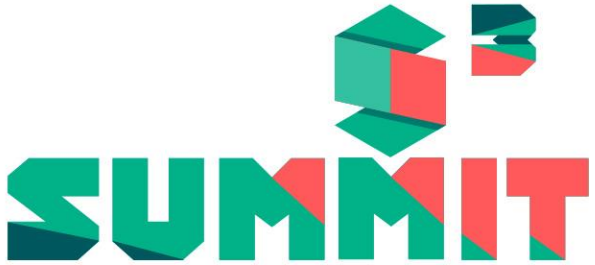


INNOVATION AND SMART SPECIALIZATION FORUM

MAY 18 TH

Partnerships for Regional Innovation: A new approach for territories that want to go beyond the S3 enabling condition

Dimitrios Pontikakis, European Commission, Joint Research Centre

VICE-PRESIDÊNCIA DO GOVERNO

Lessons from Smart Specialisation (S3)

Achievements of Smart Specialisation

Large take up

- **185 strategies** driving over **60bn EUR** of research and innovation funds

Changed ways of thinking

- Focused attention to territorial needs and lengthened policy horizons

Participatory governance

- Stakeholder participation in the design and implementation of most strategies

Room for improvement

Persistent silos in government and lack of synergies

- Calls for multi-level, multi-portfolio analysis; new ways to work across government

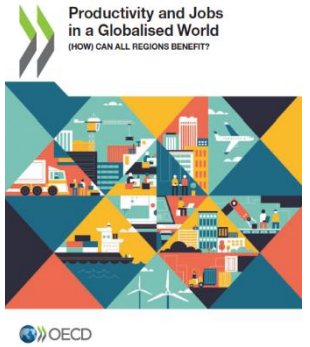
Weak governance capacities in lagging regions

- Strengthen capacities and introduce reforms

Single-fund (ERDF) and single-instrument (project funding) strategies

- Develop fuller policy *mixes,* coordinate with non-innovation funding, harness demand

Challenges for lagging (low-growth and/or low-income) 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 / massive resources mobilized to cover them for the green and digital transitions

Pressing need to develop *production* (in addition to innovation) 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

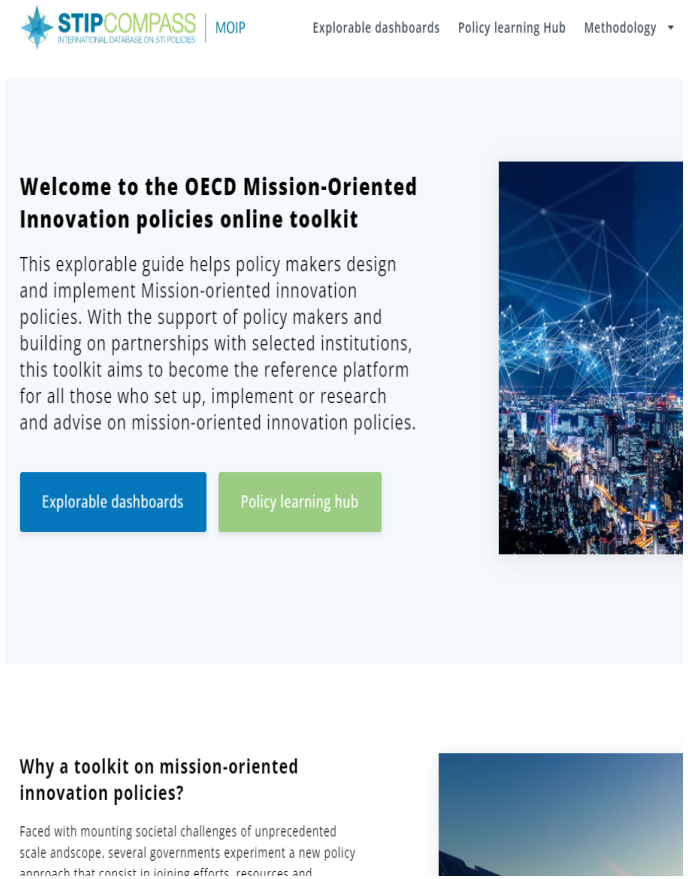
→Lost capability for long-term, large-scale social action

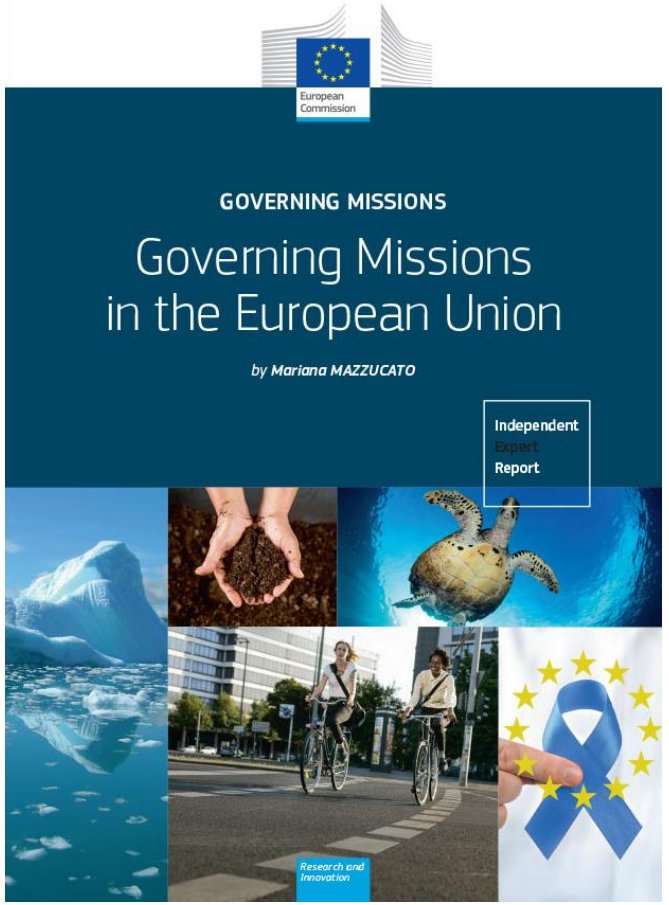
→Climate emergency: Non-negotiable deadlines, Massive coordination task

→No point reviving 20th cent. industrial policies - world moved on

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

Transformative innovation policy going mainstream?





