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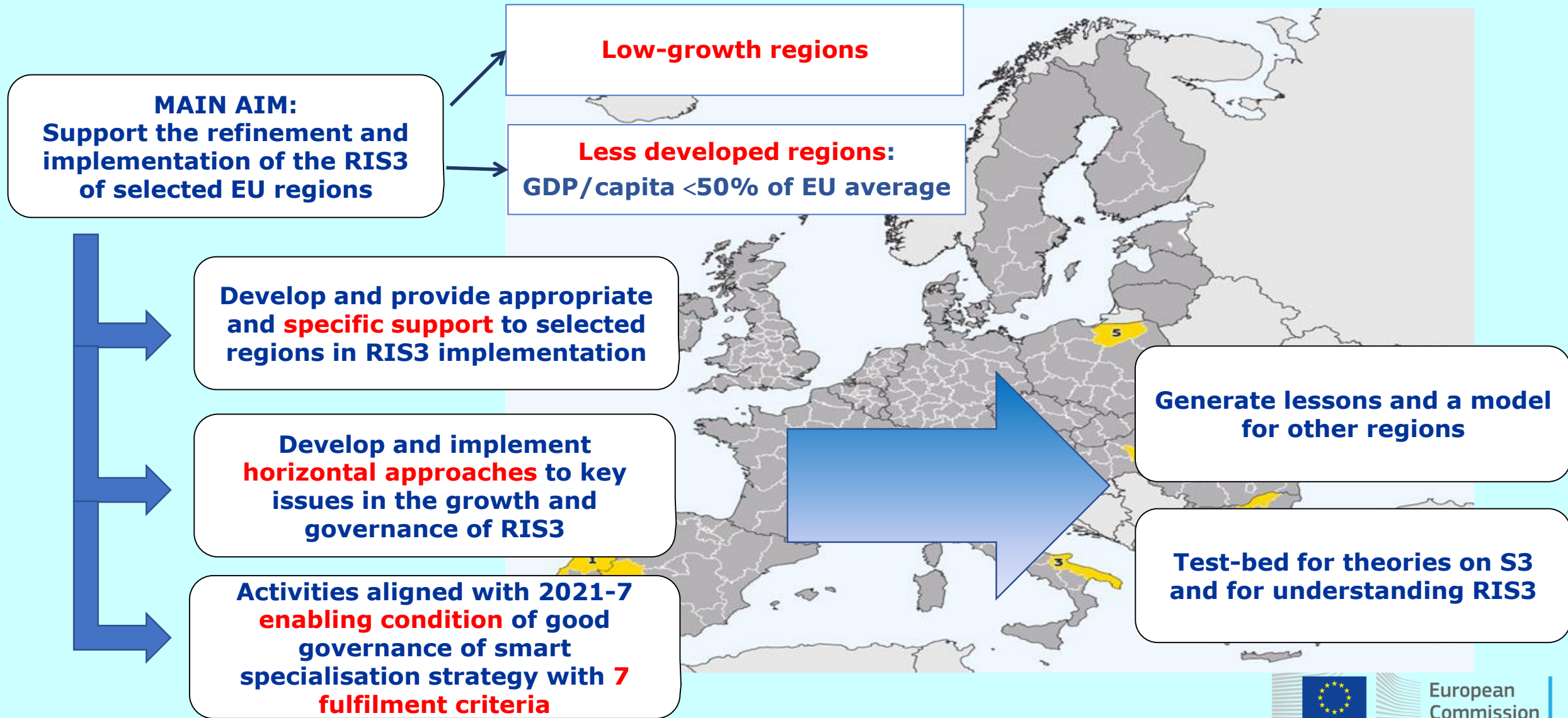
JRC Working Group "Understanding and Managing Industrial Transitions"

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JRC.B3 Territorial Development

Brussels, 9th December 2019

Smart Specialisation Strategy (RIS3) Support to Lagging Regions: Main Objectives



Challenges of Lagging Regions

→ Regions with low growth / low income

Long-term challenges:

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

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



*<https://www.theguardian.com/science/2009/jul/02/apollo-11-back-up-team>

Global impulses present a unique window of opportunity

- Global impulses: climate change and massive associated investments in renewables, batteries and electric mobility. Circular economy. AI.
- *Sustainability as a European competitive advantage*

Paradigm shift in electric mobility (a technological revolution?):

- strong backing from global finance
- consumer shift + new/transformed GVCs = opportunities
- massive implications for infrastructures; skills
- strong synergies with other global impulses
(renewables + digitalisation/AI + I4.0 + circular economy)



→ *Example*: RIMAC in Croatia (est. 2011). 400+ people, world's fastest sports car.

