Louisa Rosemary Parks & Bartek Goldmann
University of Trento

Working paper for the TRANSFORM project (Driving Transformative Environmental Governance)[1]

Mechanisms to drive transformative change in environmental governance

1. Transformation in environmental governance – a non-exhaustive literature review

The idea that we need to transform environmental governance is the subject of growing consensus given the failures of existing models to slow or stop environmental problems. Scholars from a range of disciplines, institutional actors, and civil society actors alike argue that a transformation is necessary to respond better to climate change, biodiversity loss and other environmental problems in fair and equitable ways (e.g. Biermann *et al.* 2012, Chaffin *et al.* 2016, Forest Peoples Programme 2020, Scoones *et al.* 2020, van Oers *et al.* 2021, Visseren-Hamakers *et al.* 2021, Convention on Biological Diversity 2022).

A broad definition of 'transformation' emerges from existing literature around an idea of fundamental, radical, or axial change which refers to the need to change the underlying logics or norms or environmental governance. Axial change, following O'Brien *et al* (2013), for example, is understood as 'moving to a different way of thinking about the issues'. Changing our ways of thinking will in this view lead to changed systems of environmental governance that are more effective, inclusive, and just: standard elements of good governance that are not currently being achieved (Bennett and Satterfield 2018) due to the mismatch with the norms that underpin environmental governance. Rather than acting first and foremost to slow environmental degradation, it is argued that current governance systems prioritise economic growth instead. For example, central concepts in environmental governance including sustainable development, green economy, and more recently decarbonisation, place an economic growth imperative centre stage (e.g. Imperatore and Leonardi 2023).

Critiques of existing environmental governance models thus point to its normative roots or underlying worldview to explain inefficient and unfair governance today. This worldview separates 'nature' or the environment from 'culture' or human society (e.g. Sievers-Glotbach & Tschersich 2019; Plumwood, 2004). This Cartesian divide sees nature, or the environment, as a set of resources for human society and its economic growth, a resource that with added value from human labour provides the basis for private property following Locke (e.g. Bavikatte 2014). This basic view of the world then becomes a founding feature of governance approaches and accompanying political discourses that place value with economic growth (based on private property). In addition to producing environmental degradation, nature/culture divide worldviews have historically driven inequalities both between and within societies and states along lines of gender, ethnicity, class, and especially through colonial conquest (e.g. Brand & Wissen 2021; Martinez-Alier, Imperatore and Leonardi 2023). In addition, following theories of discursive power, this worldview closes off many options for different governance approaches that critical scholars argue may be more effective in fighting environmental degradation of all types in fair and inclusive ways (Adger *et al*. 2001, Natarajan & Khoday. 2014 Uggla 2010, van Oers *et al*. 2021).

While many of the more recent arguments for transformative environmental governance share a degree of attention to a shift in norms or worldviews, they differ in terms of how they envision the details of what transformation will look like. For the purposes of the project, a broad difference can be drawn between more procedural accounts which emphasise institutional processes and the 'input' side of transformation, and accounts that focus more on what a transformed, and therefore transformative, governance model should produce in terms of its 'outputs', as well as whose claims and demands this

[1] Funded by the European Union – Next Generation EU, in the framework of PRIN 2022 PNRR Call, project P2022R3NKJ - CUP E53D23019390001. PI Louisa Parks.

model should respond to. The former emphasises which different actors should contribute to transformation via specific processes, while the latter emphasises which environmental and social goods should be secured for whom in a transformed model of environmental governance. There is necessarily overlap here: both types of accounts devote attention to actors whose participation and inclusion is seen as key to challenging underlying worldviews.

1.1. Examples of procedural accounts of transformation

Chaffin and colleagues (2016) trace an idea of transformative governance, defined as 'an approach to respond to, manage, and trigger regime shifts' in socio-ecological systems (SES) (2016, p. 399) at the crossroads of two literatures. The first from ecology is adaptive management, which aims to create resilience through flexible governance including space for learning and feedback loops, while the second is from sustainability transitions, which marries the goal of resilience with that of fundamental system change and attention to the actors and institutional conditions necessary for change. This approach focuses on local level actors as sources for change. Local actors implement innovative management approaches in 'niches', and these then have the potential to spread, cluster and scale up. To allow this to happen, institutions need to change in order to better recognise innovation. The original impetus for innovation here is an environmental problem: the perception of a SES as 'untenable' (ibid). This either drives local actors to make niche innovations, or drives institutional interventions (also termed deliberate destabilisation) to encourage niche innovations: who drives the change thus does not matter for the outcome. Institutions are key for either enabling or hindering the transformative potential of local innovations: they can either create spaces for change (van Oers *et al.* 2021), facilitate their spread, or fail to do so, with the effect of limiting the transformation in space and time (Chaffin *et al.* 2016). In this tradition, transformation appears as a technical process, initiated by the perception and understanding that socio-ecological systems are failing. Transformation takes the guise of governance that is flexible and adapts to tackle these failures in one of two ways: by emulating and spreading local level innovations, or by creating incentives for solutions. Institutions appear neutral in this reading, rather than shaped and limited by norms.

Visseren-Hamakers and colleagues (2021) build on perspectives from international law, and take more heed of constraints in the design of multilateral governance institutions and how these should be changed. They focus on biodiversity, arguing that transformative governance institutions must be integrative, inclusive, adaptive, and pluralist (ibid: 22). Integrative and adaptive governance are intended as solutions to inertia and fragmentation in current governance models. Integrative governance should avoid negative externalities, where a solution to an environmental problem in one area merely shifts the problem elsewhere. The fragmentation of environmental governance across separate legal regimes contributes to this, and can itself be related to the nature/culture divide and a view of the environment as a set of resources that may be governed in discreet regimes. Integrative governance thus speaks to the idea of a need to shift underlying worldviews. Similarly to the transitions literature, this view also underlines that transformative governance should be adaptive, i.e. agile and reflexive. In addition, institutions should make space for a range of voices by being inclusive. A broad range of non-state actors should be included, but particular attention should be paid to those 'whose interests are currently not being met'. Aside from different actors, institutions should also make space for a range of views by being pluralist. Transformative governance should thus allow for the recognition of and action in line with different types of knowledge. These are often held precisely by actors that are currently marginalised, linking inclusivity with pluralism through 'meaningful participation' (ibid: 23). This discussion of transformative environmental governance thus points to normative shifts away from the nature/culture divide through inclusive participation by actors with holistic worldviews, a theme long discussed by critical scholars of international environmental law (e.g. Bavikatte 2014, Natarajan and Khoday 2014, Rajagopal 2009) and governance (Marion Suiseeya 2014; Reimerson 2013; Brand and Vadrot 2013).

In this account the push towards the creation of transformative institutions seems to lie with actors that currently hold little power, while the institutional changes envisaged simultaneously 'empower' them. Dryzek and Picking (2018) address this question of agency, pointing to areas where marginalised groups

are already creating spaces for change to some extent. In *The Politics of the Anthropocene* (2018), they first trace the inability of the current model of environmental governance to face the problems of the Anthropocene to what they describe as a set of Holocene discourses that include the nature/culture divide, planetary boundaries, and an enduring belief in the importance of economic growth. These discourses create 'pathological path dependency', shutting off options for flexible governance and locking us into models incapable of resolving current crises. Like others, they argue for a model of governance rooted in a different discourse, but are more explicit about which discursive basis would allow transformation – a strong version of ecological modernisation.[2] In brief, strong ecological modernisation discourses perceive and embrace the unknowability and risk of ecological crisis: science is not able to predict the complex interactions and extents of climate change and biodiversity loss, for example. This discourse leaves spaces for 'discourse entrepreneurs' (ibid) of different types, who will be heard in more reflexive governance institutions that are agile enough to react to new knowledge, and to build on different bodies of knowledge in something akin to polycentric governance (Ostrom 2010). Polycentric governance has begun in some areas of the governance of climate change such as orchestration and the global stocktake (Dryzek and Pickering 2018). Thus, actors and institutions are built and will spread in a kind of deliberative symbiosis.