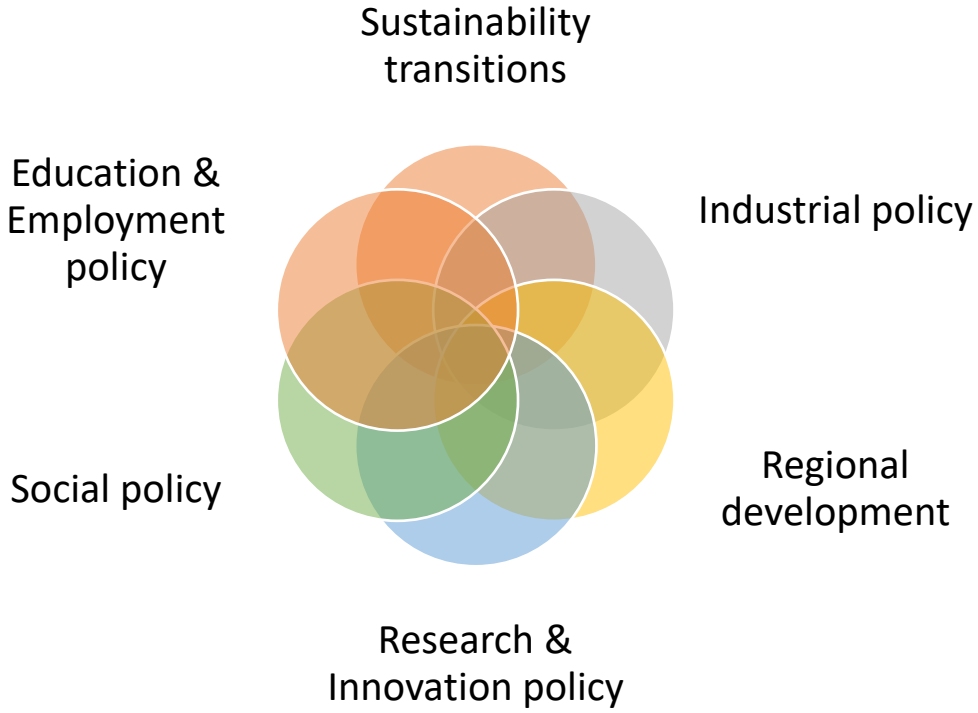
The right moment

- Urgency to address **climate change** while leaving no one behind
- Secure **Europe's position** in the economy of the future
- Confluence of maturing trends:
  - Deep global **transformations in socio-technical systems**;
  - Return of **industrial policy: EU competitiveness through sustainability**;
  - **Production capabilities** at centre stage – not just about innovation
  - New scientific paradigm of innovation: **system-level innovation and transformative innovation policy ("Frame 3");**
  - JRC experience with **Smart Specialisation (regions)** and **RRF (countries).**

What are Partnerships for Regional Innovation?

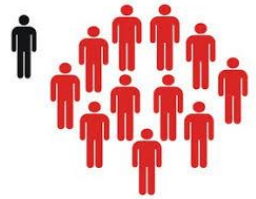
A new strategic approach to innovation-driven **territorial transformation**, linking **EU priorities** with national plans and **place-based** opportunities and challenges

- **Impact-based partnerships** for sustainability transitions that create economic, social & environmental value
- Participatory **governance framework** in support of forward-looking policy
- **New ways of working across government** departments and levels focused on solving territorial challenges



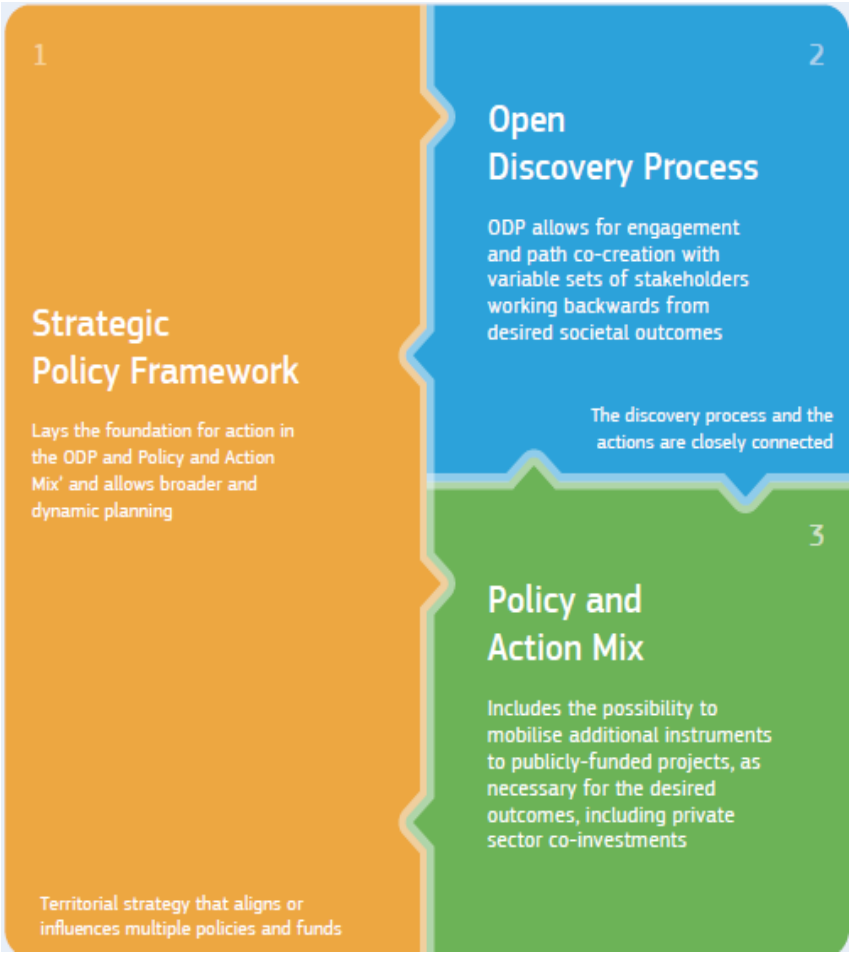
Objectives of PRI

- Deliver **effective solutions to pressing societal challenges within defined timeframes**
- Use resources in ways that **generate co-benefits for the economy, society and environment**
- Draw **linkages across multiple policy domains, exploit synergies and address tensions**
- **Reform, revise and complement policy and regulatory instruments** to improve coordination and amplify impact



Last image source: https://ec.europa.eu/info/strategy/international-strategies/sustainable-development-goals/eu-holistic-approach-sustainable-development_en

The PRI approach



1. **A Strategic Policy Framework,** repurposing existing strategy(-ies) and laying the foundation for dynamically planning action in the following two 'building blocks'

2. **An Open Discovery Process (ODP)** allowing engagement and path co-creation with variable sets of stakeholders also by working backwards from desired societal outcomes.

