

Designing knowledge-action networks for supporting energy focused sociotechnical change in illiberal democracies:

Interfacing science, policy and transformation processes towards sustainability in Andean Countries.

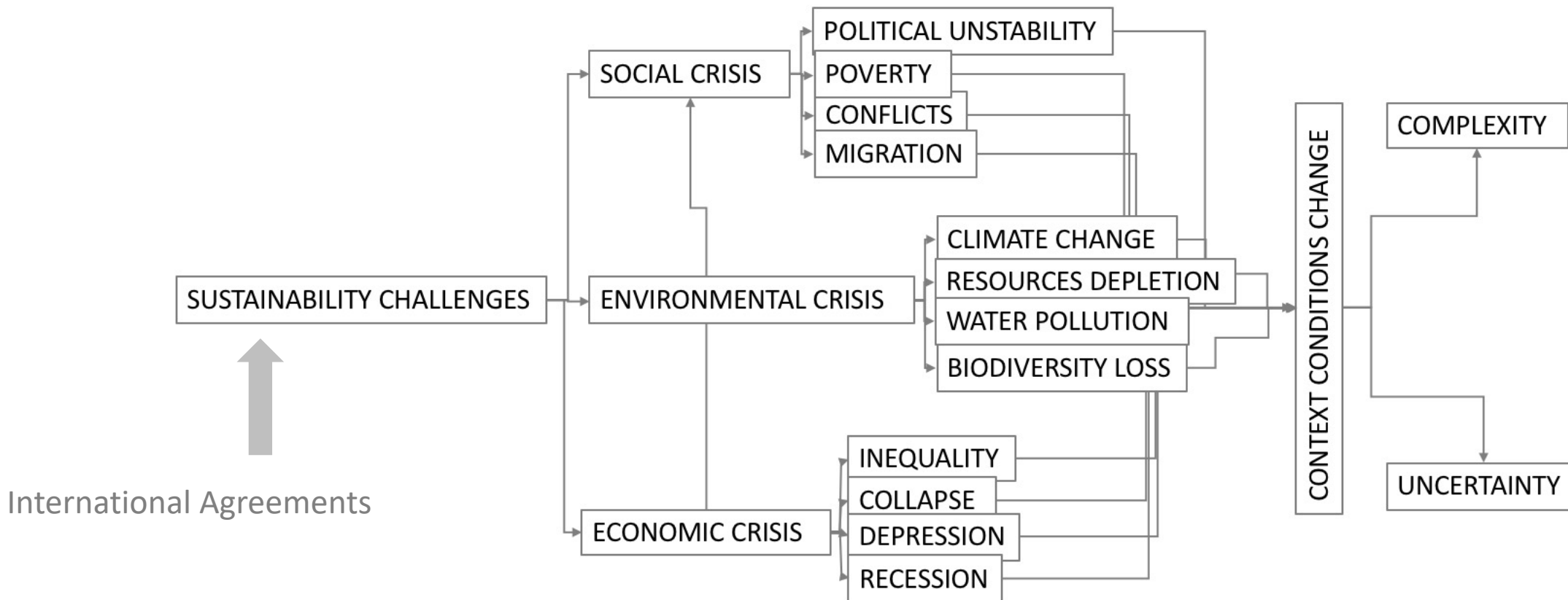
Eduardo Noboa, PhD

1.- Background

Assembling the research sphere

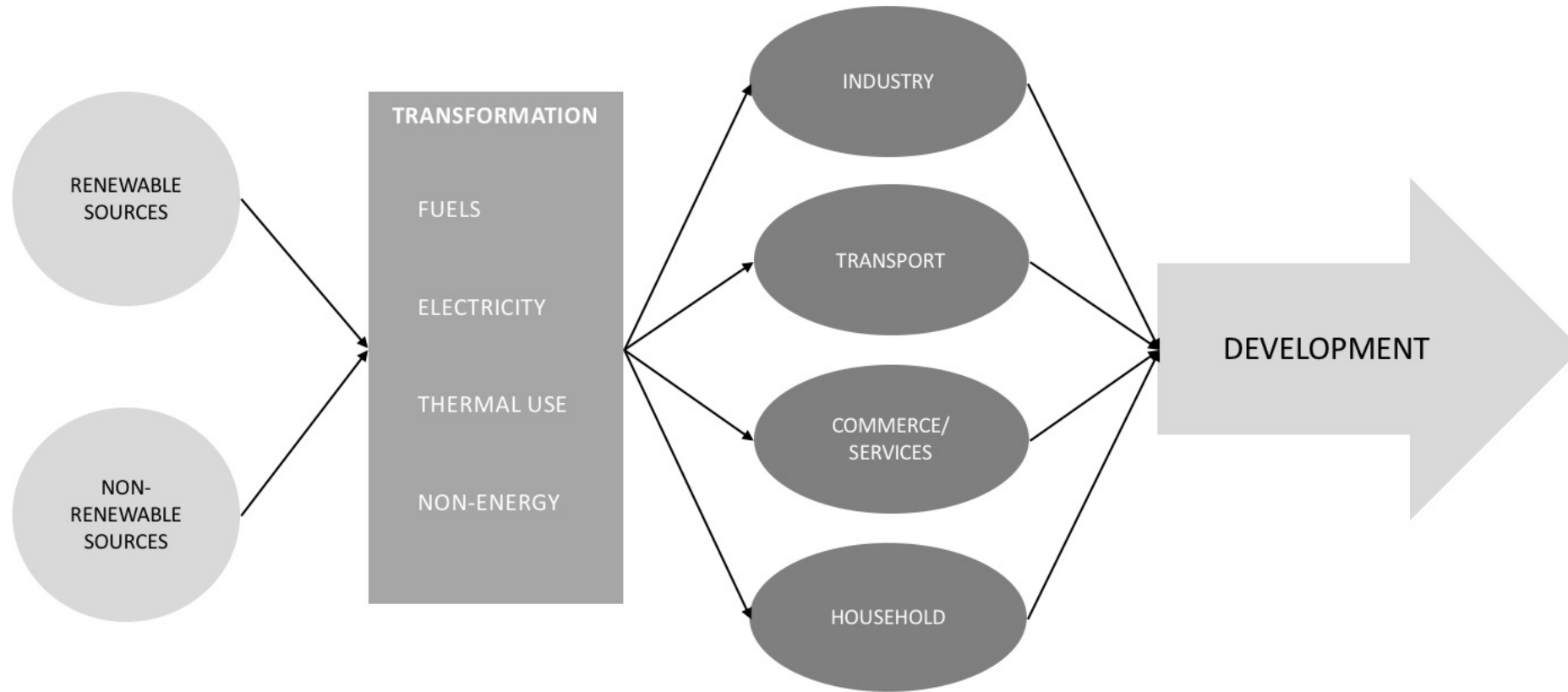


Sustainability Challenges



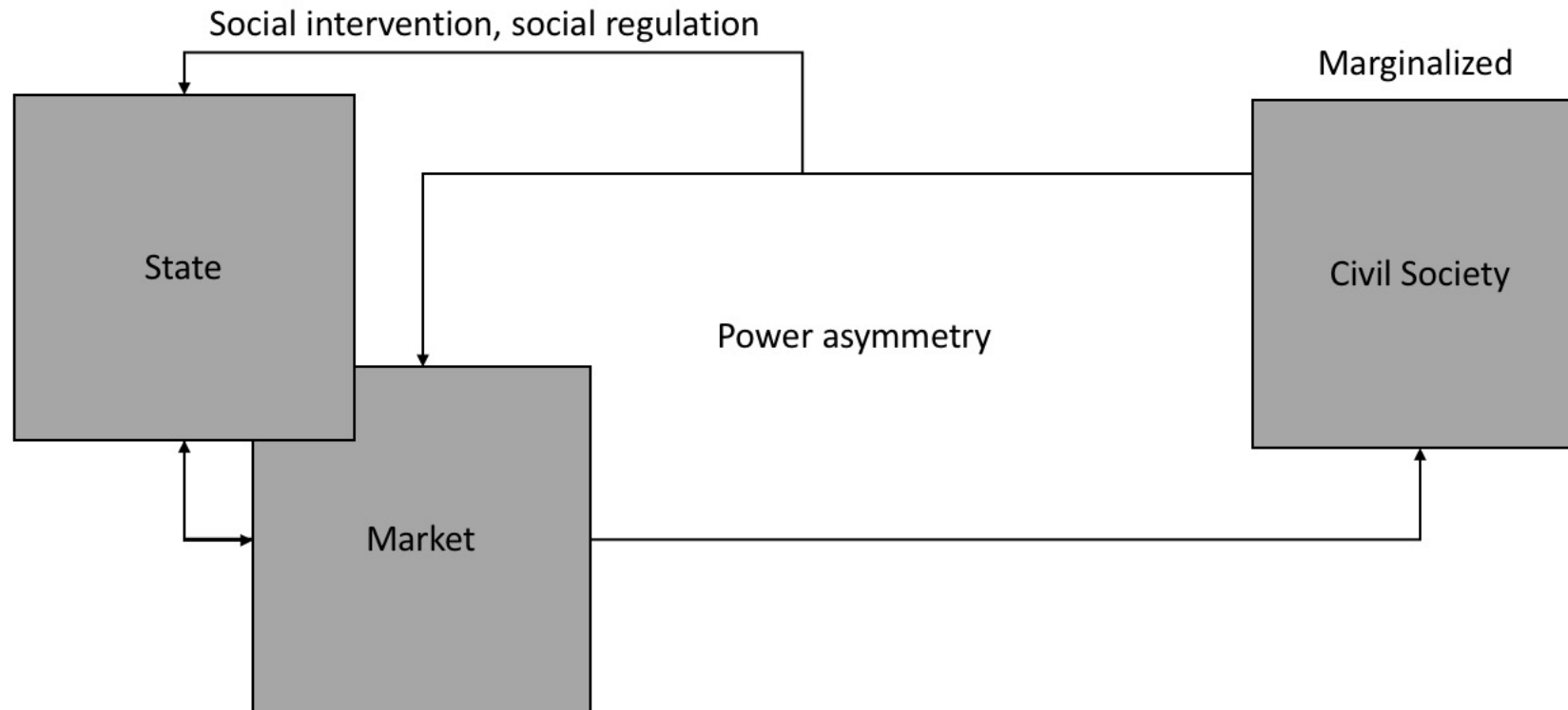
Source: Sustainability challenges and crisis (based on Steffen et al., 2015)

Energy and Development



Source: Energy fuelling societal development (based on Davis et al., 2010)

Merging Spheres and State Capture



Source: The context of state capture (based on Hellman et al., 2003)

