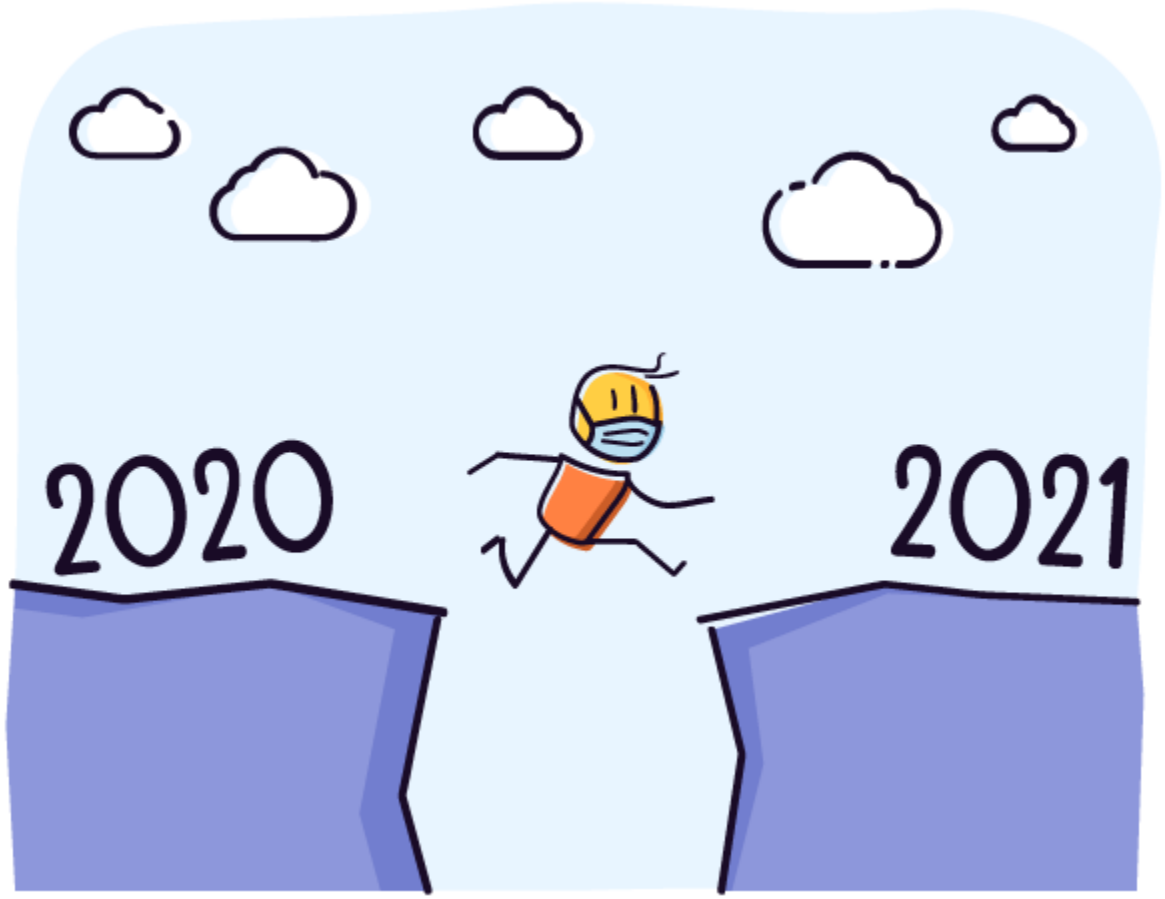
From S3 to S4: some reflections

Elisabetta Marinelli PhD
Elisabetta.Marinelli@pr-i.eu
www.pr-i.eu

Lessons from 2020



- Our systems are fragile
- We are responsible for how our communities react to global challenges
- We need research and innovation systems and policies capable to address societal challenges