These three examples of accounts of transformation that place more emphasis on procedures and institutions from three different fields (ecology and transitions, international law, and environmental politics respectively) are obviously far from exhaustive. Nevertheless, they underline the importance of how institutions are designed: current institutions are seen as too limited because of their roots in a nature/culture divide worldview; future transformed institutions must overcome this to produce better environmental governance. All of the approaches, some more implicitly than others, see a role for this in a range of actors that are not currently powerful players in environmental governance at least when compared to State authorities. Discussions of transformation that place more emphasis on what exactly this better environmental governance should look like and for whom shares much of this and also point to the need for new institutional spaces for listening to a range of voices as discussed in the following section.

1.2 Transformative governance (output)

Many content and action-centric accounts of transformation do not use this specific term, often referring instead to the need for governance that produces environmental justice. To illustrate the link briefly, the literature on Environmental Justice as both concept and social movement (Agyeman *et al* 2016) has illustrated the ways that the impacts of climate change, biodiversity loss and other environmental crises are experienced to different degrees according to wealth, class, gender, ethnicity, geography, colonialism and intersections of these and more. In environmental justice perspectives such as the environmentalism of the poor and political ecology, how far a person or community is impacted by an environmental problem is understood within an international political economy rooted in the nature/culture divide and resulting extractivism (Adger *et al*. 2001; Martinez-Alier, 2014). Often, it is States considered as 'developing' in the dominant worldview that underpins global governance, and marginalised communities within these, that are the primary victims of this colonial extractivism (e.g. Escobar 1998). The specific experiences of marginalised communities was first explored in work on environmental racism in the United States (Agyeman *et al*. 2016 for an overview), a theme now being explored, for example, in scholarship about campaigns against infrastructure in Europe (Imperatore, 2018; della Porta *et al*., 2019). Ecofeminist literature has long shed light on the ways that environmental degradation is both suffered more acutely by women and how women have less voice in decision-making (e.g. MacGregor 2021).

[2] Weak models of ecological modernization have met with much criticism from scholars of environmental governance and politics, seen as creating an over-reliance and belief in market mechanisms and technology to resolve multiple and intertwined social and environmental crises. For a longer discussion and a thorough explanation of the differences between the 'weak' and 'strong' versions of this political discourse see Dryzek (2022).

A core claim from environmental justice scholarship and social movements is therefore about wholesale changes to global governance - or transformation. Climate change, biodiversity loss and other environmental disasters are understood to be produced by a global political economy that creates various forms of injustices which are overwhelmingly borne by poorer and more marginalised communities that played little part in the creation of these issues and received little of the monetary wealth generated. Following environmental justice arguments, tackling environmental problems thus means changing whole systems of environmental, economic, and social governance rather than single policies (Agyeman *et al*. 2016). A governance institution that is transformed and transformative should be judged in this logic on the basis of whether it produces environmentally just outcomes. The emphasis is thus firmly on content in these accounts, yet this is also linked in various instances to issues of democratic participation.

Environmental justice has mostly been discussed as a social movement in scholarly work relevant to a discussion of the transformation of governance. Without claiming an exhaustive overview, or to reflect the huge variety of ways that environmental justice movements frame transformations of governance, some examples can point to how activists envision transformation and their role in it. First and more broadly, scholars of environmental social movements have noted that calls for system change have become prominent with the advent of the climate justice movement peaking around 2019 (de Moor *et al* 2021). This movement is closely linked to thinking on environmental justice, and argued to have coalesced around this idea to bridge a wide range of interlinked struggles by Indigenous Peoples, for social justice, against infrastructure projects, against environmental racism, and more with the work of advocacy groups that had been close to multilateral environmental governance institutions, the youth movements of the climate strikes, degrowth activism, and more (see e.g. Hadden 2015; Agyeman *et al*., 2016). Here, broad demands for environmentally just decisions and the redistribution of costs and benefits are made through protest, feeding into the procedural accounts of transformation outlined in the previous section. In the literature on transitions, for example, Scoones and colleagues (2020) discuss both the structural critical junctures they see as necessary for transformation and systemic influences from different actors including the 'unruly and often adversarial politics of citizen mobilization' (ibid: 70). In an international law view, social movements can represent those voices that are marginalised and bring about shifts in the underlying logics of law (Rajagopal 2009), while Dryzek and Pickering (2018) see them as discourse entrepreneurs in an environmental politics approach.

Within this complex picture, different social movement groups (and other kinds of collective actors in civil society, such as NGOs or local community groups) make specific claims that reveal more detail about their imaginaries of transformed environmental governance. In Europe, for example, the climate justice movement in recent years has been closely connected with groups including Extinction Rebellion, Last Generation, and Just Stop Oil, connected through the A22 Network. In addition to their diagnoses of problems with governance systems in line with those explored here, all of these groups call explicitly for citizens' assemblies or similar participatory democracy forums as a method for bringing different voices to bear in decision-making on climate and environment issues by bringing a range of citizens' voices into play. In this view, citizens' assemblies can provide a space for reasoned and informed debate that will both oblige governments to act and transform governance systems by building deliberative elements into decision-making in line with Dryzek and Pickering's view (2018, see also Dryzek and Stevenson 2011). Environmental justice outcomes are thus also linked to more substantive democratic and scientifically informed input in this view of transformation. Positions calling for broader participation in environmental decision-making regarding the distribution of costs and benefits are also clear in the claims of labour movements around just transition (Andretta & Imperatore, 2024; Stevis and Felli 2015; Wilgosh *et al*. 2022).

Another trend in environmental justice movements has been towards prefiguration: actually carrying out claims to demonstrate their validity. This applies not only to participatory decision-making in forums akin to citizens' assemblies within movements, but also to a range of experiments for tackling the impacts of climate change and more in practical ways outside of hegemonic market models. These 'sustainable materialism' experiments (Schlosberg & Craven, 2019) are seen as ways of demonstrating

different and innovative approaches to solving environmental problems in ways that avoid reproducing injustice and dominant models of consumption. These approaches can then diffuse and scale up, recalling the procedural accounts of the transitions literature, but with more attention to the content of innovation. In this reading, an innovative approach is one that challenges and operates outside the logics of the dominant nature/culture divide worldview. These approaches are much debated: they can lead to a depoliticisation of struggle, particularly in the moment of diffusion and scale shift, as explored in more detail in the following section. Nevertheless, other prefigurative movement groups reveal a different imaginary of transformation via unmaking. This perspective is understood by scholars from a perspective that sees sustainability transformation research as biased towards innovation. This diverts attention from movement processes of unmaking, disarticulation and deconstruction of existing socio-ecological configurations (Feola *et al*. 2021; see also Pellizzoni 2021 on subtraction). Rather than resulting from the mere addition of innovative solutions, values or social imperatives that limit the scope for imagining alternative futures, sustainability transformation might instead occur "by subtracting problematic existing institutions, forms of knowledge, practices, imaginaries, power structures, and human-non-human relations in the first place" (Feola *et al*. 2021: 2). Such approaches highlight the importance of challenging incumbent paradigms such as materialist culture and growth, the control and autonomy of humans over nature, and expert knowledge and specialization (Sievers-Glotzbach and Tscherisch 2019). This brings struggles and environmental justice firmly back in.