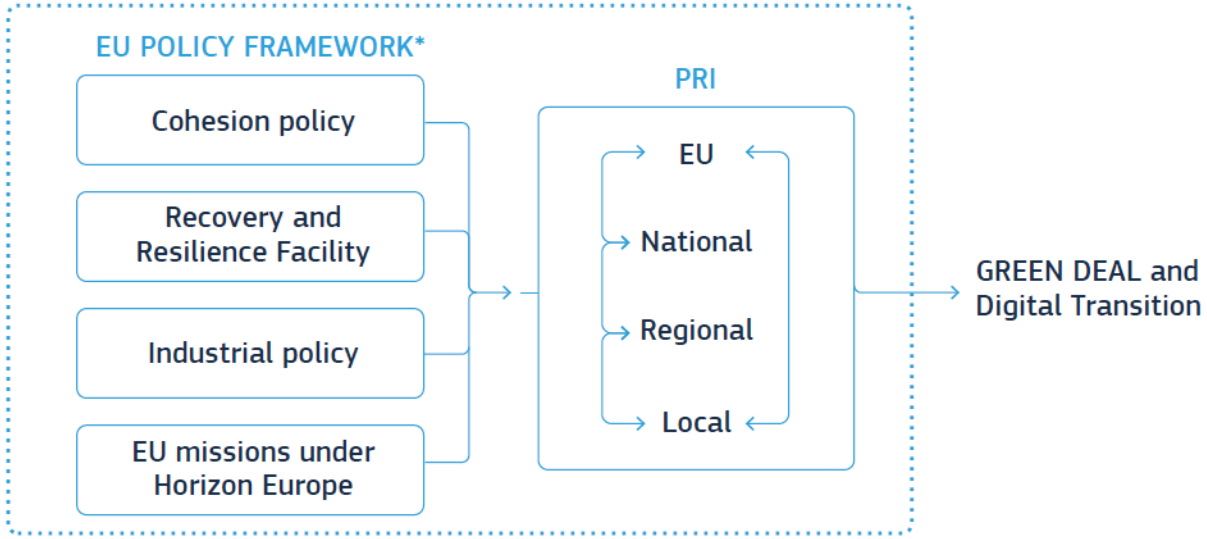
3. **A Policies and Actions Mix** mobilising additional instruments to publicly-funded projects, including private sector co-investments, to achieve the desired outcomes

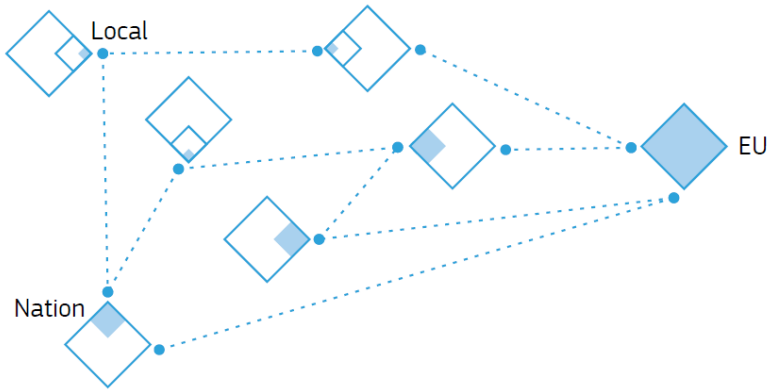
PRI and Smart Specialisation Strategies (S3)

PRI goes beyond S3 in the context of

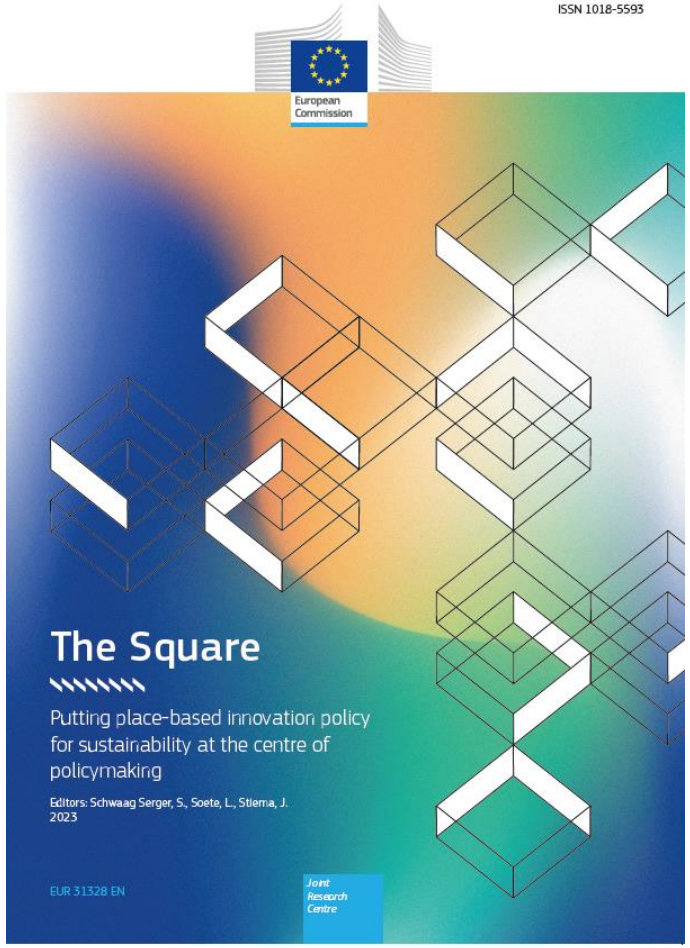
both the green and digital transition:

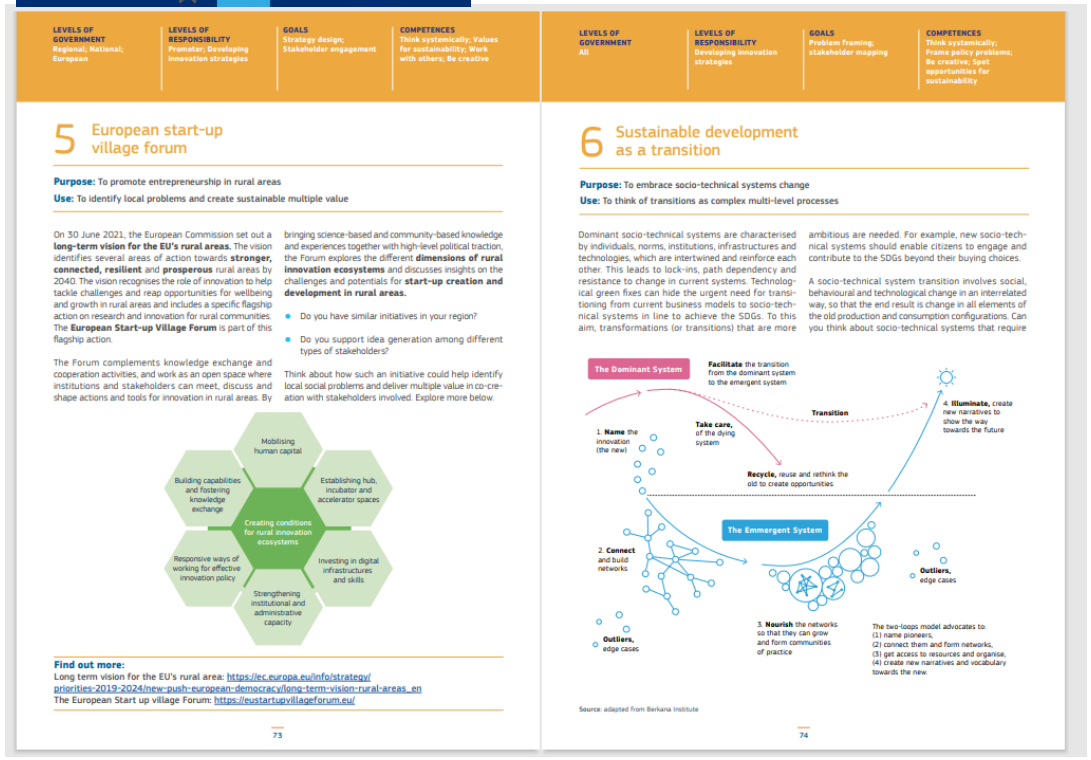
- *S3 is limited to ERDF innovation funds*
- *PRI considers other essential policies for transformation (e.g. energy, transport, environmental, demand side policies, skills, regulation)*
- *Partnerships are broader (beyond STI actors)*
- *Transformative Innovation Policies are designed as policy mixes or portfolios of projects/instruments.*





