



# Mainstreaming Renewable Energy Prosumerism: *Directionality of an ongoing Transition*

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5th Global Research Conference:  
Social Innovation and Socio-Digital  
Transformation – Towards a Comprehensive  
Innovation Policy  
Dortmund, 28-29 October 2019



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# 1) Renewable Energy Prosumerism

- Renewable Energy (RE): towards sustainable energy systems
- RE prosumerism: Activating passive energy consumers (Pel et al. 2016), developing institutionally hybrid energy actors (Wittmayer et al. in progress)
- Social innovation impulse for energy transition
- *How to accelerate energy transition? Which drivers & barriers? How to 'cultivate' RE prosumerism?*



## 2) Mushrooming, mainstreaming & directionality

- *What **incentive structures** will **enable** the **mainstreaming** of RE prosumerism...*
- *...and, in so doing, safeguarding citizen participation, inclusiveness and transparency in the Energy Union?*
- **Some questions about the research question**





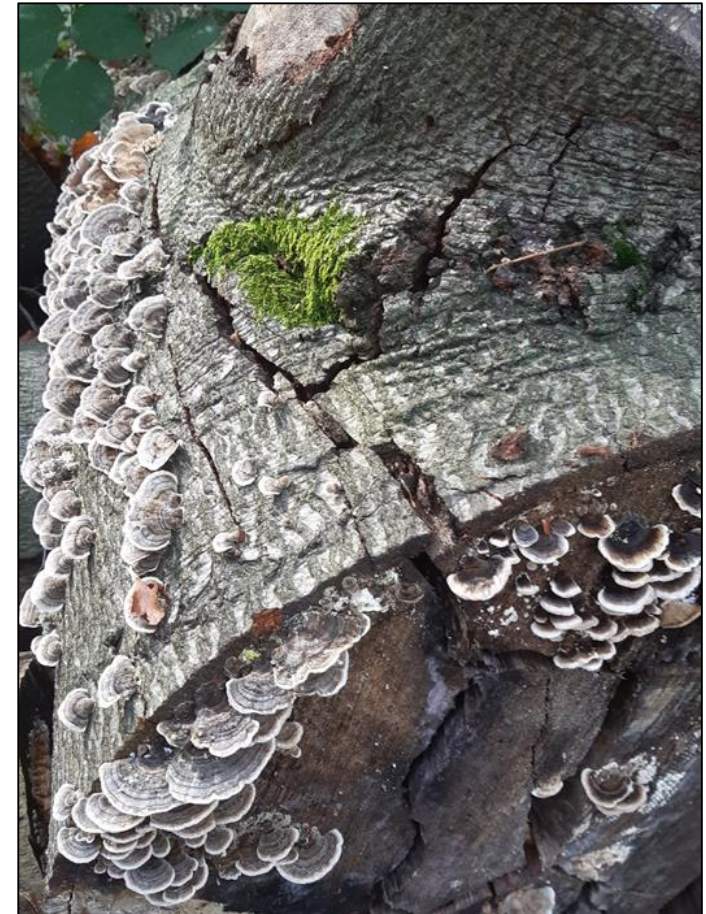
## 2.1) Mushrooming & acceleration?

- ‘Mushrooming’ RE prosumerism: Mainstreaming already ongoing
- Several earlier waves in mainstreaming; ‘peak prosumerism’ in sight? (Hewitt et al. 2019)
- What business-models for it to thrive in post-subsidy era? (Brown et al. 2019)
- Mainstreaming: Hopes of accelerated transition, possibilities of deceleration



## 2.2) Transforming the system?

- RE prosumerism needs infrastructures that carry it. How to deal with infrastructure instability?
- Will it remain a transient turbulent phase, followed by re-entrenchment of current incumbent actors (Brisbois 2019)?
- Transformation or system reproduction (Geels & Schot 2007)? Which fitting-in with, and stretching of, 'regime' structures? (Smith & Raven 2012)?



## 2.3) Democratizing society?

- RE prosumerism could ‘democratize’ energy (Burke & Stephens 2018)
- But community energy & ‘lifeworld’ logic are vulnerable to instrumental use of ‘system’ logic (Taylor Aiken 2019)
- Prosumerism for public or mutual benefit (Bauwens & Defourny 2017)?
- Need to look ‘under the hood’ of prosumerism initiatives for inclusiveness/ reproduction of power structures