The JRC Working Group: "Understanding and Managing Industrial Transitions"

How to mobilise efforts from all levels/portfolios to develop knowledge-intensive employment (production capabilities)?

Contribute to the development of:

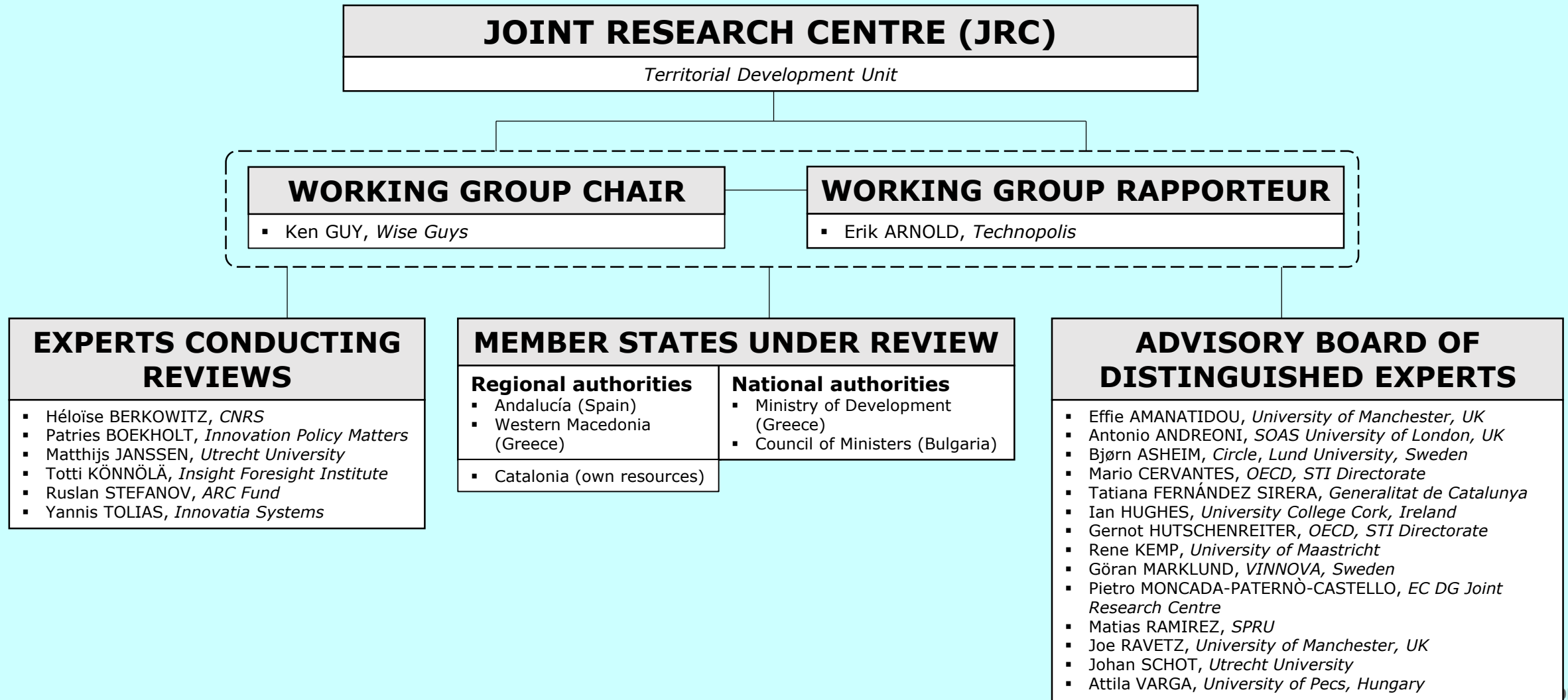
- An integrated *policy framework* in support of industrial transitions
- Appropriate lessons for the *revision* and *extension* of Smart Specialisation Strategies

Central to the approach:

- **Two-sides of the transition:** not just threats/downsides, but also *opportunities*
- **Interdependencies:** Interdependencies can reveal unnoticed levers for change
- **Cross-portfolio coordination:** e.g. R&I, skills/education, employment, large physical infrastructures (energy, transport, environment), urban planning, public procurement
- **Cross-stakeholder mobilisation:** engage with both supporters and detractors

LAGGING REGIONS Working group

"Understanding and Managing Industrial Transitions"



WG Outputs and outcomes

POINT Review Pilots + Draw and disseminate wider lessons
1st meeting 9 July; 2nd 9 December; 3rd March 2020.

