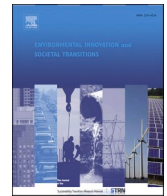




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Elite vs. mass politics of sustainability transitions

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ABSTRACT

While the past decade of transitions scholarship has increasingly acknowledged the centrality of politics, key questions on transition politics deserve further research. Here, we develop a heuristic framework from the discipline of political science that separates transition politics into the classic categories of interests, ideas, institutions, as well as elite and mass politics. Based on this framework, we conduct a review of existing transitions literature on politics. We find that some areas of our framework are better covered than others. For instance, while the institutional foundations of elite politics are relatively well researched, there are only few studies on interests and ideas in mass politics. In geographical and sectoral terms, research is biased toward energy transitions in Europe and North America. Based on our review, we map areas for future research we believe to be indispensable to better understand varieties of transition politics.

The next decade will be decisive for tackling urgent sustainability challenges, such as the climate crisis (IPCC, 2018). To address these challenges, ambitious and timely *sustainability transition policy* is needed (Rosenbloom et al., 2020) to accelerate the transition away from fossil-fuel based towards low-carbon economies and clean energy systems (Kivimaa and Kern, 2016; Schmidt and Sewerin, 2019). However, a policy-induced transition on such a scale is, by nature, subject to intense political conflicts. The past decade of transition research has increasingly acknowledged the centrality of such *politics* (Meadowcroft, 2011; Patterson et al., 2017), especially for the acceleration of transitions (Roberts et al., 2018). Scholars have introduced politics into central transitions frameworks, e.g. the multi-level perspective (Geels, 2014), strategic niche management (Smith and Raven, 2012) or technological innovation systems (Kern, 2015). Others have borrowed concepts from policy process theories (Kern and Rogge, 2018; Schmid et al., 2020), or used political science approaches to examine *transition politics* (Avelino et al., 2016; Brisbois, 2020; Hess, 2014; Lockwood, 2016).

While these contributions have improved our understanding of transition politics, key questions deserve further research, including: How can we explain different transition pathways and policy trajectories across countries, sectors, and technologies? What are inroads to increase the political feasibility of more ambitious, and accelerated, transition policy? Here, based on a heuristic framework developed from the discipline of *political science* and a review of existing transitions literature, we map areas for future research we believe to be indispensable to address these questions. The framework in Table 1 breaks down the abstract concept of

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politics into the three classic categories of *interests*, *ideas*, and *institutions* (Hall, 1997; Kern, 2011; Schmid, 2020). In simple terms, interests can be defined as the materialist, rationalist, or utility-maximizing motivation of actors. Ideas are claims about descriptions of the world, causal relationships, or the normative legitimacy of actions. Institutions can be defined as formal political entities or informal norms which guide the behavior of actors. The framework further distinguishes between *elite politics* and *mass politics*. This distinction refers to i) the number and degree of organization of political actors, as well as ii) the different loci of political activity by these actors (Trumbull, 2012; Varshney, 1998). For example, while the concept of elite politics captures lobbying by interest groups (relatively low number, highly organized, informal access to the policy process), mass politics includes, amongst others, voting behavior by citizens (high number, low organization, formal yet indirect access to the policy process).

Resulting from these typologies, we propose to heuristically separate the analysis of transition politics into six distinct *building blocks*. Each of these blocks – and their interaction – is the object of longstanding academic debates in political science, ranging from research on economic voting, epistemic communities, to social movements.

Past transitions research has engaged with selected aspects of these building blocks. Yet, our review of research articles published in *Environmental Innovation and Societal Transitions* suggests that studies on transition politics remain relatively sparse, accounting for approximately a tenth of all publications in the journal (63 out of 546 articles). The review also shows that some building blocks of transition politics have been addressed more frequently than others (Fig. 1A). Transition scholars engaged with *elite politics* to some extent, especially with elite institutions. For instance, several articles have examined how state institutions shape transitions (Johnstone and Newell, 2017; Lockwood, 2016), while others have analyzed the ideational underpinning of transitions at the elite level (Rosenbloom, 2016). In comparison, *mass politics* was rarely an object of study. Examples include work on identity in coal mining communities (Mayer, 2018), or the institutionalization of local sustainability initiatives (Barnes et al., 2018).