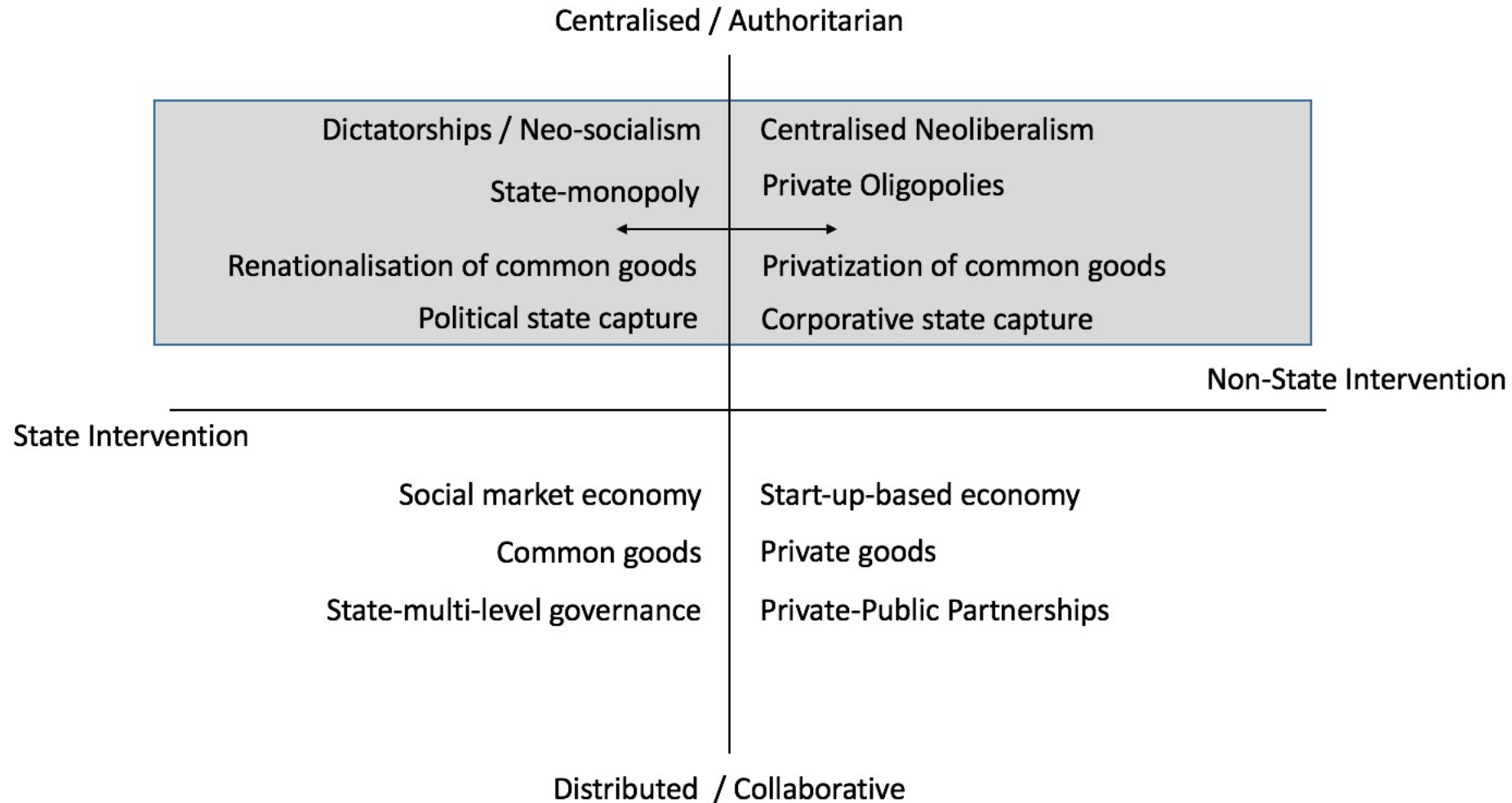
Centralised and Distributed Models



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Source: A fourfold typology of political economy (Based on (Rifkin, 2012))

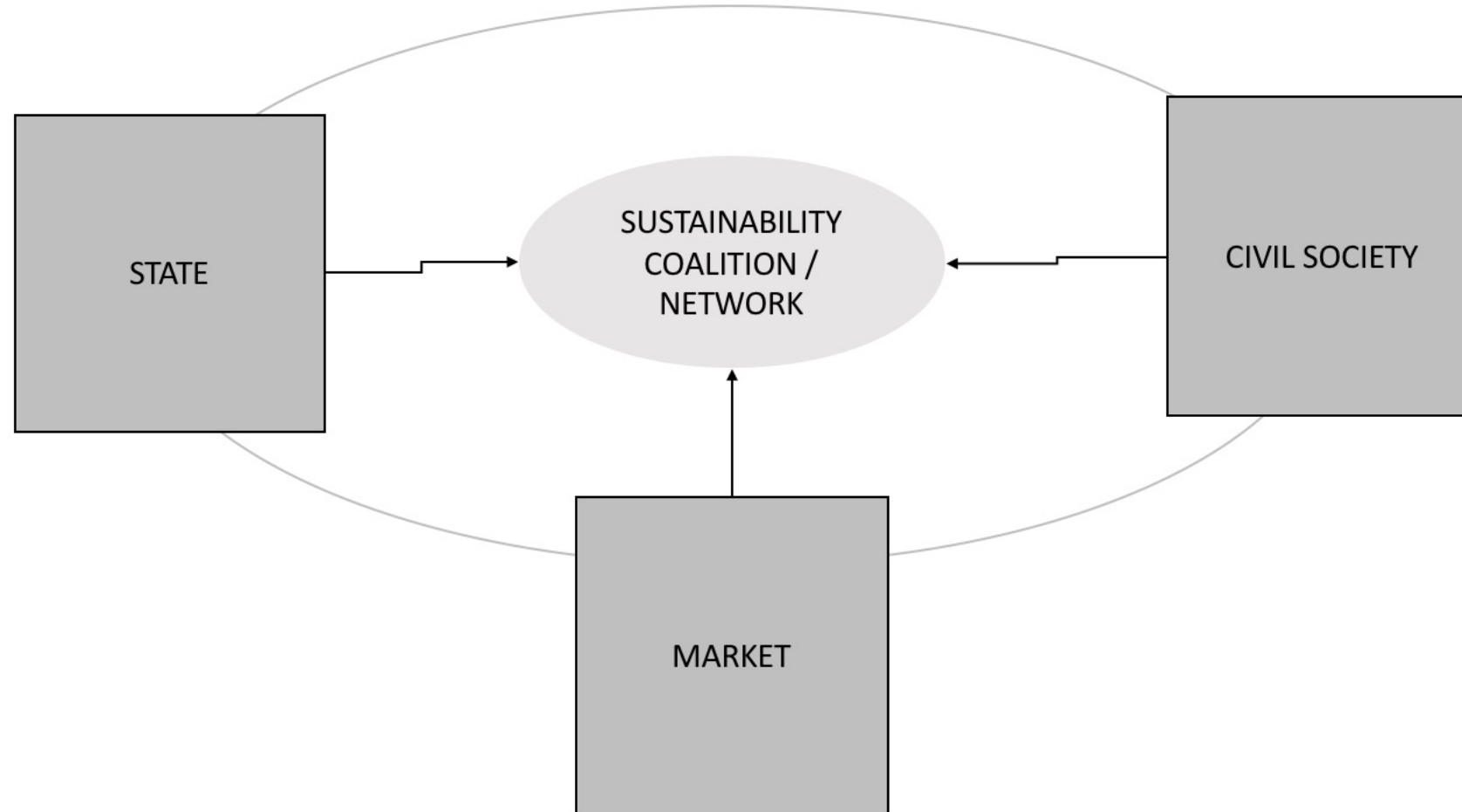
Sustainability Partnership



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Source: A new social contract for sustainability (based on Polanyi, 2001)

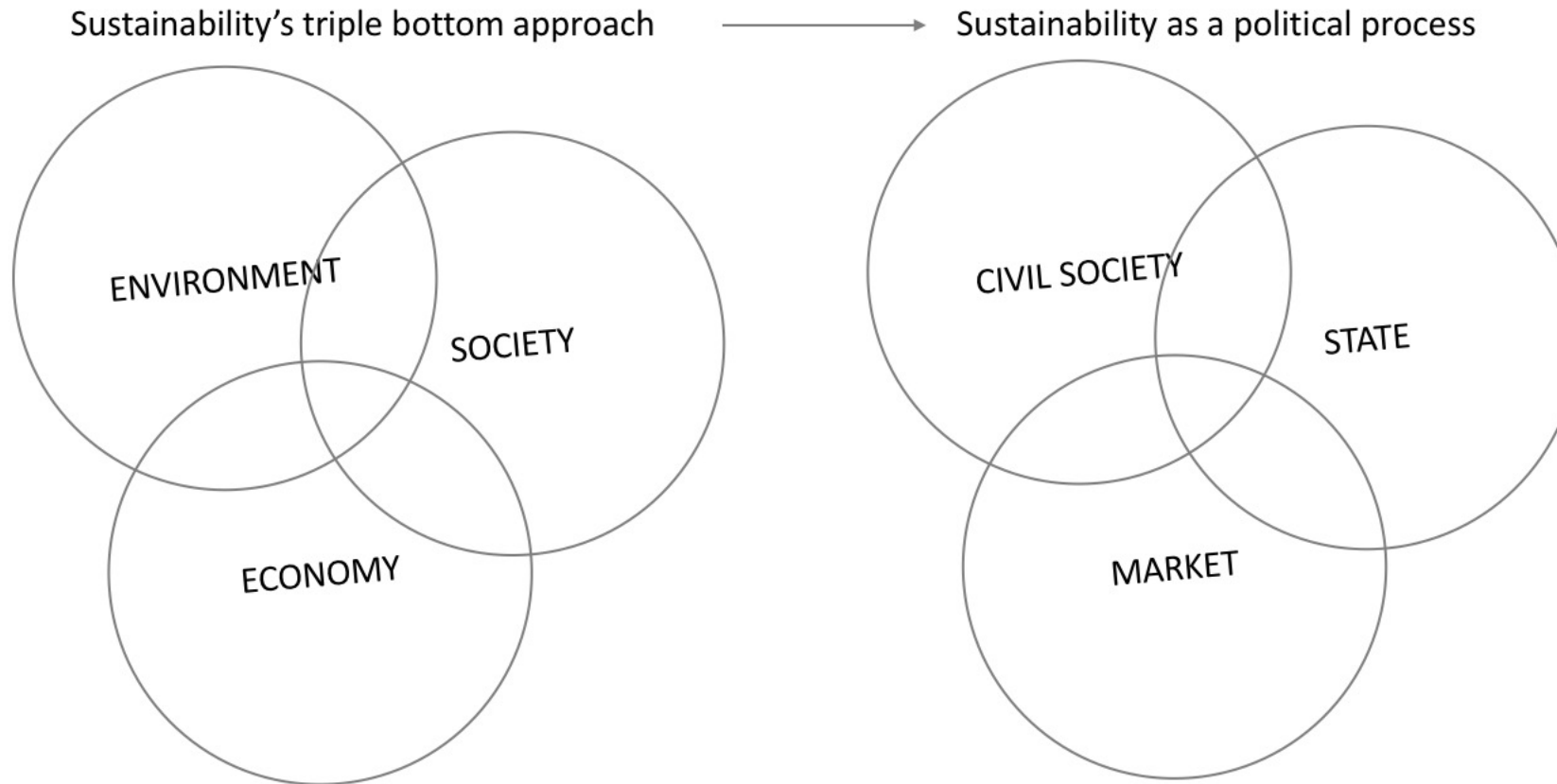
Sustainability as a Political Process



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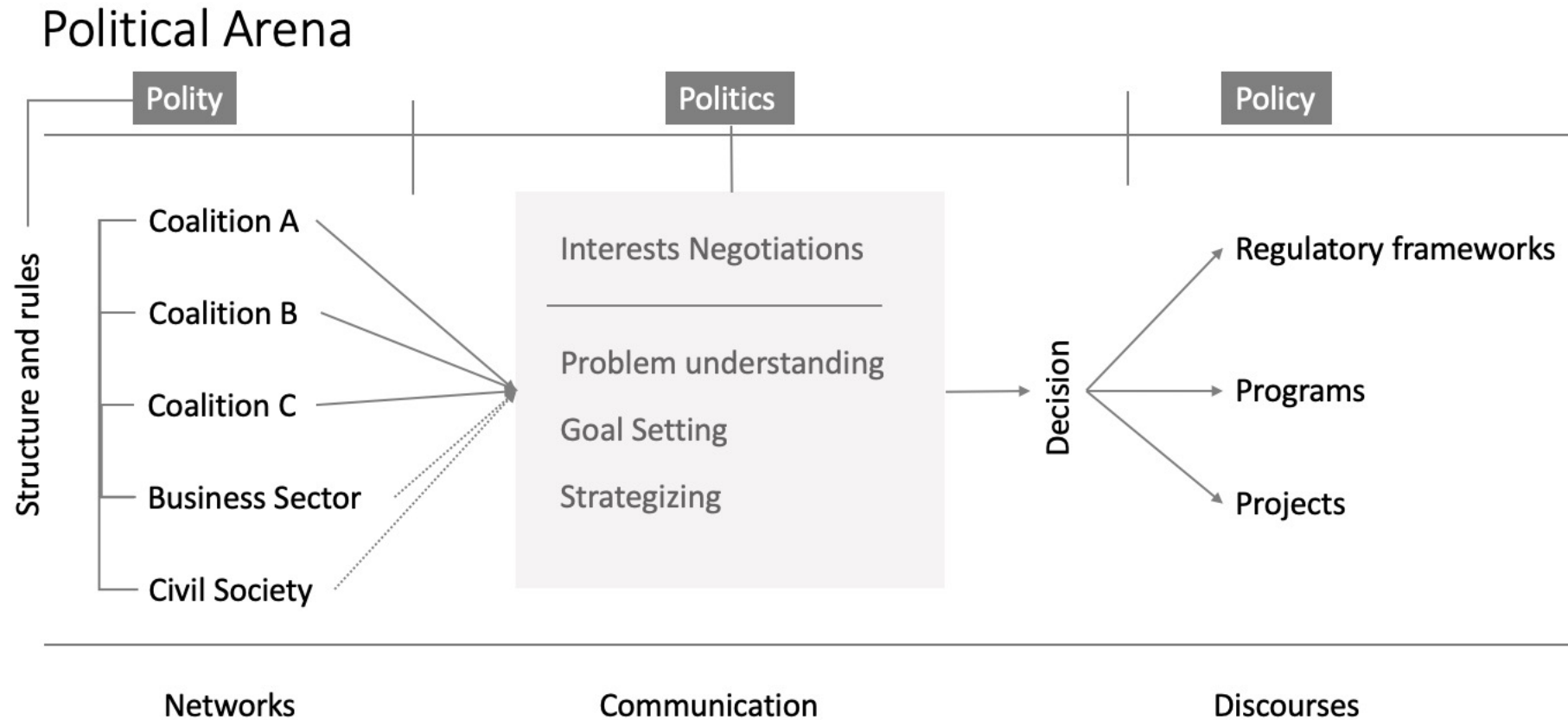


