Community Green Projects and Enabling Citizen Participation in the Energy Transition

Zoran Kordić, Green Energy Cooperative (ZEZ)
Renewable Energy Coordination Group
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Green Energy Cooperative (ZEZ)

Mission: supporting citizens in developing and investing in green energy and accelerate community energy projects in WB region

Scope of activities: Croatia and WB region

Expertise: Community energy models, creating environment for community energy

Zelena Energetska Zadruga

Networks

Member of European Federation of Energy Cooperatives - REScoop (entered the Board in November 2017)

Task leader for “Citizens participation in the development of RE projects” within RE coordination group, for 2016 and 2017

Cofounder and Member of Cooperative for Ethical financing

RESCOOP.EU

ZEF
Zadruga za etično financiranje

Energy Community

ALT FIN LAB

UNDP

TERRA HUB

Key activities in EC Contracting Parties in 2016-2017

Scope of activities: Croatia, BiH and Serbia

Pilot projects: Started creating pipeline of community energy projects

Mapping activities: Mapping of local energy inititatives in Croatia and BiH, Workshop in Macedonia on energy coops

Legal framework: Drafting Recommendations for legal framework how to enable citizens to take part in renewable energy projects in BiH (GIZ project: Promotion of RES in BiH)

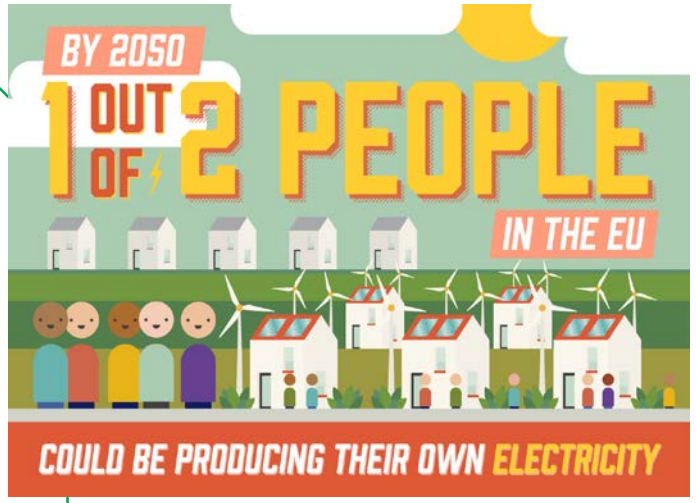
Studies: Comparative study on energy cooperatives in SEE region

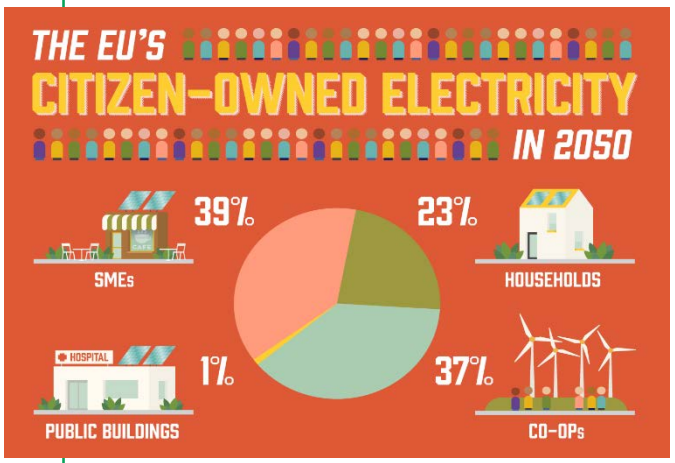
Energy Community

Community energy in EU

Report “Putting citizens at the heart of the energy transition” (REScoop 2016) estimates 264 millions of EU citizens could be producing their own electricity by 2050

Cooperatives could contribute 37% of the electricity produced by energy citizens





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Community energy in Western Balkans

"Comparative study on energy coops in Eastern Partnership countries and Western Balkans": http://calendar.boell.de/sites/default/files/companalysis_e-coops_eastern_europe_short_version.pdf

