The role of Community Energy in the Energy Transition

2nd SEYN Academy
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Chania Crete

Antonia Proka

DRIFT / Erasmus Universiteit Rotterdam

proka@drift.eur.nl

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Short bio

Background in Business Administration

Masters in Environment and Resource Management: Energy

Traineeship at Greenpeace International

Researcher on TRAPESES project:

Transition Patterns Enabling Smart Energy Systems

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➢ Focus on understanding and accelerating sustainability transitions
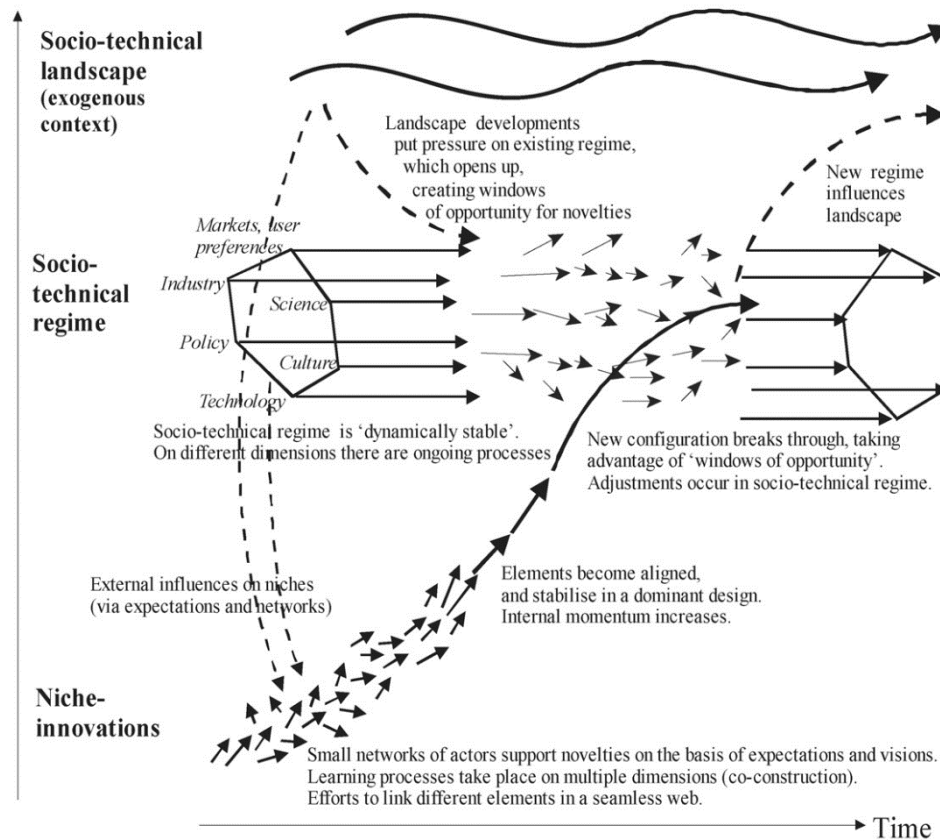
➢ Research, consultancy, education

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The Energy Transition.
What should it mean?