Expected outcomes by June 2020:

- **POINT Review methodology** Technical Report (end 2019)
- up to 3(+1) **transition reviews** in lagging territories (spring 2020)
- co-develop **policy experiments** (scalable/replicable)
- A horizontal **synthesis report** (June 2020)

Conceptual framework

- Literature on "System Innovation" / "Transition Management"
 - **Not** the same as "*innovation system*"!
 - **Production / Consumption** at centre
 - Knowledge/research one (of many) vectors
 - ~ **macro-level organisational innovation**
- Builds on:
- Socio-technical transition experiences (mostly in NL)
 - Multi-level perspective (Frank Geels/Johan Schot)

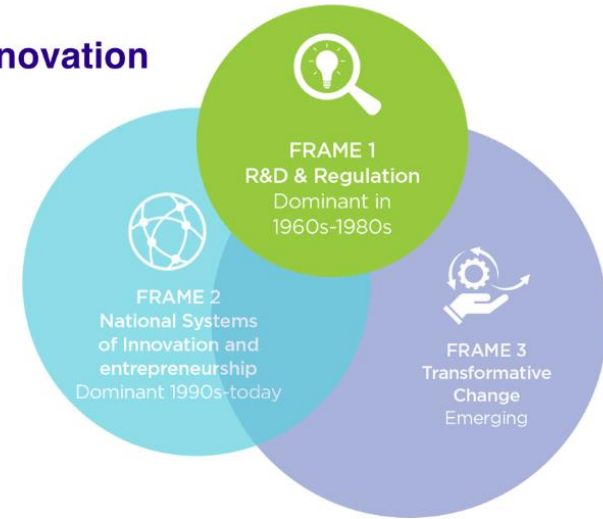
See links below::

OECD [System Innovation Synthesis Report](http://www.tipconsortium.net/)