Scenarios for economic investments

	Estimated invest with exist. pilots		Worst case scenario 5 years			Best practice scenario 5 years		
Country	Exist. Pilots	Investm. In €	No. Coops	Invest	Jobs	No. Coops	Invest	Jobs
Georgia	SWH, PV	100.000	2	200.000	2	15	1.500.000	30
Armenia	PV	200.000	2	400.000	2	15	3.000.000	30
Ukraine	Biomass, PV	200.000	3	600.000	3	20	4.000.000	40
Moldova	SWH	100.000	2	200.000	2	15	1.500.000	30
Belarus						5	500.000	10
Croatia	PV, Biomass	250.000	3	750.000	3	20	5.000.000	40
Serbia	PV, Biomass	250.000	3	750.000	3	20	5.000.000	40
BiH	PV, Biomass	150.000	2	300.000	2	15	2.250.000	30
Total		**1.250.000**	**17**	**3.200.000**	**17**	**125**	**22.750.000**	**250**

- Methodology

1. National climate and energy policies
2. Degree of gender equality in the countries
3. Situation and power of civil society
4. Legal framework for coops
5. Existing pilots, business models and technologies

- QNR, expert interviews, desk research

Summary of findings

- Identifying good practice cases and measuring their impact requires platforms and knowledge transfer
- The policy framework plays a crucial role in fostering community renewable energy projects but energy cooperatives can be pushed from bottom-up
- The main barriers are lack of appropriate support framework, lack of financing, lack of knowledge and cooperative pilots
- The key to success are intermediate institutions, like energy cooperatives and local governments.

Recommendations for national authorities

- Adopt a national strategy to increase the participation of citizens in RE projects
- Establish binding targets for renewable energy and, more specifically, targets for community energy
- Incentivise community energy projects based on ‘self-sufficiency’ (e.g. direct marketing and production for self-consumption).
- Provide financial support (e.g. grant-to-loan, guarantee or cheap credit opportunities) for preliminary investigations and works on community energy projects.
- Require integration of RE and energy efficiency into public, new and renovated buildings

Developing community energy models to finance RE projects in BiH

- **GIZ project: Promotion of renewable energy in BiH**
- **Duration: July 2017 – January 2019**
- **Activities**

  Scanning for local RES projects

  Analysis of the BiH context for options for community based models

  Developing 3 - 5 alternative community based financing models for RES projects

  Introduction and testing at least 2 community based energy projects

  Drafting Recommendations and Strategy for Community Engagement

  Validated Strategy for Community Engagement in RES Projects

  Drafting of new or changes to existing policies, laws and regulations

Legal framework in BiH- Results from the survey with experts

- Good legal basis for the development of RES micro generation
- Main obstacles are poor implementation of legal provisions and complicated administrative processes.
- Electricity market is not fully liberalized in practice, i.e. the process of liberalization is slow, although all legal preconditions exist
- Technologies most suitable for encouraging the development of community energy are solar PV systems (potential also have small CHP plants on biomass and SHPP)
- RES incentives best suited for community energy are feed-in tariff scheme, and zero-tax policy

Legal framework in BiH- Results from the survey with experts

- Net metering was recognized as a good model for encouraging citizen involvement in co-ownership and management of RES projects in BiH, but the implementation of recommendations for PV systems (prosumers) is necessary at the national level to make the model work
- The best rated financing model for community energy are: public-private partnership, individual citizen -investments and energy cooperatives

Legal framework in BiH – General recommendations for policy makers (draft)

- National strategy for community energy that will include national and entity goals
- Revision of the Law on Electricity - enabling the issuance of permits to non-energy entities (such as cooperatives) for micro generation from RES
- Ensuring at least partial community ‘ownership’ in commercial RES projects on state-owned land
- Communnity energy quota
- State aid for community projects – such as subsidies for solar technologies for self consumption

Pilots and buisness models - overview

(1) Citizen investments – prosumers (Net Metering)

(2) Energy cooperatives (Loan/Equity)

(3) Projects owned by cities and municipalities

(4) Public private partnership

(4a) ESCO model for public sector

(5) Crowdfunding

(5a) Investment based crowdfunding (Loan/Equity)