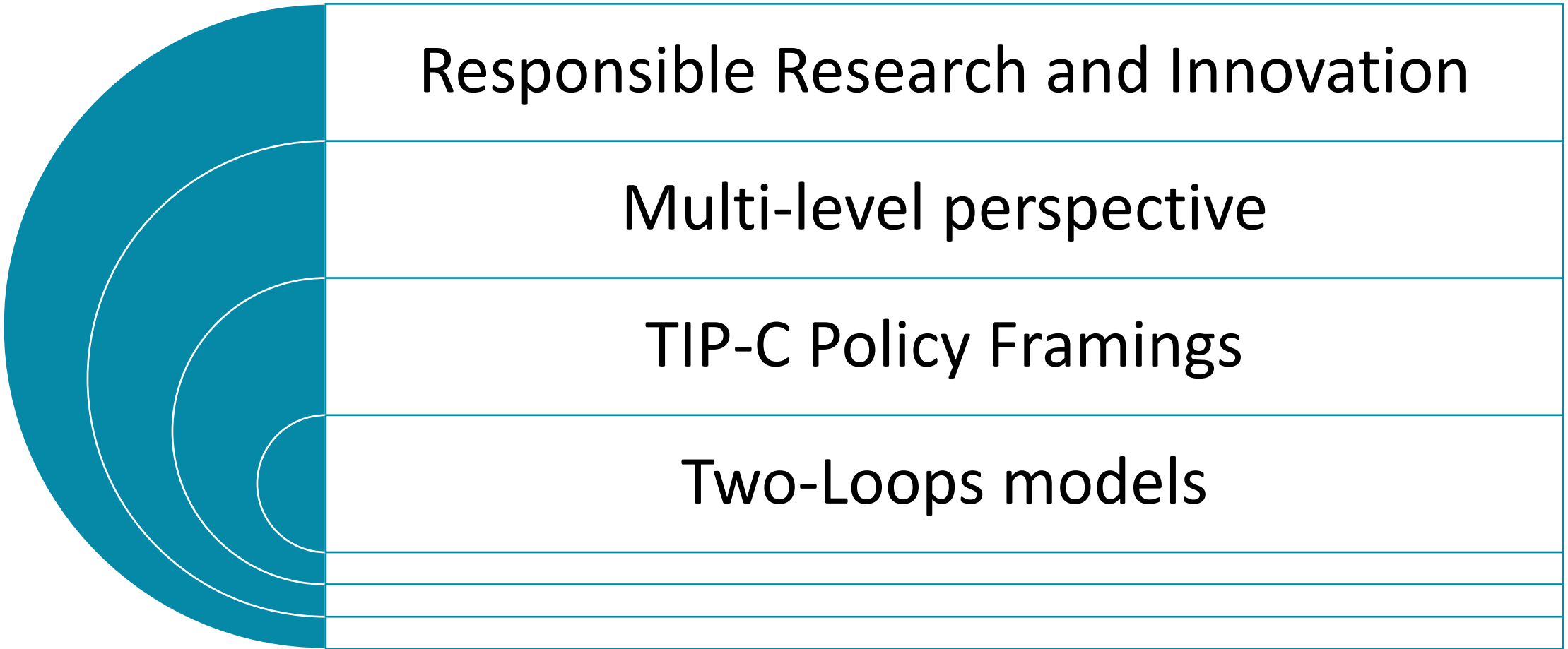
…
…
…

This is not the last crisis!