We believe that future transitions research can benefit from *broadening* its analytical focus to less-well covered building blocks – and their interaction. Especially mass politics, but also elite interests and ideas deserve more attention. Transitions research could also benefit from *further integrating* insights from political science. As shown in Fig. 1A, many transition studies do not make significant use of political science concepts. While some approaches have been integrated (e.g. historical institutionalism), important potential synergies remain between transitions literature and political science concepts and methods. To give but one example, an area ripe for further interdisciplinary exchange are the *political party* politics of transitions (Schmid, 2021). In Table 1, we listed selected references with the goal to stimulate such exchange.

Further, as shown in Fig. 1B, the review also indicates that most transitions research focuses on the energy sector, with a geographical emphasis on European countries and North America. Transitions research would benefit from expanding the *empirical scope* – both in terms of geography and sector, as well as in research collaborations with scholars in emerging economies. For instance, while we know a lot about the politics underlying energy transitions in developed countries, much less is known about transition politics in emerging countries such as India, Indonesia, Mexico or South Africa.

This gap is problematic because these countries are central in solving global sustainability challenges. Transferring insights from existing cases to these countries may not always be appropriate, and important additional empirical and conceptual insights on transition politics may emerge by broadening the geographic focus. The conditions for transition policy are vastly different depending on the political system, or level of economic development. For example, mass ideas (e.g. public opinion) in countries with low democratic accountability are unlikely to be reflected in transition policy.

Research on transition politics could also benefit from diversifying its sectoral focus. While there are good reasons to focus on energy, sectors such as mobility or agri-food are also key for solving sustainability challenges, and may feature very different political dynamics. For example, mass interests and ideas may matter more in mobility or agri-food than in the energy sector; measures such as reducing meat consumption may affect the daily lives of citizens more directly than switching electricity generation to renewables.

Crucially, to assess the relative importance and nature of the building blocks of transition politics we need more *comparative research*. Approximately a fifth of reviewed transitions articles have a comparative research design. Yet, only through such designs and a more diversified research agenda can we uncover what we would call *varieties of transition politics*. Synergies with political science may help facilitate such research, conceptually, but also regarding the methodological toolbox and data sources used. For example, transitions scholars may draw on existing studies in the field of *comparative* environmental politics (Bättig and Bernauer, 2009; Kammerlander and Schulze, 2021; Steinberg and VanDeveer, 2012). Finally, novel insights resulting from these synergies could produce more politically informed policy advice and thus increase the chances of influencing political decision-making.

Table 1

Heuristic framework to examine six distinct building blocks of transition politics. Including a *non-exhaustive* list of issues to illustrate each building block, with selected references.

	Interests	Ideas	Institutions
Elite politics	Interest groups (e.g., Moe, 2010) Business actors (e.g., Meckling, 2011)	Political agendas (e.g., Baumgartner and Jones 2013) Epistemic communities (e.g., Haas 1992)	Veto players (e.g., Tsebelis, 2002) Patterns of democracy (e.g., Lijphart, 2012)
Mass politics	Economic voting (e.g., Stokes, 2016) Social acceptance (e.g., Wüstenhagen et al., 2007)	Public opinion (e.g., Prakash and Bernauer, 2020) Knowledge and perceptions (e.g., Aklın and Urpeläinen, 2014)	Social movements (e.g., Mcadam et al., 2001) Societal norms (e.g., Inglehardt, 1990)