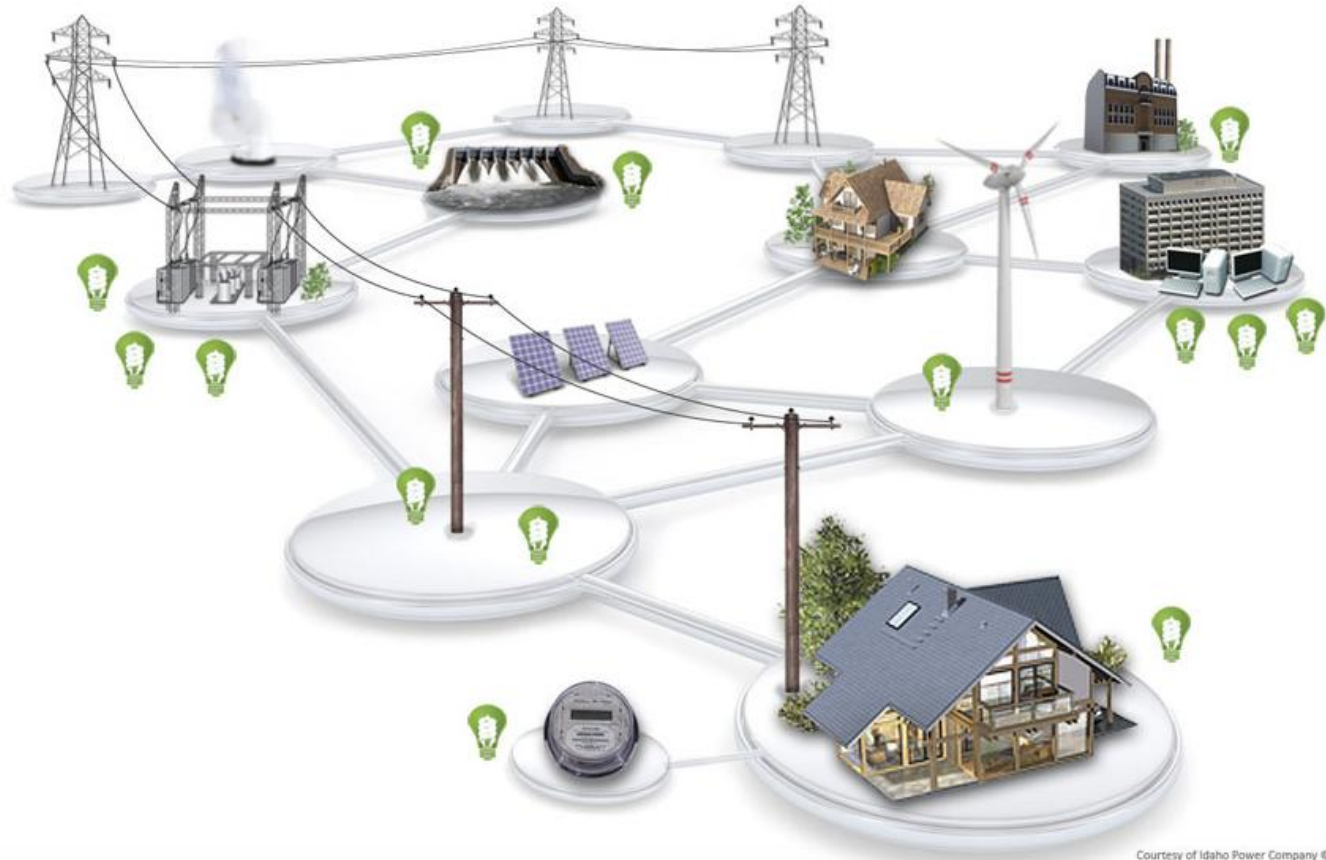# The energy transition

(Geels and Schot, 2007)

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Are Smart micro-grids the *end state* of the Energy Transition?

Courtesy of Idaho Power Company © 2011

Is it the Super Grid?

Legend:
- Solar Thermal Power Plants
- Photovoltaics
- Wind
- Hydro
- Biomass
- Geothermal

