

Badajoz closing meeting- ESR15

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Identifying enablers and barriers to foster the replicability of
business models for Green Energy Systems

Supervisors

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Supervisors



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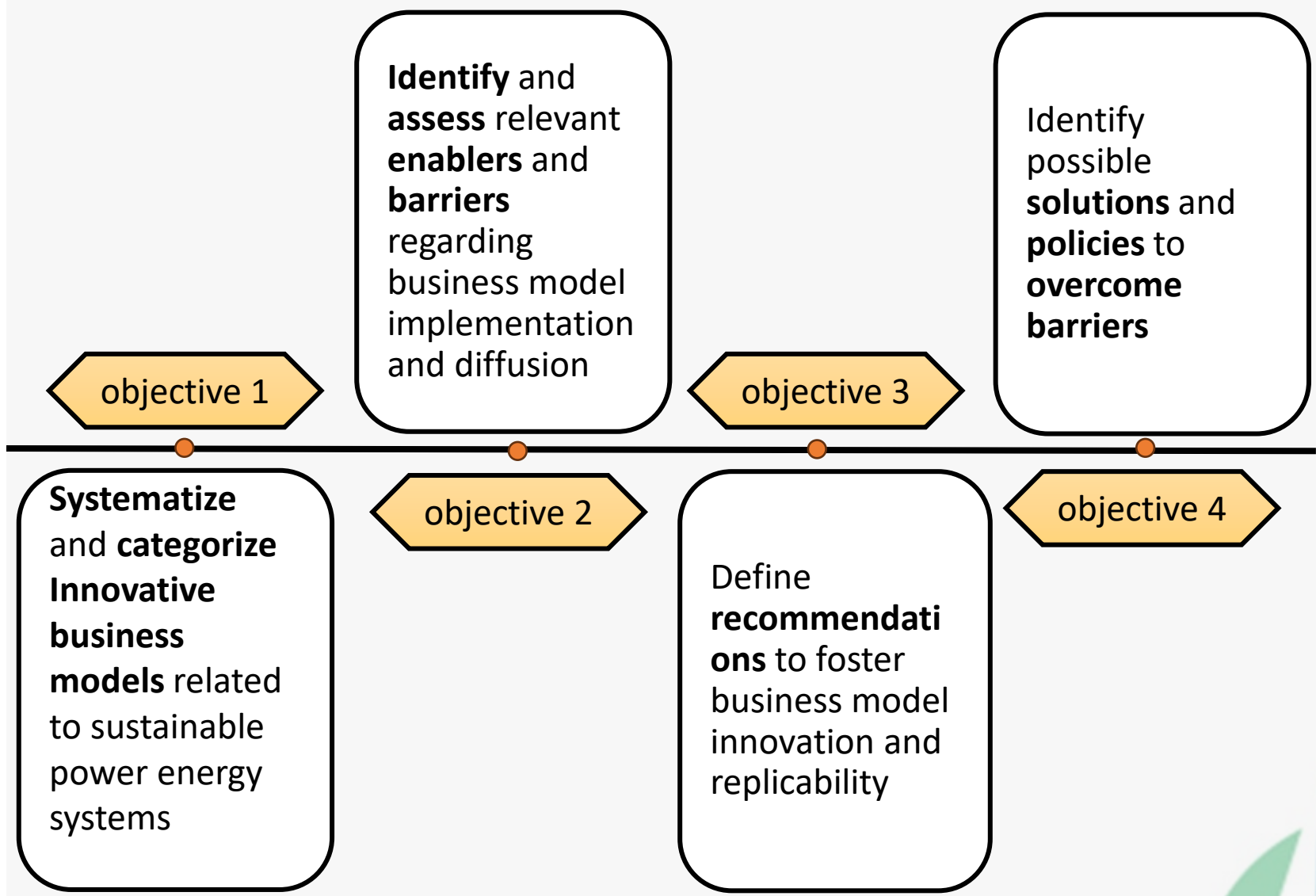
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ETN 955614

Marie Skłodowska-Curie Actions (MSCA)
Innovative Training Networks (ITN)
H2020-MSCA-ITN-2020

Research and Training Network for
Smart and Green Energy Systems and Business Models

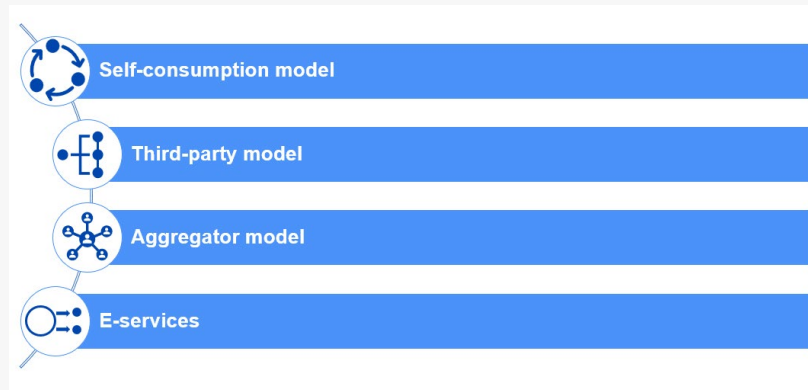


Energy Community Business Models

Develop a tailor-made analytical framework for EC BM analysis.

