

Welcome to the CETPartnership Annual Conference 2025

We will start at 9:00 am CEST

Moderation



Florian Moritz

CETPartnership Coordination Team

Federal Ministry Innovation, Mobility and Infrastructure
Republic of Austria

Practicalities

- The meeting will be recorded, and the recording will be published for future watching
- Online data declaration: Please be aware that your name will be displayed in the list of participants as well as in the chat window
- Please ask questions to the presenters and panelists in the chat



Today's Agenda

09:00 – 09:15

A Brief Welcome by Michael Huebner, CETPartnership Coordinator

09:15 – 09:45

R&I challenges for System Transitions in Energy & Mobility - Keynote by

- *Rosalinde van der Vlies*, DG Energy, European Commission
- *Pierpaolo Cazzola*, University of California

09:50 – 10:45

Panel Discussion & Q&A:

European Research and Innovation Challenges for Energy System Transitions

10:45 – 11:00

Coffee Break

11:00 – 11:30

How to Transition a System? - Keynote by

- *Paula Kivimaa*, Finnish Environment Institute Syke

11:30 – 12:25

Panel Discussion & Q&A:

What does System Transition mean for us, the CETPartnership?

12:25 – 12:30

Wrap-up and outlook for the afternoon

12:30 – 13:00

Lunch Break

13:00 – 15:30

Project Presentations - Voices of transition: CETPartnership Projects Driving Europe's Energy transition

Welcome by the Coordinator



Michael Huebner
CETPartnership Coordinator

Federal Ministry Innovation, Mobility and Infrastructure
Republic of Austria



Co-funded by
the European Union

R&I challenges for System Transitions in Energy & Mobility



Rosalinde van der Vlies

Director Just Transition, Consumers, Energy Efficiency &
Innovation - DG Energy

R&I challenges for System Transitions in Energy & Mobility

Pierpaolo Cazolla
University of California

Co-author of the Report *Addressing European Research and
Innovation Challenges for System Transitions in Energy and Mobility*

Panel Discussion European Research and Innovation Challenges for Energy System Transitions



Moderation: **Henriette Spyra**, Director General Innovation and Technology
Federal Ministry Innovation, Mobility and Infrastructure, Republic of Austria.

Panelists



Birte Holst Jørgensen
Head of Scientific Advice
DTU Wind & Energy
Systems



Dr Eleanor Webster
Head - Mission Innovation
Secretariat



Henk Jan Vink
President
EU Energy Research
Alliance



Michael Huebner
CETPartnership Coordinator

Q&A session

Ask your questions in the chat

Coffee break

We will continue at 11:00 CEST

- 11:00 – 11:30** **Key note - How to transition a system?**
Paula Kivimaa, Finnish Environment Institute
- 11:30– 12:10** **Panel discussion: What does this mean for us, the CETPartnership?**
Paula Kivimaa, Finnish Environment Institute
Aage Stangeland, Leading Expert TRI3 (CCUS; Hydrogen & Biofuels)
Gerdi Breembroek, Leading Expert TRI4 (Heating and cooling systems)
Tina Ringenson, Leading Expert TRI5 (Regional energy systems)
Åsa Bergérus Resnvik, Leading Expert TRI 6 (Industrial energy systems)
Stefan Nowak, Leading Expert TRI 7 (Integration in built environment)
- 12:10 – 12:25** **Q&A to panelists**
- 12:25 – 12:30** **Closing & Outlook to the afternoon**



How to transition a system?



Paula Kivimaa
Finnish Environment Institute

Co-author of the Report *Addressing European Research and Innovation Challenges for System Transitions in Energy and Mobility*

How to Transition a System?

Paula Kivimaa

Research Professor, SYKE

Member of Finnish Climate Panel

European Commission DG GROW Fellow



Suomen ympäristökeskus
Finlands miljöcentral
Finnish Environment Institute

Introduction

- Mitigation of climate change has for long necessitated system-level transitions, i.e. **sustainability transitions**
- Recent geopolitical turmoil brought forward energy security benefits of system-level transition
- Innovation is vital – but needs to be integrated into broader transition dynamics

What do system transitions mean?

