



Recommendations for developing renewable energy communities in Latvia



NATIONAL CONTEXT AND
SUGGESTIONS FOR ACTION

Objective

To draft recommendations promoting development of community renewable energy projects and to improve public understanding of energy communities in Latvia.



RIGA
PLANNING
REGION

... focusing on community energy projects where **communities are formed by its members** with a common goal to generate energy from RES, **providing renewable energy for self-consumption**, delivering energy to the grid and/or selling to other users.

Contents

WHAT IS THE CURRENT SITUATION?

- EU policy, definitions & national plans
- Riga Planning Region & community energy cases from Latvia
- Benefits & barriers
- Legal forms & cooperation within the energy system
- Funding & finance

RECOMMENDATIONS

- I. Facilitate energy communities through regulations
- II. Diversify funding for community RES
- III. Ensure engagement, coordination and access to information
- IV. Plan for energy communities and climate neutrality

Current situation





European Green Deal & Clean Energy Package

The energy rulebook «Clean energy for all Europeans package» for implementing the energy union strategy.

[Regulation on the Governance of the Energy Union and Climate Action](#) (EU) 2018/1999

The [recast Renewable Energy Directive](#) (EU) 2018/2001

[Directive on common rules for the internal market for electricity](#) (EU) 2019/944

Decarbonising the EU's energy system is critical to reach our climate objectives.

Key Principles:



Prioritise energy efficiency and develop a power sector based largely on renewable sources

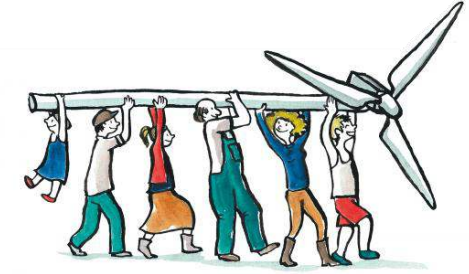


Secure and affordable EU energy supply



Fully integrated, interconnected and digitalised EU energy market

Energy community definitions



RENEWABLES DIRECTIVE 2018/2001: RENEWABLE ENERGY COMMUNITY

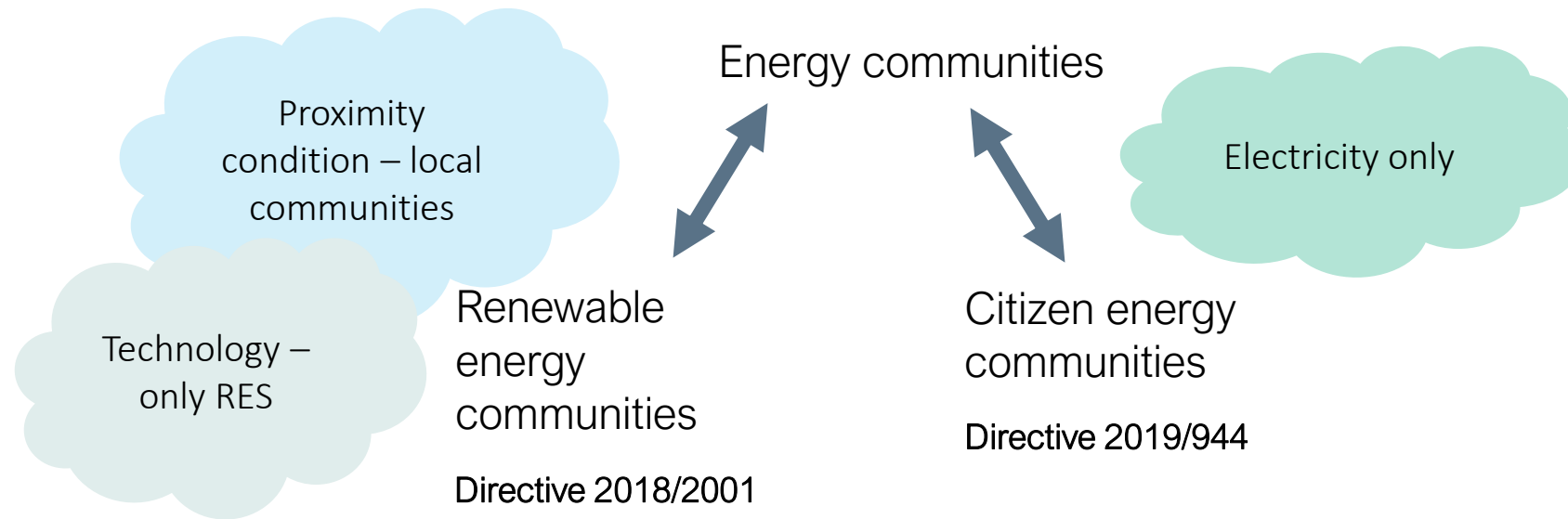
a legal entity...