- Climate change
- Inequality

Policy responses to a challenging time in history

New conceptual tools for transformative Innovation Policy



Responsible Research and Innovation

Anticipation

Of the effects of innovations

Inclusion

Of stakeholders producting but also being affected by innovation

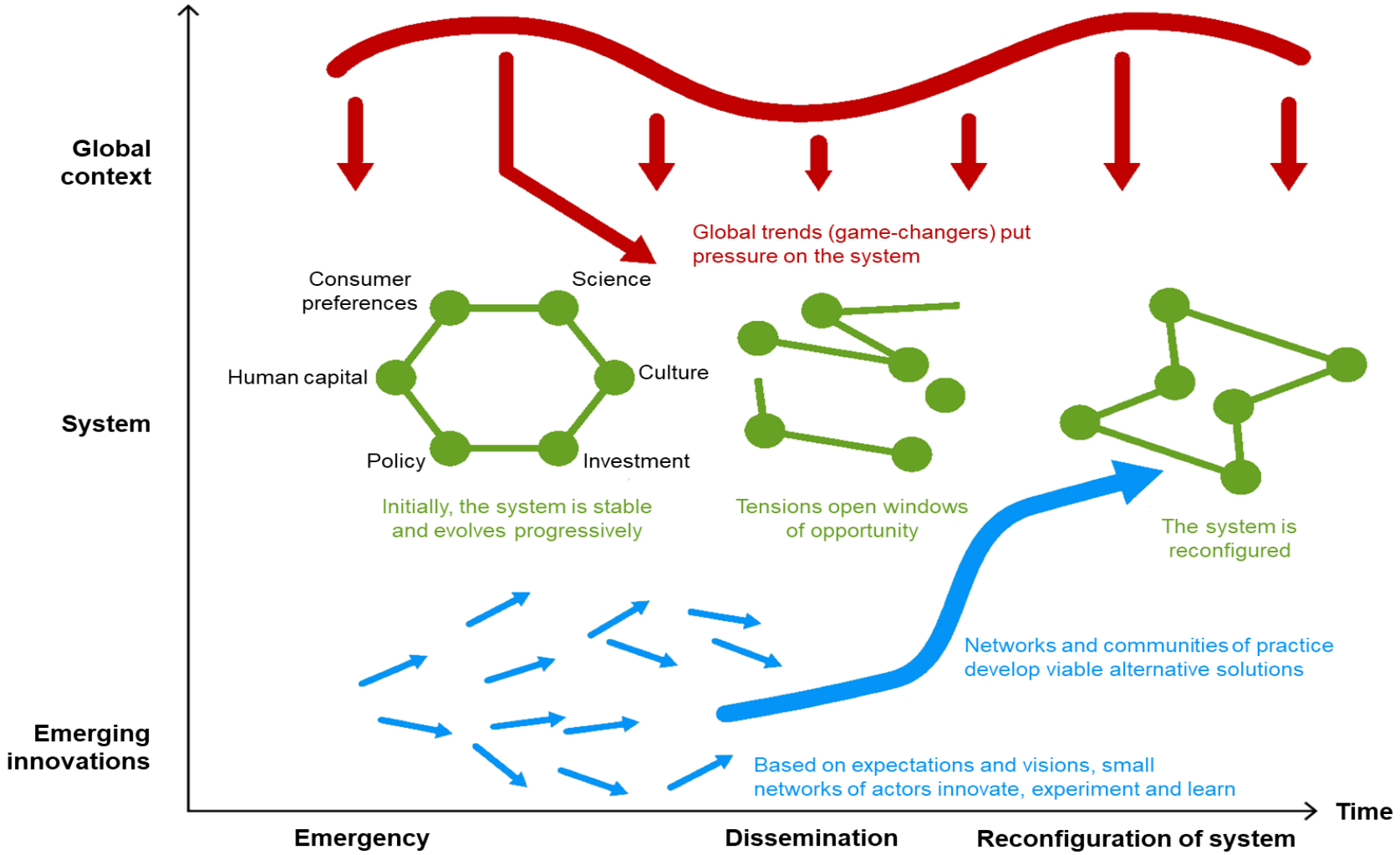
Reflexive

able to monitor and reflect

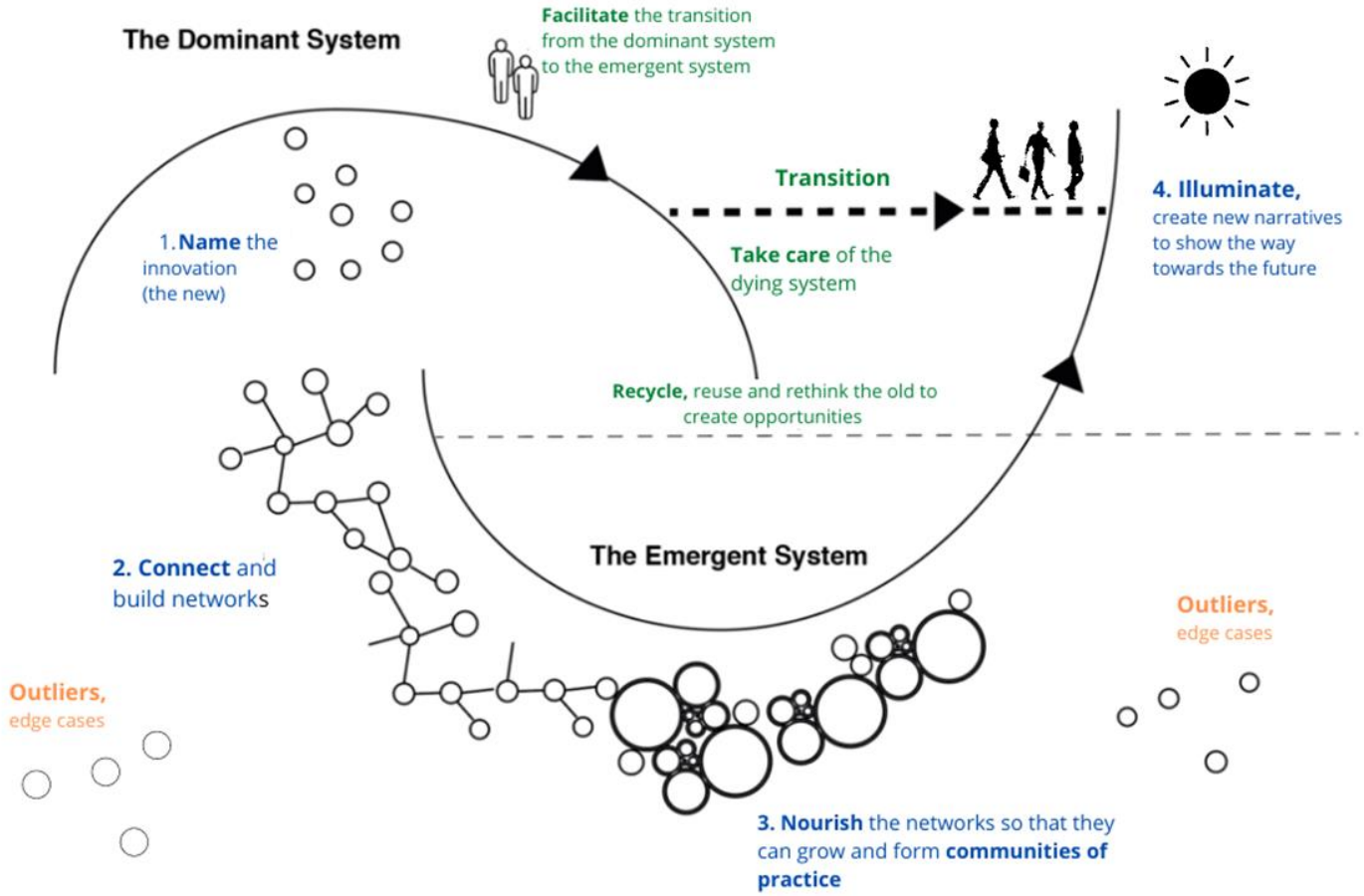
Responsive

able to respond to findings

Multi-level perspective



Two-Loops model



Three framings for innovation policy (TIP-C)

Framing 1:Innovation for growth

- 1960s-1980s
- National
- Government, scientists and industry
- Fixing market failures
- Knowledge generation
- Technology
- RDI stimulation, IP regime, STEM education and communication
- Linear

Framing 2: National Systems of Innovation

- 1980s to today
- National, regional, sectoral systems of innovation.
- Triple-helix interaction
- Fixing structural system failures
- Knowledge utilisation
- Competitiveness
- Building links, DUI learning, Demand policy, Entrepreneurship support
- Interactive and system bound

Framing 3: Transformative change

- Emerging
- Multi-scalar
- Quadruple Helix
- Fix ng transformational system failures
- Solving social and environmental challenges
- Support to experimentation with niches
- Attention to R&D directionality
- From STEM to STEAM
- Systemic and experimental

Implications for Smart Specialisation: focus, framing, context

	S3 2014-2020	S3 2021-2027
Focus	• Competitiveness • R&I ecosystem of innovation • Triple helix approach.	• Transformative change • Providing sustainable alternatives to societal challenges • Quadruple helix approach.
Framing for R&I policies	• STI policy framing 2	• STI framing 3
Analysis of regional context	• Mapping of the regional economic and innovation system to identify opportunities for knowledge-based development.	• Multi-level, systemic analysis centered on societal challenges

Implications for Smart Specialisations: EDP

	S3 2014-2020	S3 2021-2027