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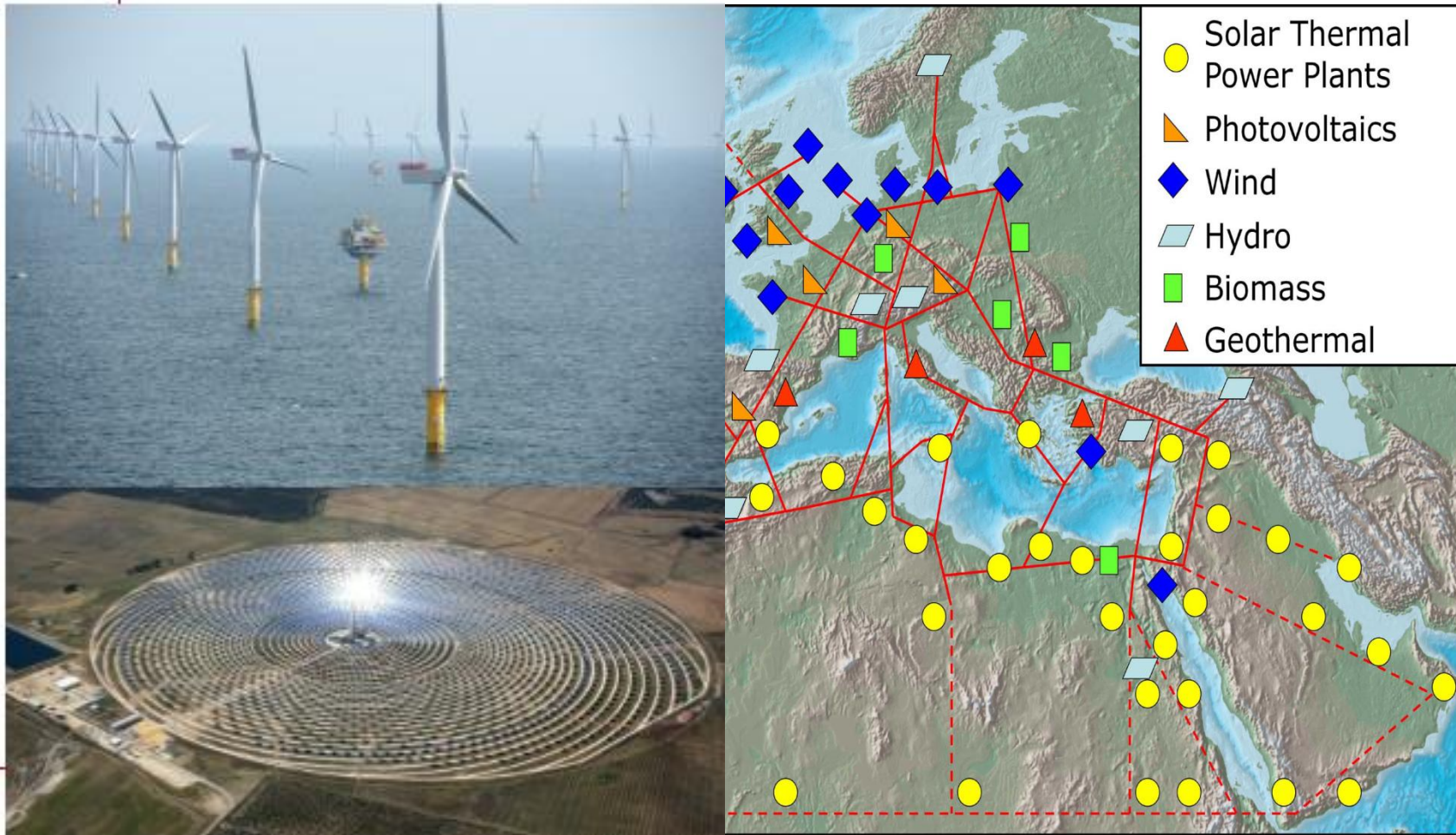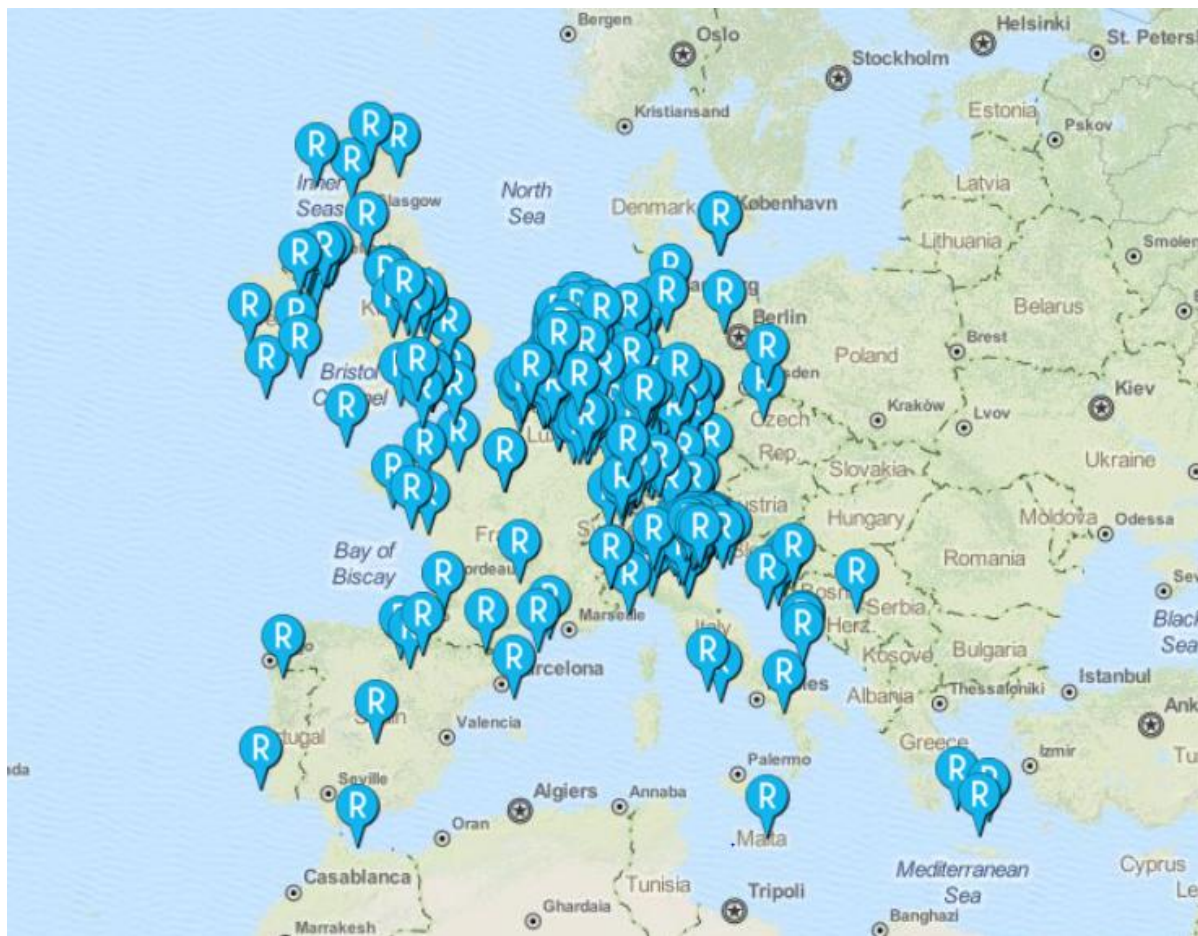
What is the role of Local Renewable Energy Initiatives?