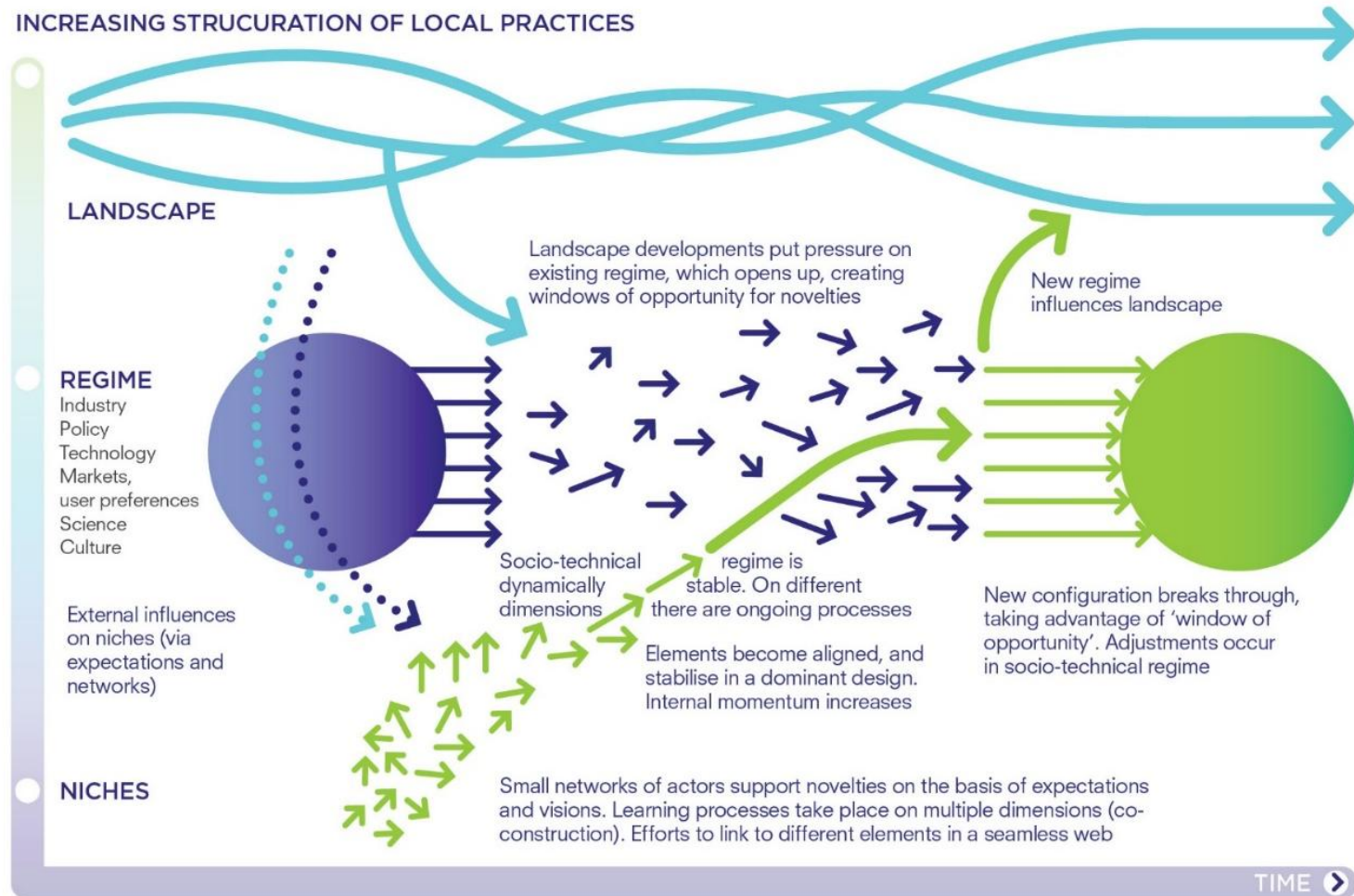


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*Broader context
conditions system
transitions – obstacles &
windows of opportunity*