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Source: Sustainability as an essentially political issue (based on Heinrichs et al., 2015)

Policy-making Process



Source: Policy-making process including other sectors (based on Sabatier and Jenkins-Smith, 1993)

3.- *Concept Design*

*The Transdisciplinary Transition
Management Arena (TTMA)*



Transition Management Cycle

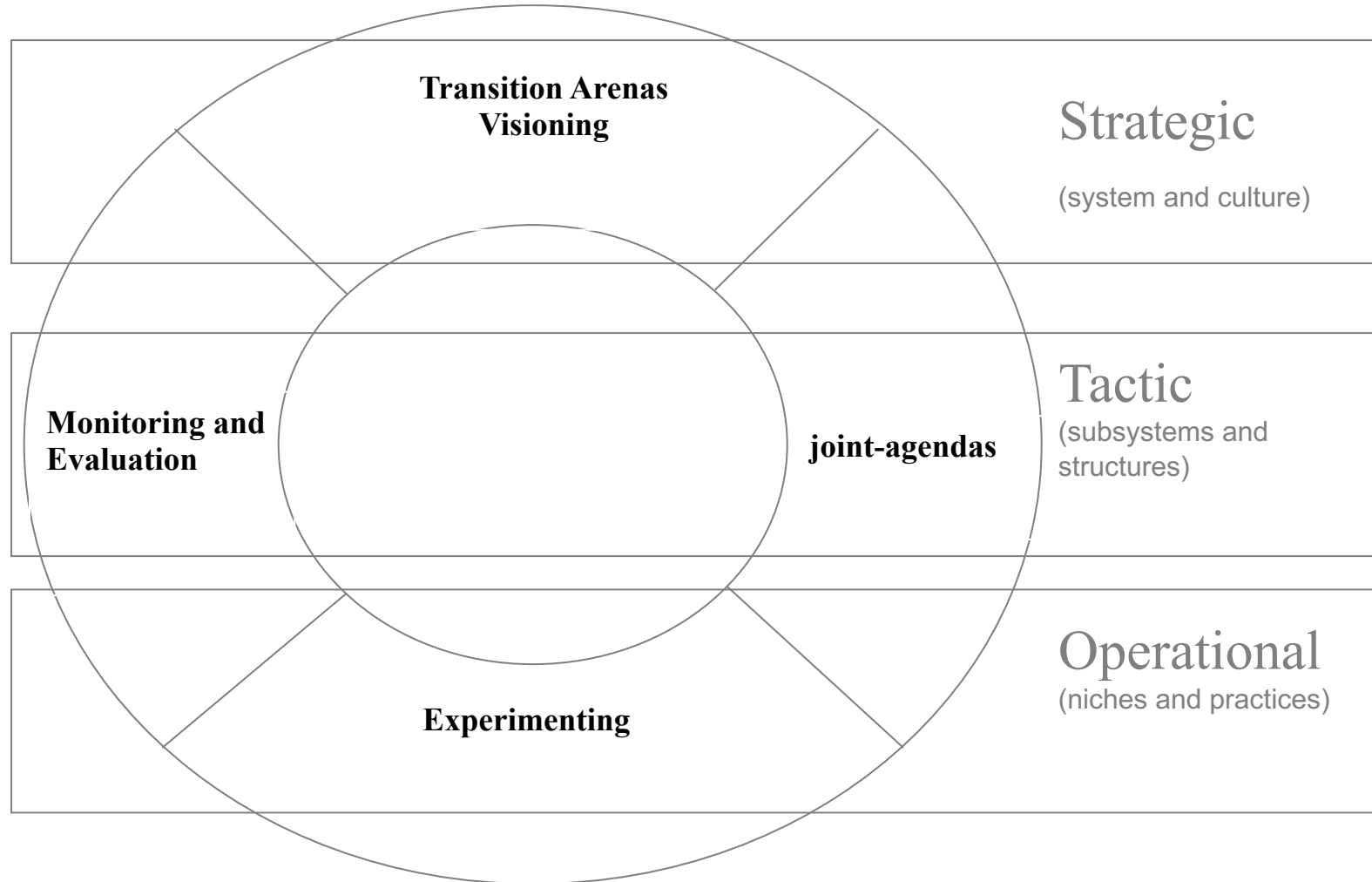


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Multi-actor and multi-dimensional approach

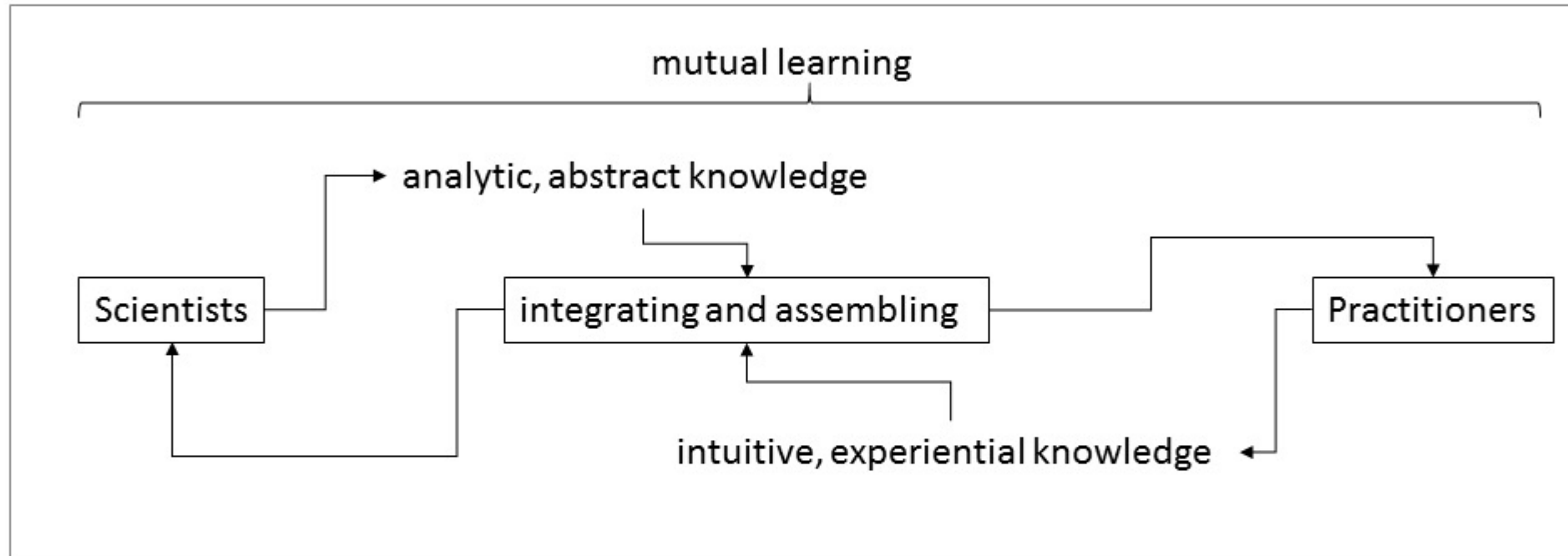


Learning, experimenting and innovation

Source: Transition management cycle (Based on Kemp, R., Loorbach, D., Rotmans, J., 2007)

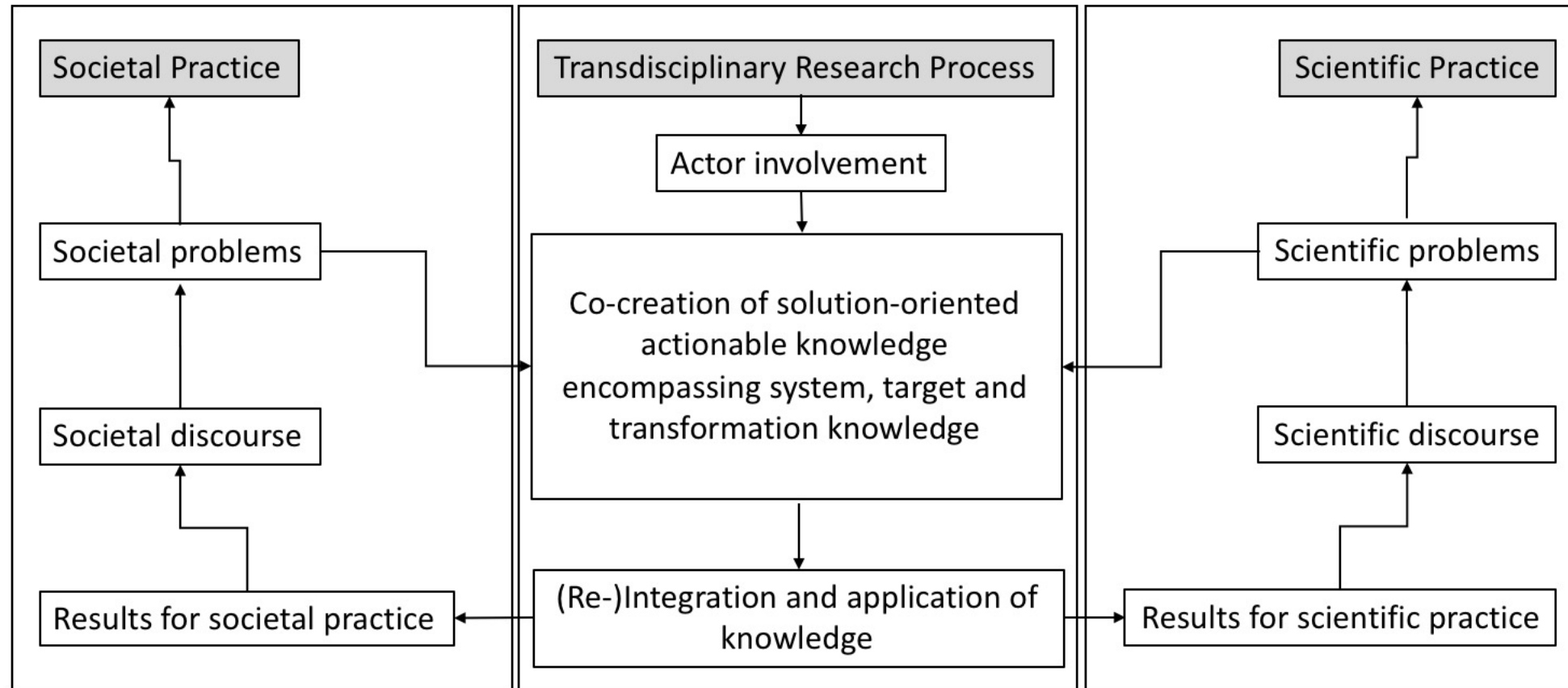
Strengthening the Science-Society-Policy Interface

Real world system knowledge



Source: Real World System Knowledge (based on (Scholz and Steiner, 2015))

Transdisciplinary Research Process



Source: An idealised Transdisciplinary Research process (after (Lang et al., 2012)).