From science to practice





LEVELS OF GOVERNMENT: Regional; National; European
LEVELS OF RESPONSIBILITY: Promoter; Developing innovation strategies
GOALS: Strategy design; Stakeholder engagement
COMPETENCES: Think systemically; Values for sustainability; Work with others; Be creative

5 European start-up village forum

Purpose: To promote entrepreneurship in rural areas

Use: To identify local problems and create sustainable multiple value

On 30 June 2021, the European Commission set out a **long-term vision for the EU's rural areas.** The vision identifies several areas of action towards **stronger, connected, resilient** and **prosperous** rural areas by 2040. The vision recognises the role of innovation to help tackle challenges and reap opportunities for wellbeing and growth in rural areas and includes a specific flagship action on research and innovation for rural communities. The **European Start-up Village Forum** is part of this flagship action.

The Forum complements knowledge exchange and cooperation activities, and work as an open space where institutions and stakeholders can meet, discuss and shape actions and tools for innovation in rural areas. By bringing science-based and community-based knowledge and experiences together with high-level political traction, the Forum explores the different **dimensions of rural innovation ecosystems** and discusses insights on the challenges and potentials for **start-up creation and development in rural areas.**

- Do you have similar initiatives in your region?
- Do you support idea generation among different types of stakeholders?

Think about how such an initiative could help identify local social problems and deliver multiple value in co-creation with stakeholders involved. Explore more below.

Find out more:
Long term vision for the EU's rural area: https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/long-term-vision-rural-areas_en
The European Start up village Forum: https://eustartupvillageforum.eu/

73

LEVELS OF GOVERNMENT: All
LEVELS OF RESPONSIBILITY: Developing innovation strategies
GOALS: Problem framing; stakeholder mapping
COMPETENCES: Think systemically; Frame policy problems; Be creative; Spot opportunities for sustainability

6 Sustainable development as a transition

Purpose: To embrace socio-technical systems change

Use: To think of transitions as complex multi-level processes

Dominant socio-technical systems are characterised by individuals, norms, institutions, infrastructures and technologies, which are intertwined and reinforce each other. This leads to lock-ins, path dependency and resistance to change in current systems. Technological green fixes can hide the urgent need for transitioning from current business models to socio-technical systems in line to achieve the SDGs. To this aim, transformations (or transitions) that are more ambitious are needed. For example, new socio-technical systems should enable citizens to engage and contribute to the SDGs beyond their buying choices.

A socio-technical system transition involves social, behavioural and technological change in an interrelated way, so that the end result is change in all elements of the old production and consumption configurations. Can you think about socio-technical systems that require

Source: adapted from Berkana Institute

74

The PRI Playbook

- **Present the framework and its building blocks + 68 tools** (concepts, principles, practices, methodologies...)
- **Based on input and support** from JRC units and Scientific Committee
- **A federated collection** of JRC science for policy tools for territories to experiment and create their own sustainable pathways
- **Co-developed further** through the JRC-CoR Pilot Action, together with its intended **end users**