Define and Categorize 4 EC BM archetypes

Dimensions	Description
Value proposition	Refers to EC's main objective and the benefits provide to its members and society.
Value capture	Refers to revenue stream and cost structure of the EC.
Main function	Refers to the main activities, technologies and services of the EC.
Governance	Refers to the management, decision-making and control of the EC.
Membership	Refers to the different types and roles of actors participate in the EC as members.



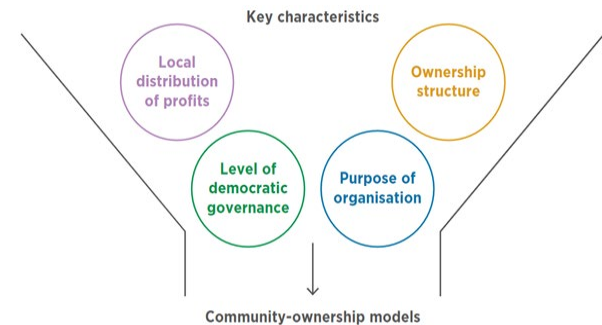
Energy Communities: Analysis of ownership models and funding mechanisms

Financial Mechanisms of Energy Communities

The ways in which an Energy Community can raise capital from different actors to fund its activities, and usually take the form of debt capital or equity capital



Ownership Model of Energy Communities



Different Categories of ECs based on Initiators and Membership

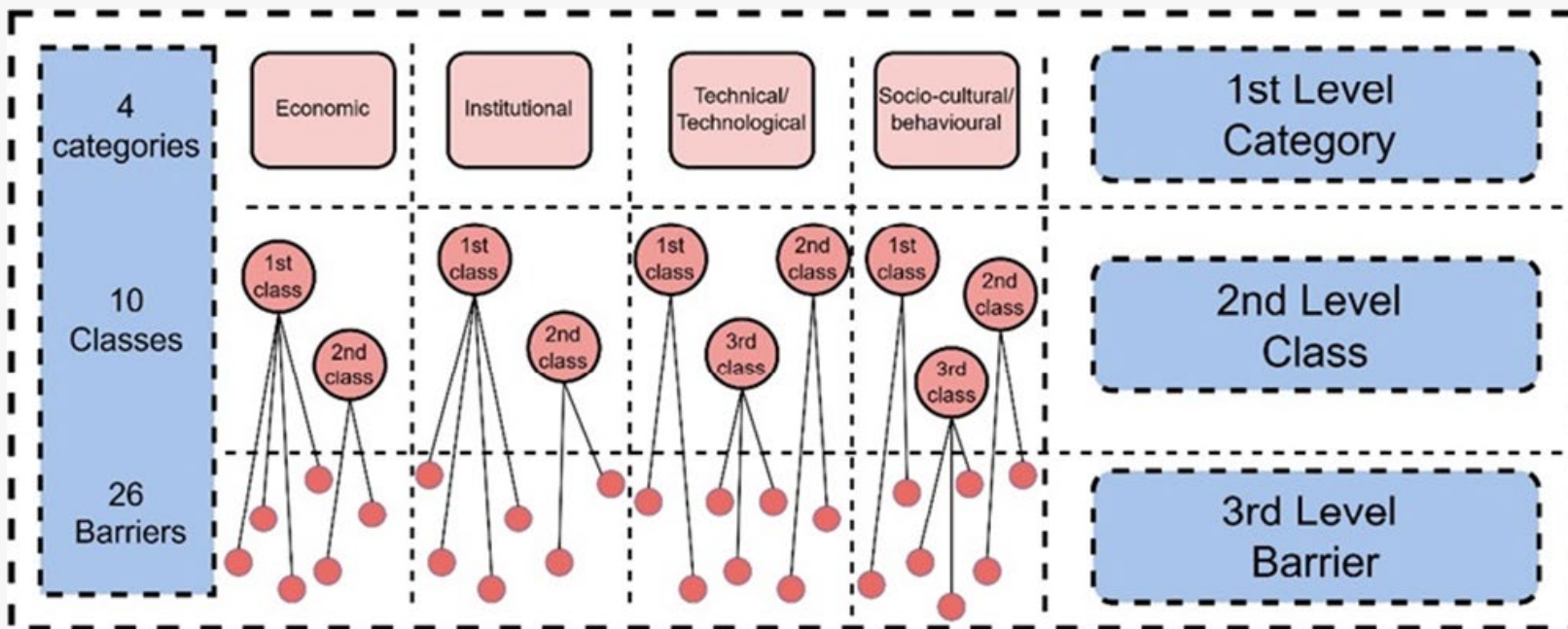
Categories	Initiators	Membership	Number of EC in the sample
1	Citizens	Citizen	4
2	Citizens	Citizens + Private	6
3	Citizens	Citizens + Public	1
4	Citizens	Citizens + Public + Private	7
5	Public	Public	1
6	Public	Public + Citizens	1
7	Private	Citizens	2
8	Citizens + Public + Private	Citizens + Public + Private	3
Total			25