Claims by advocacy groups representing marginalised Indigenous Peoples and local communities engaged in environmental conservation are another important example of specific claims fleshing out a view of transformation. One tool bringing together experiences of these groups in the implementation of biodiversity governance is the Local Biodiversity Outlooks (LBOs),[3] published by a number of groups working for and with Indigenous Peoples and local communities which shares case studies of their experiences as well as claims about transformation. The LBOs are published as a counterpoint to the Global Biodiversity Outlook produced by the Convention on Biological Diversity. The second edition of the LBOs (Forest Peoples Programme *et al*., 2020, p. 7), analyses the current biological and cultural diversity, climate and development crises as stemming from unsustainable global systems of values, knowledge, governance, production, consumption, technology, economics, incentives and trade, and systematic power asymmetries. To remedy these crises requires six transitions that will allow us to move towards 'more balanced relationships within societies and with nature'. These changes concern culture, where shifts to include diverse worldviews are needed; land tenure, which should be redefined to include customary tenure; governance, which should be based on more inclusive decision-making and self-determined pathways of development; incentives and financing, which should reward effective culture-based solutions; economies, which should be geared to sustainable use and diverse local economies; and food systems, which should allow the revitalization of Indigenous and local food systems (ibid., pp. 20–21). These claims lend some detail to the more general views of transformation seen so far, and they tie what the transitions literature would describe as local innovations to cultures, worldviews, and customary rules and institutions linked to these. This more general point of the importance of understanding 'traditional ecological knowledge' as part of complex social systems and thus in a relational view is linked to ideas of transformation in the work of Whyte (2013). What this means for the idea of meaningful participation as part of transformative governance is that it must be truly collaborative, acknowledging different types of power asymmetries.

Though far from exhaustive, this overview of selected accounts of transformation points out some shared aspects across different disciplines and across more procedural and more content-oriented accounts as opposed to a previous lack of shared understanding (Feola, 2015; Sievers-Glotzbach and Tscherisch 2019). All of these accounts point to the importance of participation for marginalised actors including a range of civil society groups. These are seen as both a source of impetus for transformation, and guarantors of environmental justice outcomes via new inclusive, pluralist governance institutions. There is also an emphasis on reflexivity rather than rigidity in governance: it is important that institutions are built to learn and to adapt and change. In the environmental justice reading, this is

[3] https://localbiodiversityoutlooks.net/

reflected in claims for ongoing dialogue and debate. Finally, all accounts touch on the need for normative change, whether that is seen as making spaces for accommodating other knowledge systems, priorities, and worldviews, or as a more wholesale change and a reconstruction of governance on the basis of non-dominant worldviews and knowledge.

A working definition of transformation for the purposes of this project is:

> a shift in environmental governance that is: 1) *substantive* in that it is directed towards achieving environmentally just outcomes; and 2) *procedural* in that it involves the amendment of existing and/or the introduction of new institutions which provide meaningful spaces to thus far marginalised voices, systems of knowledge, and worldviews, and work to render existing and new institutions reflexive and agile.

Arguably however there are still gaps in understanding about how transformation will begin and how it might unfold. Here the existing literature often points to the role of civil society in a broad sense, ranging from local communities to social movements and from scientific communities to NGOs. Following Feola (2015) these questions refer less to the question of what transformation will look like as some imagined end point, and more to questions of causality, form, temporal range, directionality, and outcomes. Indeed, attention to these questions underlines the emerging understanding of transformative governance as a continuing process of becoming and the ability to adapt to new understandings and knowledge about the impacts of environmental problems and what is just in the responses formulated to address them. The central question of the Transform project is about causality - what will drive transformation? The bodies of literature covered attribute some power for this to the perception of failures and the emergence of new knowledge about the extent and complexity of environmental degradation. Yet knowledge alone has thus far failed to drive effective action: progress on targets ranging from reductions in greenhouse gas emissions, the Aichi biodiversity targets, and the Sustainable Development Goals (SDGs) is slow (Young 2011, Buchanan *et al.* 2020, Intergovernmental Panel on Climate Change 2021). The same bodies of literature also point to the need for civil society actors to bring citizens' perspectives, worldviews, and knowledge into governance. Thus, the Transform project focuses on the agency of civil society actors. What impacts are seen when civil society actors try to push for transformation in environmental governance? In the following section, the literature on the impacts of collective action is reviewed to formulate a theory of change that can inform an investigation of this question.

2. Civil society actors and the transformation of environmental governance. An overview of literature on political impacts and two theorised paths to change.

The role for 'civil society actors' (CSAs) in any hypothesised kind of transformation in environmental governance is one of the leitmotifs of the existing literature discussed in the previous section. For that reason, although we draw on the literature on social movement and collective action impacts to suggest more detailed scenarios of how CSAs might contribute to transformation, we avoid a focus on any particular kind of CSA to privilege a study of action rather than actors. A focus on the combined impacts of plural forms of collective action rather than social movements in a narrower sense is warranted given the need to appreciate the dynamic interactions of various kinds of actors and actions across multiple fields, and to identify the contextual conditions under which CSAs can produce environmentally just outcomes (Bosi & Uba, 2021; Jasper, 2006). Bringing collective action approaches to bear on actors that are not mass social movements has been argued to be key for a better understanding of the field (McAdam & Boudet, 2012). Looking at collective action for transformation thus allows a more organic view of CSAs that span a variety of forms and which may be involved in such action: local grassroots groups, formally organised NGOs, informally organised social movements, social movement organisations, scientists, critical action intellectuals, community groups and more. Civil society, and social movements in particular, are conceptualised as networks of actors joined in more and less formal ways (Diani 2003; Kaldor 2003) drawing attention to the varied constellations of allies, opponents, third parties and attentive publics that emerge in different arenas (Rucht 2004). Since campaigns consist of multiple actors and forms of action, it is necessary to consider interdependencies across whole networks.

A range of CSAs have been shown to have influence on environmental governance according to existing literature. For example, local community CSAs and groups including and representing Indigenous Peoples are shown to have influenced decisions at the global level, for example in the UN Framework Convention on Climate Change (UNFCCC) (Allan and Hadden, 2017; Marion Suiseeya and Zanotti, 2019) and the Convention on Biological Diversity (Parks and Tsioumani 2023). There is also evidence of their influence in governance at local and national levels (e.g. Parks, 2020), including through their direct participation in management (e.g. Nelson 2010). However, their impacts are found to be limited in scope due to the barriers represented by current dominant norms of environmental governance (Natarajan and Khoday, 2014; Ulloa, 2019), and where change occurs, explanations refer to complex favourable legal and political contexts (e.g. van Oers *et al*., 2021; Girard, Hall and Frison, 2022). This finding is echoed in work on agricultural CSAs (Claeys and Edelman, 2020; Tsioumani, 2022). Long-term influence over environmental governance is also linked to the efforts of the environmental justice movement (EJM), including encouraging the recent rise of citizens' assemblies (de Moor *et al*. 2021), and new trends in successful climate litigation (Setzer and Vanhala, 2019). Social movement scholars have in fact demonstrated the impact of social movements and citizens' collective action on the long-term development of core social and political rights, empirically proving a link between the frequency and intensity of mobilisation and responses from states (Tilly, 1978), and the role that citizens' collective action plays in representing minority interests and holding governments to account (Kaldor, 2003). Scholars have also distinguished between personal and biographical impacts on activists themselves (or internal outcomes following Earl, 2000), and different types of political change. These external outcomes (ibid) concern access to policy makers, changes in the political agenda, changes to policy, and on actual outputs linked to implementation (Schumaker, 1975). These outcomes may be planned or unintentional, and may be more or less favourable to the actors themselves (Bosi & Uba, 2009; Della Porta & Zamponi, 2022).