https://s3platform.jrc.ec.europa.eu/pri-playbook

The PRI Pilot

4 Member States

+

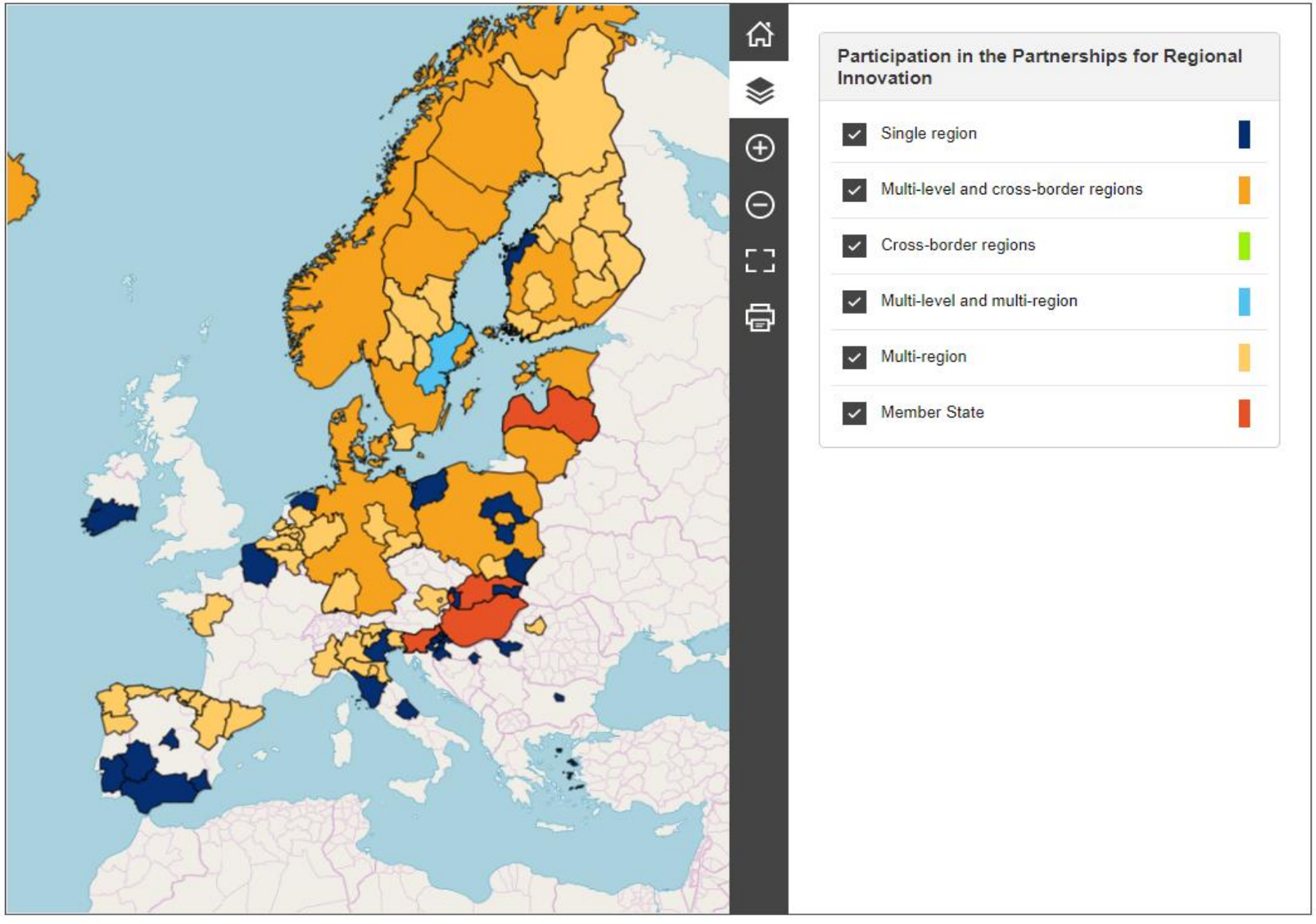
7 Cities

+

63 Regions

=

74 Territories in total



European Committee of the Regions

European Commission

Considerations on adapting S3 for transformative innovation

Reframe and repurpose

- Take a transition view and provide paths for everyone
- Use a broad framing of innovation
- Consider the right tool for directionality and alignment

Build legitimacy and progressively raise ambition

- Build the case for the transition
- Adapt monitoring and evaluation
- Open up stakeholder engagement beyond fund beneficiaries

Build capacities and (social) infrastructures

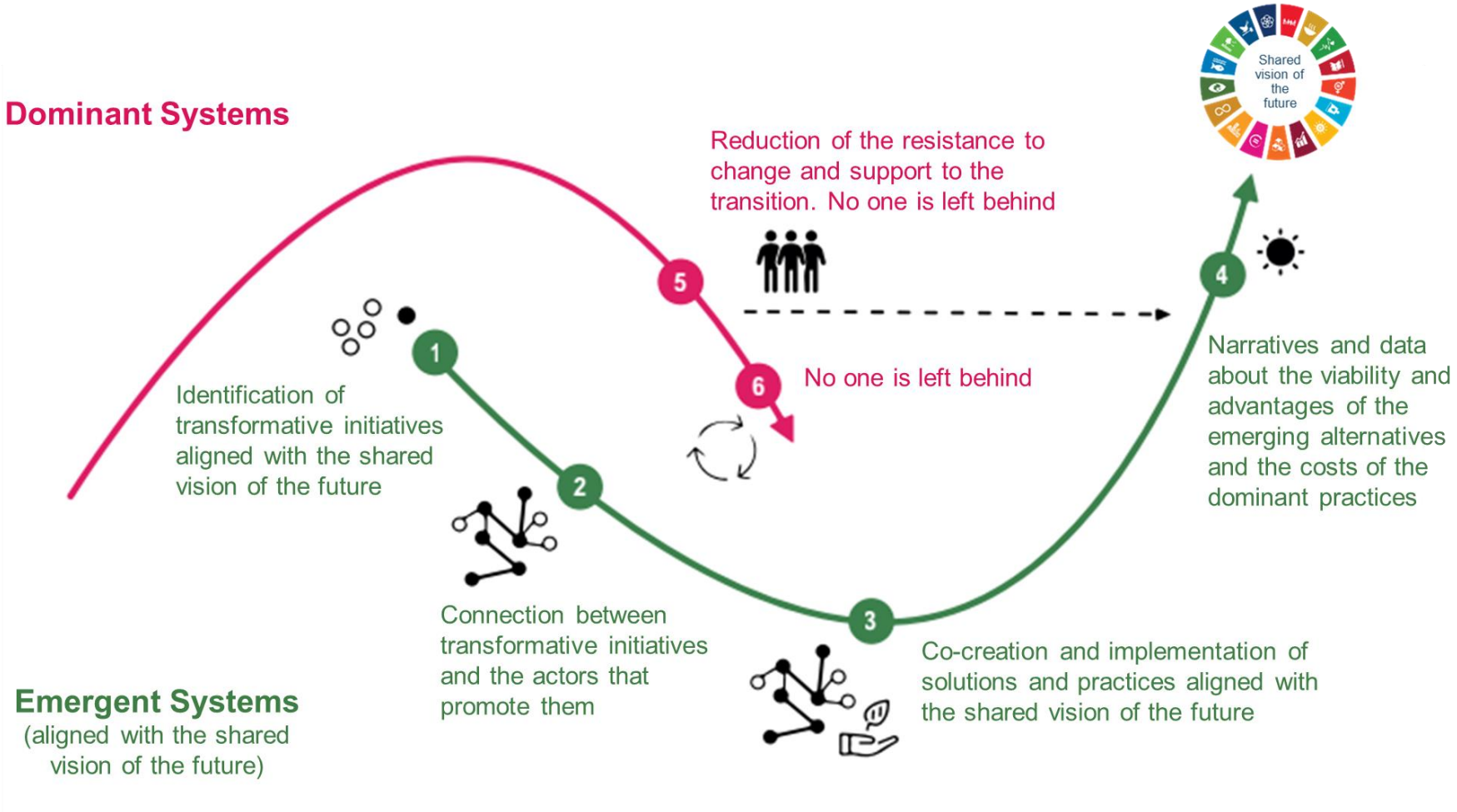
- Identify missing capacities in your governance system for transformative innovation
- Manage the boundary between control vs influence

Challenge-Oriented Regional Innovation System (CORIS)

	Conventional RIS	Challenge-oriented RIS
Purpose of innovation	Economic growth and competitiveness of the regional economy	Place-based problems and needs related to grand societal challenges
Types of innovation and their effects	Innovation in the regional corporate sector: technological, organizational, marketing innovation Focus on positive effects (strong pro-innovation bias)	Innovation in the regional corporate sector and in other realms (public sector, civil society, regional and urban communities: technological, user, social, institutional innovations) Focus on multi-dimensional effects of innovation (bright and dark sides)
Actors, networks, institutions	Firms, universities, government, intermediaries knit together in stable (local and non-local) networks and embedded in a static multi-scalar institutional landscape	Conventional RIS actors and 'new' innovation agents (civil society, public sector actors, users, etc.) knit together in/influenced by dynamically developing networks and evolving institutional configurations at multiple scales
Production and application side	Supply side (generation/production of innovation in the region)	Supply side and demand/application side (experimentation, diffusion, upscaling of innovation in the region)

Source: Michaela Trippl (2023) 10.2760/135706

Take a transition view and provide paths for everyone



Source: Tatiana Fernandez, Generalitat de Catalunya, adapted from Berkana Institute