Increasing number of renewable energy cooperatives in Europe

REScoop.eu

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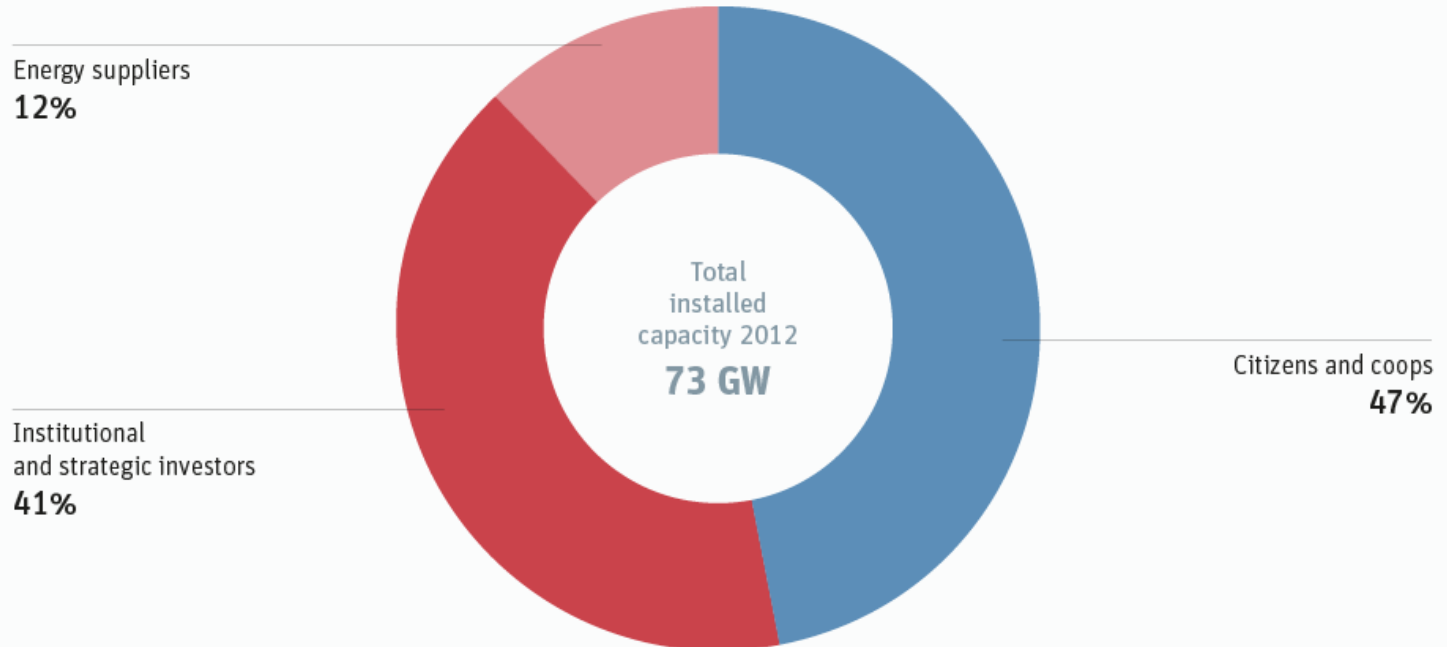
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The energy transition
to energy democracy

