# Is efficient sufficient?

# Mapping the energy community cooperation chains (ecosystems)

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# From energy efficiency actions to energy community







Investissement total: 312 845 €







PRODUCTION ANNUELLE: 320 000 kWh soit la consommation

soit la consommatior de 220 personnes (hors chauffage)

Apport citoyen bonifié: 100 000 €

Autres apports citoyens,

collectivités, entreprises: 100 000 €

Apport Région : 100 000 €

Commune Luc-sur-Aude: 12 845 €





32 tonnes

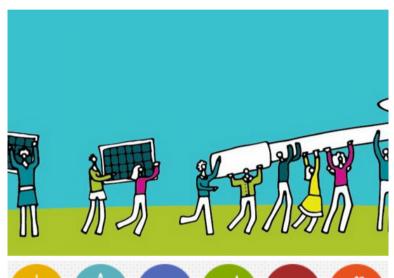
d'équivalent Co2 évitées par an

3,5 kg de déchets nucléaires à vie longue (> 10 000 ans) évités par an.

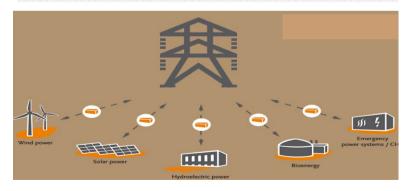


J-C Pons, Mayor of Luc-sur-Aude

# Energy communities - our definition and focus in pics









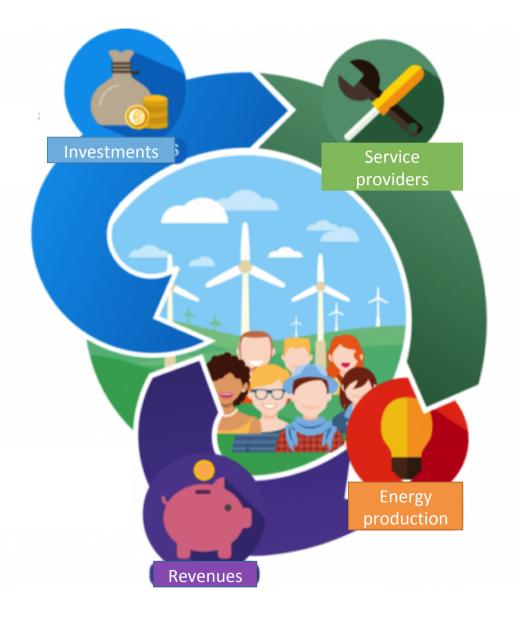








A virtuous local economic loop





# Benchmarking between France and The Netherlands

- 300 communities
- 11,000 shareholders
- 0.5 comm/100.000 inhab.
- 0,2% national annual electricity production

- 500 communities
- 70,000 shareholders
- 2.8 comm/100.000 inhab.
- 2% national annual electricity production



## To better understand key success factors

#### Our question:

 Why some communities work better than others? How to develop further?

Our assumption: communities are fragile alone but robust collectively

 Besides looking at individual initiatives, we study the cooperation chain that supports their creation and growth

#### Our objective

 Benchmark business models and structure of cooperation chains in both countries

### Our methodology

• Semi-structured interviews with community members, associations (pubic or private) cooperating with communities; experts.

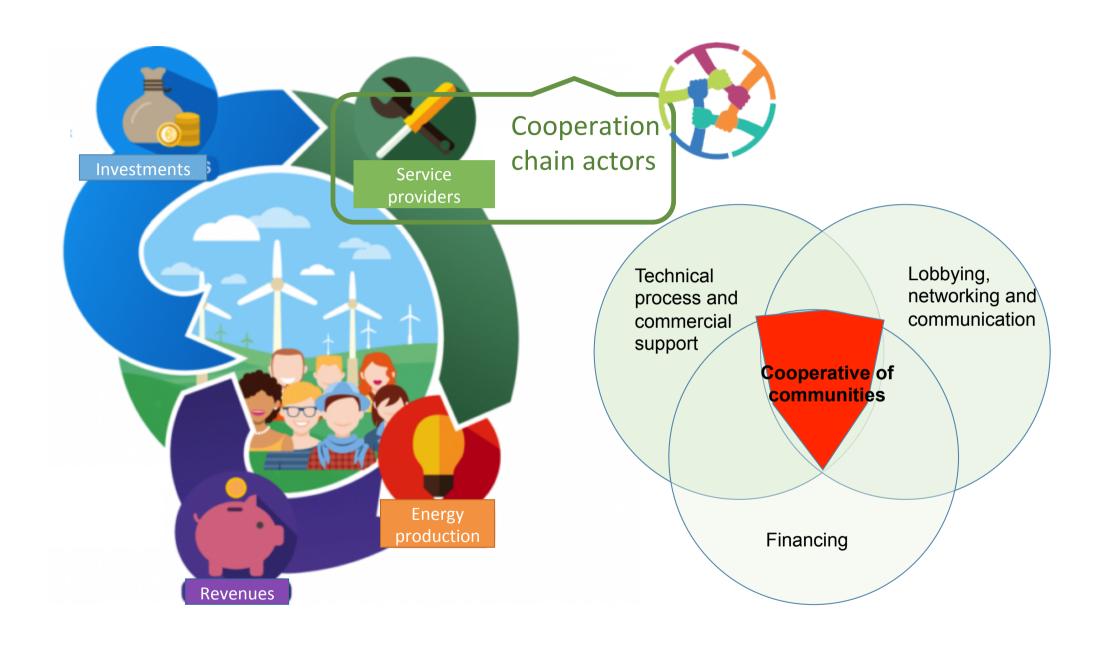


26 interviews in France and 10 interviews in The Netherlands

# Comparing energy communities

Value creation	France	The Netherlands
Take back control	X	X
Give meaning to one's savings	X	X
Get an interesting return on investment	(x)	X
Promote local development	X	X
Propose an alternative to incumbent energy suppliers		X
Consume electricity generated locally		X
Energy sufficiency action, energy literacy		X

