

Designing policies for transformative recovery and adaptation after shocks

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Climate change impacts will likely pose substantive shocks to social, economic and ecological systems in the near future. At some point, these shocks will overstretch current individual and collective coping capacities. However, catastrophic shocks may enable the transformation to decarbonisation and resilience of our society, if the rebuilding phase after an event not only quickly restores the pre-shock situation. An integrated perspective on climate change adaptation and mitigation policies ('adaptigation') during recovery could accelerate transformation processes and leverage synergies.

The Build Back Better project illustrates how to use shocks for a transformative change to lower carbon emissions, higher climate resilience and encompassing adaptation policy. The project analyses the interaction between the individual actors affected by a shock, and the policy instruments in place before and after a shock. The Strategy Shock Implementation Reaction (SSIR) framework illustrates how a shock converts an intended into an implemented policy strategy and how this conversion might influence the individual reactions.



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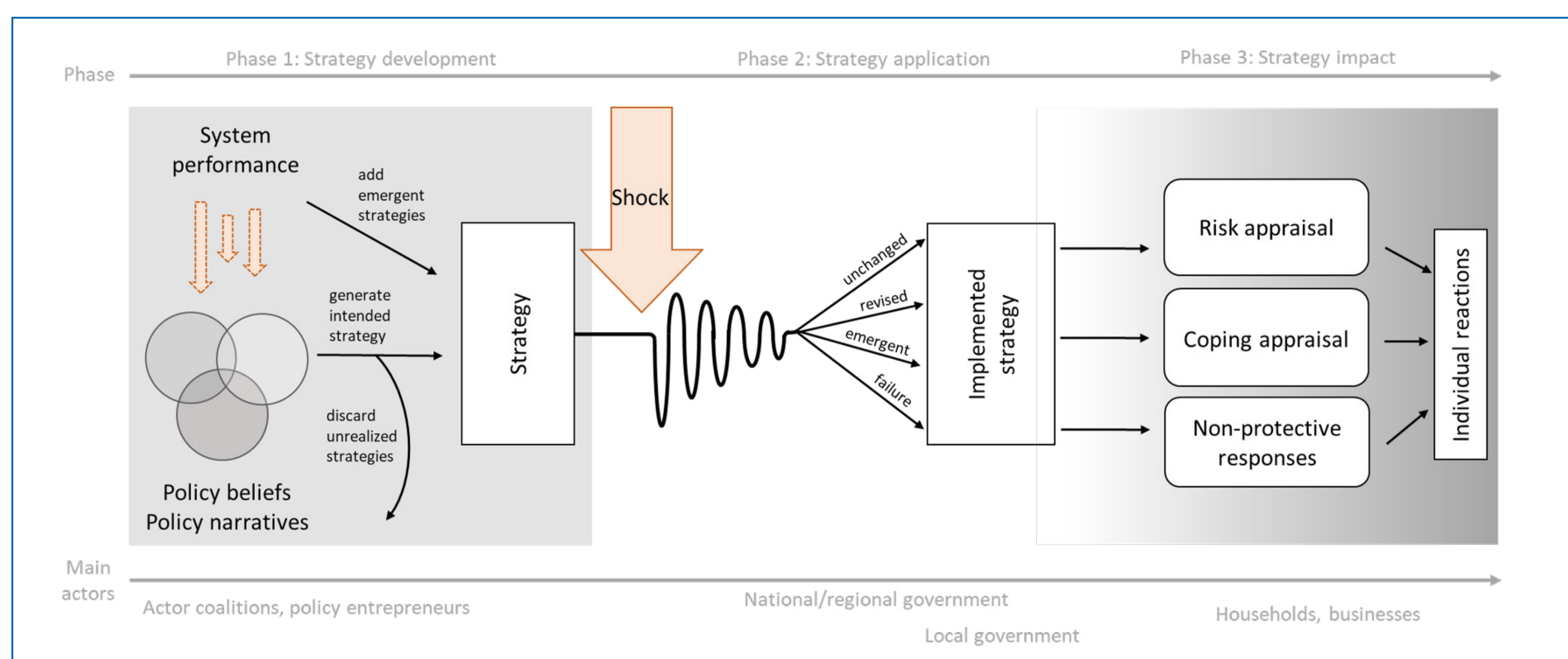
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Applied methods

Based on the SSIR framework, three case studies in Austria dealing with systemic shocks were investigated by

- Policy document analysis and analysis of funding guidelines
- 42 semi-structured interviews with households, farmers and hotel owners
- 28 semi-structured interviews with regional stakeholders
- „Over-the-fence coding“ of 123 buildings and 30 survey questionnaires

Overarching findings

- No awareness or lacking integration of mitigation and adaptation
- Shocks indeed function as policy filters, but strategies are unaffected by shocks (except: droughts)
- High divergence between worldviews of policymakers and affected households/farmers/hotel owners

Three shocks – Three case studies – Built Back Better?

Examples for explanatory factors to individual reactions to shocks

	Riverine flooding in Eferding Basin	Multi-seasonal droughts in Seewinkel	Post-Covid tourism in Tyrol
Transformation Build back better	Strict efficiency standards for new buildings	Possibilities and costs for mechanisation Drought resistance of cultivated crops/varieties	Energy-efficient modernisation and diversification of tourism products Twice the amount for green investments
Maladaptation Build back short-sighted	Pre-flood building permits cannot be revoked Farmers may build outside designated zones	Ongoing use of already existing irrigation systems Lack of planning certainty blocks improvement of irrigation systems	Adaptation measures not politically encouraged, not a focus of subsidies, not considered necessary by hotel owners
Backfire Build back worse	Compensate the emotional loss of the previous residence by building the perfect home Future domestic needs of <10 years considered	Short term perspective on currently high market prices for crops with high water demand Yield maximisation	Rushed implementation of subsidies and funding for investments that create energy-intensive new offers
Inaction Build back as before	Municipal actors need to compensate absent policy integration on higher levels Catastrophe fund payments preclude improvements	Irrigation technically not feasible in case of dispersed, small plots Subsidies for drought insurance	No overview and guidance for existing subsidies and financial aid schemes Time lag for granting green investment subsidies



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