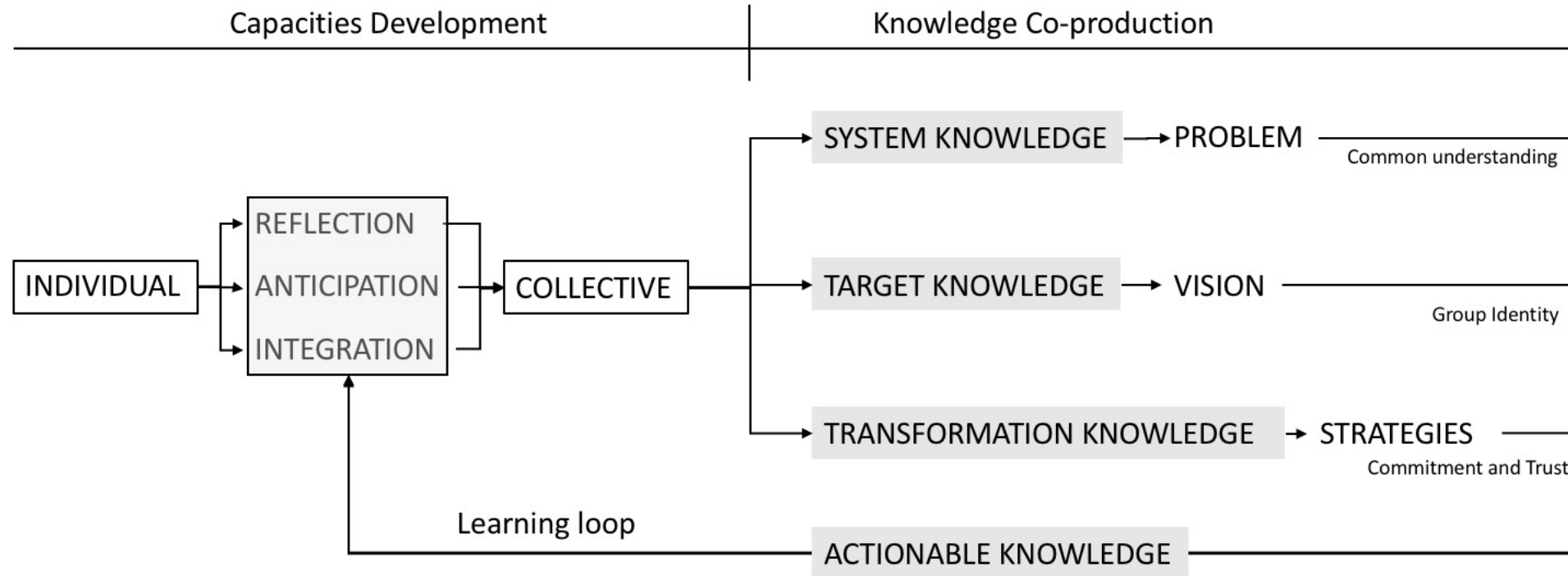
Capacities and types of knowledge



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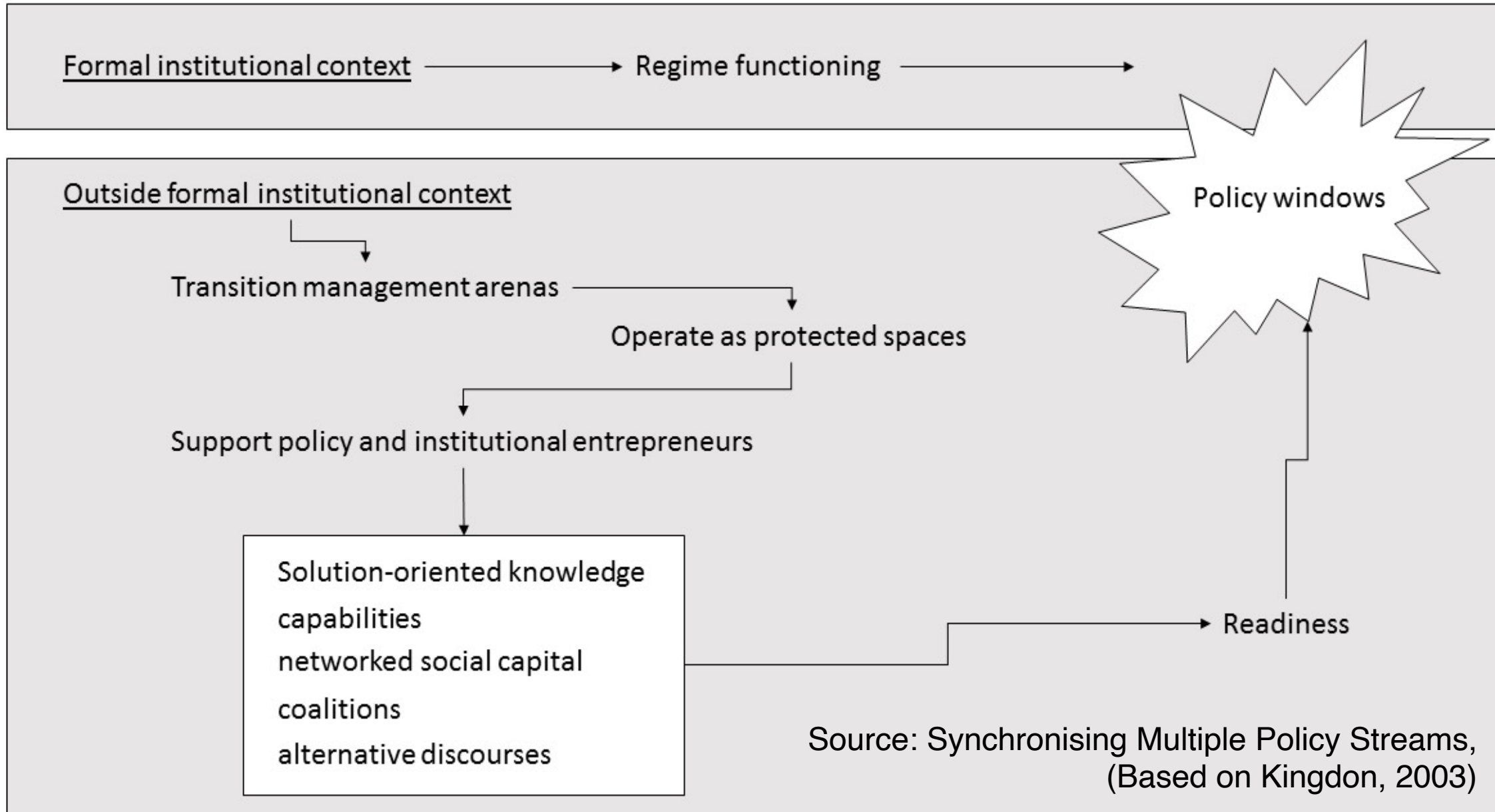
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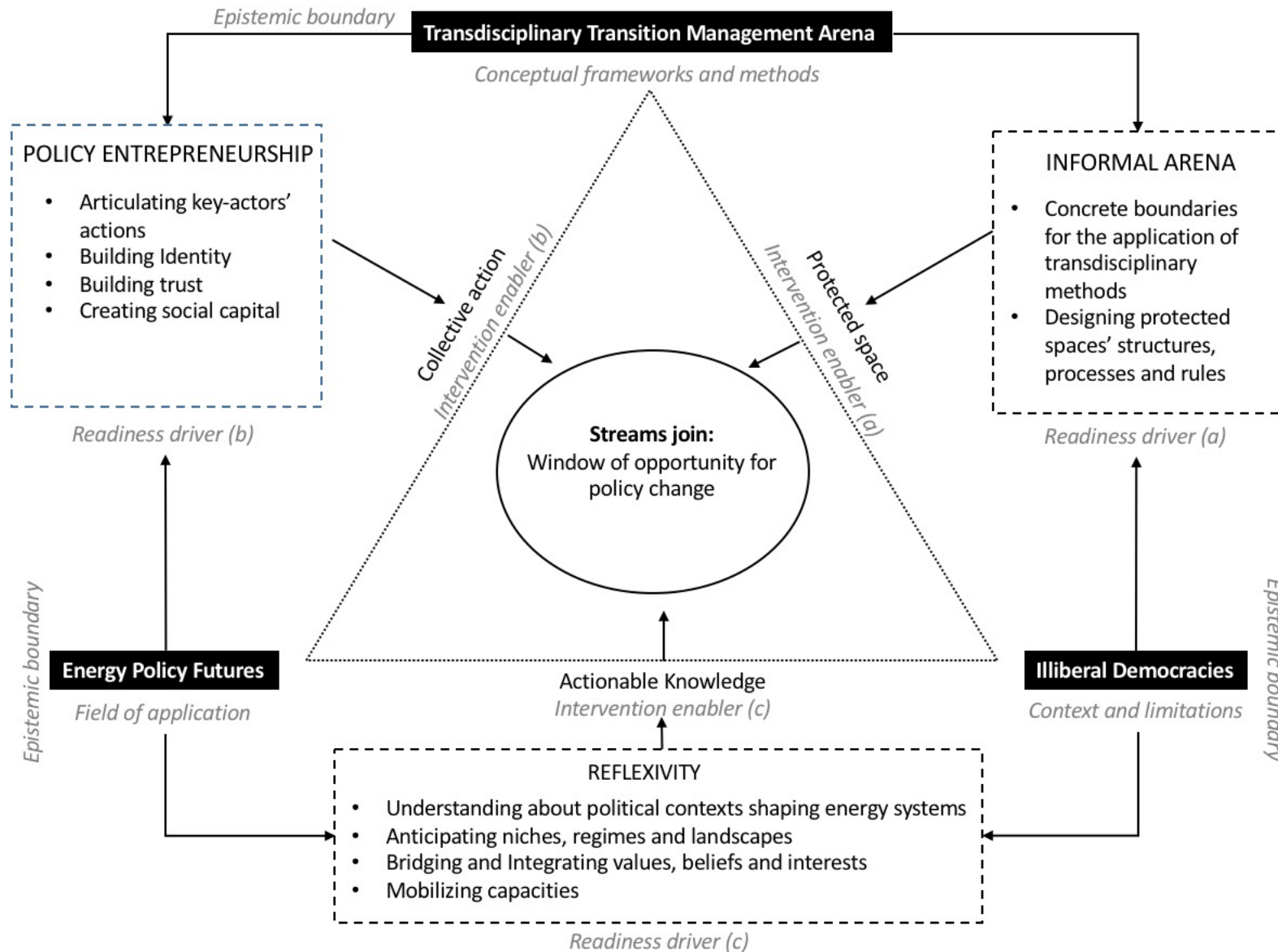


“Knowledge co-production generate capacities , capacities dynamize knowledge”

Source: Types of knowledge and capacities in transdisciplinarity
(Based on (Lindner, 2016)(Brandt et al., 2013)(Wiek et al., 2012)(Caniglia et al., 2017)(Schäpke et al.,2018))

Policy windows







2.- Questions

Strategizing the research process



Questions and Intellectual Goals



Research questions	Intellectual goals
<ul style="list-style-type: none">• To what extent does a “Transdisciplinary Transition Management Arena” enable the co-production of actionable energy policy knowledge?	Understanding the particular context within which the participants act
<ul style="list-style-type: none">• What is the actionable knowledge that can be co-produced throughout a “Transdisciplinary Transition Management Arena” that enables the participants to envision a transition path towards a sustainable energy future?	Understanding the <i>meaning</i> , for participants in the study of sustainable energy development
<ul style="list-style-type: none">• What is the potential to dynamize a cross-sectorial partnership/coalition triggered by the “Transdisciplinary Transition Management Arena” process?	Understanding the influence the context has on the participants actions

