

25-26 June 2019 in Lisieux,
Normandy - France

Thematic Session 3: How can agroecology be better integrated within the value chain and with consumers, citizens and the local area?

Workshop 3.2: Integrating agroecology with the downstream: non-food value chains

Antoine Messéan, INRA

<https://www.reseaurural.fr/Sommet-agri-innovation-2019>

<https://ec.europa.eu/eip/agriculture/en/event/agri-innovation-summit-2019>

Agro-ecology and bio-economy

- ⊙ Biological regulations
- ⊙ Substitution
- ⊙ Crop diversification



- ⊙ Recycling
- ⊙ Wastes (including urban wastes)



- ⊙ Higher income and social welfare
- ⊙ Low carbon agriculture
- ⊙ Delivery of multiple ecosystem services

COOPERATION



Crop diversification is a major lever

- ⊙ Diversification of bio-based products;
 - ⊙ Industrial crops in rotation
 - ⊙ Aromatics in vineyards/olive
- ⊙ Combination of food and energy crops
 - ⊙ Use of cover crops for methanisation
 - ⊙ Hemp « cracking »
- ⊙ Wild plants as crops for soil restoration

COOPERATION



Challenges

- **Defragmentation**
 - Coupling, retroaction, cascade
- **Integration** value chains/territory
 - Horizontal coordination
- **Multicriteria** assessment of performances
 - New vision of « optimality »
- **Lock-ins** in value chains and in socio-technical systems



Institutional innovation

- Education
- Crop diversification in CAP
- Regulation for mixed crops

Current systems

Eco-efficiency

Input substitution

Systems re-design

Agro-ecological landscapes and value chains

- Guayule for rubber
- Cover crops for biogas
- Hygienization of organic waste

Technological innovation

Workshop

Question 1: What are the most promising innovations ?

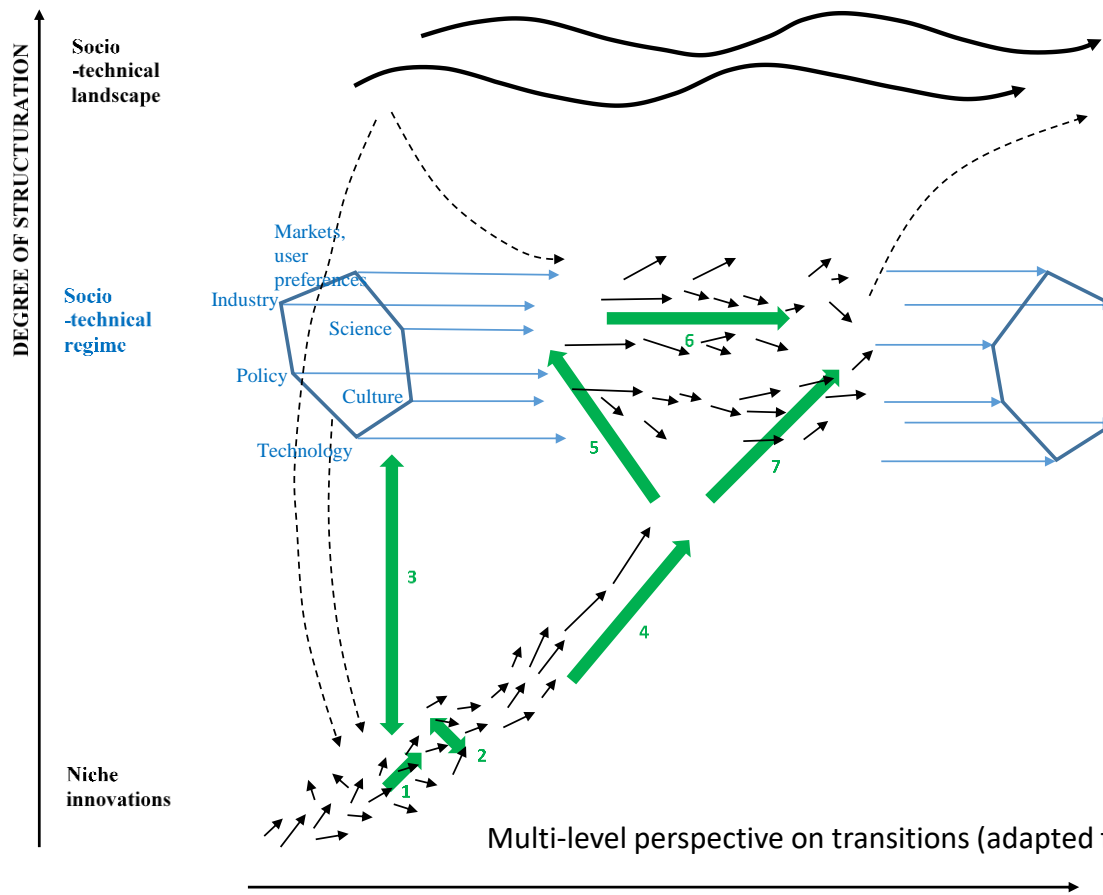
Question 2: What will it take to implement or scale up these innovations in my sector / region / activities?

Remember → Get out of the box!

COOPERATION



The multi-level perspective on transitions



Call for

- **Technological** innovations
- **Organisational** innovations
- **Institutional** innovations

Multi-level perspective on transitions (adapted from Geels, 2012)