## 2.4) Directionality

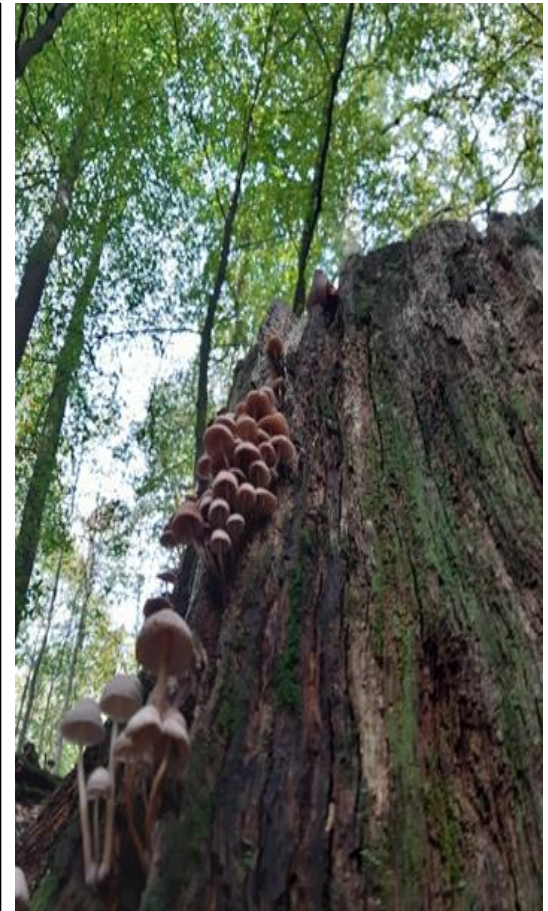
### Taking transitions directionality

(Stirling 2011; Schlaile et al. 2017; Pel et al. in progress)

#### **seriously:**

- socio-technical multiplicity of RE prosumerism variations
- Multiple normative yardsticks
- Uncertain mainstreaming dynamics
- RE prosumerism as innovative *actions, objects and ideas*

(Czarniawska & Joerges 1996; Haxeltine et al. 2017)





# 3) Unpacking directionality

## RE prosumerism:

Which social conditions are shaping mainstreaming?

### RE prosumerism ideas

- Discourses of decentralization & energy democracy
- Environmental awareness
- Perceptions of political legitimacy
- Perceptions of reliability and competence
- Discourses of Inclusion

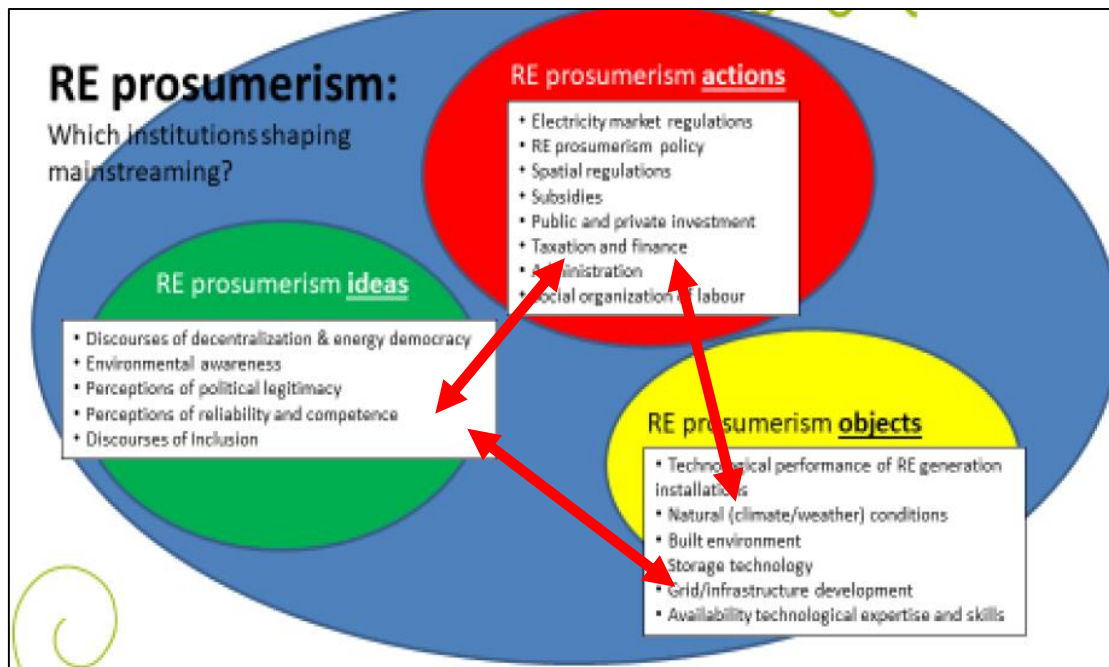
### RE prosumerism actions

- Electricity market regulations
- RE prosumerism policy
- Spatial regulations
- Subsidies
- Public and private investment
- Taxation and finance
- Administration
- Social organization of labour

### RE prosumerism objects

- Technological performance of RE generation installations
- Natural (climate/weather) conditions
- Built environment
- Storage technology
- Grid/infrastructure development
- Availability technological expertise and skills