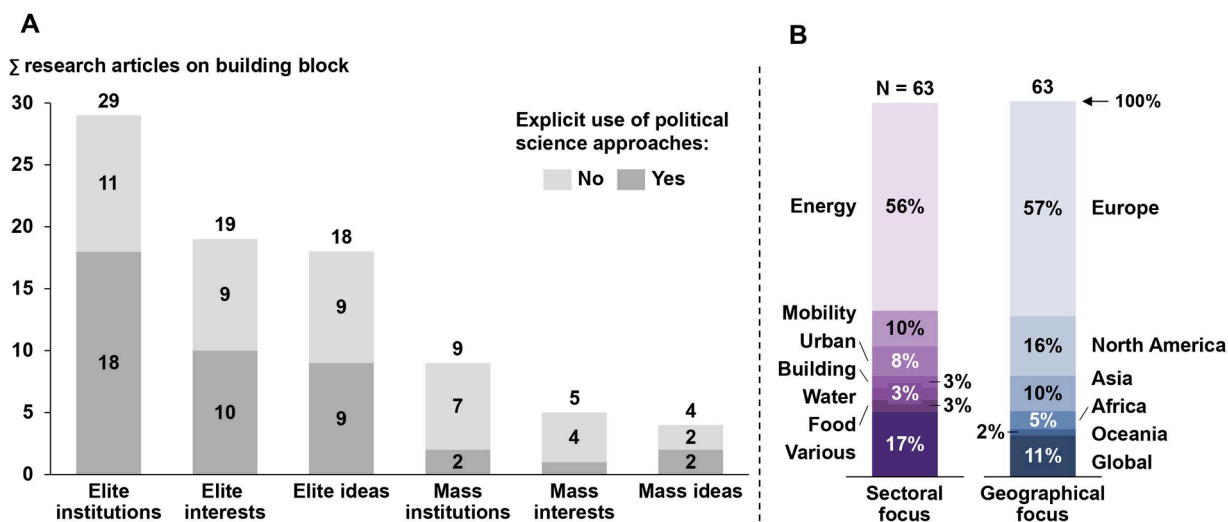


Fig. 1. Review of existing studies on transition politics published in *Environmental Innovation and Societal Transitions*, on each of the six building blocks (A), and split by sectoral and geographical focus (B). Based on coding of 63 EIST research articles published from 2011 to May 2021, based on qualitative judgement. Coding of *primary* research focus, but more than one category/article possible. Articles selected with the search terms “politics OR political” in title, abstract, or keywords (85 hits), further narrowed down to 63 articles (e.g. excluding comments).

Declaration of Competing Interest

The authors declare no conflict of interest.

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References

- Aklin, M., Urpelainen, J., 2014. Perceptions of scientific dissent undermine public support for environmental policy. *Environ. Sci. Policy* 38, 173–177.
- Avelino, F., Grin, J., Pel, B., Jhagroe, S., 2016. The politics of sustainability transitions. *J. Environ. Policy Plan.* 18, 557–567.
- Barnes, J., Durrant, R., Kern, F., MacKerron, G., 2018. The institutionalisation of sustainable practices in cities: how initiatives shape local selection environments 29, 68–80.
- Baumgartner, F.R., Jones, B.D., 2013. *Agendas and Instability in American Politics*, Second ed. University of Chicago Press, Chicago.
- Brisbois, M., 2020. Shifting political power in an era of electricity decentralization: rescaling, reorganization and battles for influence. *Environ. Innov. Soc. Transit.* 36, 49–69.
- Bättig, M.B., Bernauer, T., 2009. National institutions and global public goods: are democracies more cooperative in climate change policy? *Int. Organ.* 63, 281–308.
- Geels, F.W., 2014. Regime resistance against low-carbon transitions: introducing politics and power into the multi-level perspective. *Theory Cult. Soc.* 31, 21–40.
- Haas, P.M., 1992. Introduction: epistemic communities and international policy coordination. *Int. Organ.* 46, 1–35.
- Hall, P.A., 1997. The role of interests, institutions, and ideas in the comparative political economy of the industrialized nations. *Comparative Politics: Rationality, Culture, and Structure*. Cambridge University Press, Cambridge.
- Hess, D.J., 2014. Sustainability transitions: a political coalition perspective. *Res. Policy* 43, 278–283.
- Inglehart, R., 1990. *Culture Shift in Advanced Industrial Society*. Princeton University Press, Princeton.
- IPCC, 2018. *Global Warming of 1.5°C*, International Panel on Climate Change Special Report 15. UNFCCC, Bonn.
- Kammerlander, A., Schulze, G.G., 2021. Political-economic correlates of environmental policy. *Environ. Res. Lett.* 16, 024047.
- Kern, F., 2015. Engaging with the politics, agency and structures in the technological innovation systems approach. *Environ. Innov. Soc. Transitions* 16, 67–69.
- Kern, F., 2011. Ideas, institutions, and interests: explaining policy divergence in fostering ‘system innovations’ towards sustainability. *Environ. Plan. C* 29 (6), 1116–1134.
- Kern, F., Rogge, K.S., 2018. Harnessing theories of the policy process for analysing the politics of sustainability transitions: a critical survey. *Environ. Innov. Soc. Transit.* 27, 102–117.
- Kivimaa, P., Kern, F., 2016. Creative destruction or mere niche support? Innovation policy mixes for sustainability transitions. *Res. Policy* 45, 205–217.
- Lijphart, A., 2012. *Patterns of democracy: government forms and performance in thirty-six countries*. Yale University Press, New Haven.
- Johnstone, P., Newell, P., 2017. Sustainability transitions and the state. *Environ. Innov. Soc. Transit.* 27, 72–82.
- Lockwood, M., 2016. Creating protective space for innovation in electricity distribution networks in Great Britain: the politics of institutional change. *Environ. Innov. Soc. Transit.* 18, 111–127.
- Mayer, A., 2018. A just transition for coal miners? Community identity and support from local policy actors. *Environ. Innov. and Soc. Transit.* 28, 1–13.
- Meadowcroft, J., 2011. *Engaging with the politics of sustainability transitions*. Environ. Innov. Soc. Transit. 1, 70–75.
- Meckling, J., 2011. *Carbon Coalitions: Business, Climate Politics, and the Rise of Emissions Trading*. MIT Press, Cambridge, MA.
- Moe, E., 2010. Energy, industry and politics: energy, vested interests, and long-term economic growth and development. *Energy* 35, 1730–1740.