*Energy systems formed
with path-dependent
technologies, markets &
institutions*

*Development & upscaling
of innovations can enable
transitions*

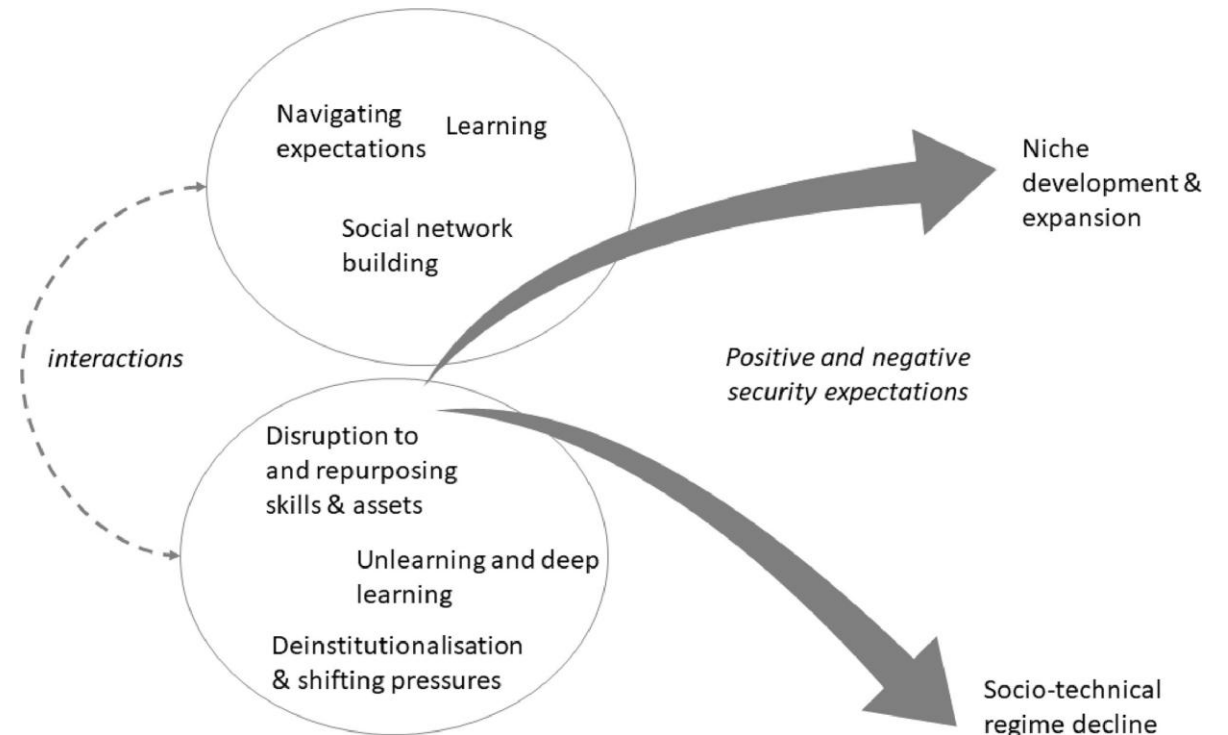


Multi level perspective of the socio-technical transition framework. Source: Geels, 2002; Geels and Schot, 2007

What are sustainability/system transitions?

Processes that lead to a fundamental shift in socio-technical systems (energy, food, mobility, etc.)

- Extensive changes along different dimensions – not just technological, but also organisational, institutional, political, economic, and socio-cultural
- A large variety of actors
- During a transition, new products, services, business models, and organisations emerge
- Technological and institutional structures undergo fundamental changes



Characteristics of contemporary energy transitions

- Increases in renewable energy, energy storage, smart homes, digitalisation, green hydrogen
- New energy & resource efficiency solutions
- Electrification of heating, transport and industry
- Phaseout of fossil fuels
- Increasing international grid connections
- Increasing decentralisation of energy systems (& prosumers)
- Raising attention to energy justice and democracy



Experimentation, learning and unlearning



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Energy transitions require experimentation, learning & unlearning