## 4) Institutional tensions: 3 mainstreaming crossroads

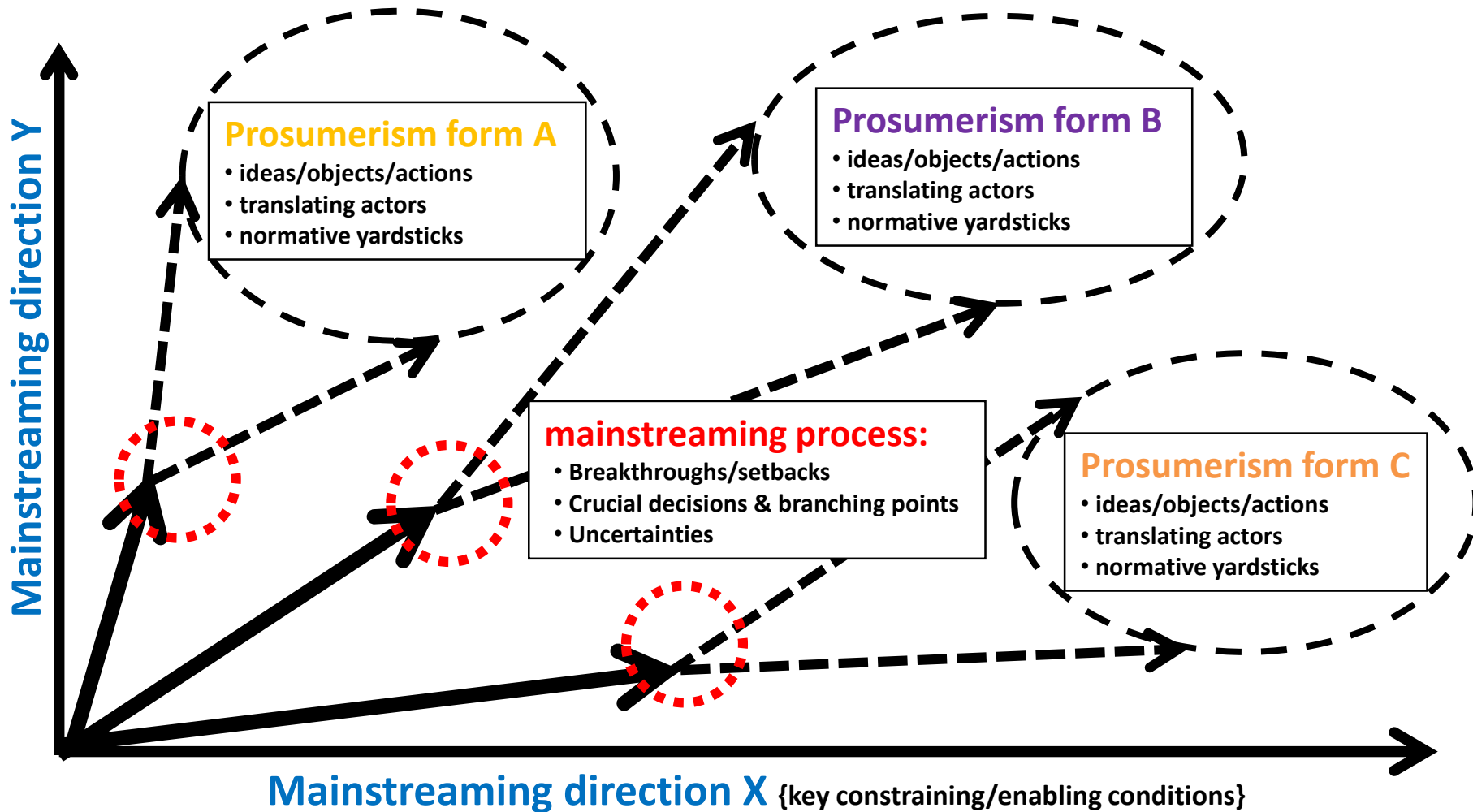


- Different developments of shaping societal conditions...
- **Different directions of mainstreaming process**

### Elaboration through 3 mainstreaming crossroads.

RE prosumerism mainstreaming unfolding

- 1) ...between 'social economy' and 'commercialization'
- 2) ...between 'energy parochialism' and 'system-optimisation'
- 3) ...between 'inclusiveness' and 'privilege'





# Conclusion

- **What characterises the diffusion of social innovation based on your research perspective?**
- Physical-biological metaphors are doubtful 😊; evolution is institutional
- Mainstreaming implies transformations of the (soc-tech-institutional) innovation. RE prosumerism is not one 'thing', or one product
- Mainstreaming: Multiple directions, shaped by institutional complexity (Fünfschilling 2019; Stirling 2019)



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# Thanks for your attention!

## Any questions?

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This project received funding from the EU's Horizon 2020 research and innovation programme under grant agreement N°764056. The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the EU.