



**SteuerBoard
Energie**

Governance Mechanisms
in a Future Polycentric
Energy System

FINANCIAL PARTICIPATION

Lars Holstenkamp

Financial Participation of Citizens –
Practical Examples

Session Overview & Overview of
Energy Communities in Europe &
Globally

30th AUGUST 2023

PROJECTPARTNERS



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INSTITUTE FOR ECOLOGICAL
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SESSION(S) OVERVIEW

Time	Presentations
<p>PART I: 14:30 – 15:45</p>	<p>Financial Participation by Citizens in Renewable Energy Projects in Europe and Worldwide (<i>Lars Holstenkamp</i>) Q & A Case I: Climate Bonds/Crowdfunding in the UK (<i>Mark Davis</i>) – Online Q & A Open Discussion</p>
<p>PART II: 16:15 – 18:00</p>	<p>Case II: BürgerEnergie Buxtehude eG (<i>Robert Neumann</i>) – Online Q & A Case III: Feldheim, Brandenburg (<i>Henry Hecker</i>) Q & A Case IV: Hydro Minigrids in Pakistan (<i>Najam Memon</i>) Q & A Open Discussion</p>

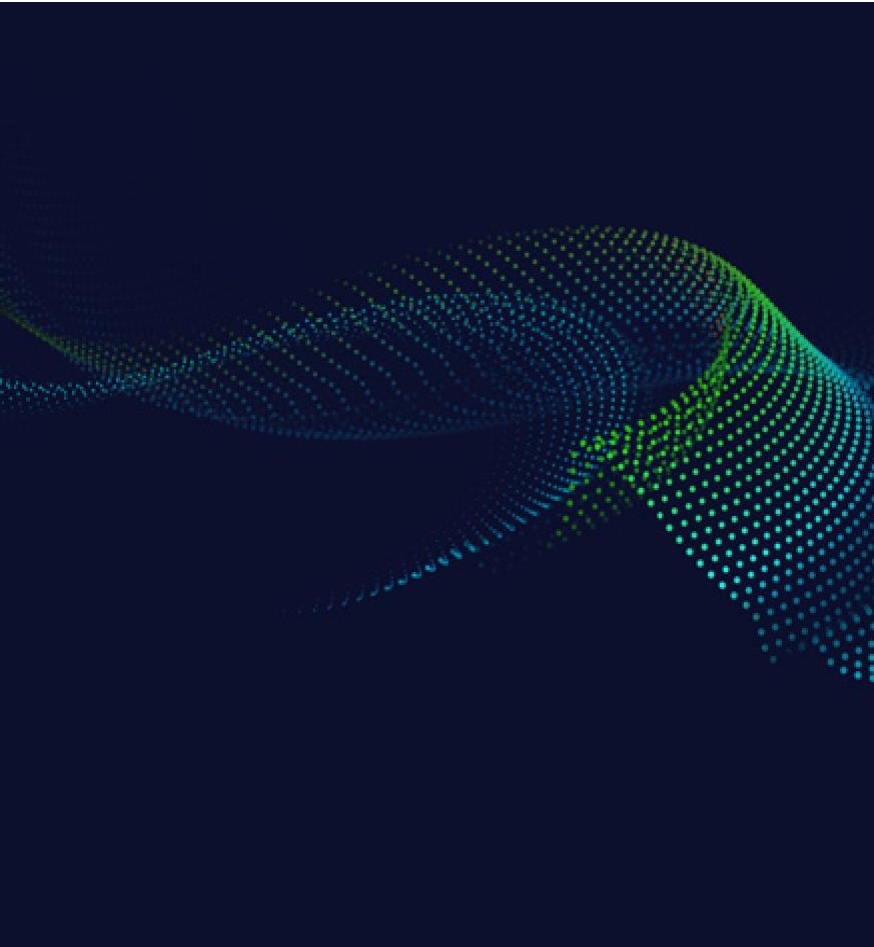


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CONTENTS

- A. Energy Communities & Other Forms of Financial Participation**
- B. Case Overview**





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(SELECTED) DIMENSIONS

- _Terminology & substance (types of projects)
- _Types of financing & governance structures
- _Business models
- _Community benefits