Experimentation in different forms & scales

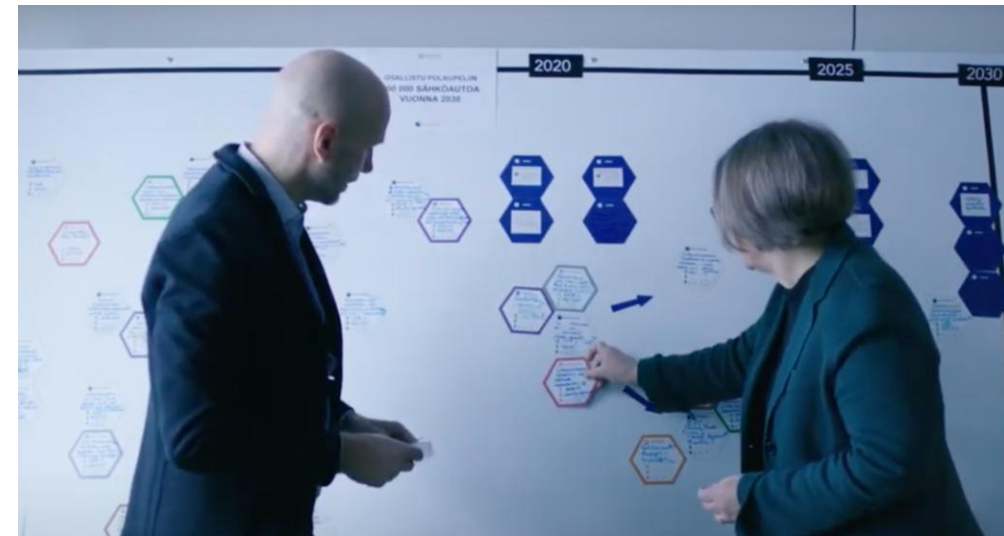
- Different aims: technological development, market creation, spatial development, societal problem solving, social innovation

Deeper learning needed to avoid pitfalls of 'projectification'

- E.g., not only focus on how to develop solar technology but also address opportunities and barriers for viable business models, and consumer behaviour
- Transferring learning between actors, projects and locations

Unlearning established ways of thinking & acting

- Questioning taken for granted ways
- E.g. rethinking how energy markets work, how to manage energy security