- 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
- the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities
- 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

ELECTRICITY MARKET DIRECTIVE 2019/944: CITIZEN ENERGY COMMUNITY

- is based on voluntary and open participation and is effectively controlled by members or shareholders that are natural persons, local authorities, including municipalities, or small enterprises
- has for its primary purpose to provide environmental, economic or social community benefits to its members or shareholders or to the local areas where it operates rather than to generate financial profits
- may engage in generation, including from renewable sources, distribution, supply, consumption, aggregation, energy storage, energy efficiency services or charging services for electric vehicles or provide other energy services to its members or shareholders

Overlapping, differentiable concepts



Alternative typology along two axis (Moroni et al 2019):

I place based or non-place based; II single- or multifunctional energy communities



National energy and climate plan 2030

COMMUNITIES IN TARGETS & PRIORITIES:

50% RES in 2030 (the share of community projects not specified)

Direction of action: “Promoting economically feasible self-consumption and self-generation”

Policy section: “Involving society in energy production”

Focus on air quality improvement with non-emission technologies in heating.

SPECIFIC MEASURES (TRANSPOSITION OF EU DIRECTIVES):

- Legal frameworks for energy communities
- RES installations in renovation projects
- Establishing a single contact point
- State fund for energy efficiency & RES projects
- Studies on optimal business models
- Guidelines for project development benefitting local communities

National Development Plan 2021-2027

Latvia's Sustainable Development Strategy 2030



Priority: Quality living conditions and territorial development



Renewable and Safe Energy

Energy Safety and Independence
Use and Innovation of Renewable Energy Resources
Energy Efficiency Measures
Energy Efficient and Environmentally Friendly Transport Policy

Neither refers to energy communities directly.

However, **energy transition and community-driven development are recognized:**

- ✓ NDP2027 aims at providing «access to innovative and efficient energy solutions achieving greater self-sufficiency and distributed generation» as well as supports «civic microprojects for involving households in RES deployment and housing renovation».
- ✓ LSDS2030 (published in 2010) supports distributed RES and microgeneration in the private sector.

Riga Planning Region in context

METROPOLITAN, URBAN AND RURAL AREAS HOUSING ½ LATVIA'S POPULATION

- Regional Action Plan for Heating Systems (2016) – decarbonization & efficiency focus
- Action Plan for Development of Riga's Metropolitan Area (2020) – energy planning and climate change adaptation
- Horizon2020 project C-Track-2050 – sustainable energy and climate plans for municipalities

PILOT SITES AT MĀRUPE MUNICIPALITY

Installing solar collector systems for different types of multiapartment houses (significant natural gas savings)