Reframe and repurpose: Use a broad framing of innovation

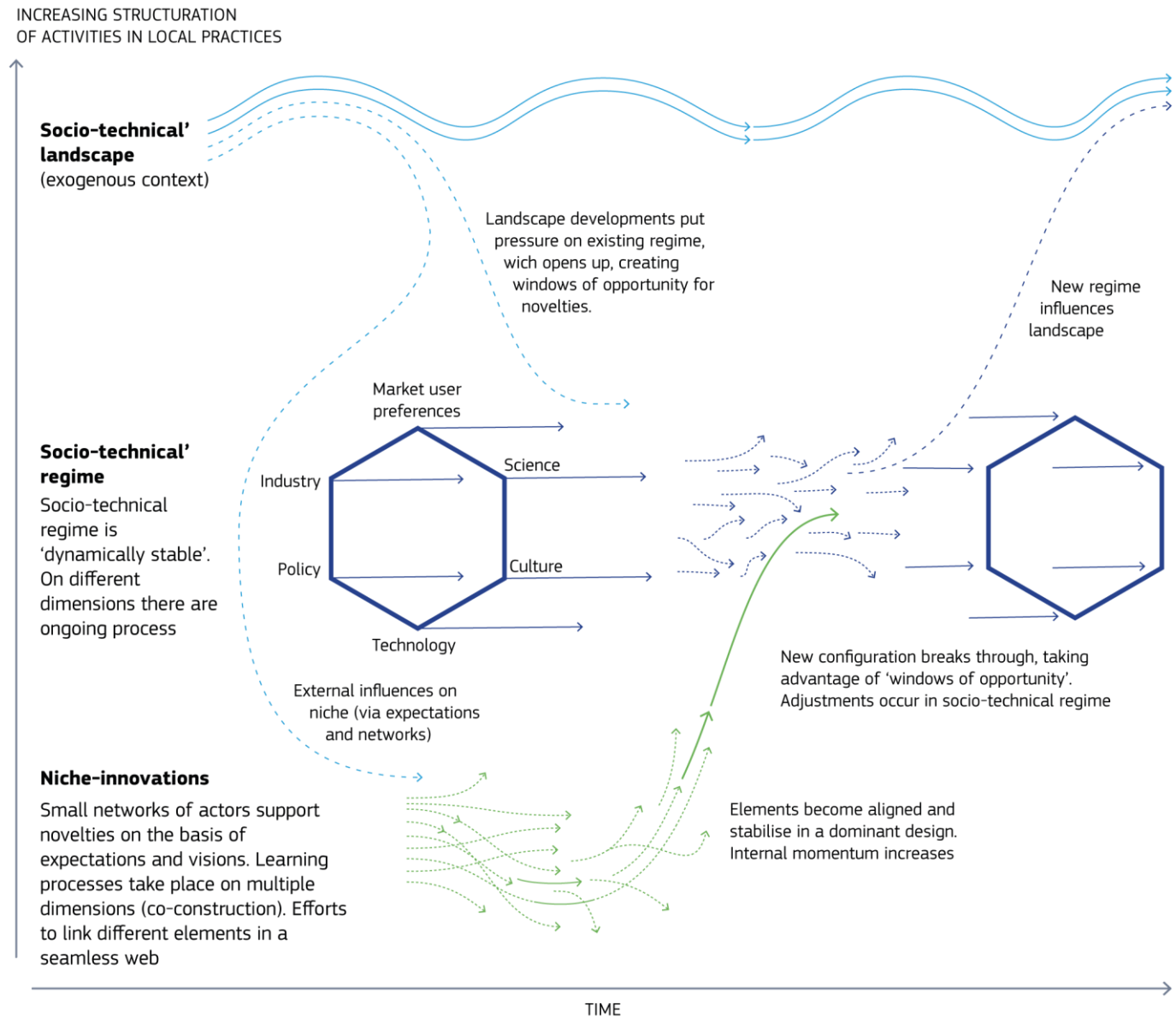
Old framing

- Science and technology centred
- Operated principally at lower level (e.g. researcher, firm or organisational level)
- Objective: innovation-driven growth

New framing

- Producer and consumer centred (incl. knowledge)
- Operates at multiple-levels (system-level innovation is a legitimate policy aim)
- Objective: system re-configuration to meet new societal purpose(s)

[== system-level innovation with directionality]



Source: Adapted from Geels (2008)

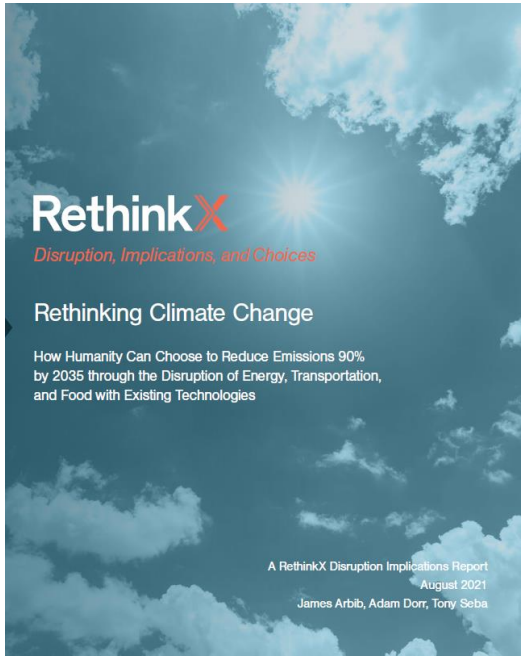
Consider the right tools for directionality and alignment

Element of directionality	Transition arenas	Missions	JT initiatives	Policy integration / coherence	EDP
System-level scope	Yes (usually)	Yes (but not always)	Partial, needs expanding beyond energy, transport and digitalisation	Implicit, needs more attention.	Partial, needs expanding beyond structural economic change.
Transformative ambition	Yes	Yes (but not necessarily gaining priority over other goals)	Partial, limited by sectoral scope and single-fund perspective	Not usually but could be added to policy integration.	No, does not go beyond economic growth. Needs more attention.
Pathway neutral or selective	Neutral at first, then selective	Broad missions with pathways as outcomes	Neutral but aspects may be selective	Not explicit, needs more attention	Focus on economic transformation pathways. Not sustainability.
Distributive and inclusive	Needs more attention	Aim to target whole society, but processes somewhat exclusive.	Inclusive of public authorities and sectoral interests, not citizens	No, needs more attention.	Inclusive but in practice often limited to triple helix, needs more attention.
Multi-scalar	Needs more attention	Yes	Yes	Yes	Mostly regional with several country-level S3s including regions
Deep and policy learning based	Yes	Yes	No	Yes	Partial, but not oriented to transitions.
Policy mix support	Needs more attention	Yes	Partial, focused on investment and incentives	Yes	Partial, focused mainly on supply side instruments