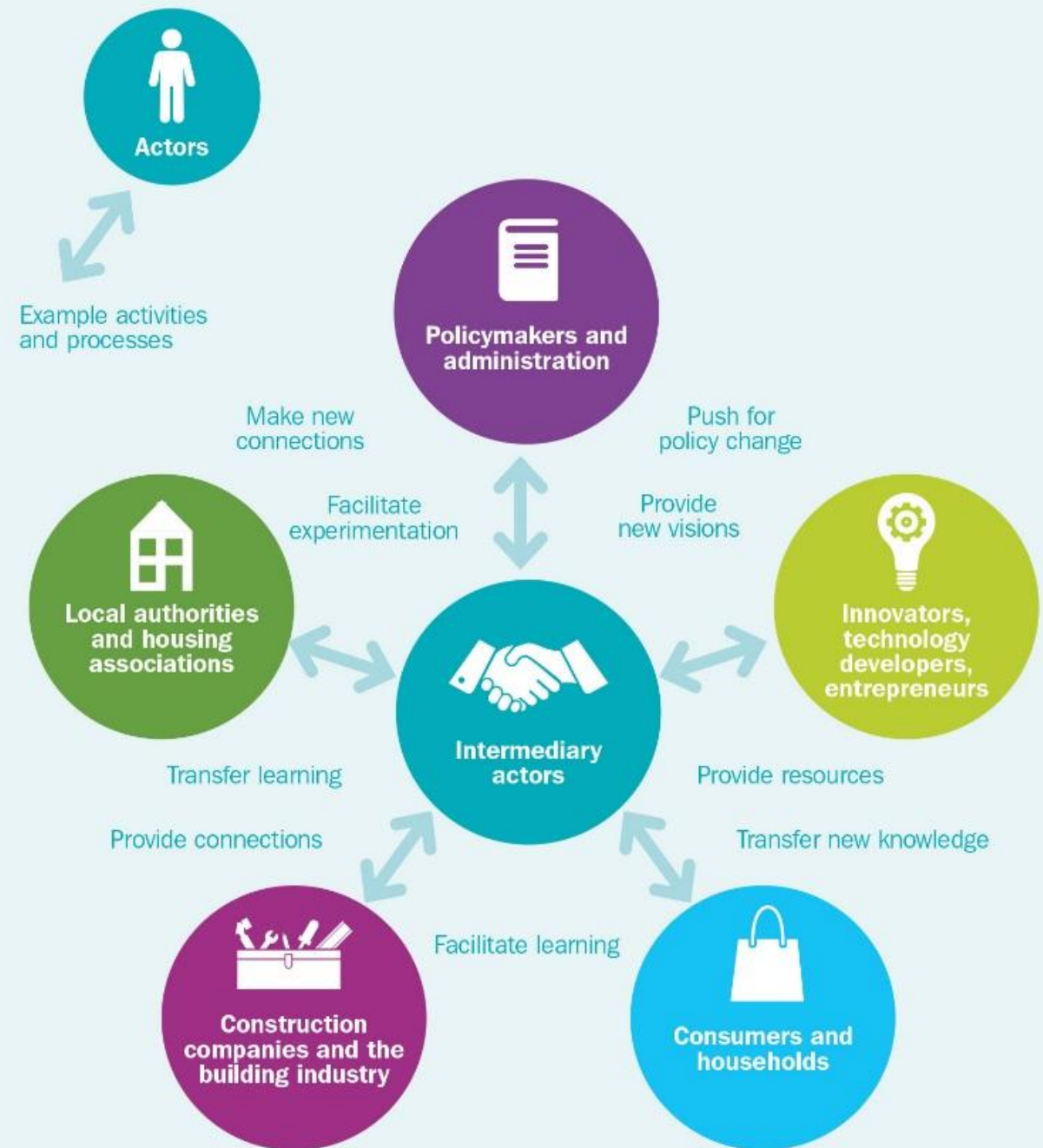


Governance trends for experimentation in transformative policy



Intermediaries link actors – new entrants and incumbents – and activities, skills and resources connected to these actors

- to create momentum for change
- create new collaborations around niche technologies, ideas & markets
- coordinate experiments
- pool/share knowledge & learning
- disrupt prevailing socio-technical systems
- Influence policy / implementation



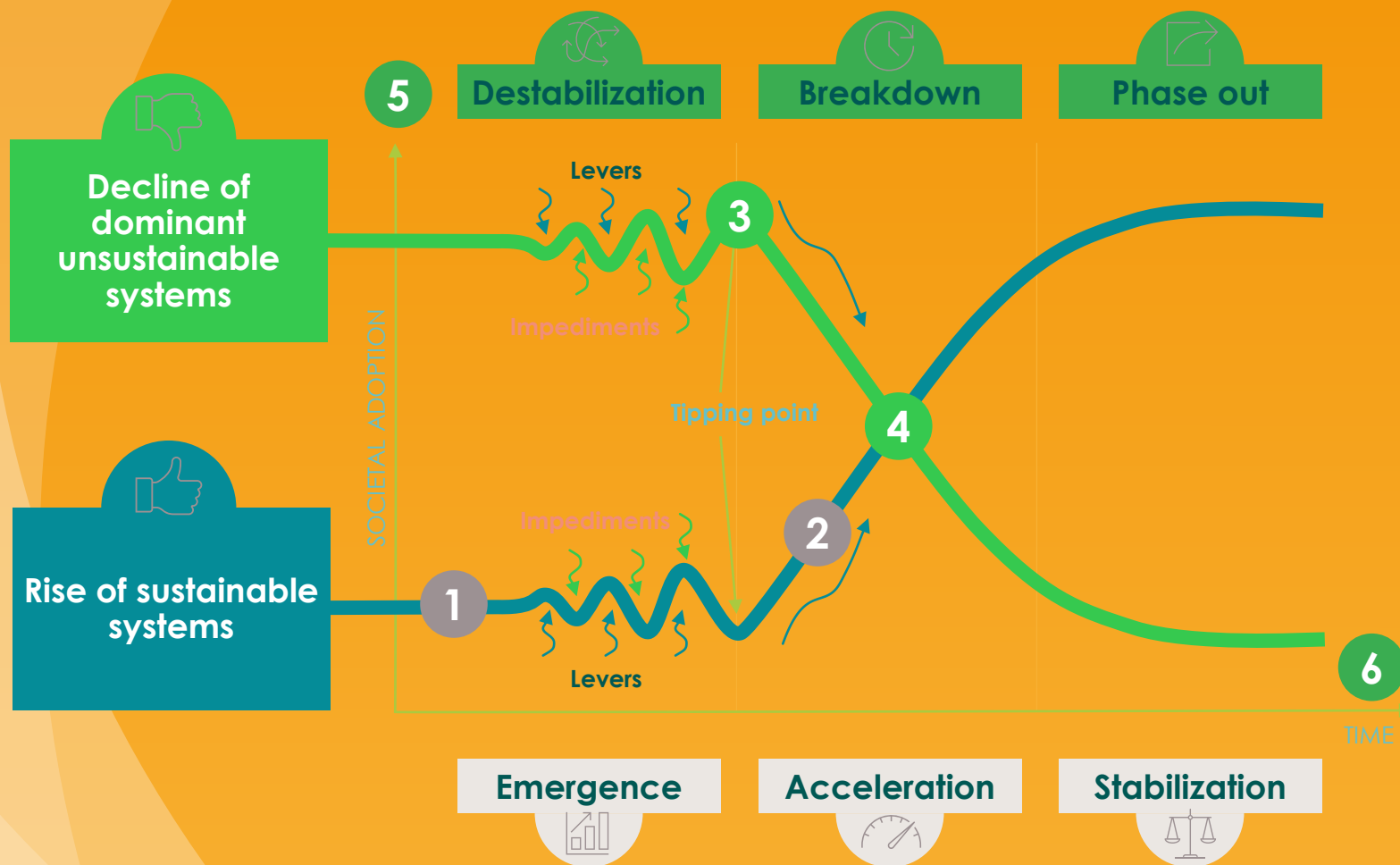
**System transitions
require also
transformation policies**