https://vimeo.com/122848296

German energy transition is a democratic movement

Ownership of renewables in 2012

Source: AEE, www.unendlich-viel-energie.de

Energy suppliers
12%

Institutional
and strategic investors
41%

Total
installed
capacity 2012
73 GW

Citizens and coops
47%

German Energy Transition   energytransition.de   (cc) BY SA

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Local initiatives in the Netherlands

## INVENTARISATIE

Voor dit overzicht is gebruik gemaakt van o.a. de inventarisatie die de Natuur en Milieufederaties maakten in het kader van HIER opgewekt. We hebben nu bijna 500 initiatieven op de radar. Pas als initiatieven toestemming geven, worden ze opgenomen in

ZOEKEN

Initiatieven zoeken op basis van meerdere kenmerken? Dat kan!

**SELECTEER OP KENMERK(EN)**

9
28
18
43
9
27
33
26
47
7
42
19
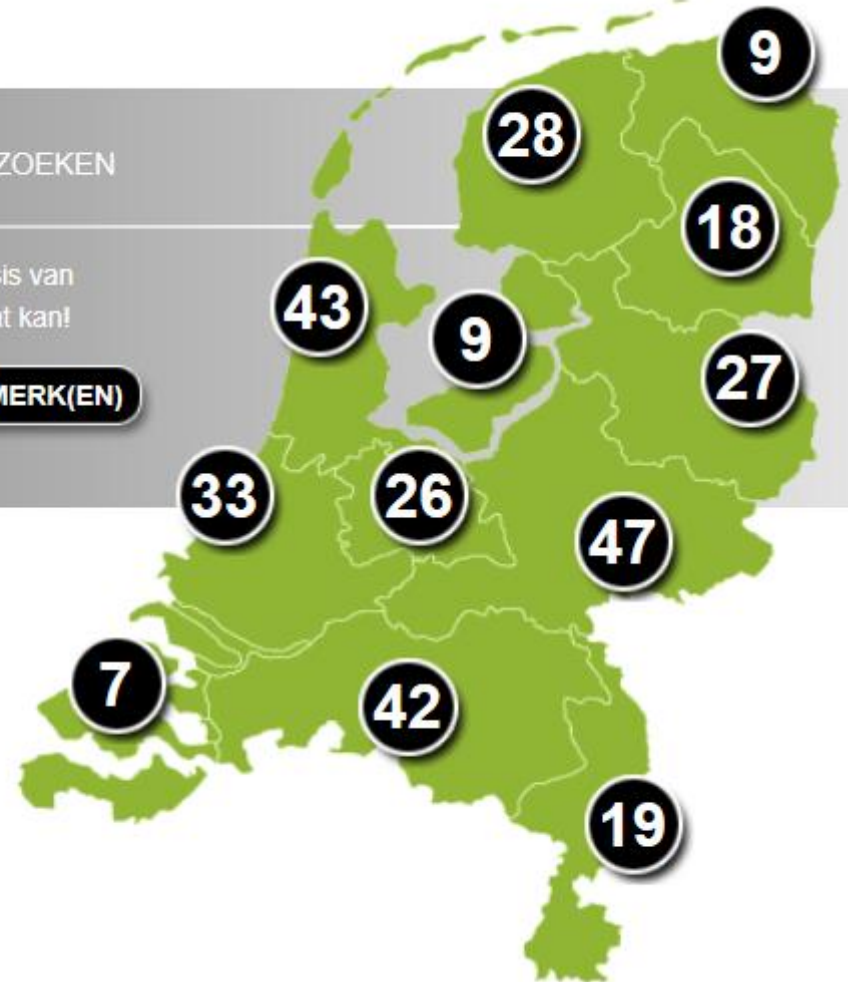
Great variety of community energy initiatives