Rationale for the EDP	• Discovery of emerging opportunities in relation to specialisation and competitiveness	• Discovery of emerging opportunities in relation to specialisation and transitions towards more sustainable and inclusive pathways.
Identification of priorities (EDP process)	• Broad priorities are defined through a broad bottom-up consultation or participative processes. • Methods include workshops, focus groups, platforms for interaction (building on the previous analysis), mainly with triple helix stakeholders.	• Priorities are (or can be) identified sequentially • Broad priorities are defined trough a bottom-up consultation or participative processes, at the regional level. • This is complemented with sub-regional/sectoral continuous bottom-up processes, continuous way, that aim at building an action plan along the lines of a "shared-agenda". • Quadruple helix stakeholders (and beyond) are actively engaged, as they are crucial in addressing territorial challenges.

Implications about S3: Instruments and monitoring

	S3 2014-2020	S3 2021-2027
S3 Instruments	• The S3 instruments are oriented towards the S3 priorities and to reinforce the R&I ecosystem	• S3 instruments have a RRI approach • Focus on continuous and challenge-oriented experimentation within broad priorities. • Support the exploration of alternative technologies and networks of innovative communities.
Monitoring	• Accountability and effectiveness. • Focus on the performance of priorities • Indicators based on statistics, surveys, administrative data, complemented with qualitative information • Incipient digital tools and open data.	• Accountability and effectiveness and attention to societal challenges. • Digital monitoring and mapping tools, exploiting big-data and open-data to identify challenges and connect initiatives and actors. • Monitoring as a learning tool not only by the regional administrations but also by stakeholders.

Conclusions

- S3s from 2014-2020 are a solid base to move forward
- Embed RRI principles
- Bring stakeholders’ engagement to the next level
- Embrace experimentation
- Enhance coordination with other policy initiatives (recovery funds)