

Focusing on non-state actions instead of non-state actors in the context of sustainability transitions

Loïc Cobut, Amandine Orsini, Katja Biedenkopf, Mathieu Blondeel, Gerhard Fuchs, Elena Kavvatha, Delphine Misonne, Irene Niet and Marielle Papin

Abstract

Non-state and subnational actors active in sustainability transitions have increased considerably in recent years. However, the term "non-state actors" is not consensual in academia and in policy cycles because of the diversity of their nature, actions, processes, objectives and outcomes.

We defend the opinion that it is actions, rather than actors, that we need to focus on to speed up transitions. We emphasize how talking about non-state actions refocuses the debate on the quality of actions rather than on their origin. Our proposition is to focus on non-state actions according to two trajectory dimensions. First, the latest Intergovernmental Panel on Climate Change special report on 1,5°C may serve as a guide. Now, there is no doubt that every action launched by non-state actors must target a net zero emission business plan in the coming months in order to respect the Paris Agreement trajectory. Secondly, actions need to be considered in the light of their potential transformative effects.

A simple way to differentiate them is to name actions that bind both of these dimensions "sustainable actions" and those that do not, "non-sustainable actions".

Policy Recommendations

- Instead of losing ground by proposing ideas on how to classify non-state actors, an impossible task, scholars should help policymakers focus attention on non-state actions.
- Policy makers and scholars should help actors of all kinds to shift towards sustainable actions.
- Non-state actions should all respect the 1.5°C limit and aim for strong transformative effects.

Introduction

What role can non-state actors play in sustainability transitions? This apparently question was addressed by a multidisciplinary group of scholars from different fields, ranging from political science and environmental studies to law, who were working on the issue of transitions. The question turned out to be extremely complex. First, the experts defined the term non-state actors in different ways. Second, the level of expert knowledge of sustainability transitions and their environmental, social and economic dimensions, ranged from comprehensive to highly specialised in one issue-area. This article presents the results of our collective discussions on non-state actors sustainability transitions. The main point that we want to underline is that scholars should help policymakers focus attention on non-state actions, rather than on the classification of actors, especially non-state actors, which is an impossible task in our view. Actions should be considered in a broader context sustainability, which includes all dimensions of sustainable development.

In the first part of this paper, we present the diversity of non-state actors currently involved in sustainability transition research. We argue that attempts to classify and define non-state actors are pointless. Instead, we suggest that discussions should focus on actions. In the second part, we apply this idea by proposing a continuum showing the diversity of actions carried out in sustainability transitions. This reveals whether their trajectory respects the goals of the sustainability transition initiated by the Paris Agreement. We differentiate between sustainable and non-sustainable actions using the example of climate change. Achieving climate change governance goals requires multiple transitions in different systems, including mobility, energy and environmental protection. In addition, climate change provides a good illustration of the specific transnational governance structures and processes that have been developed to meet a planetary-scale challenge.

Non-state actors are needed, but who are they?

It is tempting to define non-state actors simply as any actor other than 'the state'. What is distinctive about them? In 1992, Agenda 21 defined nine groups of the major non-state actors: local authorities, business and industry, children and youth, indigenous non-governmental peoples, organisations (NGOs), women, workers and trade unions, the scientific and technological community and farmers. This classification considers that subnational actors (e.g. local and regional authorities), such as cities or American states, are non-state actors. However, this is the case only to some extent as these entities also have a part of legal authority and rely on public elections and public funding. Defining "nonstate actors" and related terms is therefore problematic. This is partly due to the fact that their nature, actions, processes, objectives and outcomes are extremely diverse. Attempts to reach a consensus on the meaning of the term "non-state actor" in academic circles and policy cycles have failed.

The number of non-state actors has increased rapidly since the beginning of the century. Contemporary governance is premised on governance networks, glocal agency, hybrid institutions, third sector activity, triple helix collaborations, as well as participative or governance arrangements. As mentioned, non-state actors may work independently from states. More than 4000 are now registered at the United Nations Economic and Social Council. environmental field is no exception. The United Nations Environment Programme has accredited more than 400 non-state actors. These actors are very diverse, ranging from traditional actors, such as environmental NGOs cities, renewable to communities and trade unions. The scope of their activities is also expanding and covers traditional sectors, like climate and energy, as well as new multiple scale and innovative sectors, for example, the smartphone industry, urban resilience or modern permaculture, which are all part of broader sustainability transitions.