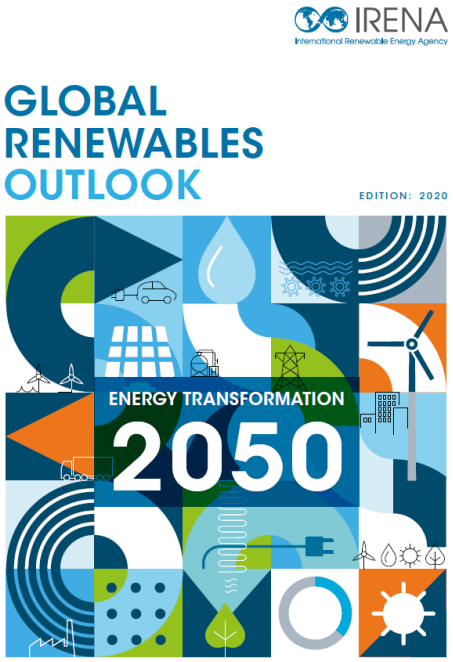
Source: Kivimaa, Pontikakis, Reimeris and Miedzinski (work in progress), “Directionality for transformation: Analytical dimensions and illustrations of selected 'policy tools’”

Build the case for the transition: localise the *evidence*

- Identify <u>positive</u> pathways



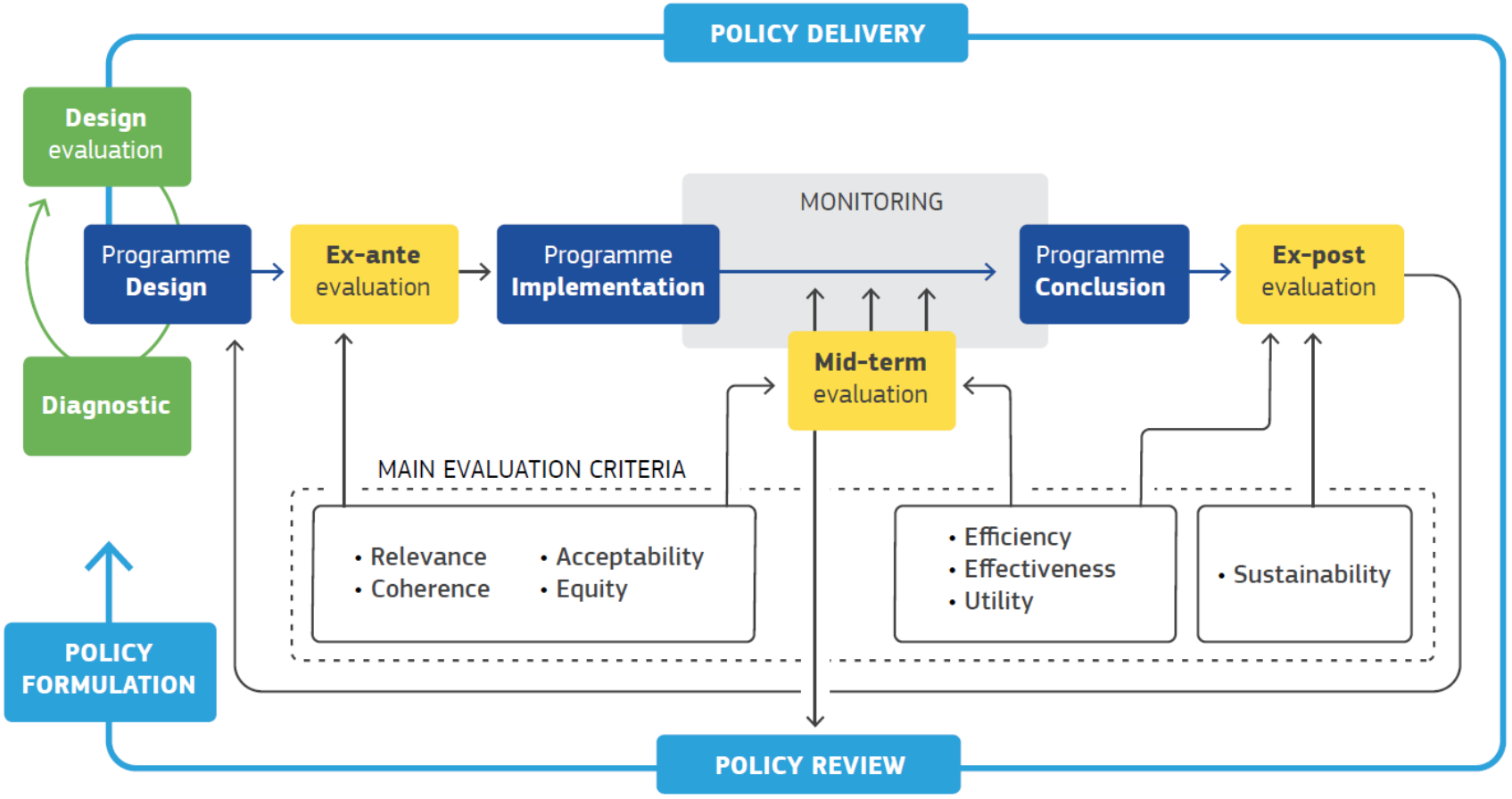
- Show co-benefits are possible (jobs and sustainability, r



- Fight misinformation (

Adapt monitoring and evaluation

- **Relevance**: justification of the strategy or priorities chosen based on socio-economic-sustainable needs which can evolve
- **Coherence:** compatibility of the intervention with other intervention(s) in a country/region)
- **Acceptability**: support of policy design and implementation by society, decision-makers and decision-takers
- **Equity**: intragenerational and intergenerational effects



Open up stakeholder engagement beyond fund beneficiaries

S3 - EDP

- Identification of priorities for investment in research and innovation
- Focus on territorial needs and on economic strengths
- Inclusive stakeholders engagement from 4-ple helix
- Stakeholders include the private, research and public sector
- Collaboration results in joint projects
- Continuous EDP implies that stakeholders are kept engaged
- Stakeholders contribute to the refinement and review of priority-areas

PRI - ODP

- Developing directionalities driven by territorial challenges which however aim at **multiple value creation**
- **Working backwards from goals** with coalitions of stakeholders in a multi-level perspective
- Implicated types of **stakeholders vary** acc. to the goal – some may be excluded
- Include **other parts of (**/ levels of) **government,** incl. public and private investments according to the goal
- In return for public support, stakeholders **open up their agendas** which allow for synergies/sequencing
- In return for public support, stakeholders **commit to additional actions** including invest./changes in behaviour
- Continuous, **growing and reflexive coalitions** result in **multiple actions** beyond publicly funded projects