Different types of political impacts are also linked with questions of timeframes of impact. CSAs' influence over political decision-making has been explained with reference to both different types of impact, and to longer and shorter timeframes. Longer term impacts are discussed in the literature on cycles of contention, marked by an increase of mass protest events which peak before declining. When protests are on the rise, cycles of contention are characterised by heightened conflict; geographic and sectoral diffusion or scale shifts where protests spread from centre to periphery; the establishment of new SMOs and new frames of meaning; and innovative ways of protesting (Tarrow, 1998). Peaks are often followed by latent periods when less contentious strategies and groups become more prominent, argued to be partly the result of authorities' reactions to widespread mobilisation at the peaks of cycles. These reactions, which can be understood as social movement impacts, usually involve a combination of responsiveness and repression. Responsiveness includes concessions on the claims made by movements, and the opening of new spaces for the inclusion of institutionalised or tamed social movement groups in decision-making (Kaldor, 2003; Tarrow, 1998). This often occurs simultaneously with repressive actions such as more forceful policing of activism, the adoption of new rules to regulate and restrict new innovations in protest strategies, or denouncing protesters as dangerous, unlawful or extreme. These reactions induce some social movement organisations to institutionalise and follow more advocacy-oriented strategies, taking advantage of new concessions on their claims and spaces for their participation, indicated in increases in the numbers of NGOs at the ends of cycles of protest (Keck & Sikkink, 1998). Such institutionalisation processes have also raised critiques around ideas of cooptation leading to detrimental effects for more radical social movements (Choudry and Kapoor, 2013) Other movement organisations may continue to protest but adopt different strategies as mass protest declines, moving towards more spectacular or disruptive actions or, in very particular circumstances of repression and isolation, into patterns of radicalisation (ibid).

Another common point in the literature on the political impacts of collective action is that there is no simple direct causation between social movements and responses. Political impacts are best understood as conjunctural, as social movements contribute to the creation of complex political contexts that shape responses over longer timeframes through relational exchange with other actors (including other CSAs) and institutions (Amenta *et al* 2010; Giugni, 2007; Bosi, Giugni & Uba, 2016). This is reflected in

conceptual distinctions between the direct, mediated and conditional effects of mobilization: collective action may have a direct impact on an outcome of interest, it may first affect a factor that is in turn crucial for the outcome, or the outcome may emerge in only specific conditions (Bosi & Uba, 2009). Such explanations are rooted in political process theory, which explains the mobilization of social movements as rational participation choices given individuals' and organisations' perceptions of the political context (Meyer, 2004). By paying attention to how social movements perceive, interact with, and shape both more fixed political opportunity structures as well as more dynamic political opportunities and threats, a basis for examining impacts (on politics and decision-making) is formed (Amenta *et al* 2010). Open political opportunity structures are proven to be more conducive to impactful activism, including climate activism (Fisher and Nasrin 2020). Political contextual factors found to have particular relevance for understanding outcomes include institutional structures, the stability and political leanings of governments and opposition, public opinion, openness to dialogue with civil society, the resources held by administration, protest policing styles, the presence of elite allies and opponents, the presence of intra-elite conflict, and the proximity of elections (Fisher and Nasrin 2020; Kolb 2007). The outcomes of CSAs' claims are also likely to be influenced by the actors which stand to gain or lose in economic terms from changes in governance; the roles envisaged for new and old technologies in change and accompanying policy interventions; the perception of viability of SESs and how environmental problems are interlinked; the role of dominant discourses rooted in the nature/culture divide; and the role of legal frameworks at multiple levels. Since much of this work has focused on national states, understanding the impacts of collective action on global governance institutions requires attention to multilevel opportunity structures and the perceptions of openings and closures by actors (Marks & McAdam, 2009).

Moments of perceived crisis and urgency are also seen as producing opportunities for collective action to become 'momentous' in terms of outcomes (della Porta 2020). The pandemic crisis saw actors draw attention to the links between Covid-19 and biodiversity loss, while the war in Ukraine has underlined the urgency of an energy transition. The current climate of perceived crisis linked to the pandemic, environmental degradation, conflicts including elements linked to access to natural resources, and the rise of anti-democratic political forces, has been cast as an opportunity for progressive CSAs to drive change (della Porta 2020). This should be understood in the context of other findings that demonstrate how cultural and institutional context shapes the outcomes of collective action, such as its impact on public discourse, political systems, as well as protestors' own choices of tactics and frames, which in turn influence the success of collective action (Bosi & Uba 2009; Zemlinskaya, 2009). The likelihood of actions and frames to resonate with existing cultural understandings and gain wider purchase is dependent on context, however what is less clear is why and how certain contextual features are important for outcomes (Bosi & Uba, 2009). Insufficient attention to cultural factors has led to the development of the discursive opportunity approach (Koopmans & Statham 1999), particularly fruitful for investigating how collective action based on local community knowledge can contribute to creating spaces for marginalized voices rooted in non-hegemonic ontologies (Parks, 2021).

Existing work on the impacts of collective action in terms of political decision-making and governance thus point us towards a focus on demands or actions rather than a specific type of actor, and underline that we should pay attention to complexities of networks, claims and actions, political contexts, and the different types of impacts that might unfold over different timeframes. Matching this up with the literature on transformation of environmental governance, the following two subsections present two hypothesized trajectories, or causal sequences, via which CSAs could drive transformative change, namely by 'doing' and by 'demanding'. While an analytical simplification, this is based on the premise that transformative change can emerge through multiple pathways, as a product of the dynamic interaction between actors and context. Pathways are neither linear nor predictable, but porous (Bosi & Zamponi, 2020), and it is expected that in practice, CSAs may pursue claims through one path, then subsequently shift to another, or indeed mix the two. The final section seeks to bring the discussion together and introduce a model to guide the study of how CSAs might transform environmental governance. The model aims to identify possible steps towards transformation among these two pathways, and the salient factors that influence CSAs' likelihood to produce transformative outcomes.

2.1 Hypothesised pathways to transformation: by doing

One of the pathways through which CSAs can drive systemic change is through 'doing', a process that emphasizes grassroots innovation, community-led initiatives and localized action. This draws on the literature suggesting transformations will stem from radical solutions applied in specific socio-ecological systems (SES) that will then diffuse or spread to drive change. The hypothesis is that a CSA challenges existing governance by demonstrating the benefits of a radical solution or innovation: this then drives an initial institutional change that spreads and scales up. The literature on transformative environmental governance and sustainable transitions underline that to fully understand the chances of radical solutions or innovations to drive institutional change and spread via the 'doing' pathway, attention needs to be paid to the ways that political aspects intertwine with economic, technological and ecological contexts.