TERMINOLOGY

_Heterogeneous field & various terms

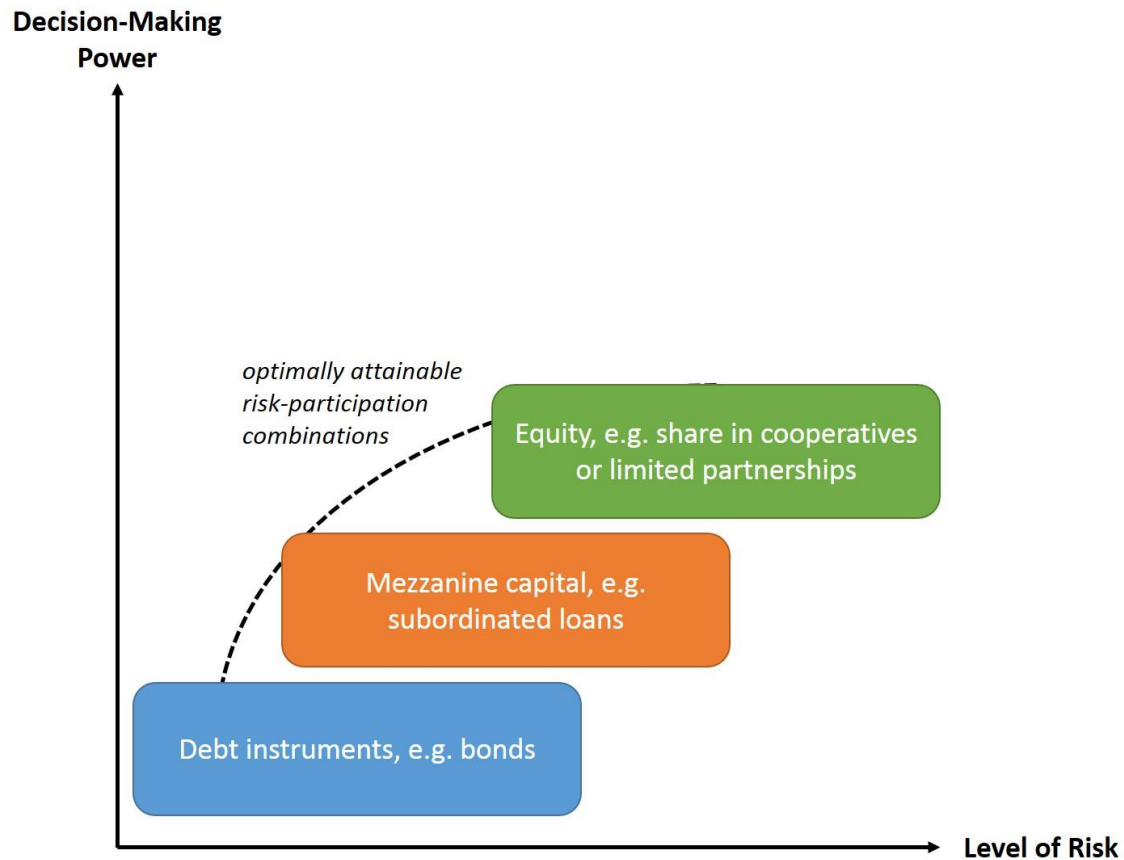
_Often used: “community energy” (variations: community power, civic energy, citizen energy [DE: Bürgerenergie, FR: énergie citoyenne]), in NL: local energy

_EU legislation: “energy communities”

_Renewable energy communities (RECs)

_Citizen energy communities (CECs)

TYPES OF FINANCING



Source: Holstenkamp
(2019)

GOVERNANCE STRUCTURES

- _Municipality-led, SME-led, citizen-led
- _Single-project [“Special Purpose Vehicles”, SPVs] vs. multi-project
- _“Own” projects vs. co-ownership (or co-investment)
- _Initiators: [top-down] utility company, project developer, municipality, civil-society group/interested individual(s) [bottom-up]
- _Leadership question
- _Embedded in “business ecosystem”

LEGAL STRUCTURES

Form of financial participation	Leasing arrangements	Individual ownership	Partnerships	Limited partnership	Intermediary entities	LLCs	Co-operatives
Voting rights	-	-	Direct, often proportional to shares	Direct, proportional to shares	Conveyed through trustee/ representative	Direct, proportional to shares	Direct, one man one vote
Rights of information	-	-	Given	Limited rights of LPs	Given/ delegated?	Given	Given
Compatibility with strategic commercial investors	-	-	Unusual	Given	Given	Less common	Unusual
Compatibility with municipal investments	-	-	Not possible	Given	Given	Given	Limited
Personal liability	Unlimited	Unlimited	Unlimited	Limited to investment (GP: personal, unlimited)	Limited to investment	Limited to investment	Usually limited to investment
Changes in participants	-	-	Possible, no registration	Limited / costly unless trustee relationship	Possible, easy	Limited / costly	Possible, easy
Start-up costs	Low	Low	Low	Medium	Medium	Medium	Medium