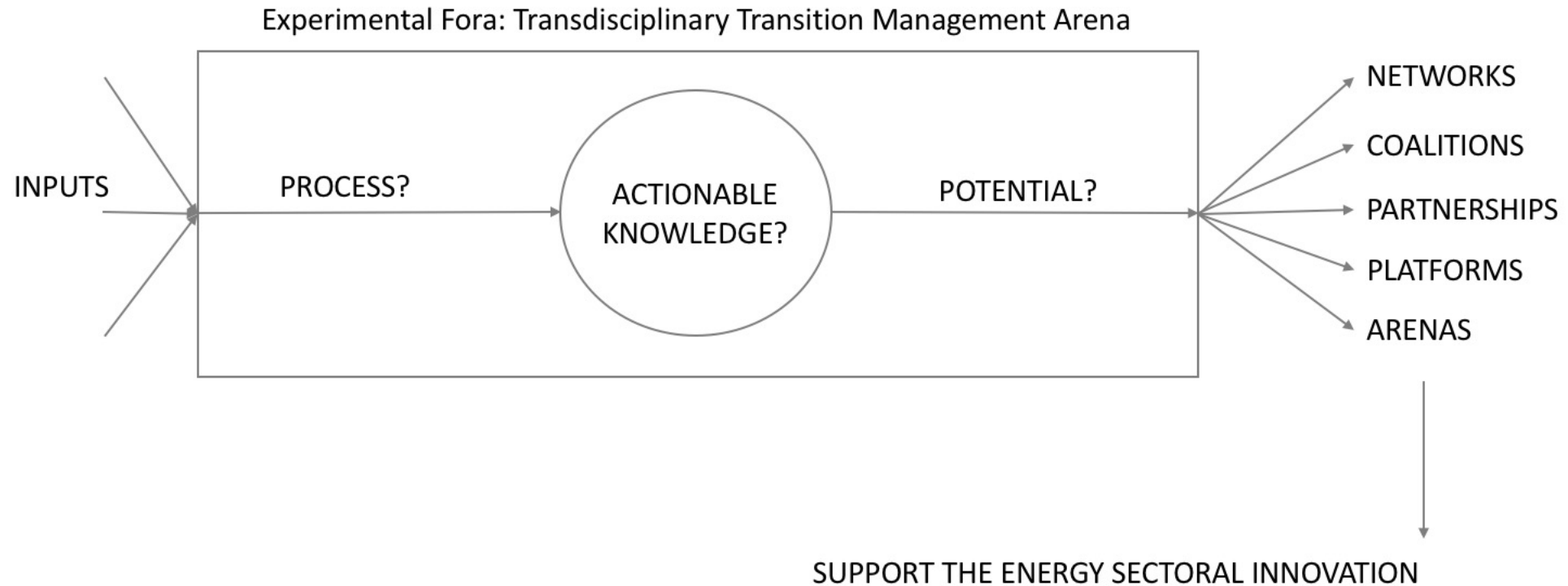
Research Questions



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Source: Process, knowledge and potential to support sociotechnical change (based on Noboa and Upham, 2018)