- Type and scale

✓ Technology employed
✓ Interest - Drivers
✓ Geography
✓ Socio-demographic background
✓ Stage of implementation
✓ Level of support

Great variety of community energy initiatives

- Legal and organisational variety

- ✓ Organisational structures
- ✓ Legal status of initiatives
- ✓ Financial structure
- ✓ Partnerships and networking activities
- ✓ Resource bases
- ✓ Patterns of ownership
- ✓ Development models
- ✓ Business models and roles for community members

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Various business models
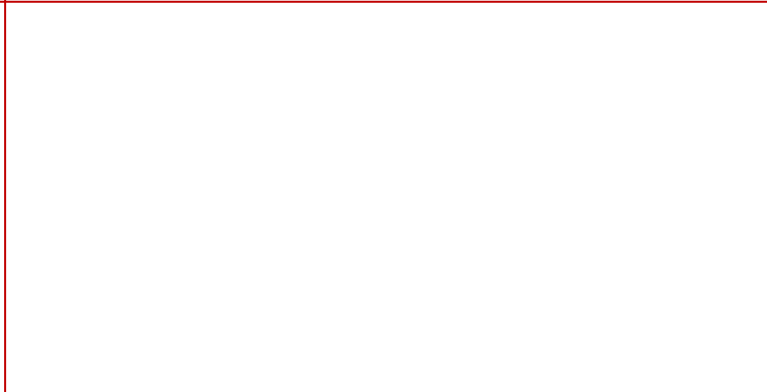
Variety of motivations

- concerns about future generations
- community wellbeing and health
- community development
- social cohesion
- social inclusion
- community empowerment

- improving local environment
- reducing carbon emissions
- possible local sources

Variety of motivations

- saving money on energy bills
- generating income for local community
- tackling fuel poverty
- skills development
- local job creation

Variety of motivations

- dissatisfaction with inconsistent energy policies and incompetent governments

- need for independence from big utility companies and/or unstable political regimes