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Policy intervention points

(slide adapted from Kaljonen, 2024)



1. Innovation niche stimulation

2. Innovation niche acceleration

3. Socio-technical regime destabilisation

4. Repercussions of regime destabilisation, e.g., (in)justice

5. Coordination of multi-regime interaction

6. Landscape tilt

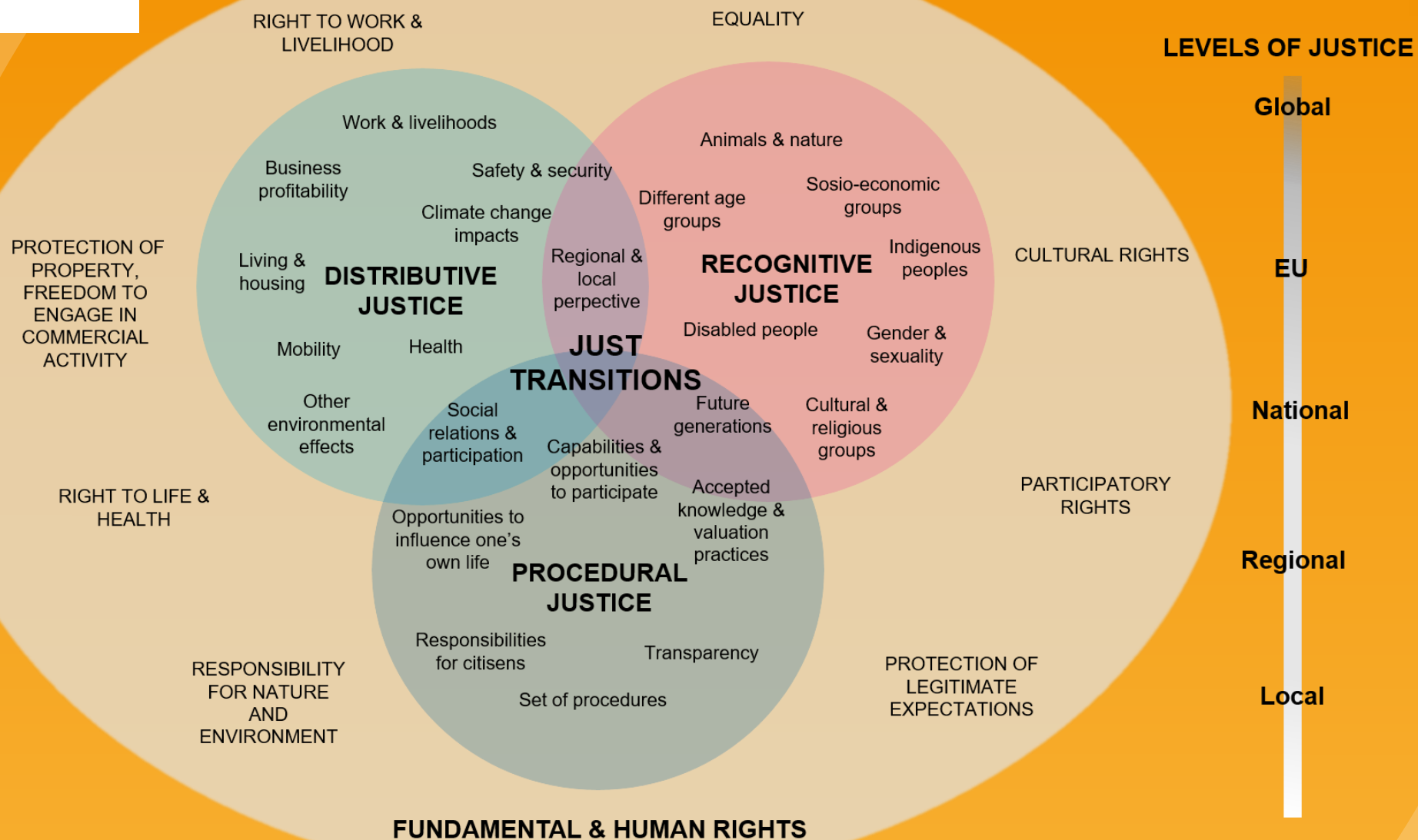
How science & innovation policies can accelerate transitions

