments of this sort.

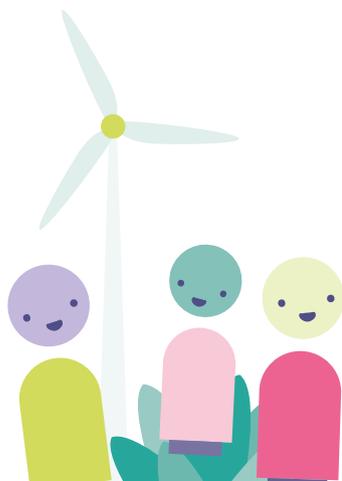


In **Križevci**, Croatia, the local authority is leasing solar energy from a green energy cooperative that installed panels on the city-owned Business Centre. The solar modules deployed were entirely financed by citizens through a crowd-funding campaign. With a total investment of €50,000, the citizens will be repaid from the monthly energy savings over 10 years, after which the system will be transferred back to the city's ownership.

MUNICIPALITIES AS DRIVERS OF COMMUNITY ENERGY IN HUNGARY

In Hungary, and other countries of Central and Eastern Europe, municipalities are the main drivers of community energy projects. There are numerous cases of municipality-owned renewable installations and projects involving local residents and schools.

Friends of the Earth Hungary is cooperating with several municipalities who are considering supporting community photovoltaic projects as the first 'classical' renewable energy communities in Hungary.



LOCAL AUTHORITIES AS INFRASTRUCTURE OPERATORS

Where local authorities are involved in running utilities, they can **play an important role in ensuring that communities are incorporated.**

In **Vienna**, the local Stadtwerke (electricity provider) launched a creative programme called “**citizens power plants**” in 2012. The model functions through ‘sale and lease-back’. The Stadtwerke encourages citizens to invest in solar panels on public facilities and sites and leases them back to them with an annual return (between 1.75% and 3.1%) for a minimum of five years. In December 2013, two supermarket chains cooperated with Wien Energie to create a new model, remunerating citizens through yearly shopping vouchers. In October 2017, the utility extended the model to co-ownership of e-charging stations, with a target of deploying 1000 stations by 2020 and paying part of the yearly remuneration through supermarket but also public transport, gas and electricity vouchers.



In the German municipality of **Wolfhagen**, citizens own 25% of the local utility, allowing them to benefit from the revenues of the renewable energy plants. But the participation of citizens has also had a direct influence on decision making processes.



Outside of electricity production, cities that are owners of district heating infrastructures are now looking at crowd-funding options to directly involve the local community members in the financing and ownership of distribution networks.



4

WHAT TO DO NEXT

- **PRACTICAL STEPS (32)**

- **RESOURCES AND LINKS (34)**

The new EU renewable energy law, the REDII, with its new rights for citizen and community renewable energy, could unleash a desperately needed energy transformation in Europe. All local energy communities, households, local authorities and SMEs across the European Union now have much more legal certainty and clarity.

But the next steps will be key as governments transpose the directive and set up their National Enabling Frameworks to implement across their countries. This is where citizens, local authorities, local renewable energy groups, civil society groups and others advocating for full implementation come in.

PRACTICAL STEPS

Now you have all the information - what to do with that concretely?

WE KNOW:

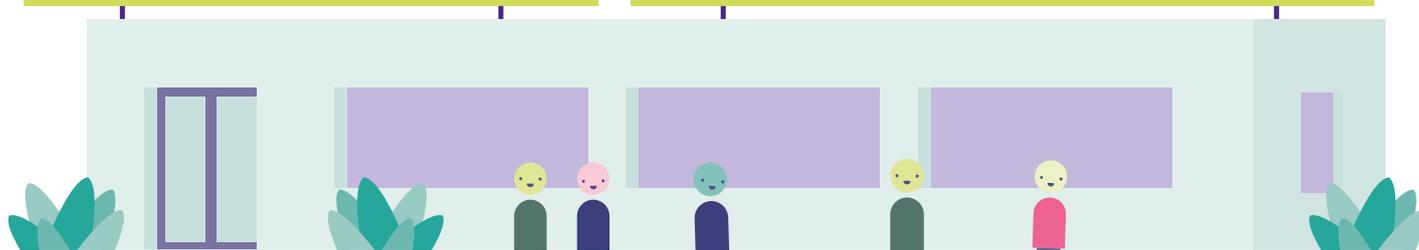
- the deadline for Member States to deliver finalised National Energy and Climate Plans (NECPs) is the **end of 2019**.
- **the deadline for Member States transposing REDII is 2021**. The earlier these rules come into effect, the sooner people and communities can start to reap the benefits of investing in renewables.