<http://co2mmunity.eu/outputs/rencop-developments>

Community energy cases in Latvia

SOLAR COLLECTORS & BIOMASS
BOILERS FOR RENOVATED HOUSES



Sigulda

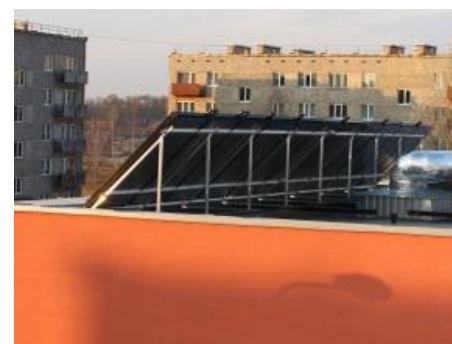


Valmiera

DIY COMMUNITY (LEADER),
RES FOR PUBLIC BUILDINGS



«Off Grid RES»
workshops



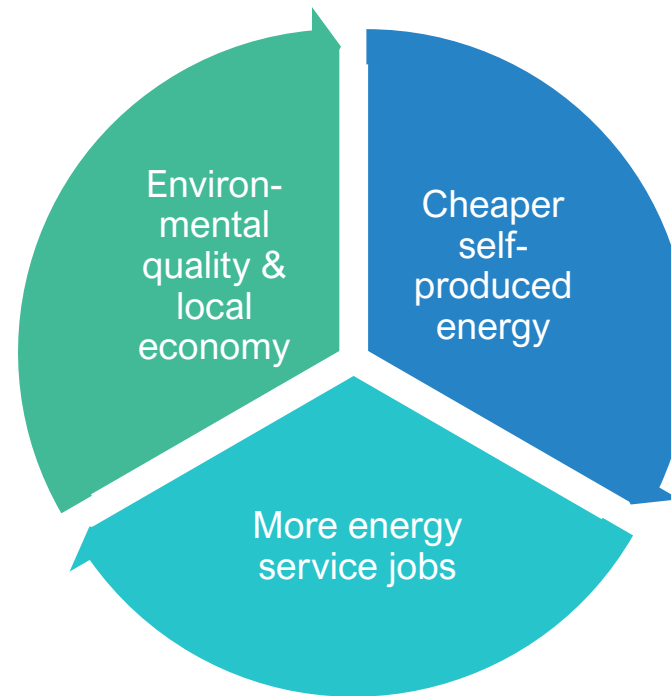
Gulbene
municipality

Benefits and advantages

MAIN BENEFIT CATEGORIES ACCORDING TO BRUMMER (2018)

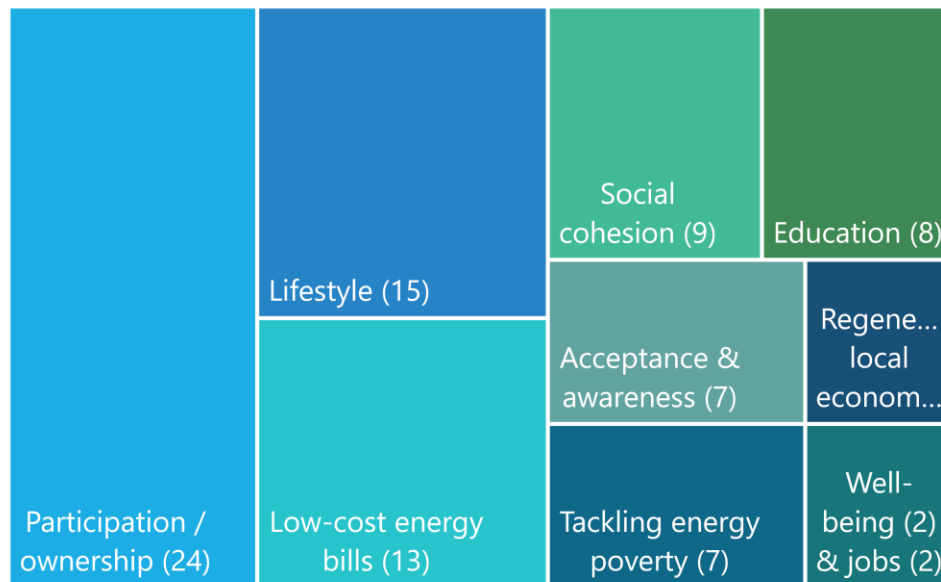
1. Economic benefits
2. Education and acceptance
3. Participation
4. Climate protection and sustainability
5. Community building and self-realization
6. Renewable energy generation targets
7. Innovation