<http://www.tipconsortium.net/>

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

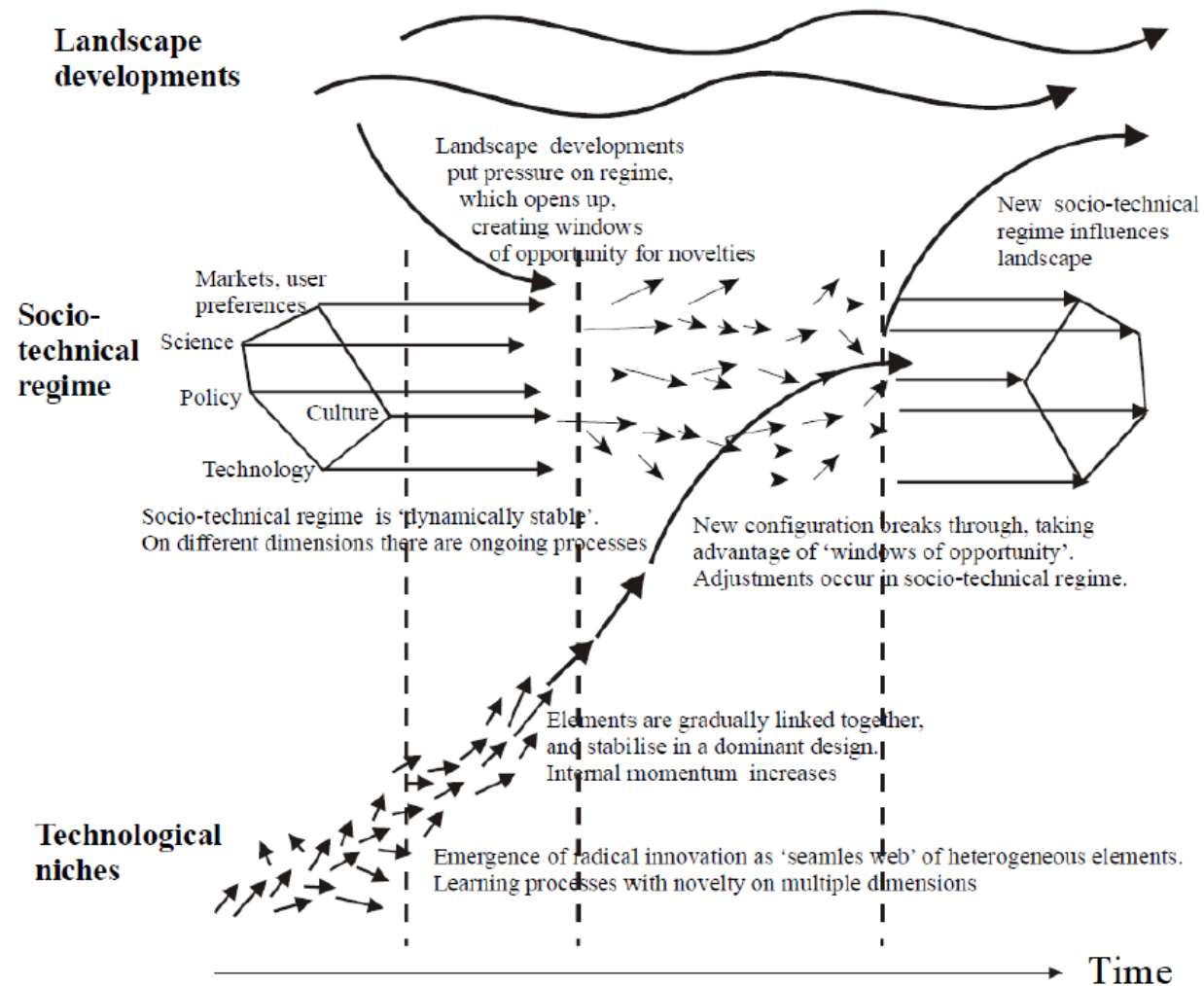
The 3 Frames of Innovation



SYSTEM INNOVATION:
SYNTHESIS REPORT



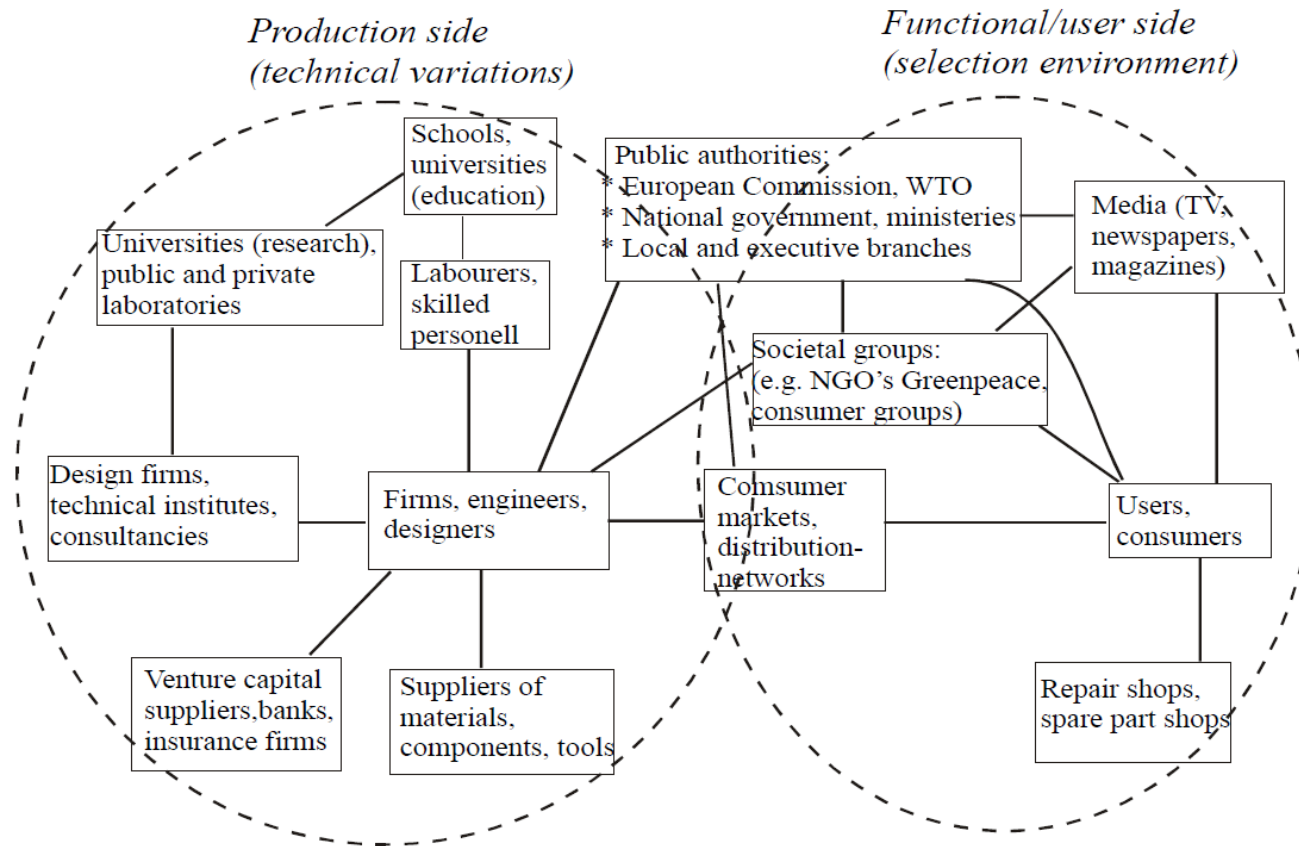
Figure 1.3 A dynamic multi-level perspective on system innovations