BUSINESS MODELS

- _ “Refinancing” via policy instrument, e.g. feed-in tariff/premium, auction, net-metering scheme, power purchase agreement (PPA)
- _ From easy to implement and small (rooftop solar PV on public roof) to large (e.g. wind farm) and complex (energy services)
- _ Motivation & value proposition
 - _ For profit – not so much for profit – non-profit
 - _ Economy (profit, supply), regional economy, environment, energy transition, social cohesion, ...

COMMUNITY BENEFITS

- _ Depending on laws (allegation of bribery): project-related community benefit agreements or more informal
- _ Direct and indirect effects of the project(s): regional value added of the project(s)
- _ Retained profits given into community fund to support local projects

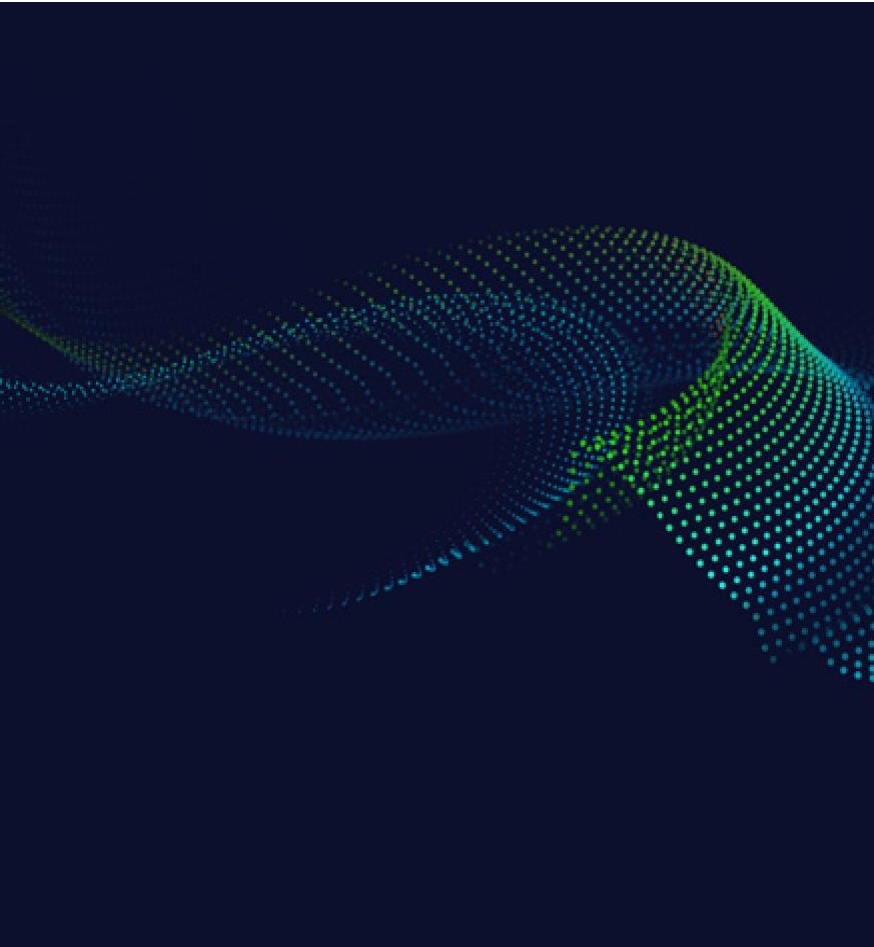


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CASES

- _For more examples, see e.g. Coenen & Hoppe (eds) (2021), Debizet et al. (eds) (2023), Löbbe et al. (eds) (2022), Lowitzsch (ed.) (2019)
- _Many EU-funded research projects on energy communities (Horizon 2020/Horizon Europe, INTERREG)

CASE OVERVIEW

- _Climate Bonds, UK: municipality-led, debt instrument
- _BürgerEnergie Buxtehude, DE: citizen-led community energy company = equity capital, renewable energy installations
- _Feldheim, DE & Kodiak, US: grid & renewable energy installations, island systems
- _Mini-hydropower, PK: donor-funded, intermediated, small hydropower/microgrids



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Thank you.

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