These actors play a major role in current sustainable development (non)-practices. Specific transformative agency is a typical feature of evolutionary niches, relative outsiders, front runners or grassroots actors, which means that they are important when it comes to kick-starting or leading transition processes. In other words, non-state outsiders are more likely to lead transition than state actors. This is particularly true because states be constrained by existing infrastructure, administrative routine, policy paradigms and regulatory frameworks (Pel, 2016; Avelino et al., 2017).

Certain non-state actors may block transitions. The Carbon Majors Database was analysed in 2017 by the then Carbon Disclosure Project, which collects data on companies' greenhouse gas emissions. The report shows "the distribution of emissions is concentrated" (Griffin, 2017: p. 8). Since 1988, 71% of global industrial greenhouse gas emissions (635 GtCO2eq) can be linked to 100 corporate and state producers; of which 32% are public investor-owned, 9% are private investor-owned and 59% are state-owned (see the 2017 report for the list of 100 actors and the methodology used to estimate emissions). Essentially, the report underlines the fact that the weight of non-state actors in terms of greenhouse gas emissions is extremely varied, ranging from carbon neutral actors to single non-state actors responsible for over 1% of global greenhouse gas emissions, as in the case of ExxonMobil. Cities constitute another interesting example. More than 50% of the world's population now lives in cities, which account for 70% of the world's greenhouse gas emissions. Yet, clearly cities have different impacts. Moran et al. (2018: p. 4) stress that "in most countries a few urban areas account for a disproportionate share of the total footprint".

In the past decade, the policy landscape has evolved to include diverse actors in the governance of sustainability transitions. However, to ensure that states are not discouraged from pursuing sustainability transitions, non-state actors are not directly referred to as key transition players. Let us consider climate change. The adoption of the 2015 Paris Agreement is a recent milestone. It

presents non-state actors as a linchpin that should complement and support the multilateral process (Chan et al., 2015). Indeed, the recent United Nations Framework Convention on Climate Change (UNFCCC) and the outcome of the Paris Agreement "have brought climate action from cities, companies, civil society groups and other subnational/non-state actors" that is in line with their "understanding of the ways in which climate change can and should be governed" (Bulkeley, et al., 2018: p. 68).

The role of non-state actors in climate governance should be understood in a context where "the UN climate regime is evolving from a global deal model, in which countries negotiate emission targets, to a 'pledge-andreview' model, in which each country defines its own goals, subject to some form of intergovernmental review" (Chan et al., 2015: p.4). This model is based on Nationally Determined Contributions (NDCs) and may be perceived as sparking "renewed optimism in the multilateral climate regime" (Van der Ven, Bernstein and Hoffmann. 2017: Nevertheless, cumulated NDCs have fallen short of the objectives of Article 2 of the Paris Agreement, namely, "to hold the increase in the global average temperature to well below 2°C" (United Nations, 2015: p. 3). The potential of state actions appears to be limited by a lack of political will. At the same time, the role of non-state actors is increasingly seen as being part of the solution for climate governance.

The UNFCCC launched several initiatives to encourage the involvement of non-state actors. For example, the NAZCA platform was launched at the 20th Conference of the Parties in 2014 to create a space where "companies." cities, subnational regions, investors and civil society organizations - can display their commitments to act on climate change" (UNFCCC, 2018). The initiative was designed to create opportunities: "the aim is a clear, comprehensive view of climate action by nonstate actors, to recognize commitments and inspire still greater ambition, for the good of current and future generations" (UNFCCC, 2018). Van der Ven, Bernstein and Hoffmann (2017: p. 2) define these platforms as "orchestration platforms" that "aggregate and

value the cumulative impact of nonstate climate governance. These registries represent purposive efforts intergovernmental organizations and other transnational actors to coordinate, mobilize, and value the contributions of private, hybrid and subnational actors [...]". The NAZCA platform is an interesting example of the vague use of the term "non-state actor". The website refers to both "non-state actors" and "nonparty stakeholders". The latter indicates that the actors are not among the official "parties" to the UNFCCC and, therefore, cannot replace states.

Among policy cycles referring to non-state actors is not consensual, which is surprising climate governance is becomina increasingly polycentric (Jordan et al., 2018). While states need them, they also fear to lose sovereignty and might prefer, considering the diversity of interests among non-state actors, to engage with those who are in line with their objectives. While consensus is lacking about how to refer to non-state actors, we need a new analytical tool to keep up with the rise and diversity of these actors and to re-center the debate on fertile discussions. We propose to focus on non-state actions and their trajectory dimensions, instead of on non-state actors.