ADVANTAGES ACCORDING TO LATVIA'S NECP2030

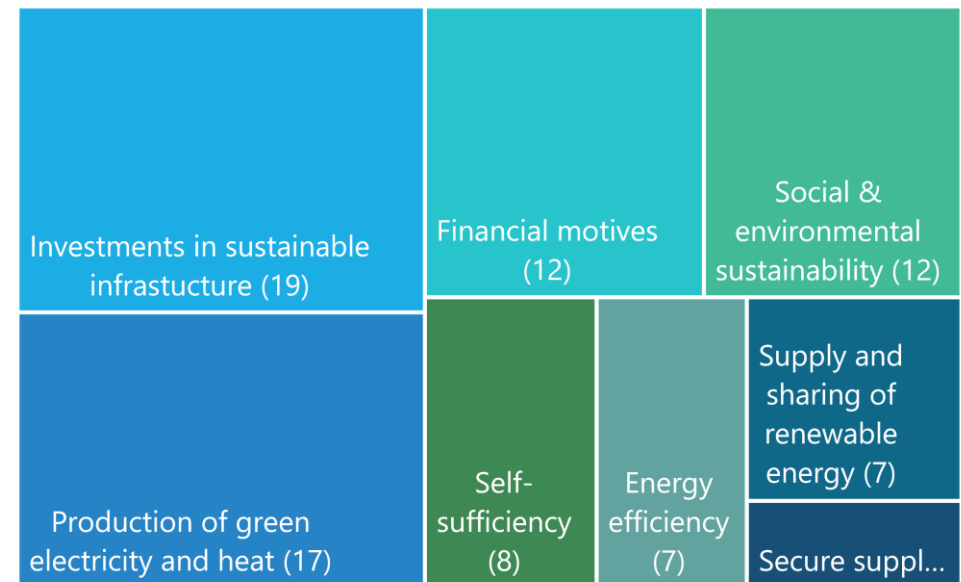


Corresponding to 24 energy community cases in Europe (JRC,2020):

SOCIO-ECONOMIC BENEFITS



DRIVERS MOTIVATING PARTICIPATION



Barriers and constraints

Fragmentary or no policy support

Low civic activity, weak tradition of cooperation

High initial project costs, limited affordability

Complex administrative procedures, technical demands

Exclusion from net metering of RES electricity

Legal forms of energy communities



ACCORDING TO ELECTRICITY MARKET DIRECTIVE 2019/944

«It should therefore be possible for Member States to provide that **citizen energy communities take any form of entity**, for example that of:

- an association,
- a cooperative,
- a partnership,
- a non-profit organisation or
- a small or medium-sized enterprise»

COOPERATIVES – MOST POPULAR

Energy communities are primarily organizational, legal forms vary significantly

Local control, equal participation and governance essential, yet among different entities

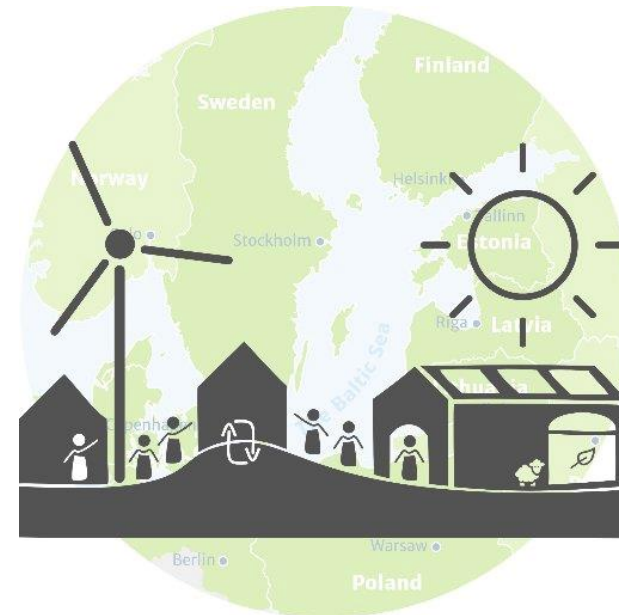
Liveability and business models: main considerations for decision-makers

Other than commercial enterprises, yet entitled to revenues and market access (ASSET 2019)

Cooperation within the energy system

MAIN AREAS OF REGULATION (CEER, 2019)

- I. Consumer rights
- II. Balancing and flexibility
- III. The business model and market design
- IV. Grid ownership, operation and development



Funding & finance

- Critical assessment of Latvia's policy framework for financing general RES projects (FIRESPOL 2019)
- System operators reluctant to lower tariffs and transfer costs to other system users
- Tax regimes to be adjusted for more motivation (JURUŠS 2020)
- Foreign examples, professionalisation of business models (BAUWENS 2020)

Recommendations and suggestions



| Facilitate energy communities through regulations

- Incorporate community definitions and general provisions in **Energy Law & Electricity Market Law**
- Strengthen **flat owner associations** and **synergies with renovation** projects
- Ensure **participation of public / local authorities** in community RES projects
- **Adjust the net metering system** to include community organizations, or come up with alternative models
- **Balance costs and benefits with other players**, as well as adopt rules among the community members

Example: Alternatives to net metering?

