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Cooperation with Incumbents in Scaling Strategies of Energy Cooperatives in France, Germany, and Switzer land: Indispensable Synergies or Faustian Bargain?



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Diffusion Processes and Scaling Strategies of Energy Cooperatives in France, Germany, and Switzerland

The SONNET project



SONNET project

Co-creating a rich understanding of the diversity, processes, contributions, success and future potential of social innovation in the energy sector





The SONNET project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 837498.

Conceptual framework and research question



SONNET's definition of social innovation

Ideas, objects and/or activities that change social relations and involve new ways of doing, thinking about and organising energy.



Energy cooperatives as social innovation



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Research questions

•How do energy cooperatives and energy cooperative fields emerge, develop and institutionalize over time ?

 How has this process been [co]shaped by the outside institutional environment ?





Figure 1: Summary of overall visual conceptual map for WP3

Methodology



Chapter

3 countries

- France
- Germany
- Switzerland









Embedded case study approach



Figure 6: Two illustrations of SONNET's embedded case study design: Based on Yin's (2003) visualisation (see left) and a SONNET 'translation' showing the relations between the subunits (see

right)

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Research steps

Fieldwork

- ~9 interviews per country
- Observation
- Documents
- Secondary sources

Case report (ongoing)

- Thematic analysis
- Innovation timeline

Cross-case analysis (ongoing)



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Country timlines



France





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- ✓ local focus
- ✓ non-speculation
- ✓ democratic governance
- ✓ ecology



Switzerland



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Energy cooperatives in Switzerland

- Cooperative (*Genossenschaft*) is well-established legal form corresponding to the ICA cooperative principles
- Cooperatives in the energy sector already engaged in electrification at beginning of 20th century (~100 still exist today as DSOs)
- 200 new energy cooperatives formed since 1985
 - initially shaped by anti-nuclear movement
 - mainly financing and operating roof-top photovoltaics
 - pursuing goals to expand renewable energy and to allow citizens to participate directly in energy decision-making and ownership at project level







Germany



Energy cooperatives in Germany

- EC already existed in the 20th century to provide the rural population with electricity (today only less than 50 of them still exist)
- The majority of energy cooperatives today was registered after 2006
- Main aims:
 - decentralisation of the energy transition
 - democratisation -> enable citizens to participate in the energy transition
 - to keep the revenues in the region
 - direct use of their own energy





Country comparison



Cross-case comparison : goals

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Institutional work VS Institutional structure	France	Switzerland	Germany
Goals VS energy system	Electricity mix: 92 % decarbonised (nuclear and hydro power)	 Electricity mix: 56% hydro-power, 35% nuclear, 4% wind and solar power Apti puplear meyoment, then 	 Electricity mix: 54% conventional, 46% renewables Cools of decentralization
	 Anti-nuclear motivation (early phases) Discourses emphasising local economic benefits and citizen participation 	 Anti-Indicieal movement, then energy transition (RE expansion) Focus on roof-top photovoltaics Citizen participation but broader societal goals subordinate 	 Goals of decentralisation, democratisation, local economic benefits, self- consumption Contribute to energy transition
	All coops emphasis citizen participations	Energy coops goals is context- dependent	

Cross-case comparison : legal framework

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Institutional work VS Institutional structure	France	Switzerland	Germany
Cooperative organizing VS legal framework	 Social economy legal framework but limitations to apply it to energy Use of coop statute + bricolage + advocacy to change laws Adapted legal framework is an enabling condition 	 Well established cooperative statute Widespread use of coop statute Self-help within the field for the application of the cooperative statute 	 Organisational form of cooperatives regulated in the German cooperative law (Genossenschaftsgesetz) Amendement to cooperative law Use of coop statute

Cross-case comparison : policies

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Institutional work VS Institutional structure	France	Switzerland	Germany
Advocacy VS policies Support scheme for RE is an enabling condition Support scheme & liberalization degree condition business models	 National RE support, FET, pushing for bigger projects and tender procedures Support of intermediaries by ADEME national agency and some regions Gatekeeping and definition work to frame "citizen energy" as policy target No specific energy coop national policy Successful REScoop EU translocal advocacy 	 Federal RE support, FET, then investment sub. Change sometime compensated by municipalities or cooperation with local supplier Decisive conditions are set at the local level No explicit recognition of energy cooperatives (or similar concepts) at national policy level Advocacy in local energy politics through personal linkages Advocacy at national level not for cooperative form, rather renewable energy advocacy 	 National RE support, shift toward tender procedures Support of intermediaries by federal state Advocacy on the federal state level through intermediary organisations Advocacy in local energy politics through personal linkages and simultaneous board membership in different organisations

Cross-case comparison : relations with public actors

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Institutional work VS Institutional structure	France	Switzerland	Germany
Relation with public actors VS public actors competenci es	 Progressive decentralisation of energy competencies to local authorities Alliances with parapublic energy agencies, local governments, public energy companies 	 Initially municipalities' responsibility; progressive engagement of federal level; still broad municipal autonomy in energy policy (Para)public suppliers have small scale 	 National level energy policies, ??? Strong linkages with municipalities (collaboration, membership of municipalities, personal links)
Support from para- public agencies is more stable than government support	 Difficult relationships with national government, administration and gird manager Cooperative find a some government (local+EU) to ch another (nation 	Often strong linkages with municipalities (support, collaboration, personal links) Allies in t levels ange hal)	Strong local support can slow field structuration, as there is less need for supra-local organisation and advocacy

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Cross-case comparison : energy market

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Institutional work VS Institutional structure	France	Switzerland	Germany
Relation with private actors VS energy market structure	 Liberalisation (2007), electricity supply oligopole (decreasing), concentration trend on RE generation side, national gird monopoly Cooperation with small developers, negotiations ongoing with big ones Difficult relationships with incumbents (EDF) Cooperative relationship between cooperative producers and cooperative supplier, sometime compensating absence of public support 	 Liberalisation (2009) for large-consumers only, 650 electricity providers with territorial supply monopolies (mostly in ownership of municipalities / cantons), big companies own majority of generation capacity High dependence on providers due to pricing for fed-in electricity Ambivalent relationships with electricity providers (conflicts & collaboration) Collective lobby with some other independent producers 	 Liberalisation (1998), supply oligopole (decreasing), national grid monopoly Cooperation with project developers and companies Cooperation with independent renewable energy providers and solar installators Difficult relationship with the four big conventional energy suppliers

Cross-case comparison : intermediaries

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Institutional work VS Institutional structure	Intermediaries' structuration mirror states structures	Switzerland	Germany
Intermediaries structuration VS government structuration	 Unitary government (deconcentration trend) National network coordinating regional networks 	 Federal government Scattered regional and national networks without specific focus on energy cooperatives 	 Federal government 2 national networks regional networks

ross-case comparison : process comparison



Preliminary results

- Necessary/enabling conditions
 - Favourable RE tariffs
 - Legal framework making cooperative organisation of energy possible (including citizen fundrising, engagement of local authorities, liberalized market...)
- Conditions triggering emergence of local projects
 - Ecologist militants (anti-nuclear or other...)
 - Local or remote inspiring example, or discourses
 - Local counter-example (private actor prospecting)
- Conditions triggering emergence of intermediaries
 - Legal and administrative obstacles, or lacking support (need to lobby)
 - Access to funding



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Future steps

- Contribution is on process patterns
- Continue comparative analysis
- •Link with existing theories about social innovation processes
 - diffusion

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- scaling up
- role of intermediaries
- actors dynamics



Thank you Questions & suggestions are welcome



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