Scholarly debates on sustainable materialism and new environmental activism provide valuable insights into the opportunities and limitations faced by CSAs in addressing environmental degradation, and their capacity to scale-up and trigger wider societal transformation beyond their immediate context. Sustainable materialism or 'lifestyle' activism refers to local initiatives committed to providing for the material needs of everyday life in a sustainable manner, and which offer collective engagement beyond green consumerism and outside market logics, thereby prefiguring wider societal change (Kenis, 2016; Schlosberg, 2019). These include a wide range of initiatives including community gardens, social kitchens, social centres, solidarity clinics, co-housing, local sustainable energy platforms, recycling networks and repair cafes, alternatives to fast fashion, and more. The common denominator across this disparate grouping is that they are underpinned by virtues of "systems consciousness, prefigurative humility, boldness in the face of massive power and injustice, and an ethic of care to human and non-human alike" (Schlosberg & Craven, 2019: 11). With a focus on "creating more sustainable material flows in everyday life" (Eckersley, 2020: 216), these initiatives thus prefigure the outputs that transformed environmental governance ought to produce, namely sustainable modes of consumption and social reproduction, and the knowledges and practices associated with them which are viewed as necessary for socio-ecological transformation. By demonstrating their benefits, it is hoped that these practices will diffuse more broadly from their niches and scale-up, leading to widespread adoption. However as critics highlight, their transformative potential encounters several obstacles in the form of co-optation and simulation.

With a focus on post-material values and creating concrete practical solutions at the margins, many of these initiatives explicitly reject political confrontation, open themselves to co-optation and risk being turned into service-providers (Maniates, 2001; Thörn & Svenberg 2016; Varvarousis *et al*. 2021). According to critics adopting a post-politics lens, these initiatives are not pioneering the socio-ecological transformation but engaging in a simulation of politics: at best, they develop practices of adaptation and resilience, and at worst, amount to a retreat into alternative lifeworlds and a set of strategies for coping with the psychological pressures and contradictions of unsustainability, which end up reproducing rather than resolving the problem (Blühdorn, 2014, 2017, 2023; Kenis 2016, 2017). This is allegedly because they are reluctant both to make public political claims that challenge the structural causes of unsustainability (extractivism, endless accumulation and the dominant worldviews which sustain them), and to engage in the process of reforming environmental governance institutions.

However, the post-political critique has a tendency to cherry-pick and favour strong theorizing over attention to local context, diversity and empirical specificity (MacGregor, 2019; Williams, Goodwin & Cloke, 2014: 2798-99), risking falling into a fatalistic pessimism (Larner, 2014: 190). As ecofeminist accounts highlight, the debate over the transformative potential of these movements privileges abstract questions regarding 'the political' while disregarding "situated questions of everyday justice" (MacGregor 2019: 13). This is related to the bias towards novelty in sustainable transitions studies, and the linked assumption that innovations will automatically lead to the disruption of the dominant socio-technical regime (Feola *et al* 2021). Instead of focusing on windows of opportunity or the capacity of innovative solutions to disrupt existing systems, attention should be focused on acts of deliberate unmaking, which "interrupt the routines, structures and relations that impede post-capitalist realities

from emerging and being consolidated" (10). Unmaking and deconstruction are not the endpoints or outcomes of social transformation, but its means or preconditions. Processes of making and unmaking are "concretely entangled; unmaking creates conditions for the construction of alternative institutions; however, unmaking and making occur in chains whereby the construction of some institutions and the deconstruction of undesirable subjectivities, imaginaries, physical and social structures can enable each other in turn" (Feola *et al* 2021: 10). From this perspective, to dismiss practices of sustainable (re)production, informed by principles of social and environmental justice which carve spaces outside of market logics as depoliticized is a hasty conclusion that forecloses any consideration of how such initiatives might contribute to transformation over time. While many environmental initiatives do not make explicitly political claims in their early phases, many gradually transition to making contentious, collective claims for public solutions (de Moor *et al* 2017; de Moor *et al* 2019; Dubuisson-Quellier *et al*. 2011). In other words, while such initiatives are oriented towards achieving substantively just outcomes, their impact may be limited by the form and content of their claims, namely a hesitance to engage with the procedural side, to agitate for the reform of existing or construction of new institutions that would facilitate their desired outcomes.

A more nuanced account of the opportunities and barriers faced by such initiatives can be gleaned from critical political economy scholarship, which draws attention to the forms of collective action adopted, and the content of claims. Such accounts distinguish liberal, socialist and radical tendencies in the environmental movement on the basis of alternative relationships towards capitalism, namely from where calls for system change emerge, by whom, and the type of change envisaged (Berglund & Bailey, 2023). The likelihood for actions to have transformative effects in addressing the causes of the crisis depends on 1) the extent to which actions challenge ownership (of resources, utilities, means of production) and property rights, and 2) their capacity to build collective power for social mobilisation in communities and workplaces. This echoes findings in the literature on environmental protest which suggests that the capacity of actors to drive transformative change is conditional on their 1) advancement of ideas that challenge dominant norms, for instance via claims such climate justice, degrowth or commoning; 2) rejection of post-political discourses, consensus-oriented politics, embrace of agonism and a commitment to challenging hegemonic power structures; 3) going beyond promoting alternatives and actively engaging in strategic conflict via contentious action, advocacy or policy work (de Moor *et al* 2019).

Diffusion and scalability are the next questions directly linked to the transformative potential of 'doing' actions. A tension here is discussed in terms of a contradiction between the expectation to promote environmental 'goods', namely alternative structures and practices, while opposing environmental 'bads'. In order for alternatives to spread from their niches, they must first be considered palatable to wide sections of society, however this clashes with the expectation that movements should challenge existing arrangements via contentious action and agonism (de Moor *et al* 2019: 6). Accordingly, the strategic priority often afforded to diffusing ideas and practices compromises political content. Oppositional political agendas, messaging or tactics perceived as overly radical risk scaring off potential partners or participants, endangering institutional access, funding and influence, and potentially triggering repression; hence hesitation to go beyond institutional forms of participation.

To sum up, the 'doing' pathway encompasses community-driven actions which, if they are to have transformative impacts, should scale up and interact with broader contexts. The literature highlights that while these efforts are capable of fostering radical change through niche innovations, subtraction or a combination, their impact often depends on overcoming obstacles such as scalability and co-optation. Methodologically, cases of 'doing' should be evaluated in terms of their capacity to challenge dominant norms, how they seek to mobilize wider participation and build collective power, and the manner in which they engage with the political and institutional structures they seek to transform. Accordingly, relevant cases of 'doing' would involve not only the prefiguration of alternatives, but those which directly engage in systemic critiques that push against dominant logics of governance and political economy such as private property rights, infinite growth and the nature-culture divide. Scalability remains a significant obstacle, and analysis should focus on how local and niche innovations respond to barriers to diffusion such as co-optation by market forces or political institutions. This could be

explored through a temporal lens, by focusing on how actions evolve over time, for instance, whether they manage to maintain the radical or transformative character of their claims as they interact with larger systems, whether they become depoliticized over time, or whether initially non-confrontational types of collective action gradually transition into utilising more contentious claims and forms of action as they mature. Claims themselves might be analysed in terms of both how they serve immediate tactical goals, and how they contribute to broader systemic critiques, including those which arise through coalitions with other initiatives pushing for deeper structural change. Temporally, analysis of actions in the 'doing' pathway should therefore be attentive to both immediate impacts, as well as their longer-term potential for diffusion and scalability. This might include cases where grassroots actions gradually build momentum and challenge institutional arrangements, even where immediate gains may seem incremental.