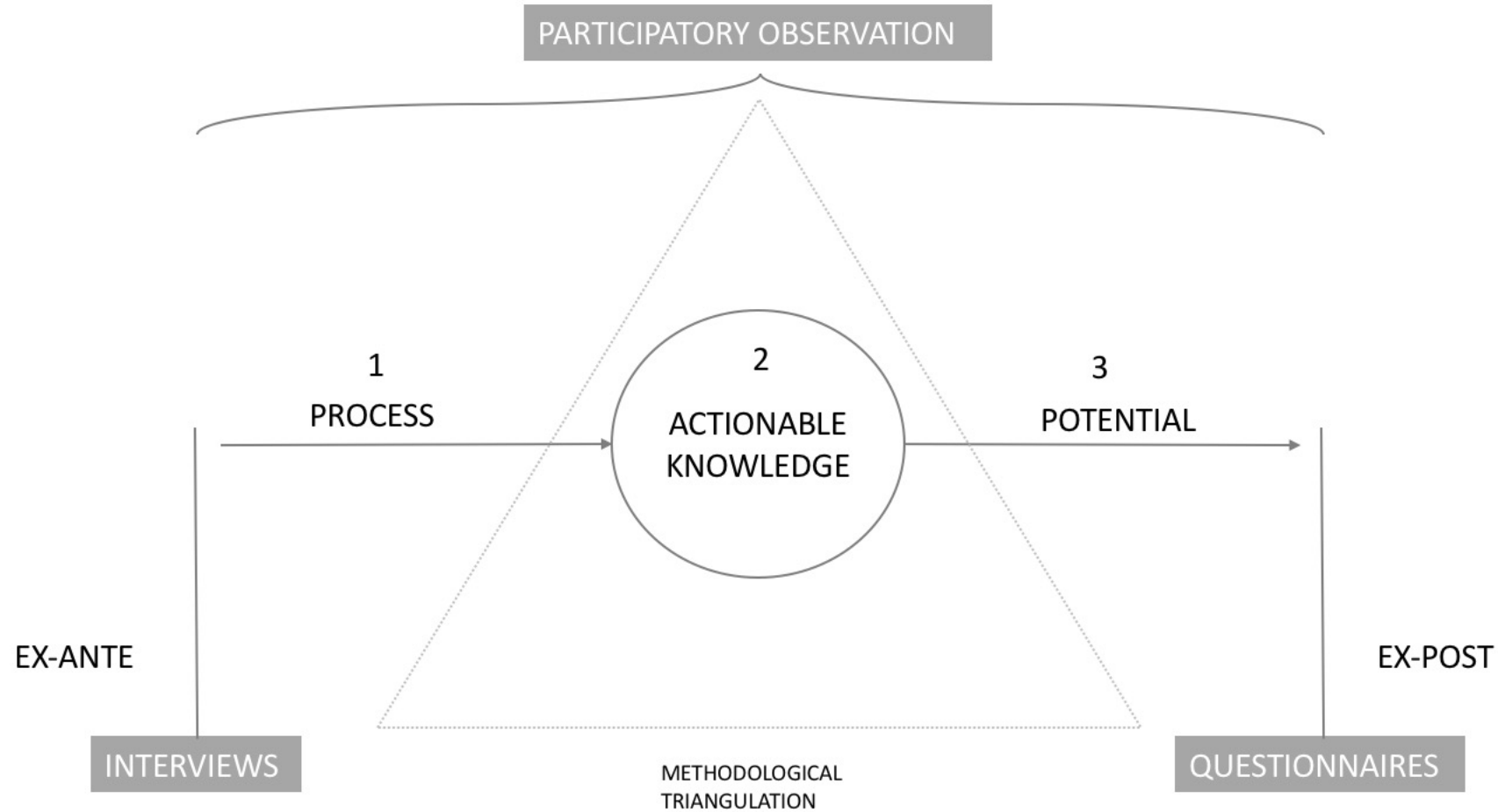


4.- Methods

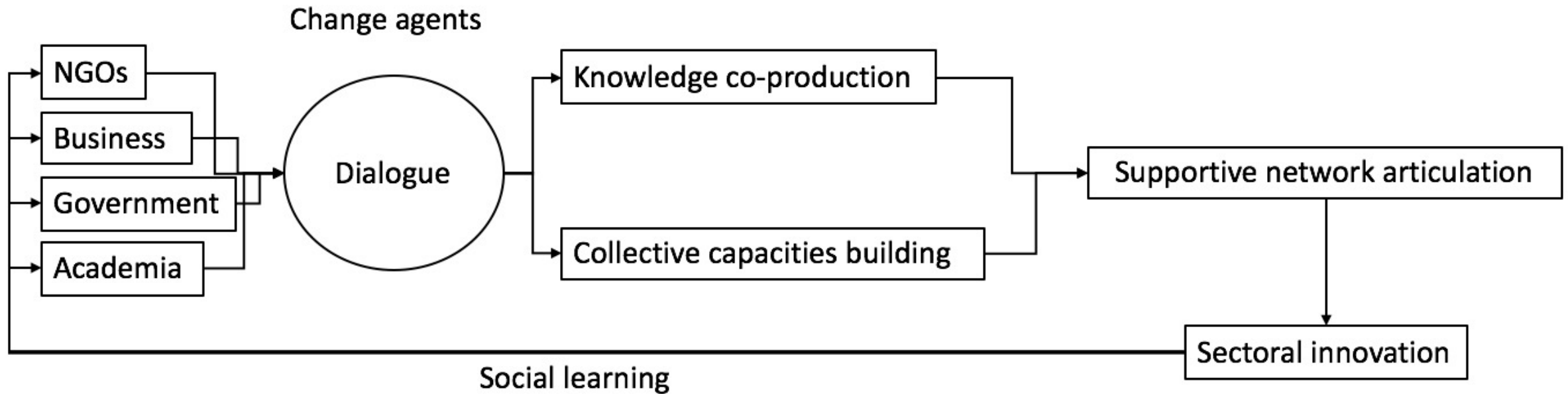
Methodological triangulation design



Triangulation

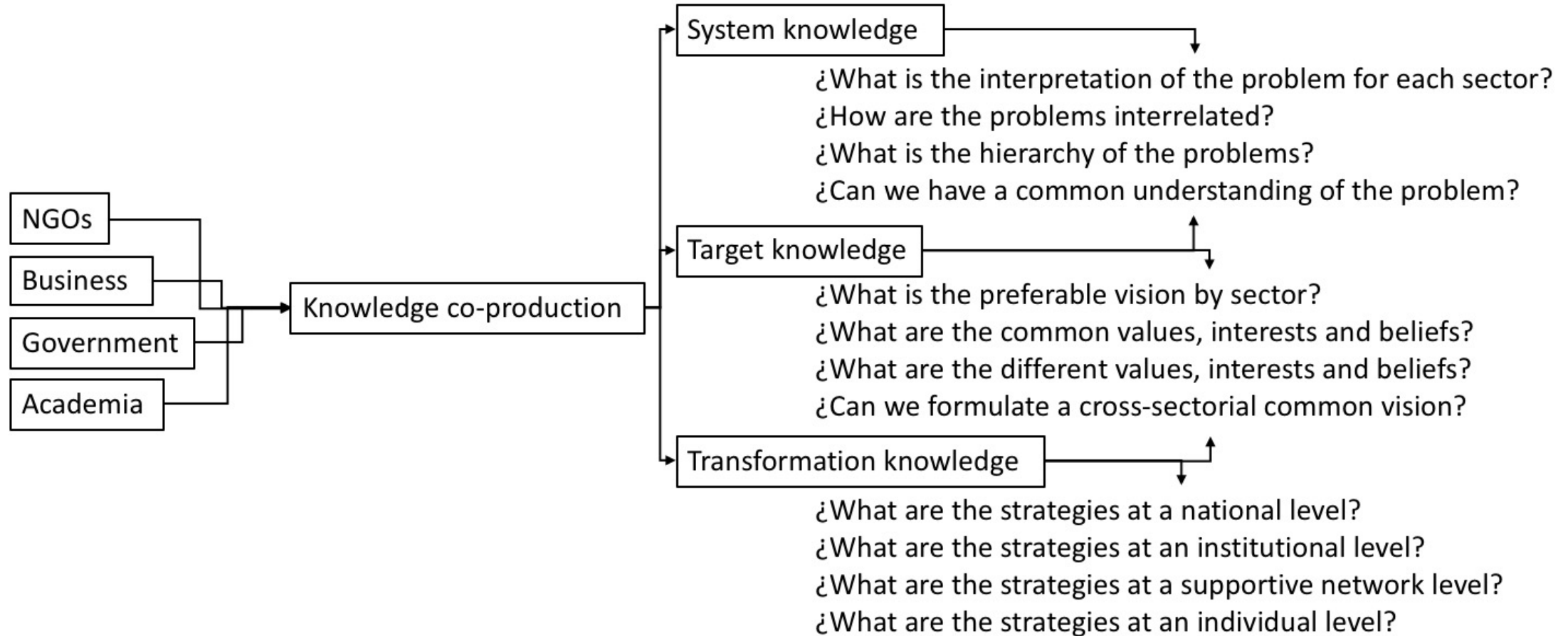


Participatory Process



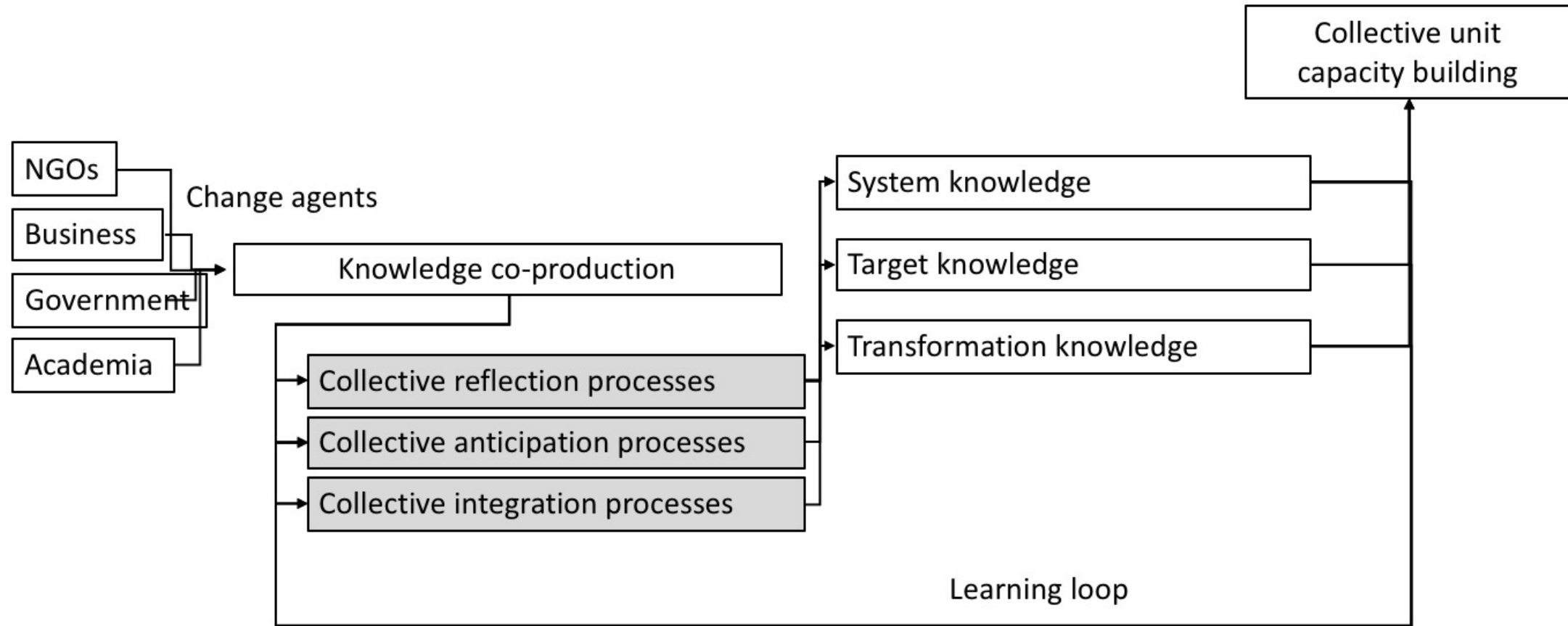


Knowledge co-production



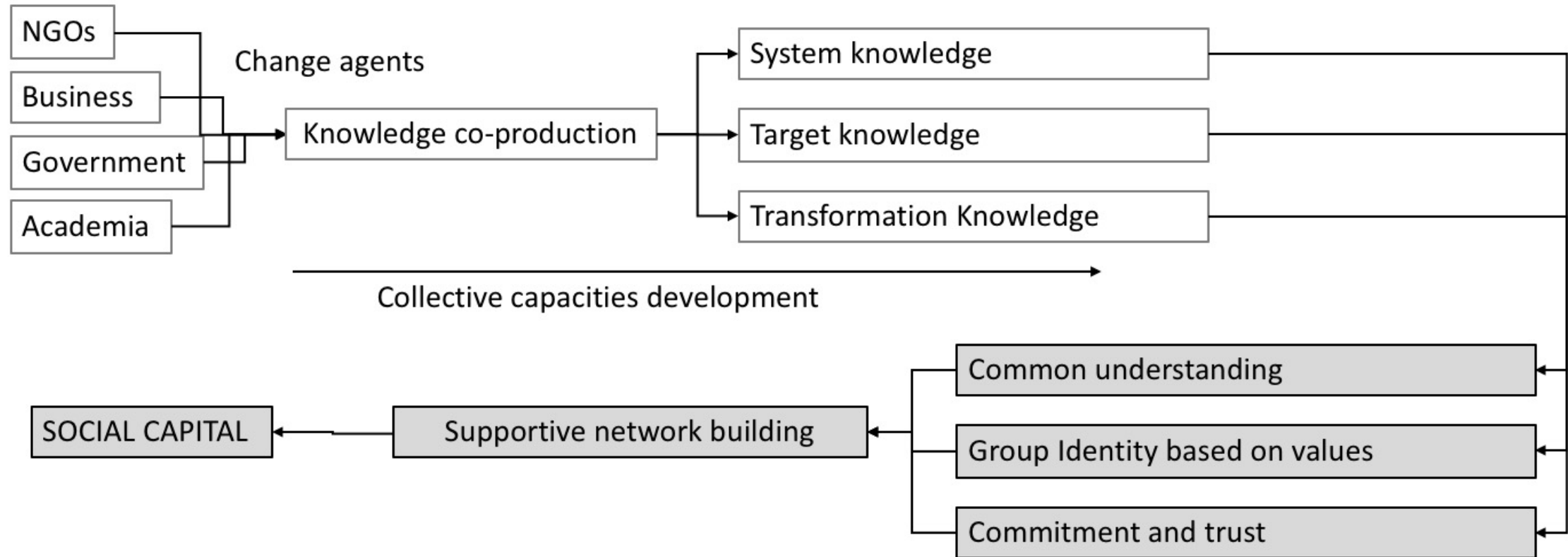


Capacities development

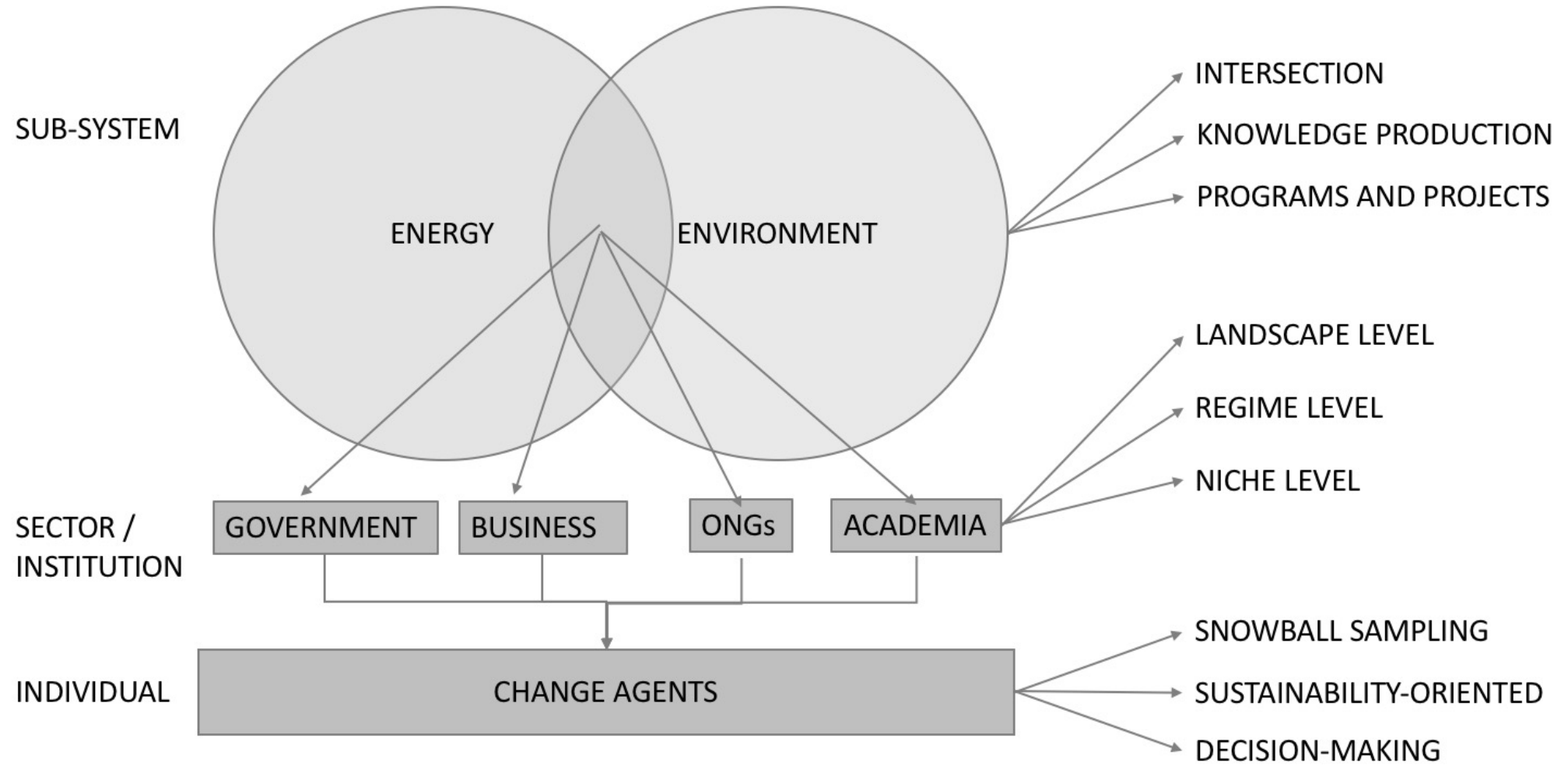




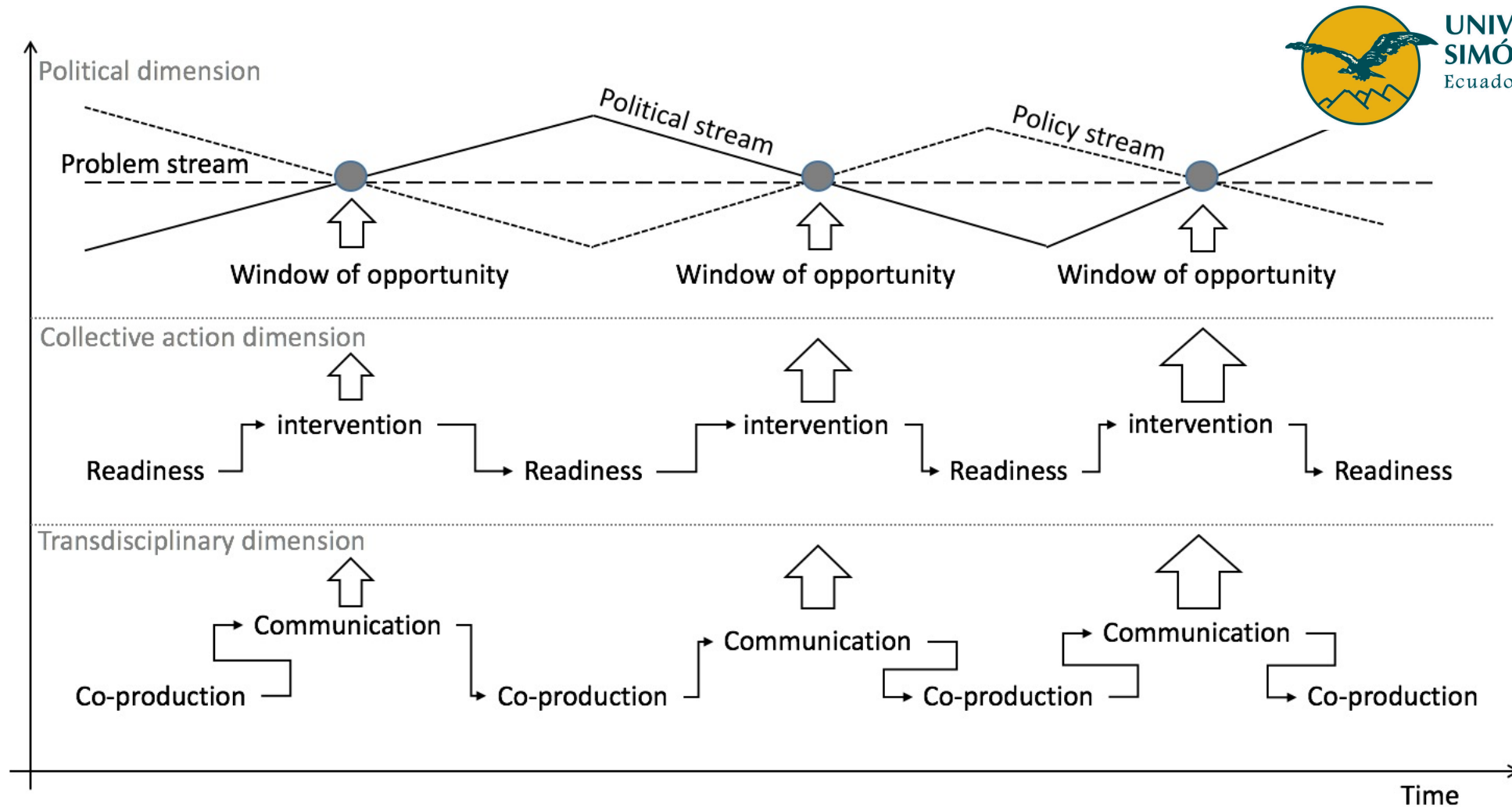
Supportive network articulation



Stakeholders Identification



Co-production, Readiness and Windows of Opportunity

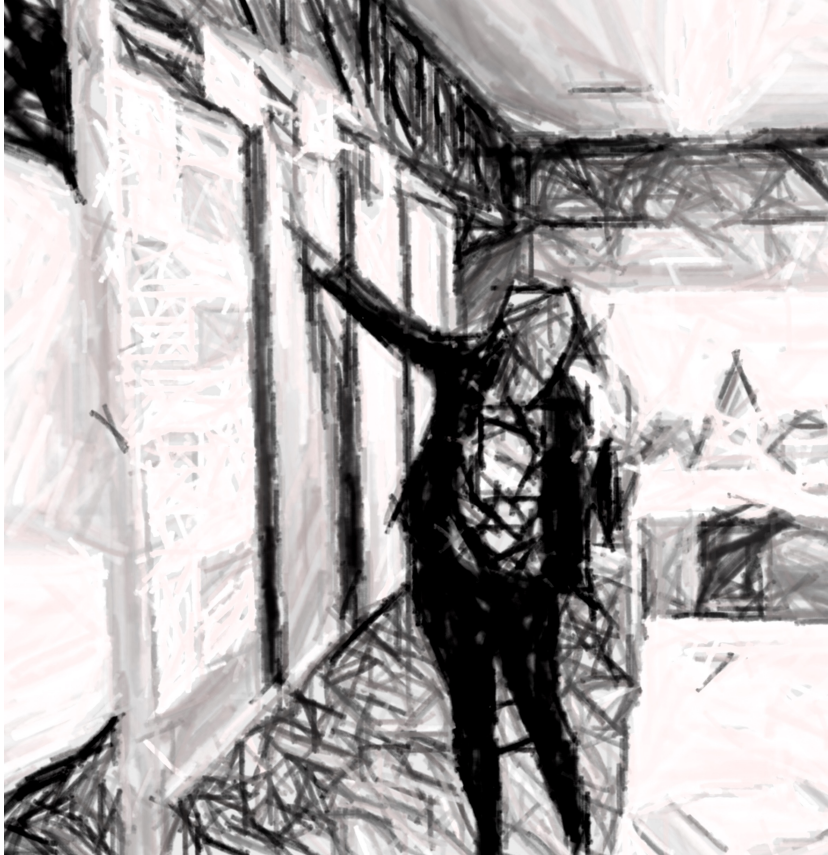