Build the right capacities in your administration and governance system

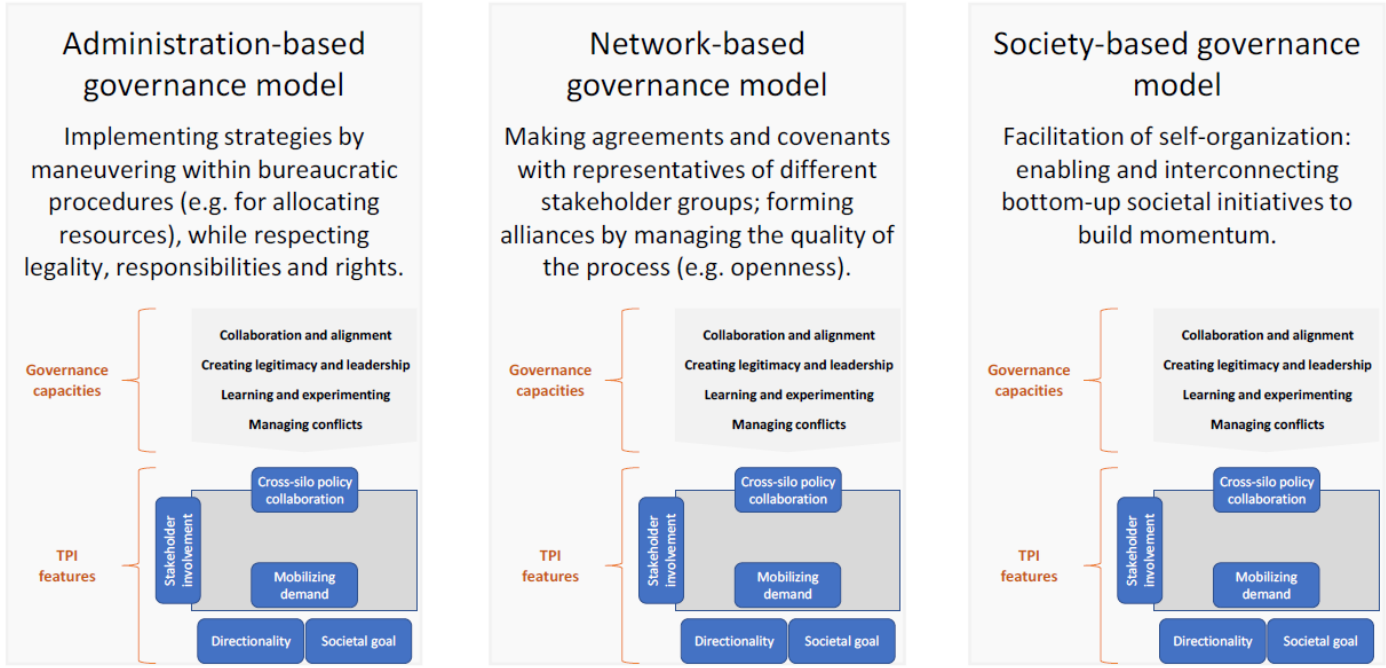
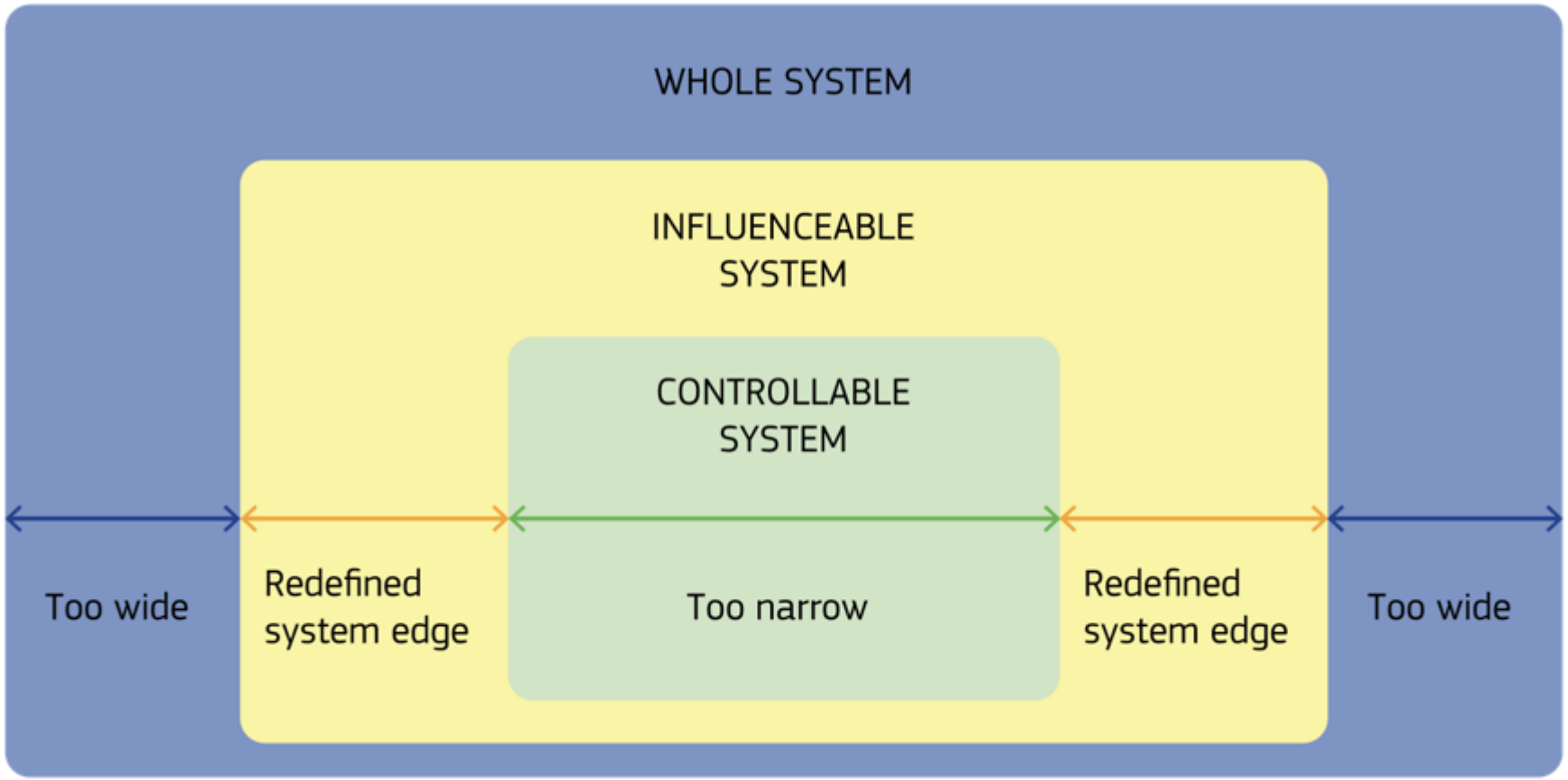


Figure 3: Three governance models conditioning the opportunities and challenges for developing TPIs.

https://doi.org/10.2760/220273

Manage the boundary between control vs influence



Source: Impower, https://www.impower.co.uk/edgework

Concluding remarks

- There is a pressing need for transformative, rather than just incremental innovation policies.
- The right policies will be highly context specific: no-one has the answers but we can begin by asking the right questions
- In addition to adapting S3, new processes may have to be initiated (discussion on local missions tomorrow!)
- The transition of actual policies to the new paradigm cannot happen overnight: learning by doing
- PRI offers a framework to guide the process of adapting S3 and linking it with other policies, domains and levels: revised user-centred Playbook forthcoming in Q3 2023

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

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

Muito Obrigado

https://s3platform.jrc.ec.europa.eu/pri

Dimitrios.PONTIKAKIS@ec.europa.eu