2.2 Hypothesised pathways to transformation: by demanding

In contrast to the 'doing' pathway, where transformation is prefigured by CSAs directly implementing sustainable practices and attempting to scale them up and out, the 'demanding' pathway focuses on challenging and reshaping the underlying norms and policies of environmental governance through a combination of collective contentious action, advocacy and protest. It is hypothesised that CSAs can obtain transformative change by pressuring environmental governance institutions to alter the frameworks within which they operate, by making direct claims to accommodate and reflect alternative norms and forms of knowledge. In this pathway, the literature underlines that attention to discursive contexts, legal constraints and opportunities for change are crucial to understanding the likelihood for CSA to extract concessions by making claims directly to actors in environmental governance (Parks 2021, Visseren-Hamakers *et al*. 2021, Büscher *et al*. 2022, Girard *et al*. 2022, Tsioumani 2022). In order to answer questions about the circumstances which either facilitate or hinder transformative change, it is necessary to situate CSAs' action and frames in holistic contextual accounts.

Accordingly, this section first delves into the literature on advocacy and environmental governance, to illustrate the barriers and opportunities faced by actors in the demanding pathway, highlighting the importance of framing and networks for impactful mobilisation. Next, it engages with scholarship on environmental protest to illustrate the strategic choices that actors make between selecting between activist and advocacy-oriented modes of action, the importance of sustained collective action to ensure effective implementation, and the implications of these strategic choices for achieving environmental and climate justice outcomes.

Research on advocacy in the context of the UNFCCC underscores that the content of claims matter, suggesting that transformative claims for system change can have positive impacts on the mobilising capacity of CSAs and consequently, their ability to influence governance outcomes. During negotiations on the 'loss and damage' article in the Paris Agreement, NGOs' adoption of climate justice frames provided a basis for the formation and broadening of coalitions and increased media attention (Allan & Hadden, 2017). By enhancing the visibility and urgency of the issue, the frame shift raised the stakes for states that were reluctant to include provisions on minimizing loss and damage caused by climate change in the final agreement, and amplified voices from less developed countries (LDCs) within these coalitions, fostering solidarity between NGOs and state actors from these regions. NGOs' strong connections to LDCs meant that they could continue to provide information and advice even when negotiations moved behind closed doors, and the article was discussed in informal and bilateral settings. Environmental politics scholarship on international environmental summits highlight synergies between different modes of action, whereby protests and marches outside venues complement more institutionally-oriented advocacy work in shaping decisions (Allan & Hadden, 2017; Marion Suiseeya & Zanotti, 2019). Historically marginalised from GEG spaces, Indigenous Peoples (IP) managed to expand their descriptive and substantive representation by engaging diverse allies, including groups advocating for gender and labour justice, and by leveraging multiple opportunities and channels for influence (Marion Suiseeya *et al* 2021). This was facilitated by a shift away from a generic human-rights framework, and towards differentiating specific rights, allowing IPs to articulate justice principles. While the final Paris Agreement did not explicitly include Indigenous rights in the

operational, legally-binding part of the text, their acknowledgment in the Preamble has been interpreted as not only a symbolic gain, but an indicator of IPs' influence. The advocacy of IPs demonstrate the possibility of attaining procedural and substantive impacts by seizing institutional opportunities, continuously contesting established categorizations in GEG and creatively cultivating different avenues for engagement.

The literature on environmental protest across multiple cycles of activism illustrates the strategic challenges that CSAs face in the demanding pathway when deciding to engage or distance themselves from institutional processes, and the limitations of these venues in delivering substantive outcomes. The literature points to a division of labour between actors adopting activist and advocacy modes of action, patterned by cyclical shifts from one mode to another (Tarrow, 1998). These strategic choices are argued to be conditioned by actor networks and perception of contexts, whereby perceived openings for influence in GEG induce actors to pursue insider strategies, and closures influencing shifts to outsider strategies and activism (Parks *et al* 2023). Further, tactical choices, for instance the adoption of insider or outsider strategies is shaped by embeddedness in networks, with actors more likely to adopt contentious repertoires if adjacent organizations, namely those they have direct ties to, have already done so (Hadden & Jasny, 2017). Within the environmental movement, disillusionment with multilateral progress and top-down strategies for mitigating climate change became widespread among activists during the global justice cycle of protest (de Moor *et al* 2021; Hadden 2015). While high-profile events such as COPs present opportunities for convergence by creating powerful common targets for resistance and the formation of transnational social movements (della Porta 2007 *et al* 1999, della Porta & Tarrow 2005), activists organising around COPs encounter an 'efficacy dilemma', since while summits offer momentum, they restrict opportunities for alternative discourses and non-COP oriented strategies, which has resulted in splits among reformist-rupturist lines (de Moor 2017). Nevertheless, attention to issues and campaigns about social justice, environmental racism, deforestation, mega infrastructure projects, and Indigenous Peoples' rights contributed to the bridging of different struggles via the master frame of climate and environmental justice (Agyeman *et al* 2016, Schlosberg & Collins, 2014), which has remained a persistent feature in the current cycle of protest. A new wave of protest for climate justice emerged from this context, characterised by a diversity of actors (Fisher 2019) and a new generation of climate activists (de Moor *et al* 2021), defined by making claims on national governments and institutions to act on the climate emergency, albeit with limited commitment to existing environmental organisations and varying interpretations of lifestyle politics (della Porta & Portos 2021, Wahlström *et al* 2019, Zamponi *et al* 2022, Zamponi *et al* 2023).

A characteristic feature of the present cycle of protest have been demands for participatory mechanisms that seek direct input from citizens, such as citizens' assemblies for climate justice and the European Climate Pact, offering some hope for bridging the long-standing divide between activism and advocacy, provided that such instruments are designed and implemented accurately. Demands for justice and greater substantive democracy can be traced to preceding cycles of activism, which have contributed to shaping an EU political climate that is increasingly attentive to demands for creating spaces for citizen participation, and these calls for greater institutional participation and reflexivity are now seen as crucial for achieving social and environmental justice outcomes. Some institutional recognition is apparent in minimal provisions guaranteeing public participation, for instance, around EU Citizen's Panels or requirements for local authorities to engage and report on citizen participation to secure funding for Just Transition Plans. While caution should be taken in attributing a direct causal link between activism and impacts on political decision-making given multiple sources of influence, such policy outcomes nevertheless echo activists' demands. However in their implementation, there is a lack of clarity around the purpose of such spaces, and shortcomings related to ownership and design: when, why or about what such bodies should be convened, how recommendations will be taken up, and on what basis, as well as their lack of attention to how they address power asymmetries and inclusivity. Indeed, these considerations have formed the core of activist claims, begging the question of what factors can explain the weakening of procedural impacts and limited institutional responsiveness. One might venture that activist claims are inevitably weakened as they become co-opted and repurposed by institutions, however such an explanation fails to account for other cases where institutions are more responsive. Empirical evidence suggests that the uptake of demands is related to contexts and networks. Research

on bottom-up municipalism indicates that the accommodation of demands for more participatory local governance depends on institutional allies as well as sustained local activism (Martinez & Wissink, 2022), while insights from the participation of Indigenous Peoples and local communities (IPLCs) in the post-2020 global biodiversity framework indicates that activism by IPLCs and allies was essential for ensuring impactful participation.