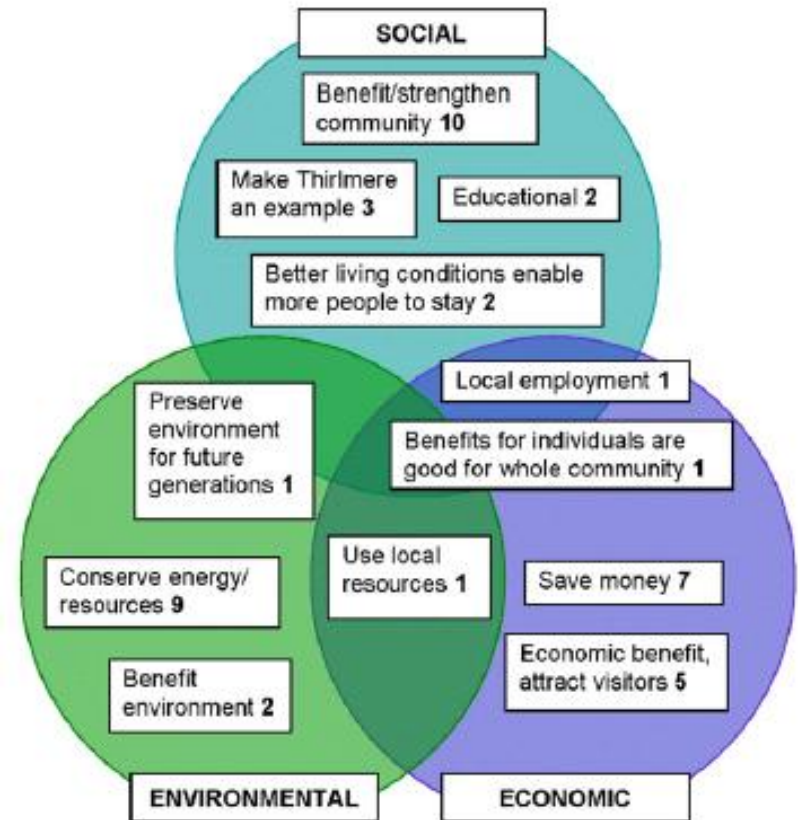- aspiration to influence

  energy policy

Benefits of community energy projects

Global
- Environmental benefits
- Future sustainability
- Strengthen market for renewables
- Renewables better for public health

- Personal responsibility

Local
- Entitled to have a say as a community member
- Save money
- Strengthen community
- Local resources should be used
- Warmer homes
- Homes more affordable
- Personal interest in renewables
- Proud of community
- Fits with business aims
- 'I've got kids'

- There's no alternative
- It makes sense N/A

(Rogers et al., 2008)

SOCIAL

Benefit/strengthen community 10

Make Thirlmere an example 3

Educational 2

Better living conditions enable more people to stay 2

Local employment 1

Preserve environment for future generations 1

Benefits for individuals are good for whole community 1

Conserve energy/resources 9

Use local resources 1

Save money 7

Benefit environment 2

Economic benefit, attract visitors 5

ENVIRONMENTAL

ECONOMIC

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Internal Barriers

- Need time/volunteers
- Need funding/access to finance
- Need expertise/tech advice
- Need to engage with community

External Barriers

- Unstable governmental policy/regulation
- Planning restrictions/hurdles
- Cost and access to the grid
- Other bureaucracy
- Lack of support from other actors
- Lack of access to finance
- Lack of legitimacy as proper market player
- Public apathy/NIMBY

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Critical success factors

Group:

✓ Having key committed individuals to drive a project forwards and

✓ an effective organising group capable of maintaining momentum and overcoming setbacks;

Project:

✓ sufficient time

✓ information

✓ skills

✓ money and

✓ material resources

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Critical success factors

Community:

- ✓ project designed to meet the community's needs
- ✓ engaging with and developing trust with the community

Network:

- ✓ forming supportive partnerships and information-sharing networks
- ✓ sharing information with other groups

Policy:

- ✓ a supportive national policy context.

Inspiring sustainable lifestyles?

Change of attitude after joining the energy cooperative

- More positive opinion towards renewable energy — **30,40%**

- Considering decentralised energy supply as a realisable alternative — **41,99%**

- Supporting further deployment of local community initiatives — **40,92%**

- Opposing larger, centralised energy infrastructure — 15,15%

- Demanding more citizen participation in the society in general — **36,43%**

- Having higher attentiveness to own energy consumption — 19,34%

- Generally more conscious about ecological issues — 10,74%

- No attitude change at all — **37,61%**

- More critical opinion towards renewable energy — 1,12%

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(Ö. Yildiz et al., 2015)

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Transformative potential of local renewable energy initiatives

- tangible achievement of sustainability improvement
- the space to develop new ideas and practices
- experimenting with new systems of provision and consumption

…but they constitute more than just the sum of their parts…

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Transformative potential of local renewable energy initiatives

Many important indirect contributions in creating…

- the platform for nurturing and sharing of technical skills
- the space to evaluate models of social innovation
- new political opportunities for active citizen engagement and challenge dominant discourses in energy.

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Any questions?