1. Introducing **sustainability "directionality"** into science & innovation policy more strongly - *visions, targets & missions* and *implementing strategies and programmes*
2. **Policy coherence:** Coordinated planning & implementation with sectoral policies (comprehensive policy mixes), identifying and *removing misalignments*
3. Increase attention to **social & business model innovation**, and supportive institutional change
4. **Addressing flipside of transitions** – paying attention to potentially negative consequences of the expansion of innovations to the systemic level

Energy justice and just transitions as new objectives



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Conclusions

- Socio-technical change is not possible without co-evolution of technologies with markets, policies and practices – typically requires disruption and tensions too
- Networks, like CETP, can play an important role in transitions as intermediaries and stimulators of learning and unlearning
 - A continuation of projects as sites of learning and unlearning
 - Requires understanding socio-technical change dynamics and working towards systemic change
- Much research evidence exists on the need for intermediaries to facilitate policy change and its implementation
 - Feeding knowledge of technological progress and market/societal barriers
 - Creating understanding of how to implement transformative policies

Thank you!



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Panel Discussion

What does system transition mean for us, the CETPartnership



Moderation: **Michael Huebner**
CETPartnership Coordinator

Panelists



Paula Kimivaa



Aage Stangeland



Gerdi Breembroek



Tina Ringenson



Åsa Bergérus Rensvik



Stefan Nowak

Q&A session

Ask your questions in the chat



Coming up this afternoon!

Voices of Transition: CETPartnership Projects Driving Europe's Energy transition - Project Presentations

13:00 – 13:10

Welcome & Introduction

13:10 – 14:40

Project Presentations

- PVT4EU - Gintare Vilke
- STORE – Jiahe Chu
- RENvolveIT – Javier Valdes
- ELECTROMET – César Escobar Claros
- LEG-DHC – Hussein Mroueh
- Man0EUvRE – Siri Mathisen

14:40 – 15:20

Q&A Session in 2 groups

15:20 – 15:25

Wrap-up by the moderators

15:25 – 15:30

Outlook on Day 2



Attention!:: new link for the afternoon session

How to attend?

13:00 - 15:30

Voices of Transition: CETPartnership Projects Driving Europe's Energy transition - Afternoon Session

 Video conferencing

Get insights into the real-world impact of CETPartnership funded projects. See how their endeavours contribute to system transition and engage with project leaders through Q&A and moderated breakout rooms.

Join here

[Join now ▶](#)

Thanks!

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