DSO «SADALES TĪKLS» RECOMMENDS

- Putting the emphasis on self-sufficiency and **energy sharing among the community members. New accounting models** preferable
- **Single-point** net metering alone does not solve the community problem, **local exchange rules** needed
- More flexibility for **DSOs to participate in R&D projects** backed by the regulation.
- Setting criteria for **efficient grid integration**, balancing capacity with consumption



II Diversify funding for community RES

- Fit community RES under Cohesion policy objectives «**A smarter Europe**» & «**A greener, low-carbon Europe**» in the programming period 2021-2027
- Include communities in the **Rural Development Programme**, LEADER
- Establish new **state foundation for RES and EE projects** & ETS funding
- Address community projects in **European Investment Bank's and commercial lending criteria**, and sustainable finance planning
- Adjust support schemes (equal conditions with commercial actors) & **specific tax exemptions**

Example: Smart villages

- Smart village – a thematic area for the European Network of Rural Areas
- On agenda – smart villages supporting low-carbon economy through deployment of renewable energy
- An opportunity to mobilize Cohesion and CAP funding to accelerate energy transition in rural areas



See highlights from the working group meeting at:
<https://enrd.ec.europa.eu/news-events/events/10th-thematic-group-meeting-smart-villages>



III Ensure engagement, coordination and access to information

- Establish **single contact point** for administrative procedures (including know-how assistance & info hub about existing initiatives)
- Launch **information campaigns authored by the government** that demonstrate public support for energy citizens and community projects
- Publish **energy monitoring and carbon footprint data**
- Enhance participation through **neighbourhood associations and green NGOs**
- Support **research & cooperation with universities** for innovation

Example: #Solarnews from @SpilsSiltums

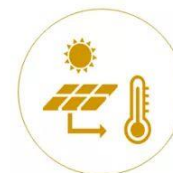


📍 SIA "SALASPILS SILTUMS"

Februārī saražotas 138MWh=
3 dienas salaspiliešiem
karstais ūdens no saules



#SAULESZIŅAS



84,1 MWh



983 W/m²

06.04.2020.



IV Plan for energy communities & climate neutrality

- Focus on energy communities in **implementing the NECP2030** – new decarbonization targets upon its **revision in 2023**
- Advance **spatial planning & Sustainable Energy and Climate Action Plans**
- Increase capacity of **Riga Energy Agency**
- Activate **the role of distribution system operators** based on shared benefits
- **Wind energy projects** – aim for social acceptance, explore community ownership and draft guidelines for commercial projects

Example: Community wind energy

LATVIAN WIND ENERGY ASSOCIATION SUGGESTS:

1. Separation between community and commercial wind projects based on capacity – 10MW boundary
2. Community planning & good practice guidelines for wind park developers
3. Ensuring equal conditions for communities and commercial actors to sell electricity to end users

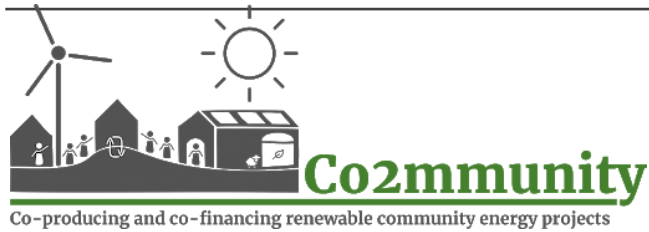
@windlatvia

- Social acceptance is a complex issue
- Need for spatial & landscape planning tools
- Shared ownership does not grant conflict-free project development (Savaresi, 2019)



See WinWind recommendations at:
[https://winwind-
project.eu/resources/outputs/](https://winwind-project.eu/resources/outputs/)

Conclusions



- Increased awareness on common benefits and barriers for renewable energy communities in Latvia's energy transition as a project outcome
- Our recommendations focus on 4 axis:
 - ✓ **Regulations**
 - ✓ **Funding**
 - ✓ **Engagement**
 - ✓ **Planning**
- Several community energy pilots are in the making (Mārupe municipality); to upscale the process, a thorough implementation of the National energy and climate plan is needed

Main references

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Co2mmunity

Thank you!

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@CO2MMUNITY

[HTTP://RPR.GOV.LV/PROJECT/CO2MMUNITY/](http://RPR.GOV.LV/PROJECT/CO2MMUNITY/)

The recommendations were developed for the project “Co2mmunity: Co-producing and co-financing renewable community energy projects” within the EU Interreg Baltic Sea Region Programme 2014-2020