

The POINT methodology to prepare for a transformative EDP

EWRC Session: Shared Agendas: the Next Stage of the EDP

Dimitrios Pontikakis *and* Anabela Santos, *JRC, B3 Territorial Development*7 October 2020















Challenges of lagging regions

- Industrial decline and mass emigration
- Structural change: low-productivity agriculture/tourism
- Weak tradable sectors; Investment barriers
- Lacking scale-efficient production and business innovation
- Societal and environmental challenges
- Large infrastructure gaps

Striving to be the first climate-neutral continent

Global trends

A European Green Deal

- Deep productive transformations, esp. in energy and transport systems, and digitalisation
- Resurgence of interest in industrial policy no longer a taboo
- Emergence of new framework of thinking: transformative innovation policy
- European Green Deal and EU Recovery Fund (>1 tn EUR for Green and Digital Transitions)

Pressing need to develop knowledge-intensive production capabilities

→ *Problem*: no framework available for full-blown industrial policy!



need to re-discover planning capabilities

Saturn V: world's most powerful rocket

- Dependent on massive network (est. 400,000 people*)
- Network disbanded since early 1970s
- Humanity has since lost heavy-launch capability
- No point using old 'blueprint' world moved on

Industrial transitions

- → Lost capability for long-term, large-scale social action
- → Climate emergency: Non-negotiable deadlines, Massive coordination task
- → No point reviving 20th cent. industrial policies world moved on





where to begin?

- What does a broad framing of innovation imply for EDP?
- What should be the objectives of transformative EDP?
- How to coordinate between policy portfolios (innovation, skills, regulation, investment support, ...)?
- Who to engage with in the territory? (who to invite to EDP workshops!?)

→ *Understanding* the system is key to preparing a truly transformative EDP



how to understand transformative change

Literature on system innovation /

"Transition management"

- Not the same as "innovation system"!
- Production / Consumption at centre
- science and technology one (of many) vectors
- ~ macro-level organisational innovation

Builds on:

- Socio-technical transition experiences (large body of knowledge in NL)
- Multi-level perspective (Frank Geels / Johan Schot)

See links below::

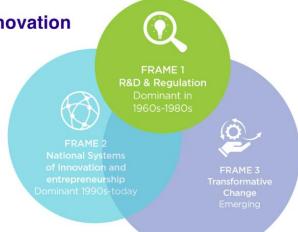
OECD System Innovation Synthesis Report

http://www.tipconsortium.net/

https://www.sciencedirect.com/science/article/pii/S0048733302000628













what is "system innovation"? not *just* S&T, not *just* '3-ple/4-ple helix'

Functional/user side Production side (selection environment) (technical variations) Schools. Public authorities; universities European Commission, WTO (education) Media (TV) National government, ministeries newspapers,\ Jniversities (research), Local and executive branches magazines) public and private Labourers, laboratories skilled personell Societal groups: e.g. NGO's Greenpeace. consumer groups) Design firms, Comsumer Firms, engineers, technical institutes. Users. markets. designers consultancies consumers distribution-'networks Venture capital Suppliers of Repair shops, suppliers, banks, materials. spare part shops insurance firms components, too

Figure 1.2 Societal groups involved in system innovation

Source: Geels (2004: p.901) "From sectoral systems of innovation to socio-technical systems: Insights about dynamics and change from sociology and institutional theory", Research Policy, 33(6-7), pp. 897-920



first step is evidence: POINT Reviews of Industrial Transition

Coordination hinges on non-readily available evidence

Each review is a **study** of the affected industrial system in the territory. Aims:

- Provide evidence about the affected production and consumption system and its direction;
- Identify realistic transition pathways and associated institutional, investment and skills needs;
- Propose governance solutions so that disparate policy domains coordinate under a coherent industrial development logic;
- Make concrete policy recommendations for the advancement of the transition and for managing its downsides.

Review of Industrial Transition of Andalusia

Renewables, Batteries and their Applications in Logistics

Prepared by Héloïse Berkowitz and Totti Könnölä

Review of Industrial Transition of Greece

Renewables, Batteries and the Applications in Mobility, Agriculture, Shipping and Defence

Prepared by
Matthijs Janssen and Yannis Tolias
for
European Commission DG IRC

Version 0.3-29 November 2019

Four pilot reviews on-going in Andalusia, Bulgaria, Greece and Romania.

Summaries here:

https://s3platform.jrc.ec.europa.eu/industrial-transition



the POINT methodology for reviews

POINT - Projecting Opportunities for INdustrial Transitions

- Structured methodology to identify viable transition paths; emphasis on positive, ambitious visions
- Draws from expertise on system innovation / new industrial policies / foresight / innovation governance
- Developed internally at JRC, with contributions from leading experts (WG Advisory Board)
- Stakeholder interviews (over 50 per territory), combined with desk research
- Focus on territorial responses to one (or more) global impulses for transformational change (e.g. SDGs)
- Gather evidence on functional systems, prevalent territorial values
- · Point to synergetic, high spillover paths, make suggestions



JRC TECHNICAL REPORT

Projecting Opportunities for INdustrial Transitions (POINT)

Concepts, rationales and methodological guidelines for territorial reviews of industrial transition