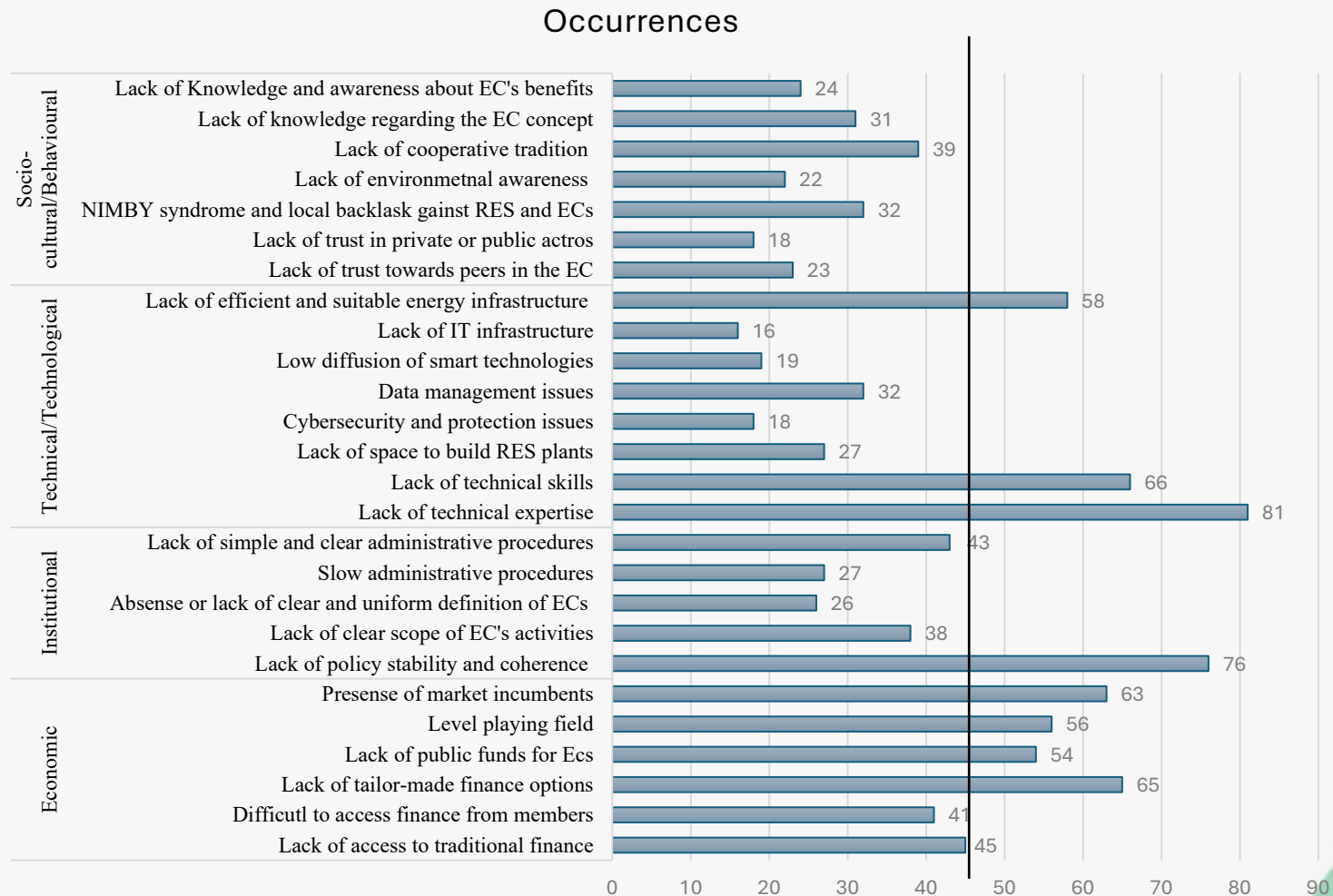
Barriers that ECs encounters

N.	Barriers	Number of ECs reporting impact
1	No subsidies or grants for EC provided at a national level	14
2	Public grants or prizes are not tailored-made for your EC	14
3	Complex bureaucratic processes make it difficult to access public finance	14
4	Private financial institutions or banks do not fund your generation plant because they consider it non-profitable.	11
5	No access to favorable loans, such as soft loans, green loans, etc.	12
6	Unattractive environment for private investors because of the absence of feed in tariff (FiT) or other pricing mechanisms	8
7	Absence of a legislative framework for the proper functioning of crowdfunding or crowd-investment platforms	7
8	Low participation of people in funding energy generation plants; thus, it isn't easy to raise capital from equity shares	11