Value delivery/value capture

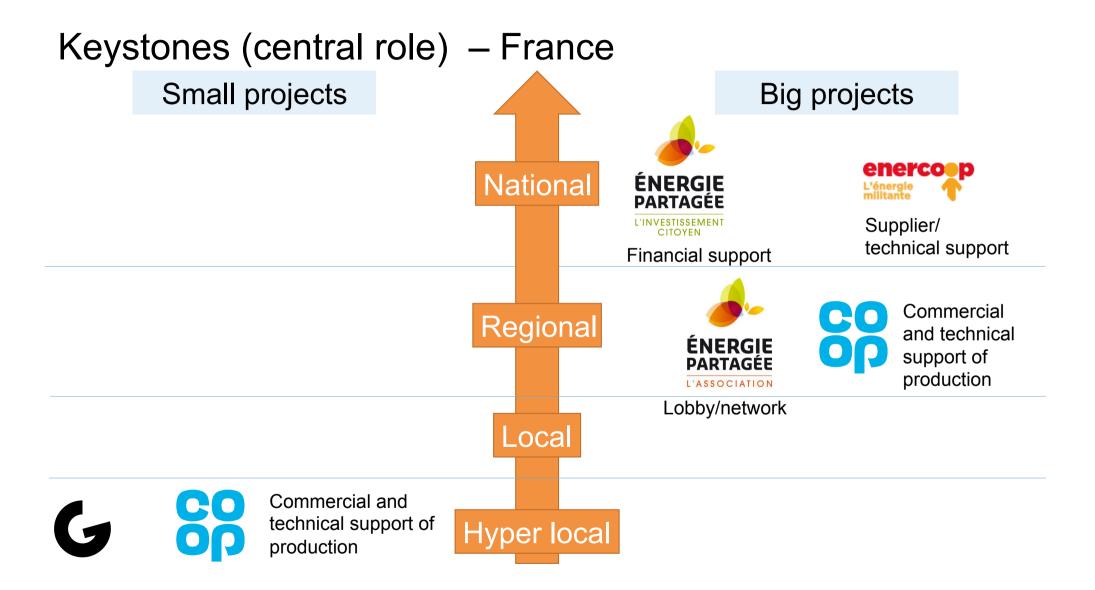


# Energy cooperation chain actors and roles

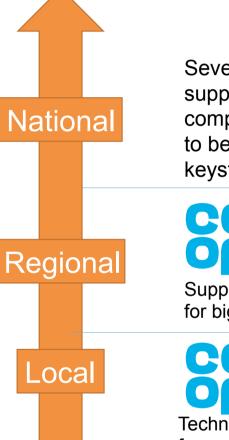


	Networking/ Lobbying	Technical & commercial support	Financing
France	-Network not yet converging (Centrales Villageoises, Energie Partagée Association) -More distributed lobbying (Enercoop, Energie Partagée, SER,)	Single active supplier (Enercoop)	Energie Partagée Investissement for big projects (FIT, EDF as a mandatory passage point)
The Netherlands	-Structured knowledge platform (Hier Opgewekt) at national level -Consolidation of lobbying actors within a single entity (Energie Samen)	Diversity of competing suppliers, incl. community itself	Completely liberalized (FIT, clients' fees, targeted customers etc.)





# Keystones The Netherlands



Hyper local

Several energy suppliers in competition that want to become the keystone







Supply, technical and financial support for bigger projects



Technical and financial support for smaller projects



## Benchmark analysis

Economic model of cooperative of communities:

 Dutch model depends to a lesser extent to public funds, is professionalising the activity, and offering multiple services

Independent model to energy utilities:

 French ecosystem is evolving independently to incumbent utilities, while Dutch ones are part of the cooperation chain (DSO, Greenchoice, Engie, Eneco....)

#### Geographical scope

- The ecosystem of smaller projects is hyper local in France
- In the Netherlands, roles are distributed according to the geographical scopes

### **Ecosystem evolution**

- In France the evolution is driven by savings and around Energie Partagée Investissement
- Multiple drivers in The Netherlands with the ambition to make energy community ecosystem self-sufficient.

## Preliminary recommendations

- Both countries depend strongly on public funds (FIT, subsidies, etc.) – ex UK
- Role and involvement of utilities can be key but is driving away community from its philosophy (independence)
- Focus support on non-national cooperative of cooperatives
  - ✓ To link local ecosystems to the national one
  - Mutualisation of skills to make economy of scale and allow professionalization
  - → Region or province as a « momentum » to develop economic activities of energy communities

## Research agenda

Develop business model analysis

Add UK to the benchmark analysis

3 interviews so far

Questionnaire targeting energy community subscribers

 To better understand the identity of these communities in France



# Thank you for your attention

Any questions?

Feel free to contact me: <a href="mailto:carine.sebi@grenoble-em.com">carine.sebi@grenoble-em.com</a>