Pontikakis, Dimitrios Fernandez, Tatiana Janssen, Matthijs Guy, Ken

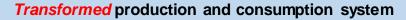
Moncada-Paternò-Castello, Pietro



Download full report: https://europa.eu/!Gr34Ng



a functional approach to system transformation



Orientation and planning

Mobilisation of resources

Production

Consumption and use

Transition pathways

Directionality that reconciles territorial values with material conditions

Actual production and consumption system

Orientation and planning

Mobilisation of resources

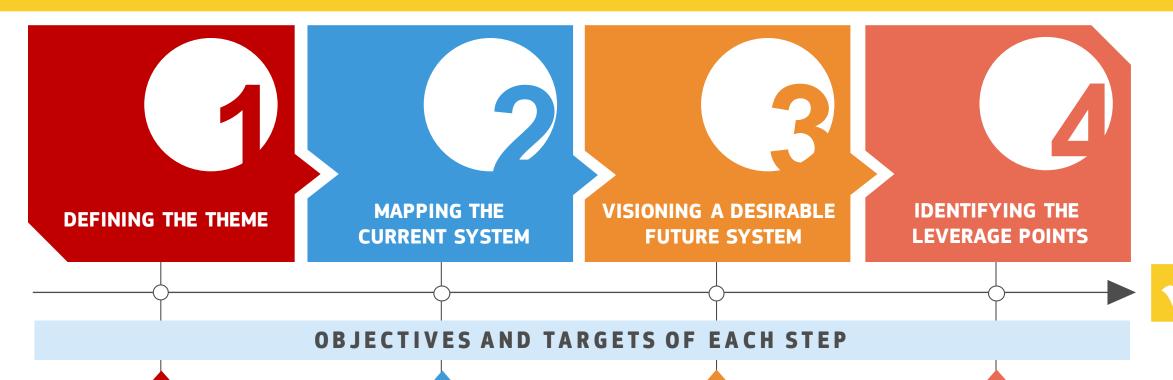
Production

Consumption and use

Global impulses: e.g. climate change, digitalisation, the pandemic, SDGs etc.



STEPS OF THE REVIEWS



- > To **select** the headline **industrial theme** corresponding to a global impulse for change
- > To **define** and delineate the **boundaries** of the system to be reviewed in the territory
- > To map the **structural components** of the
 system that needs to
 change (actors, functions,
 tasks and relationships)
- To describe the **framework conditions** under which they operate
- > To **identify** in the current system **missing** system **components** and **configurations** for achieving the territory's aspirations
- To **specify** a **direction** of the transition

To **provide guidance** for actions along four axes:

- > Governance
- > Building support coalitions
- Managing resistance to change
- Defining policies, instruments, reforms and policy experiments

ıropean ommission

QUESTIONS / DIMENSIONS TO BE ANSWERED IN EACH STEP

- > Geographical coverage
- > Reasons for the transition (opportunities/ threats for the region)
- > Thematic focus
- > Degree of ambition
- > Timeframe for the transition
- › Linkage with the reflected priorities of the relevant authorities

- > Main actors in the system: roles, capacities and linkages on the four functional sub-systems (orientation and planning; resource mobilisation; production; consumption)
- > Framework conditions of the system
- Geographic boundaries of the territory in the four functional sub-systems
- > Governance

- Current scope and degree of ambition
- Stakeholder vision for the future of territory
- Required connections and reconfigurations of the system
- Complementarity between production systems
- Role of science and technology (obstacles / improvements)
- Missing parts of the desired system (solutions)

- \rangle Lessons learnt from the past
- Role of monitoring and evaluation
- Ways to foster the whole-ofgovernment coordination and mobilisation
- Developing a support coalition for the transitions
- Stimulating and protecting the coalitions
- Resistance to change (reasons for delaying the transition and form of opposition)
- Appropriate policies reforms,
 specific instruments and policy experiments
- > Interaction with S3 strategy
- > Financing of the transitions

uropean Commission

contributions of a review to transformative EDP

A broad and relevant <u>frame</u> of innovation

key stakeholders in sunset and sunrise regimes

uncover underappreciated interrelations

A widely-backed <u>direction</u> for the transition

drawing from both economic strengths and territorial values

multiple-value creation (economic, social, environmental)

 Diagnosis of <u>functional failures</u> that may thwart EDP

need for reforms and capacity building

 Pathways for advancing the transition and addressing its downsides

who to invite to EDP workshops (who to sit together!)

EDP as a forum for whole-of-government mobilisation

conclusions

1. Coordination process essential

Multi-level; multi-portfolio; multi-stakeholder; continuous.

2. Evidence-based support: JRC reviews as a tool to help.

Provide non-readily available evidence; link-up disparate parts of the system

3. An enhanced EDP leading to Shared Agendas

JRC reviews only a beginning. Not enough to change policies. Need to work directly with stakeholders on processes of change and build support coalitions



No wind is favourable to the one who does not know to which port to sail.

Lucius Annaeus Seneca (c. 4 BC – AD 65)





Thank you!

https://s3platform.jrc.ec.europa.eu/industrial-transition

<u>Dimitrios.PONTIKAKIS@ec.europa.eu</u> <u>Anabela.MARQUES-SANTOS@ec.europa.eu</u>