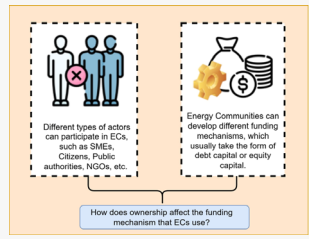
A categorization system of Barriers that EC faces



A systematic literature review of EC barriers



Energy Communities in the EU: Analysis of ownership models and funding mechanisms



Published on 16th International Conference on Energy and Climate Change.



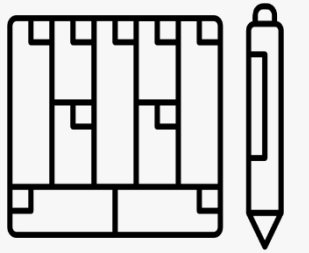
Energy communities – lessons learnt, challenges and policy recommendations



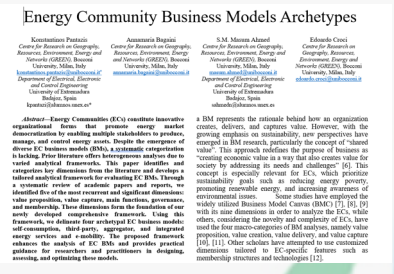
Article published on Oxford Open Energy Journal



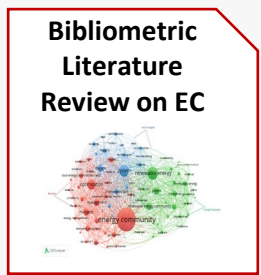
An Innovative Analytical Framework for Defining Energy Community Business Models Archetypes



Presented in 19th International conference on compatibility, power electronics, and power engineering (Will published in IEEE Xplore)



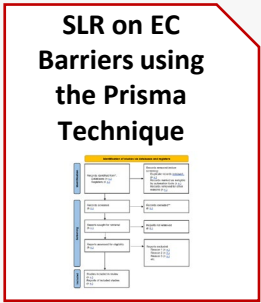
Analyzing research on Energy Communities: Insights from a Bibliometric Literature Review



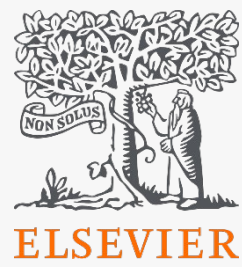
Under Submission Process as a journal article.



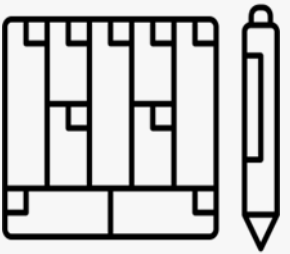
Systematic Literature Review On Energy Community Barriers



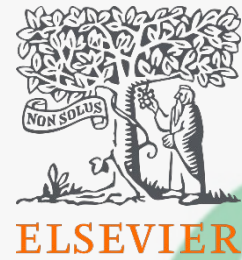
Plan to be completed by April 2026 and submitted as article in a journal (Collaboration with ESR14)



Enhancing Market Integration and Sustainability of Energy Communities: A Comprehensive Framework for Effective Transition.



Plan to be completed by June 2026 and submitted as article in a journal



**A Survey of Energy
Community Barriers
Assessment in
Europe**



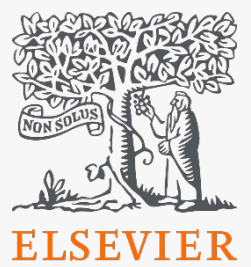
Plan to be completed and submitted in July-August 2026 as article in a journal



**A Survey of Energy
Community Impact
Assessment in
Europe**



Plan to be completed and submitted in September 2026 as article in a journal



A book chapter that presents the main findings from the research conducted by ESR15. It includes a bibliometric literature review on EC, analyzes ownership models and funding mechanisms, and examines EC and BMs.

Energy communities in the EU: Analysis of ownership, funding mechanisms and business models

ESR 15 Book Chapter



Journal Articles Published	Book Chapters	Conference papers	Journal Articles plan to be published	Journal Articles in collaboration with ESR14
1	1	2	3	2



Questions

Thank you Very much

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