

# Crowdfunding for energy projects and blockchain-based innovations

#### Who we are?



- established in 2013
- roof organization for REScoops in Croatia
- 20 members (experts, activists and practitioners, in the field of energy, economy, environmental protection, rural development etc)
- social enterprise
- our vision: energy citizens. prosumers. democratization of energy. clean energy accessible to everyone.





































### Scope of work

- social and business innovation in energy sector
  - community energy
  - alternative financing (crowdfunding for RES, ethical bank, blockchain)
- EU projects on RES and EE
- rural development, smart islands, green cities
- geo. scope: Croatia, Balkans, Central Asia











## Networking for innovation

- Climate KIC national hub, cross-sectoral collaboration for innovation
- Cooperative for Ethical Financing (ZEF) –
   establishing ethical bank in Croatia
- EnergyCities & Croatian Association of Cities working with cities and municipalities
- Energy Community Secretariat upgrading frameworks for West Balkans and SEE
- REScoop.eu sharing knowledge for cooperative movement in the region













## First crowdinvesting project in Croatia: Sunny roofs of Križevci

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- PV Plant 30 kW (RCTP Križevci)
- 230.000 HRK (around 30.000 EUR)
- 4.5% interest rate for investors (10 years)
- ZEZ in cooperation with the City of Križevci
- Campaign conducted in May 2018







## National campaign

• <a href="https://www.youtube.com/watch?v=ZniuH0OdnOw&t=94s">https://www.youtube.com/watch?v=ZniuH0OdnOw&t=94s</a>





#### ...in numbers

- Completely funded in less then 10 days!!
- 50+ investors (30% local citizens)
- Recorded interest: around 500.000 HRK (double)
- Ambasadors: REScoop.eu, Energy Cities, Greenpeace.. And many others







### What comes next?

- crowdfunding platform
- researching potential blockchain application for ZEZ projects





















































## ZEZ & UNDP ALT FIN LAB and blockchain

 Research, co-designing the token model architecture, adapting to specific market and regulatory contexts, implementing (pilot) projects in collaboration with partners



- project development and coordination
- technical solutions for distribution networks to implement blockchain (financing, energy trading, microgrids, grid stability issues etc.)
- advocating policy and regulatory changes









## Croatian national power company Blockchain platform by HEP

- analysis of blockchain applicability and models to be implemented for the HEP Group
- focus on market specifics and regulatory framework of Croatia
- pilot project proposal (Island of Krk microgrids and e-mobility)



## Faculty of Electrical Engineering and Computing

## Scientific-research project P2PCET

- Research of a concept for decentralized peer-to-peer trading in microgrids (P2PCET)
- Basic information
  - Financing: Croatian Science Foundation
  - Duration: 5 years (starting 2018)
  - Project coordinator: Faculty of Electrical Engineering and Computing, University of Zagreb
  - Participants: Croatian Energy Regulatory Agency, Croatian Energy Market Operator, Distribution System Operator, Green Energy Cooperative, island Krk etc.







### Croatian Forests Ltd.



state-owned company for forest and woodland management

- Supply chain
- Strengthen data for certification
- Carbon credit tracking (and trading)
- The Self-Owning Augmented Forest
- Coin





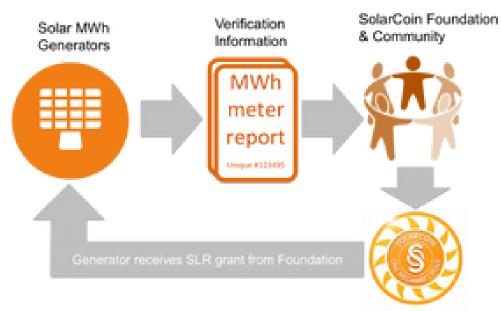




## SolarCoin (SLR) Accepted here:



#### Energy generation enables circulating SolarCoins





## SolarCoin



### Different national contexts

- 1 million USD crowdinvesting campaign in Moldova
- crypto-payments and payouts









### Remittances

- Tajikistan BitSpark
- Serbia AIDTech

- Avoiding WU
- Optional control of user expenditures



### Blockchain for conservation

- Morocco
- ArganCoin & BeeCoin









### THANK YOU



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