Source: OECD (2013), adapted from Geels, 2002: 1263.

Not just R&I, not just '3-ple/4-ple helix'

Figure 1.2 Societal groups involved in system innovation



Projecting Opportunities for INdustrial Transition (POINT Review Methodology)

- Structured methodology to identify viable transition paths; emphasis on positive, ambitious (yet feasible) visions
- Draws from expertise on system innovation / new industrial policies / foresight / innovation governance
- Developed internally at JRC, with contributions from experts
- Refined through experience with the pilots
- Stakeholder interviews (over 50 per territory), combined with desk research
- Document *functional systems* and *prevalent territorial values*
- *Point to* synergetic, high spillover paths, make suggestions

Engage with government, trade unions, producer and consumer associations, skill providers, city councils, transport boards, media / influencers...

AGENDA

Revisión de Transición Industrial de Andalucía: *reuniones de consulta con partes interesadas*

Comisión Europea, DG Centro Común de Investigación

Lugar: Edificio Expo, c. Inca Garcilaso 3, 41092 Sevilla, España
Sala de Reunión Lisboa

8 noviembre 2019

09:00 – 10:00	INDUSTRIA Y TRABAJADORES – GRUPO I Rafael Sánchez Durán, <i>ENDESA</i> Javier Brey, <i>H2B2</i> Luis Pérez, Director General, <i>Parque Tecnológico Cartuja</i> Pedro Méndez Zubiria, <i>Confederación de Empresarios de Andalucía</i> Juan A. Domínguez Quiroga, <i>ABENGOA Innovación</i> Juan de Dios Hermosín Ramos, <i>AYESA</i> Juan Antonio Cuesta Cañas, <i>Magtel</i> Juan Antonio Herero Chamizo, <i>Presidente Sector Construcción, FAECTA</i>
10:00 – 11:00	AGENTES PÚBLICOS – GRUPO I Esperanza Caro, <i>Ayuntamiento de Sevilla</i> José Manuel Torres Ramos, <i>Director Técnico y de Planificación Energética, Agencia Andaluza de la Energía</i> Daniel Escacena, Lucía Díaz Martín y María Dolores Guillen Ruiz, <i>Agencia Andaluza de Conocimiento, Junta de Andalucía</i> Julián Blanco Gálvez, <i>Director, CIEMAT-Plataforma Solar de Almería</i> Juana María García Simón, <i>Junta de Andalucía</i> José María Llaves Ruiz, <i>Diputación de Cádiz, Fundación Medio Ambiente, Energía y Sostenibilidad de la provincia de Cádiz</i>
11:00- 11:15	RECESO
11:15 – 12:15	INVESTIGADORES, ANALISTAS Y PROVEEDORES DE SOLUCIONES Jose Luis Martínez Ramos, <i>Universidad de Sevilla. Escuela de Ingenieros de Industriales de Sevilla</i> Juan Manuel Carrasco Solís, <i>GPTECH (Green Power Technology)</i> Alvaro Caballero, <i>Universidad de Córdoba</i> José Fernando Isorna, <i>Universidad Pablo de Olavide</i> Ricardo Arjona, <i>EC2CE</i> Fernando Isorna Llerena, <i>CEDEA-INTA</i> José Manuel Martín García, <i>FIDAS Fundación para la investigación y difusión de la arquitectura en Sevilla</i>
12:15 – 13:15	INDUSTRIA Y TRABAJADORES – GRUPO II José Bernal, <i>INGENIERIA DEL SOL</i> Pedro Padilla, <i>UGT</i>