Non-state actions and their trajectory on a continuum

The potential of non-state actors in terms of sustainability transitions can be evaluated by considering their actions. In the case of climate change, this can be achieved by looking different climate at actions simultaneously. Here, we combine greenhouse gas emission trajectories and their transformative effects on the same continuum.

The latest IPCC report (2018) provides a guide to transition trajectories. Following COP21, the Parties requested a Special Report on "the impacts of global warming of 1.5°C above preindustrial levels". In Article 2, the Paris Agreement aims to maintain "the increase in the global average temperature to well below 2°C above pre-industrial levels" and pursue "efforts to limit the temperature increase to 1.5°C [...]" (United Nations, 2015: p. 3). The

small difference between "2°C" and "well below 2°C" may appear to be unimportant to non-climate scientists. Nevertheless, there are strong evidences from climate change science that the differences in terms of risks and consequences between these two trajectories are severe.

The direction of the trajectory is clear: all actors, state and non-state, that have no intention of drastically shifting towards a net zero emission business plan in the coming months will not be in line with the Paris Agreement trajectory. Actors that fail to modify their behaviour will remain on a business as usual trajectory, which leads to global warming of between 4.1 and 4.8°C, compared to the pre-industrial period (IPCC, 2014). It is now essential to differentiate actions which effects respect the Paris Agreement trajectory and actions which effects do not.

Some actions conducted by certain "non-state actors" may not respect the Paris Agreement. This could be deliberate, as in the case of greenwashing, which is the use of false environmental claims in communication strategies (Dubuisson-Quellier, 2018, pp. 96-97), or simply because innovation does not alwavs lead to sustainable solutions. Individual non-state actors may be involved in contradictory actions, i.e. actions that do correspond to the Paris Agreement, but also actions that do not. This is the case for many former energy producers that invest in both renewable and carbon-intensive sources.

A number of policy initiatives focus on nonstate actions. In the case of climate change, the platform Galvanizing the Groundswell of Climate Actions brings together scholars from various universities and experts from the public and independent sectors to focus on "action" rather than "actors". It uses the term "climate action" and defines it as 'any policy, measure or program that reduces greenhouse gases, builds resilience to climate change, or supports and finances those goals". The 2015 Global Aggregator for Climate Actions (GAFCA) also refers to climate actions. It is an initiative managed by scholars from the German Development Institute (Sander Chan), the London School of Economics (Robert Falkner and Matthew Goldberg) and the Stockholm Environment Institute (Harro van Asselt).

When evaluating trajectories, effects beyond reduced greenhouse gas emissions should be considered. The social sciences underline that non-quantifiable impacts have transformative effects and should be taken into account, which brings us to the second dimension of the continuum.

As Van der Ven, Bernstein and Hoffmann (2017, p. 5) argued, effects are likely to be catalytic and political. Some actions may generate broad transformations in key institutions and lay the foundations for a wider societal transition towards decarbonisation (see also Bernstein and Hoffmann, 2018). Some transnational city networks provide a good example. By focusing on urban resilience, the 100 Resilient Cities initiative seeks to appoint chief resilience officers in every city in order to redesign how the cities function in relation to the concept of resilience, which encompasses climate adaptation.

Recently, Transformative Social Innovation theory (TSI theory) has improved our understanding of transformative effects, which now included in discussions sustainability transitions. This theory defends a normative stance, which argues that "the efforts of local communities to engage and experiment with social innovations" (TSI manifesto, 2018: p. 3) are necessary. Their transformative effects are expected to "challenge, alter and replace the dominant institutions that are ingrained in society (e.g. individualism, hierarchy, competition)" (TSI manifesto, 2018: p. 3). Ultimately, the objective is a "common future that is more sustainable, just and resilient" (TSI manifesto, 2018: p. 3). Local level and bottom-up transitions are often heavily based on nonstate actions, which frequently lead to cultural change for sustainability transitions. This type of cultural change enhances the dissemination of information (Van der Heijden, 2010), acceptance and participation (Kalkbrenner and Roosen 2016, Wirth 2014).

TSI theory has emerged in the micro and macro context of sustainability transitions. Its

theoretical base stems from the theory of sociotechnical systems, namely the Multi-Level Perspective, as developed by Frank Geels. TSI theory looks at social niches as examples of innovations that represent "new ways of doing, organizing, and knowing that are currently developing as alternatives to unsustainable [...] modes of production and consumption" (Cipolla et al., 2017, p. 1). As underlined by Pel et al. (2018: p. 2), some innovations have "evident transformative ambition and impacts (e.g. ethical banks, ecovillages, solidarity-based economies, the unconditional basic income, Transition Towns)".