Transformative change via the demanding pathway can also be grounded in locally-rooted knowledge and counterhegemonic worldviews which challenge the normative foundations of environmental governance. Knowledge and agent-centric approaches suggest that transformation in governance fields can be catalysed by the praxis of critical action intellectuals (CAI), who work both within and beyond their fields, interfacing with dominant actors, policy processes and local communities in order to address injustice and risks to sustainability (Ojha *et al* 2022). Distinct from activists and researchers, such individuals can challenge the epistemic foundations of their fields by combining critical evidence, social experimentation and the building of critical epistemic communities. On this understanding, transformative change emerges not only from strategic agency, but the interplay between praxis and field dynamics: the potential for transformation is linked to certain structural regularities and moments of recurring crisis that can be seized as opportunities to reshape these fields through effective praxis. Similarly, a knowledge practices perspective, brings nuances related to the ontological politics involved when collective action based on alternative knowledge seeks to carve out spaces and responses in contexts shaped by hegemonic worldviews, as demonstrated in initiatives to produce community protocols based on the combination of expert and local traditional knowledge (Parks, 2021). Rather than interpreting collective action as primarily *strategic* responses to political, discursive and legal opportunity structures, this perspective draws attention to the dynamic constitution and evolution of local communities as collective actors, and the complex ways in which outcomes of collective action matter to local communities, given that their knowledge can be based in ontologies radically different from those underpinning environmental governance. This underlines the importance of local community inputs for both democratizing environmental governance (Stevenson & Dryzek 2014), and making it more dynamic and effective (Bäckstrand and Lövbrand 2006; Jasanoff and Long Martello 2004), and demonstrates how meaningful dialogue on the basis of recognition of the importance of local knowledge based on holistic worldviews can lead to more effective environmental protection precisely by unseating the normative foundations of governance fields.

To sum up, the demanding pathway in transformative environmental governance is characterised by CSAs drawing on a combination of advocacy and more contentious forms of action to challenge institutional frameworks and norms that underpin environmental governance. It was argued that transformative change is often triggered by CSAs making justice-based claims that address systemic injustices. Framing shifts such as the adoption of climate justice frames have amplified mobilization efforts by facilitating the broadening of coalitions, as demonstrated with reference to negotiations over the 'loss and damage' provisions of the Paris Agreement. Nevertheless, tactical choices, whether institutional engagement or disruptive protest, depend largely on how political opportunities are perceived by actors, with openings encouraging insider strategies, and closures phishing actors towards more radical actions. Methodologically, to assess the efficacy of collective action in this pathway, attention must be paid to the types of claims made and how they intersect with institutional responsiveness. Claims for change in procedural democracy, such as the establishment of citizens' assemblies, or the recognition of alternative knowledge systems, can be powerful levers for transformative change, however they face institutional barriers. Accordingly, cases should be analysed over extended time-frames in order to track both immediate impacts such as policy concessions, as well as longer-term shifts in discourse and institutional practices. Special attention should also be given to the synergies and tensions between advocacy and activism, particularly how CSAs negotiate the risks of co-optation while pushing for substantive outcomes in governance, whether they modify their claims and tactical repertoires in pursuit of these goals, and to what effect.

3. Imagining the transformation of environmental governance

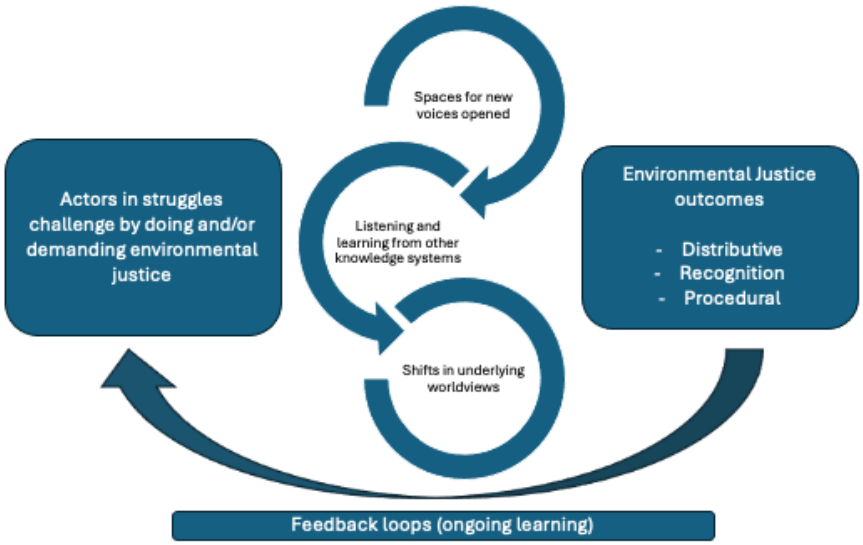
Building on the description of the two pathways described above, this section explores how these distinct modes of action can shape the ongoing transformation of environmental governance. This working paper seeks to contribute to this debate by sketching what needs to be taken into account when studying the role of CSAs in disrupting and transforming environmental governance. The first section overviewed scholarship on transformations in environmental governance, suggesting two distinct yet interlinked dimensions, namely procedural and substantive. Scholars from across various disciplines contend that existing environmental governance has failed to efficiently and equitably respond to climate change, biodiversity loss and other forms of environmental degradation due to the ontologies or worldviews which underpin governance. Incumbent paradigms such as the nature/culture divide, private property rights and the prioritization of economic growth over sustainability and justice have not only undermined attempts to address these problems, but externalized the burdens on those most vulnerable. This has been accompanied by the marginalization of a rich diversity of local and indigenous ontologies that share a holistic view of nature and culture, which ironically, have tended to produce social systems which are more effective in environmental protection, and in securing the 'goods' that global environmental governance seeks to protect, in more fair and inclusive ways (Uggla 2010; Vermeylen 2017). Global governance scholarship emphasizes the need for increased attention to discursive struggles over meaning, and contestation against the enactment of norms in domestic, operational and local contexts, namely instances of down-scaling when global norms are articulated and implemented at the local level (Pantzerhielm *et al*. 2020). In short, transformation requires a thorough procedural reform of institutional spaces and processes that enable more inclusive decision-making, particularly as concerns marginalized voices and alternative ontologies. Substantively, it involves deep changes in underlying worldviews, values and power structures that move towards more just and sustainable environmental outcomes. These two dimensions reinforce one another, as procedural changes are key for legitimizing and embedding new substantive goals, while shifts in values and knowledge systems create the conditions for more inclusive governance frameworks.

In the following section, we drew instead from the literature on the impacts of collective action and social movements to highlight two hypothesised pathways to transformation initiated by civil society actors. It delved into the role of CSAs in driving transformative change within environmental governance by considering the impacts of collective action. CSAs' ability to effect change depends on their capacity to strategically navigate their respective political landscape, to seize opportunities when institutional openings arise, and to form alliances that strengthen their influence. On this basis, we hypothesised that networks of different types of CSAs can trigger institutional change through bottom-up paths, by challenging the overarching norms underpinning environmental governance, demonstrating the benefits of radical solutions or innovations to social-ecological systems, and by making demands for change at multiple institutional levels via collective, contentious action (Chaffin *et al* 2016; Scoones *et al* 2020). Such localised disruptions and innovations are therefore the precursors to broader, systemic impacts which spread via processes of diffusion and scaling. Collective action can bring traditional, local community knowledge to the attention of environmental decision-makers (Stevensen & Dryzek, 2014), and once these solutions are perceived as efficacious, they may then diffuse to other sites, and scale-up to higher levels of governance. CSAs represent groups whose voices and interests are systematically excluded from political processes, however pluralism in governance institutions should ensure recognition and more effective governance based on different types of knowledge (Visseren-Hamakers 2021). Feedback loops in the form of institutional changes, such as mechanisms and spaces for more meaningful participation should in turn empower these actors.