WE NEED:

- every government to **transpose all citizen energy provisions in particular those that are optional** such as electricity sharing and making sure households receive the true value of their solar installation. Governments could also put in place **targets for community energy and rooftop solar**.

WE CAN DO:

- **Get together and organise:** Talk to your allies and get organised with joint campaigning targeting your national government officials. Don't wait until 2021, climate action is needed now.
- **Make local voices heard at EU and national level:** Ensure relevant information and experiences (good and bad) are fed back to the EU institutions to ensure a good monitoring and implementation of the process.
- **Influence NECPs:** EU member states should *"support active engagement of local authorities, civil society organisations, business community, investors, any other relevant stakeholders and the general public in managing the energy transition."* That means national governments should go beyond simple consultations and genuinely **involve cities and civil society in their plans**. Make sure your voices and needs are heard and implemented well.
- **Exchange and learn across countries:** Get together with other countries and exchange show cases via webinars, study tours or other creative ways.



RESOURCES AND LINKS

GET MORE INSIGHTS ON CITIZEN ENERGY POLICIES AND PRACTICE. CHECK OUT THE FOLLOWING LINKS:

The Energy Atlas: <https://bit.ly/2rQ05e4>

Local Energy Communities: a way to bring 'all Europeans' along in the energy transition: <https://bit.ly/2LuG6dT>

The benefits of community ownership of renewable energy: <https://bit.ly/2V3btjW>

The potential of energy citizens in the European Union: <https://bit.ly/2GLYnov>

Local energy ownership: <https://bit.ly/2q8ttuC> <https://bit.ly/2rKFAiW>

How Foundations Could Use Grants and Investments to Advance Solar and Storage in Low-Income Communities: <https://bit.ly/2R9Dd7y>

New models that deliver energy solutions to low-income customers: <https://bit.ly/2A7JiYs>

A multi-level governance discussion project: <https://bit.ly/2sJM190>

Mobilizing European Citizens to Invest in Sustainable Energy: <https://bit.ly/2tVC4Uj>

Experimental use of blockchains: <https://bit.ly/2UYrcRs>

Dutch climate agreement: <https://bit.ly/2Cqy9n8>

FoE Europe - Ten Steps to a Fossil Free Europe booklet: <https://bit.ly/2LtEeIG>

ClientEarth – Community Power: Model legal frameworks for citizen-owned renewable energy <https://bit.ly/2ROC5GG>

REScoop.eu – Report on Business Models <https://bit.ly/2sqmT4v>

REScoop.eu – Best Practices Report I <https://bit.ly/2AGIJF5>

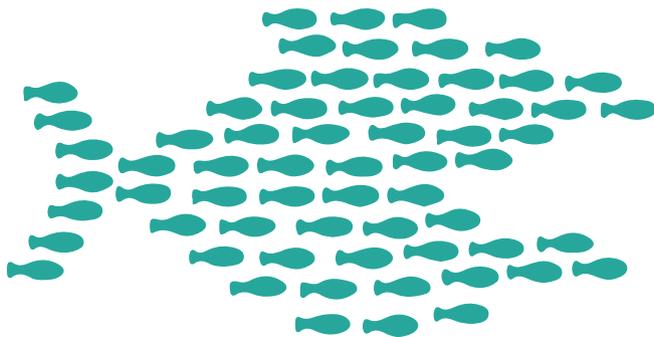
REScoop.eu – Best Practices Report II <https://bit.ly/2AK4ZxT>

REScoop.eu – Starters for new REScoops <https://bit.ly/2TMY9yM>

REScoop.eu – “The Transition to Energy Democracy” <https://bit.ly/2Fx4xX1>

FoE Europe - <https://bit.ly/2MhuATw>

PEOPLE POWER



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