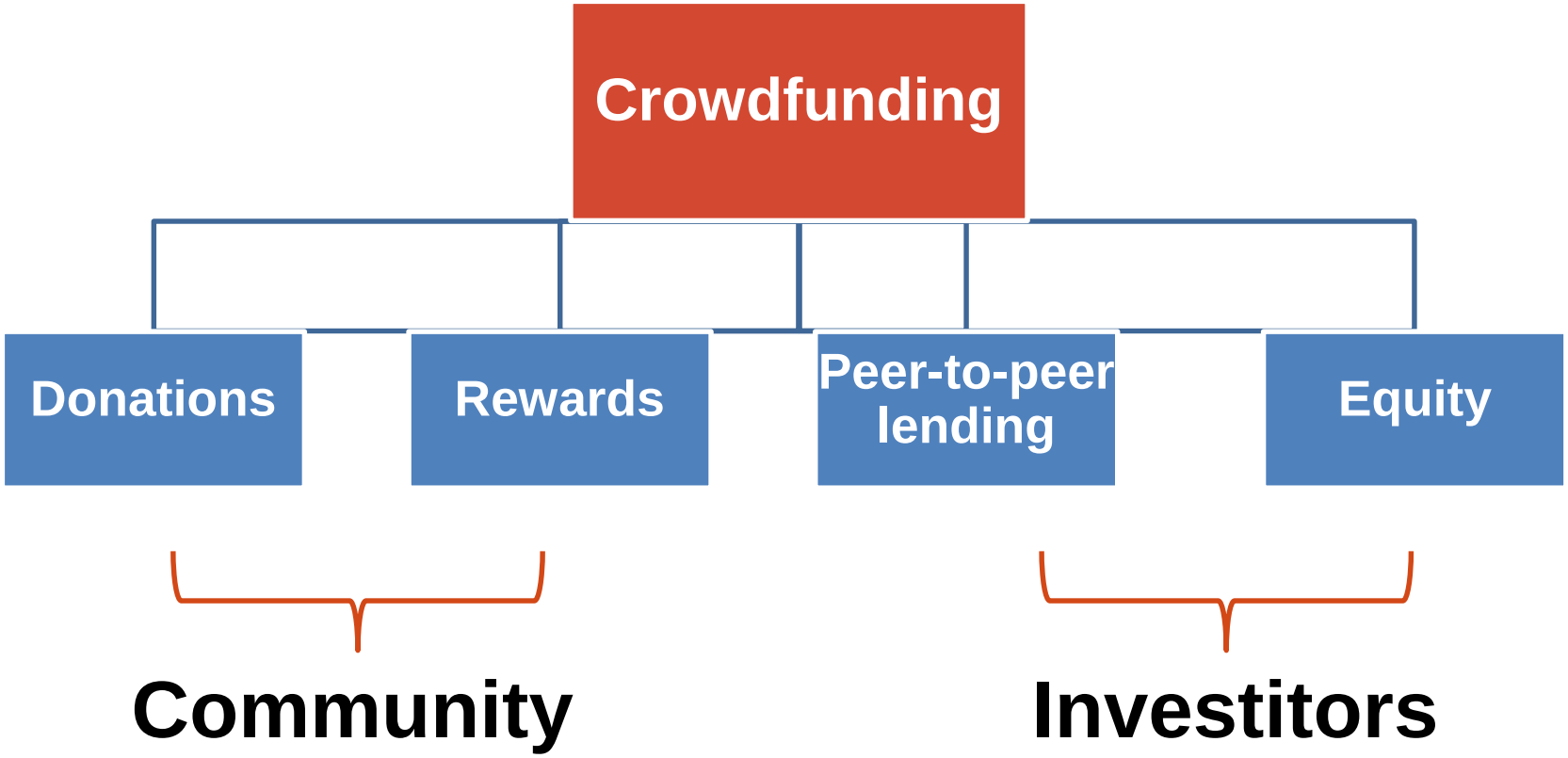
(5b) Donation based crowdfunding

Pilots and buisness models - overview

- In Croatia: Some community energy models have already been tested and implemented, such as crowdfuding, ESCO and net metering
- In Serbia: Very limited, no energy coops in Serbia at the moment, some projects owned by municipalities
- Bih: Limited, first two energy coops in Prijedor and Nemili, some projects owned by municipalities and public private partnership through ESCO

Pilots and buisness models

Crowdinvesting



Crowdfunding platform for community energy projects: www.citizenergy.eu

Pilots and buisness models

- Technology Centre Križevci
- ZEZ in cooperation with City of Križevci
- 50 kW PV system
- first Croatian citizen investment based community project
- 3-4% rate of return for investors

Next steps for accelerating community energy in EC Contracting Parties

- Developing tailor-made strategy and recommendations for community energy in all EC Contracting Parties based on participative process with local and national stakeholders
- Mapping and creating network of local energy pilots & cooperatives- to enable knowledge, pilots exchange & policy work exchanges
- Creating and/or adapting crowdfunding platform for financing RE projects through crowdinvesting
- Streamlining donor funds into development of community energy projects (such as feasibility studies)
- Creating and working on a viable pipeline of community energy projects which would be financed through crowdfunding platform

Q&A

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