Source: Synchronising Multiple Policy Streams, (Based on Kingdon, 2003)

5.- Testing

Empirical application

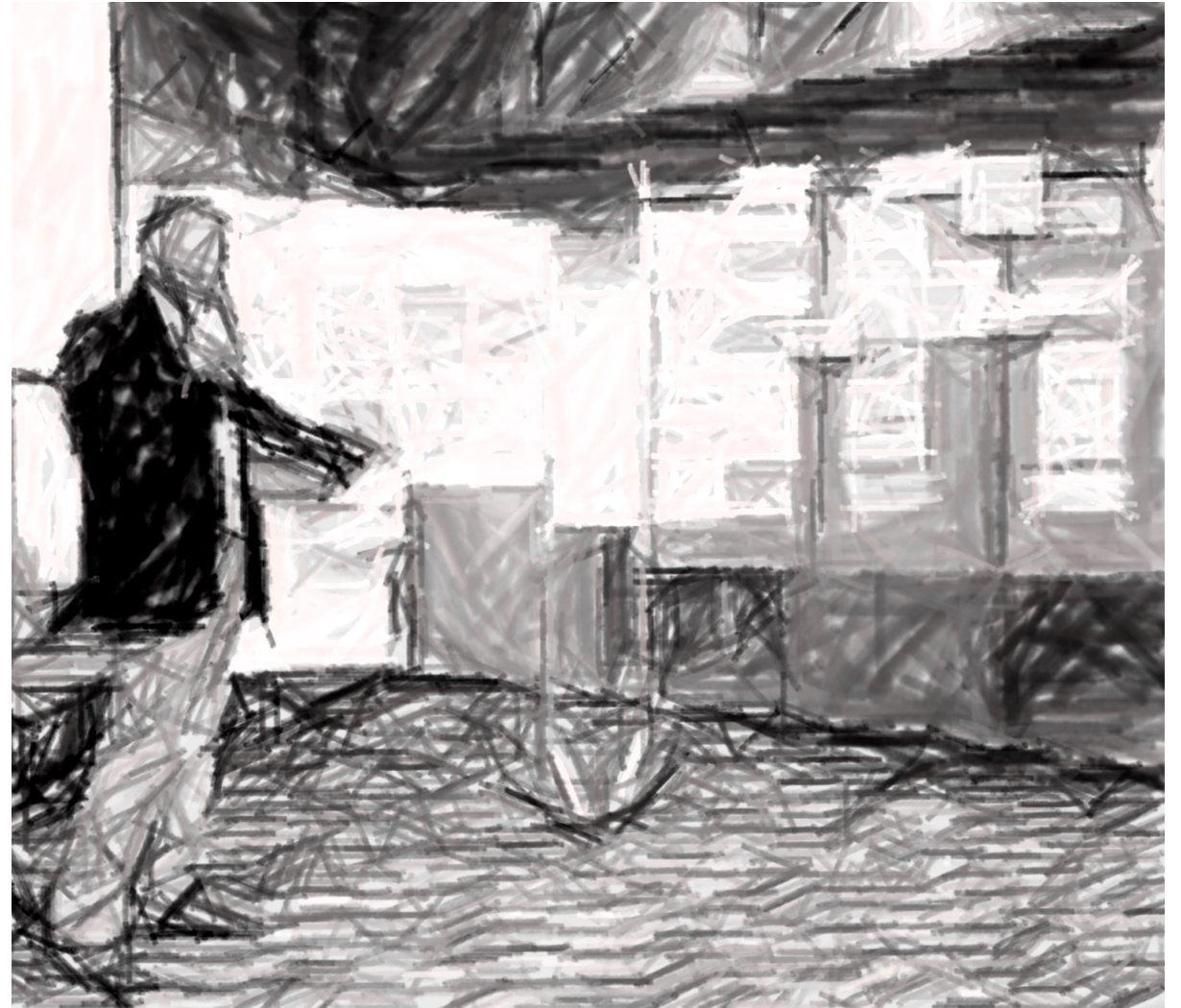
Energy Transition Laboratories





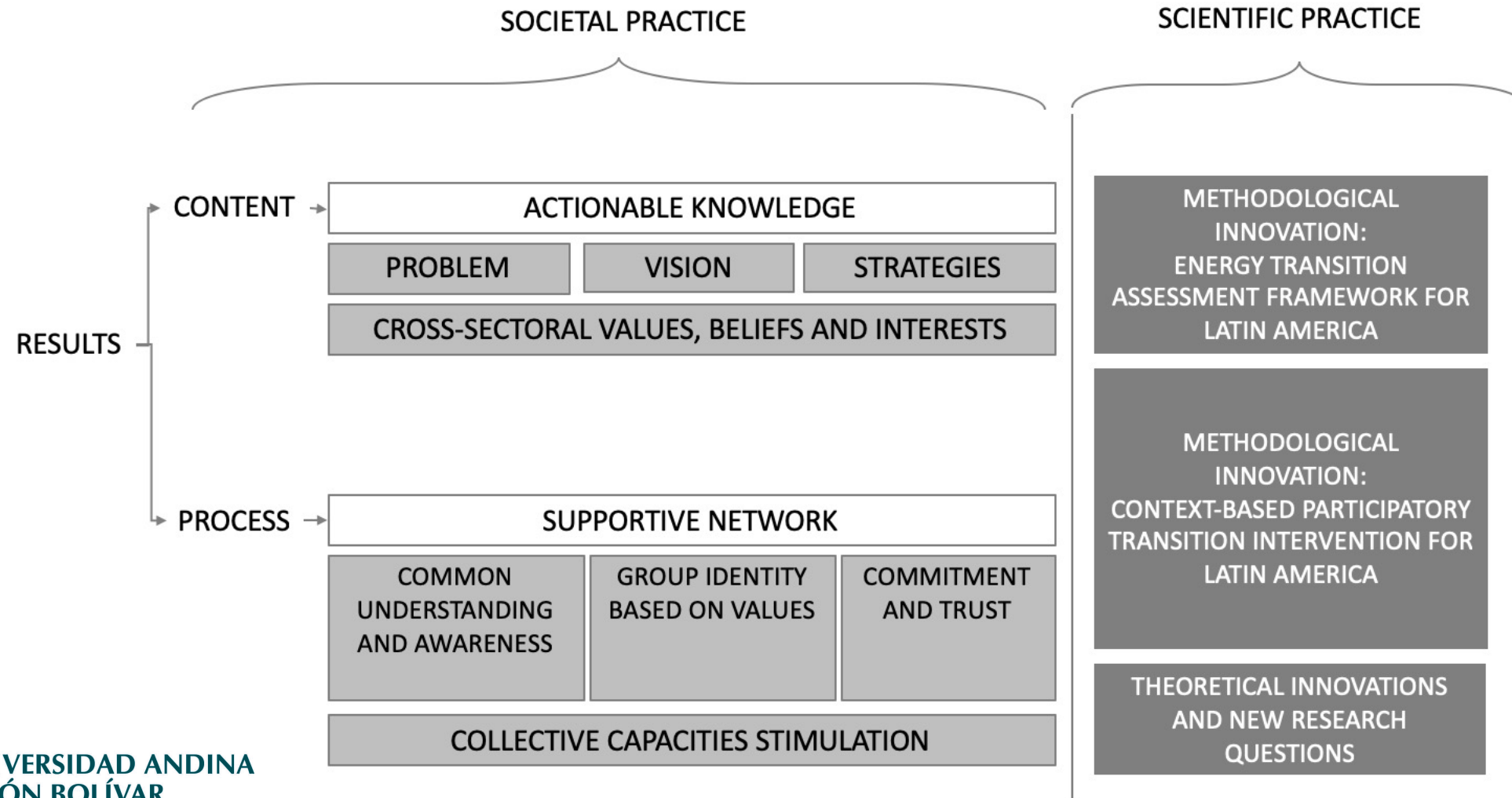
6.- Contributions

*Scientific- and societal-practice
subscription*

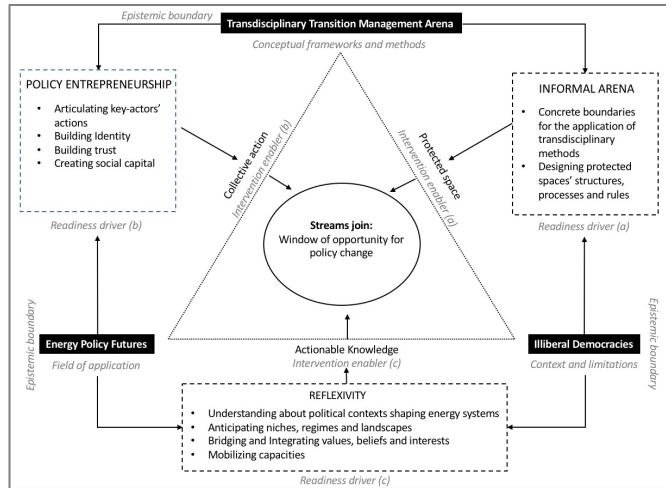




Societal- and Scientific-practice Expected Results



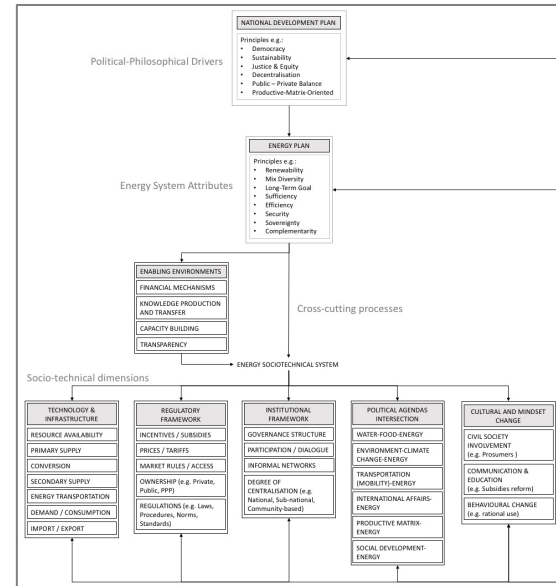
Expanded understanding of linkages between TM, TDR and Political Science



TTMA Conceptual Framework

Context-specific (illiberal democracies)