10 October 2019

09:00 – 10:00	BUSINESS REPRESENTATIVES – GROUP I Efstratios Mpardakas, <i>TERNA ENERGY SA</i> Ilias Lamprinos, <i>Intracom Telecom SA</i> Vassilis Stamelakis, <i>Sunlight</i> Spyros Kiartzis, <i>Hellenic Petroleum SA</i> Phoebe Koundouri, <i>Athens University of Economics and Business</i> Kimon Mpotsis, <i>Volterra SA</i> Polycarpus Falaras, <i>NCSR Democritos</i>
10:00 – 11:00	GOVERNMENT REPRESENTATIVES – GROUP I (RESEARCH AND INNOVATION, PUBLIC PROCUREMENT) Konstantinos Tzanetopoulos, <i>DG of Public Procurement, Ministry of Development</i> Agni Spilioti, Asterios Chatziparadeisis and colleagues, <i>General Secretariat for Research and Technology</i> Maria Kostopoulou, Michalis Gkoumas, Smaro Zisopoulou and colleagues, <i>Ministry of Development and Investments</i> Michalis Dritsas, <i>Office of Vice-Minister for Development</i> Nikolaos Thomopoulos, <i>Region of Western Greece</i> Nikolaos Karampekios, <i>National Documentation Centre</i>
11:00	BREAK
11:15 – 12:15	GOVERNMENT REPRESENTATIVES – GROUP II (PHYSICAL INFRASTRUCTURES) Dimitris Papagiannidis, <i>Ministry of Infrastructure and Transport</i> Ioannis Tselikis, & George Ageridis, <i>Ministry of Environment and Energy</i> Athina Foka, <i>Ministry of Maritime and Island Policy</i> T. Kotzia, <i>Hellenic Organisation for Recycling</i> Nikolaos Schmidt, <i>Local Program Coordinator, World Bank</i> Angelos Amditis, <i>Research Director, i-Sense Group, ICCS/NTUA</i>
12:15 – 13:15	LEAD USERS, CONSUMERS AND CIVIL SOCIETY Andreas Apostolopoulos, <i>President, Electric Boat Association of Greece</i>

POINT Review Pilots

- ~50-page reports, product of thorough expert review
- Two experts per review: national / international
- First wave: Andalusia, Greece, Bulgaria + Romania
- Catalonia participates with own resources

Steps:

- Select 1-3 themes with authorities and set objectives
- Map existing production and consumption systems
- Envision future configuration of systems that meet objectives
- Develop recommendations across 4 axes

Review of Industrial Transition of Greece

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

Prepared by
Matthijs Janssen and Yannis Tolias
for
European Commission, DG JRC

Version 0.3—29 November 2019

Review of Industrial Transition of Andalusia

Renewables, Batteries and their
Applications in Logistics

Prepared by
Heloise Berkowitz and Totti Könnölä
for
European Commission, DG JRC



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Commission

POINT Review outcomes

Suggestions along 4 axes of actions

- Governance of government
 - Support coalitions
 - Managing resistance to change
 - Reforms, policies and instruments
- Co-define a policy experiment
- Low total cost/quick signalling
 - In area with high spillovers
 - Potentially scalable / replicable



Conclusions

1. Positive visions: RIS3 is a basis to expand on
2. Territory's *values* as important as economic strengths
3. Skills and R&I important: But only part of the story
4. Multi-level; multi-portfolio; multi-stakeholder process
5. Long-term policy horizons: Sequences matter
6. Policy challenge: New coordination framework needed, building on (not readily available) evidence
7. Reviews as an evidence-based process to help

Agenda for today

- Preliminary findings from 3 POINT Reviews
- A case study in Catalonia
- Invited talks
- Panel discussion among policy makers and experts
- Meeting of the Advisory Board

Project website

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

<http://s3platform.jrc.ec.europa.eu/ris3-in-lagging-regions>

Thank you!