Antonia Proka

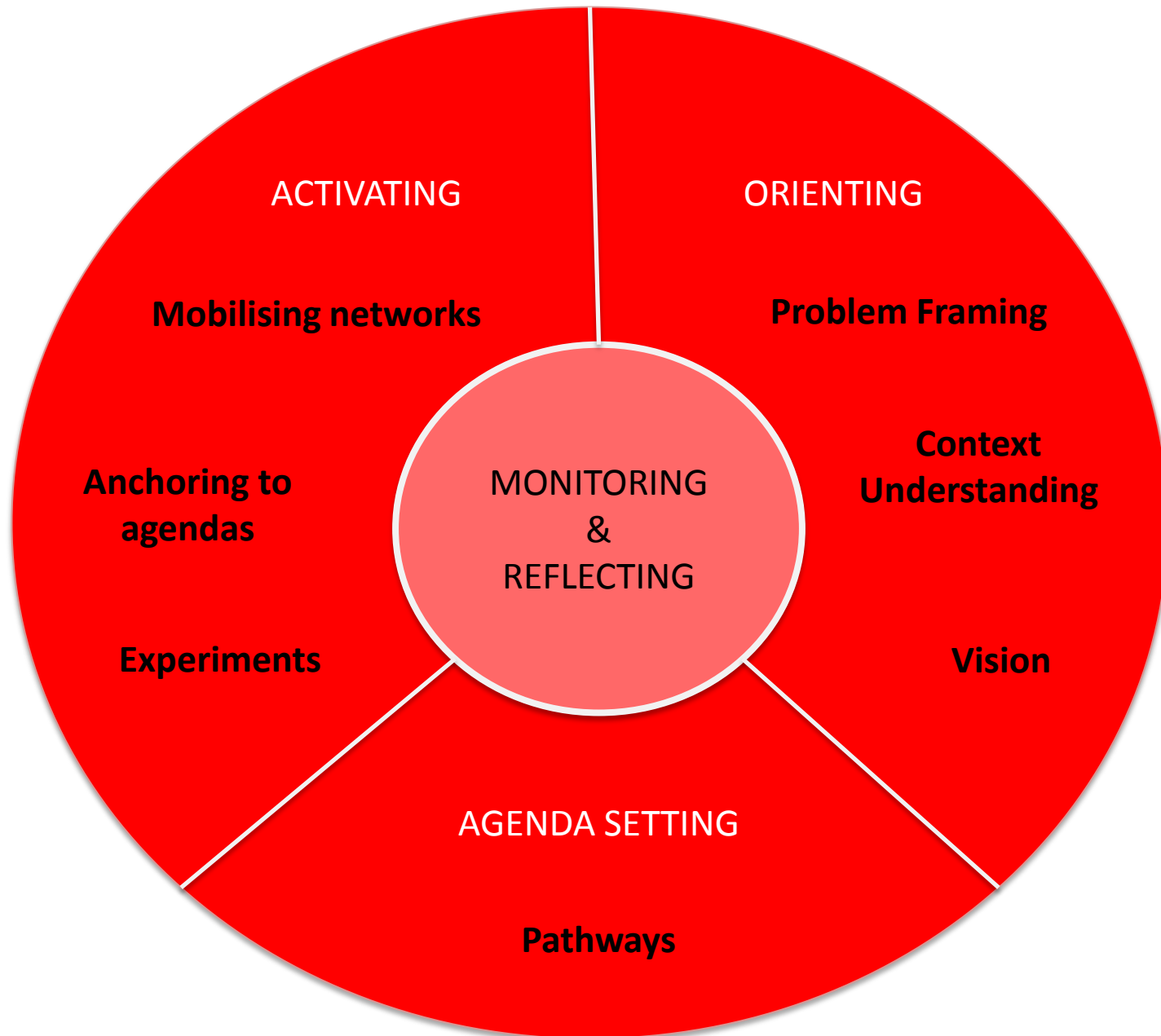DRIFT / Erasmus Universiteit Rotterdam

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Transition Management

- a governance approach based on insights from governance and complex systems theory as much as upon practical experiment and experience.

- a framework around different types of governance activities that influence long-term change.

(Loorbach, 2007)

➤ Influencing transitions through the creation of spaces for searching, learning, and experimenting.

TRANSITION MANAGEMENT PROCESS STRUCTURE

ACTIVATING

ORIENTING

Mobilising networks

Problem Framing

Anchoring to agendas

MONITORING
&
REFLECTING

Context Understanding

Experiments

Vision

AGENDA SETTING

Pathways

Operational applications of TM

Setting up processes of

- ✓ co-imagining
- ✓ co-creating
- ✓ co-mobilizing

➢ **transformative change** for sustainability.

Vision building