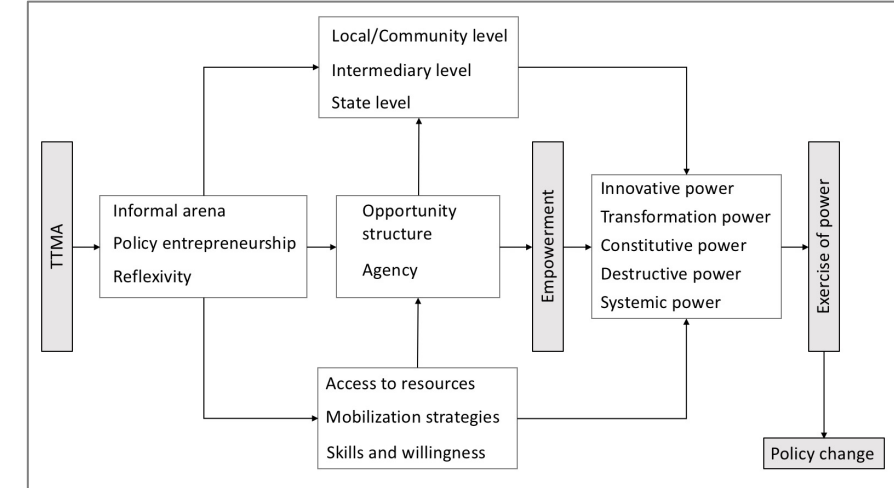
Key aspects of Transition Policy were identified and categorized



Analytical Transition Framework

Applicable in other sectors

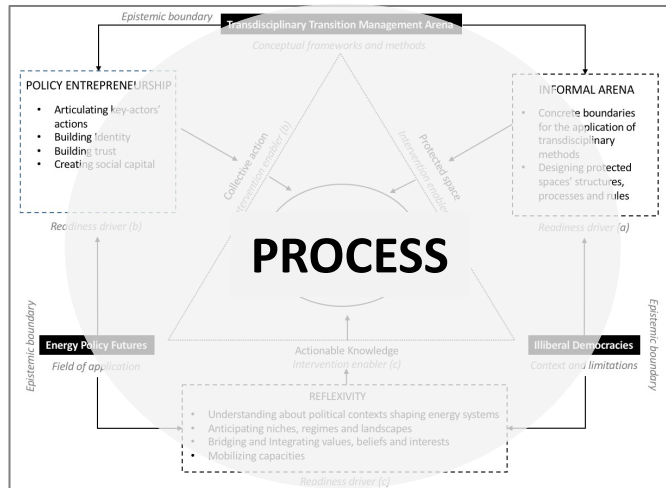
Expanded understanding of linkages between TTMA, Empowerment and Power



Empowerment Conceptual Framework

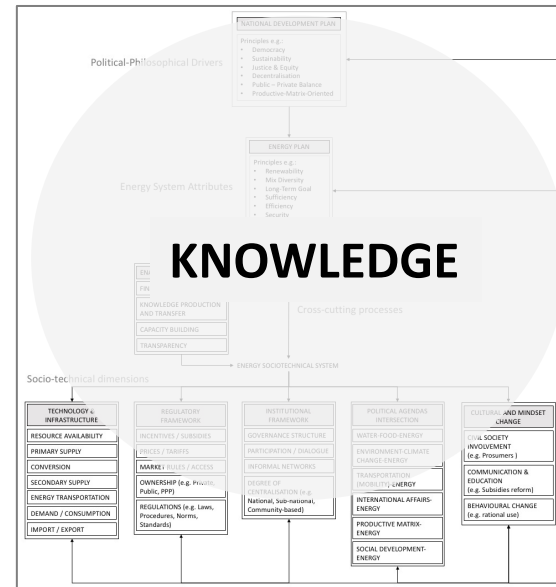
Precondition for the exercise of power

Expanded understanding
of linkages between TM,
TDR and Political Science



TTMA Conceptual Framework
Context-specific (illiberal democracies)

Key aspects of Transition
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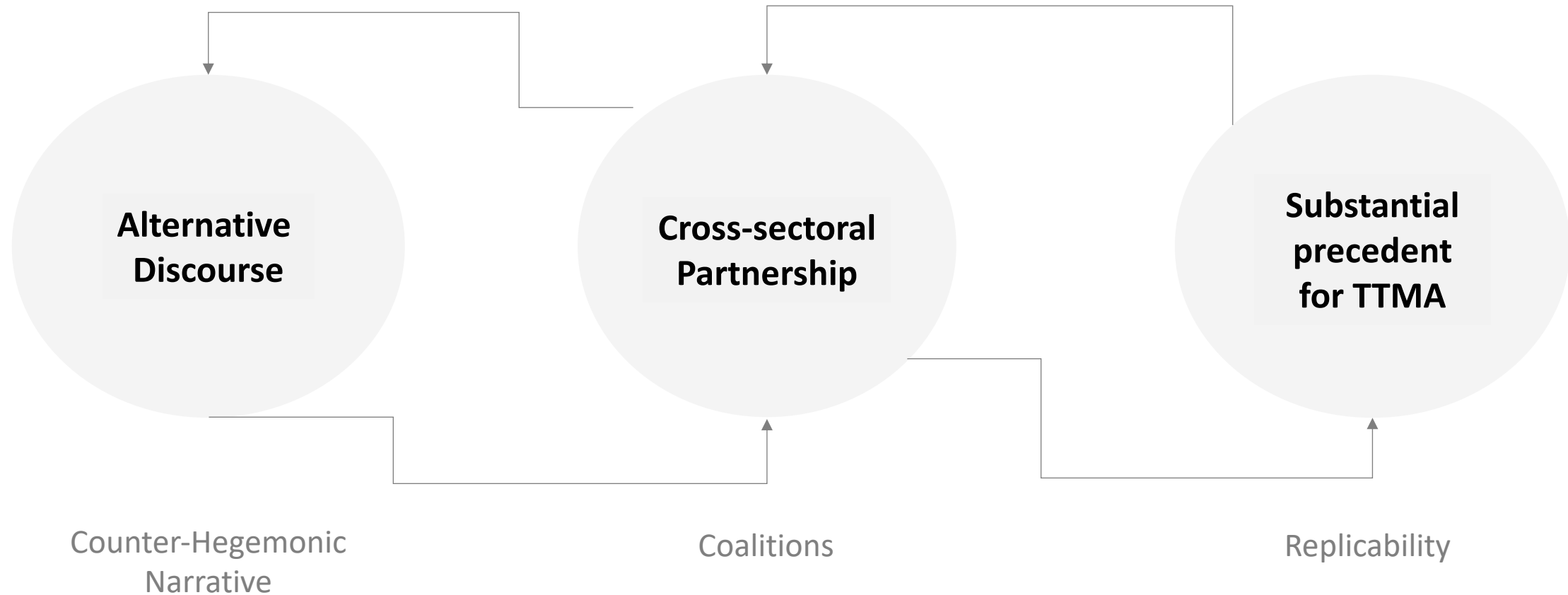


Analytical Transition Framework
Applicable in other sectors

Expanded understanding of
linkages between TTMA,
Empowerment and Power



Empowerment Conceptual Framework
Precondition for the exercise of power



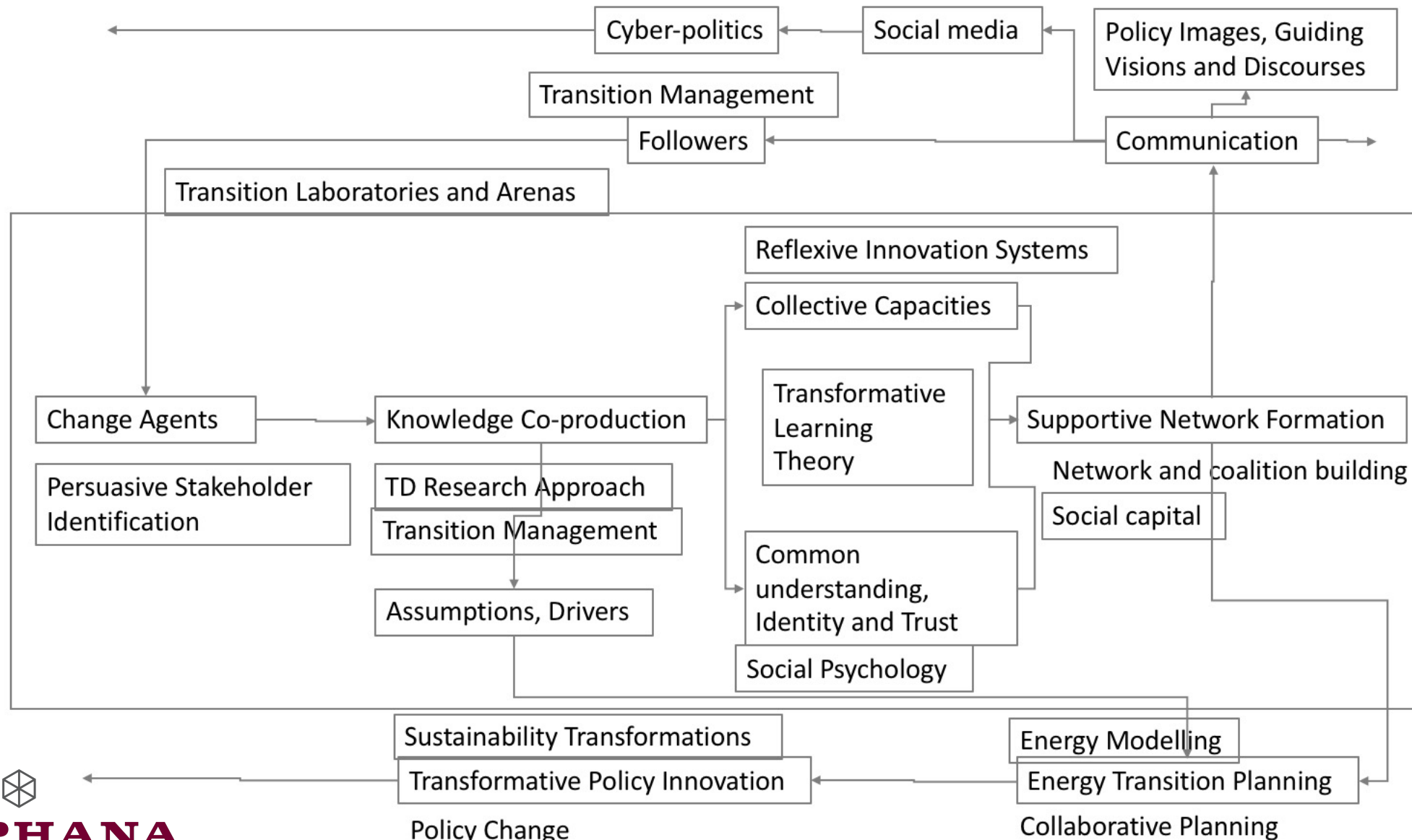


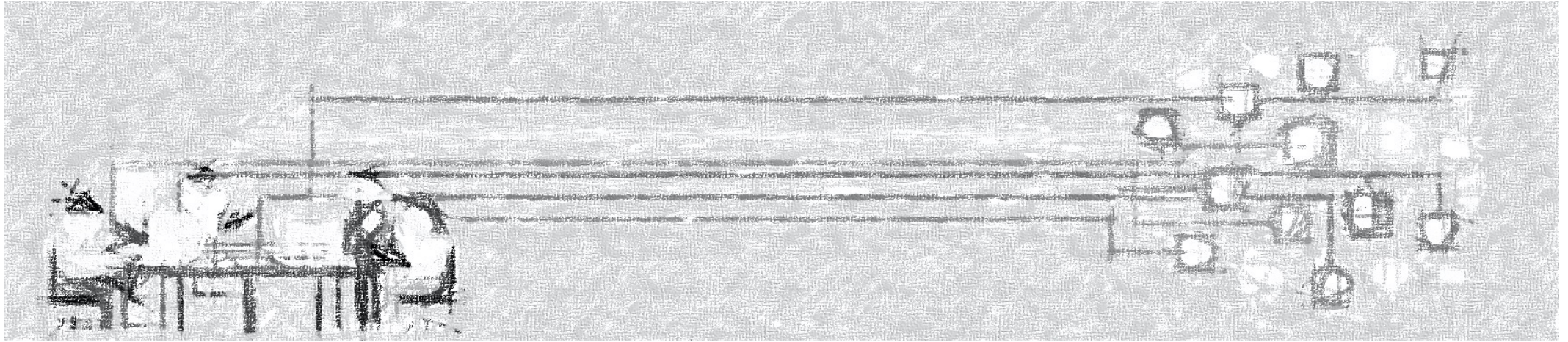
7.- Outlook

Future research



TTMA Interlinkages with other Disciplines and Processes





Designing knowledge-action networks for supporting energy focused
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*Interfacing science, policy and transformation processes towards sustainability in
Andean Countries.*

Thank you!