The two pathways explored in this paper, transformation by 'doing' and by 'demanding', can be summarised as follows. In the 'doing' pathway, CSAs implement radical solutions, innovations or forms of subtraction within specific socio-ecological systems, prefiguring or demonstrating alternative approaches that can lead to institutional changes via subsequent processes of scaling and diffusion. In contrast, in the 'demanding' pathway, CSAs make direct, often contentious claims for institutional reform, challenging existing governance structures and norms via a combination of advocacy, protest, and strategic alliances. While actions via the 'doing' pathway are characterised by driving change through experimentation and innovation, the 'demanding' pathway emphasizes pressing for justice and systemic reform through existing channels, with both approaches shaped by actors' interactions with

political opportunities and the networks they mobilize. Bringing all of these insights together, we suggest an analytical model for considering the role of civil society actors in transforming environmental governance in figure 1 below.

Figure 1. Transforming environmental governance



The model of transforming environmental governance (Figure 1), illustrates the dynamic interplay between CSAs' actions, and the transformative changes they can trigger in environmental governance. It captures not only the broad trajectories from collective actions to environmental justice outcomes, but seeks to identify the mechanisms and processes that mediate collective action and impacts. The two pathways described in the previous section broadly represent complementary yet distinct pathways to transformative change in the pursuit of environmental justice. Reconstructing sequential pathways to transformative change facilitates more detailed analyses of the opportunities and obstacles to change which may appear at different stages of the model. Across both pathways, actors face the risks of co-optation by powerful actors or vested interests.

It is hypothesised that grassroots innovations, subtraction, collective advocacy or more contentious action, set in motion a series of interconnected shifts or impacts at the procedural level that can ultimately lead to substantive, environmentally just outcomes. The first shift identified is the opening of institutional spaces for hitherto marginalized voices, reflecting CSAs' capacity to break down barriers to participation and ensure greater inclusion for groups historically excluded from environmental decision-making. This may occur by autonomously creating new practices or participatory mechanisms at the grassroots level ('by doing'), or by agitating for policy reforms or institutional procedures which may, for instance, mandate inclusion in governance ('by demanding'). Including marginalized voices is not merely about adding more perspectives, but about making room for diverse knowledge systems, experiences and practices that challenge dominant discourses and which can fundamentally alter power dynamics within institutional spaces. The second shift involves a deeper process of listening and learning: as marginalized voices and practices are legitimized and obtain a platform, they introduce different knowledge systems often rooted in Indigenous, local, or experiential understandings of human-nonhuman relations. Importantly, transformation occurs when these knowledge systems are not only acknowledged, but actively listened to and integrated into decision-making processes in a meaningful way. This engagement with alternative knowledge systems can lead to a shift in the worldviews that underpin environmental governance, provided that institutions recognize these contributions as effective and legitimate in addressing environmental degradation. In

turn, this model of transformative governance which is integrative, inclusive, adaptive and pluralist should produce more equitable environmental justice outcomes. These outcomes, categorized into three dimensions, distributive, recognitional, and procedural, reflect improvements in how environmental benefits and burdens are shared, whose voices and ontologies are valued, and how decisions are made. The model incorporates feedback loops that emphasize ongoing learning, indicating that transformation is an ongoing, iterative process, suggesting that each cycle of collective action, inclusive participation, listening and learning can lead to just outcomes.

The types of claims made by CSAs and the forms of collective action which bear those claims have a strong influence on their eventual impact, and are mediated by the contexts and networks within which these actors operate. The model assumes that the procedural shifts are a necessary prerequisite for substantive, environmentally just outcomes, however what is not clear on the basis of existing literature and models, is precisely how the inputs and outputs of transformation are connected via the three key impacts. The opening of new institutional spaces is expected to lead to a meaningful appreciation and uptake of alternative knowledge systems which unseat incumbent paradigms, however in practice, pushes for transformation may be interrupted at any point of the cycle, and impacts may not be immediately apparent in the short-term.

Impacts flowing from demanding and doing actions may be direct or indirect. Direct impacts involve immediate institutional responses to collective action, such as the introduction of participatory mechanisms, the opening of new spaces or other policy changes that incorporate CSAs' demands. Indirect impacts on the other hand involve cultural shifts or changes in discourse and guiding norms which gradually influence governance structures over the longer term. The type of claim made also matters for impact. Claims which challenge the nature/culture divide, or which challenge private property rights or the growth imperative have the potential for deeper transformative impacts, and to mobilize a wider array of actors by linking a wide range of issues, however they also tend to provoke more resistance from authorities and vested interests. Claims focusing on distributive justice, calling for a more equitable distribution of environmental benefits and burdens, may achieve more immediate successes, however they may not always address underlying systemic issues. What the discussion thus far has highlighted, is the interconnectedness of the procedural and substantive dimensions of environmental justice, suggesting that the chances of claim-makers to obtain their desired goals is contingent on their capacity to trigger key institutional reforms that can in turn effectively channel and support those claims.

Moreover, the impact of collective action is influenced by the networks within which these actors operate. CSAs embedded in multi-scalar networks are better positioned to achieve significant impacts through processes of scaling and diffusion: networks facilitate the sharing of resources, knowledge, and strategies, enabling CSAs to amplify their demands and pursue them across multiple arenas. The structure of network ties also influences whether CSAs adopt insider or outsider strategies, and the interaction between these strategies can have synergistic effects that enhance the overall impact of collective action.

Subsequent phases of the TRANSFORM project will undertake case studies of transformation by doing and by demanding to corroborate the model and to understand how the factors identified in the model relate to one another. To grasp the transformative impacts of CSAs, it is essential to focus on several dimensions. The first involves examining the types of claims made by CSAs, particularly whether and how they challenge dominant norms underpinning institutional logics, such as the growth imperative, private property rights and the nature-culture divide. Here, it is essential to examine the interaction between actors' claims and political opportunities, as well as their capacity to mobilize wider participation. The second involves understanding the networks in which CSAs are embedded, for instance, the manner in which multi-scalar ties influence the adoption of insider versus outsider strategies, and the potential synergies between strategies which might enhance their impact. Third, the timeframe of analysis is crucial, given that a focus on immediate impacts such as policy concessions needs to be balanced with a view to exploring longer-term cultural and systemic shifts, requiring a detailed analysis of the evolution of claims and their resonance with publics and institutions over time.

Finally, attention should be given to the synergies and tensions between activism and advocacy, particularly how CSAs navigate the risks of co-optation while agitating for both procedural and substantive outcomes. Such considerations will guide the project's empirical focus on how CSA-driven transformations in environmental governance unfold over time, emphasizing both short and long term dynamics of change.

Table 1. Empirical cases for analysing transformative environmental governance

Level	*Transformation by Doing*	*Transformation by Demanding*
Local	ex-GKN, Florence	Simulation Citizen Assembly, Trento
	Renewable Energy Communities, Naples/Abruzzo	Winter Olympics 2026, Milan/Cortina
National	Conferenza Contadina	Italian Climate Justice Movement
International	Convention on Biological Diversity (CBD) COP16, Cali	

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