- Patterson, J., Schulz, K., Vervoort, J., van der Hel, S., Widerberg, O., Adler, C., Hurlbert, M., Anderton, K., Sethi, M., Barau, A., 2017. Exploring the governance and politics of transformations towards sustainability. *Environ. Innov. Soc. Transit.* 24, 1–16.
- Prakash, A., Bernauer, T., 2020. Survey research in environmental politics: why it is important and what the challenges are. *Environ. Polit.* 29, 1127–1134.
- Roberts, C., Geels, F.W., Lockwood, M., Newell, P., Schmitz, H., Turnheim, B., Jordan, A., 2018. The politics of accelerating low-carbon transitions: towards a new research agenda. *Energy Res. Soc. Sci.* 44, 304–311.
- Rosenbloom, D., 2016. Framing low-carbon pathways: a discursive analysis of contending storylines surrounding the phase-out of coal-fired power in Ontario. *Environ. Innov. Soc. Transit.* 27, 129–145.
- Rosenbloom, D., Markard, J., Geels, F.W., Fuenfschilling, L., 2020. Opinion: why carbon pricing is not sufficient to mitigate climate change—and how “sustainability transition policy” can help. *Proc. Natl. Acad. Sci.* 117 (16), 8664–8668.
- Schmid, N., Sewerin, S., Schmidt, T.S., 2020. Explaining advocacy coalition change with policy feedback. *Policy Stud. J.* 48 (4), 1109–1134.
- Schmid, N., 2020. *The Politics of Technological Change – Case Studies from the Energy Sector*. ETH Zürich.
- Schmid, N., 2021. A comparative and dynamic analysis of political party positions on energy technologies. *Environ. Innov. Soc. Transit.* 39, 206–228.
- Schmidt, T.S., Sewerin, S., 2019. Measuring the temporal dynamics of policy mixes – an empirical analysis of renewable energy policy mixes’ balance and design features in nine countries. *Res. Policy* 48, 1–13.
- Smith, A., Raven, R., 2012. What is protective space? Reconsidering niches in transitions to sustainability. *Res. Policy* 41 (6), 1025–1036.
- Steinberg, P., VanDeveer, S.D., 2012. *Comparative Environmental Politics – Theory, Practice, and Prospects*. MIT Press, Cambridge, MA.
- Stokes, L.C., 2016. Electoral backlash against climate policy: a natural experiment on retrospective voting and local resistance to public policy. *Am. J. Pol. Sci.* 60, 958–974.
- Trumbull, G., 2012. *Strength in Numbers: the Political Power of Weak Interests*. Harvard University Press, Cambridge, MA.
- Tsebelis, G., 2002. *Veto Players: How Political Institutions Work*. Princeton University Press, Princeton.
- Varshney, A., 1998. Mass politics or elite politics? India’s economic reforms in comparative perspective. *J. Policy Reform* 2 (4), 301–335.
- Wüstenhagen, R., Wolsink, M., Bürer, M.J., 2007. Social acceptance of renewable energy innovation: an introduction to the concept. *Energy Policy* 35, 2683–2691.