TSI theory appears to be a pertinent analytical tool for identifying the transformative potential of innovations, as well as their weaknesses (Pel et al., 2018). This niche-centrism approach offers a new perspective on transitions, by providing insights "that cannot easily be integrated into functionalist analyses" (Pel et al., 2018: p. 19). Its approach sheds light on key themes, such as "diversity, hybridization, distributed agency, instability, and the recursivity between agency and structure" (p. 19). It seeks to improve our understanding of persistent problems arising from situations of new transition, institutional hybridization, individual and collective niche empowerment processes, translocal niche mobility and transition narrative processes (Pel et al., 2018). Unlike greenhouse gas emissions, transformative effects are not quantitatively measurable. but can be evaluated qualitatively.

A continuum that couples trajectories for greenhouse gas emission reductions with transformative effects can help define and differentiate non-state actions. Actions that follow the business as usual trajectory with no transformative effects can be seen on the far left of the continuum. They could be called non-sustainable actions. In parallel, actions in line with the Paris Agreement trajectory that have strong transformative effects are located on the far right. They could be called sustainable actions. Actions in the middle may be labelled actions in transition, if they aim to move to the right, or lock-in actions, if they maintain our dependency on fossil fuels and do not seek to change. Indeed, it is important to understand that the continuum is dynamic. Every action must evolve along the continuum over time. Any new action can enter and any (old) action can leave.

We recognise that some actions could be in line with the Paris Agreement without having (strong) transformative effects. However, following the Paris Agreement is a first step achieving major transformative towards effects. Lastly, this continuum aims to identify the most problematic actions, located on the far left, and the best possible action (on the far right). This paper does not set out to measure every action precisely. Instead, it considers actions in relation to their abstract position on the continuum with the aim of improving their contribution to the sustainability transition, if necessary.

Conclusion

The diversity of non-state and subnational actors involved in sustainability transitions has increased considerably in recent years. They differ in terms of their nature, their links with state actors, their actions, processes, objectives, outcomes and weight in terms of greenhouse gas emissions. This diversity makes any type of classification an impossible task. It has generated futile debates and confusion about how we should refer to non-state actors.

On this basis, we argue that a new analytical tool is required to keep up with the rise of non-state actors and to consider more pertinent issues. We propose focusing on non-state actions and the different dimensions of their trajectory. We draw attention to the fact that an examination of non-state actions focuses the debate on the quality of actions, rather than on their origin. We argue that it is actions that we need to focus on to speed up the transition. Non-state actors are often responsible for both sustainable and unsustainable actions. By examining actions separately, it is possible to distinguish sustainable from non-sustainable behaviour.

Non-state actions must be in line with two main trajectories that are combined on a continuum. First, the latest IPCC special report on 1.5°C serves as a guide. Now, there is no doubt that

every action launched by non-state actors must target a net zero emission business plan in the coming months in order to respect the Paris Agreement trajectory. This type of action is found on the right of the continuum. On the left, actions correspond to the business as usual trajectory. Second, actions need to be considered in the light of their potential transformative effects. TSI theory provides a deeper understanding of the transformative effects that lead to "a common future that is more sustainable, just and resilient" (TSI manifesto, 2018: p. 3). Inevitably, this continuum simplifies the diversity of non-state actions and trajectories. However, it is a useful way to represent the issues at stake. A simple way to differentiate them is to name actions bind both of these dimensions "sustainable actions" and those that do not. "non-sustainable actions". Ultimately policy makers and scholars have an important role to play when it comes to helping actors shift towards sustainable actions.

Loïc Cobut, Centre de Recherche en Science
Politique, Institut d'Études Européennes,
Université Saint-Louis — Bruxelles. Boulevard du
Jardin botanique, 43 — 1000 Bruxelles, Belgium.
Loic.cobut@usaintlouis.be, phone:
0032.498.75.02.34

Amandine Orsini, Centre de Recherche en Science Politique, Institut d'Études Européennes, Université Saint-Louis — Bruxelles. Boulevard du Jardin botanique, 43 — 1000 Bruxelles, Belgium. Amandine.orsini@usaintlouis.be

Katja Biedenkopf, Leuven International and European Studies, KU Leuven. Parkstraat, 45, box 3602 – 3000 Leuven, Belgium. katja.biedenkopf@kuleuven.be

Mathieu Blondeel, Ghent Institute for International Studies, Ghent University. Universiteitstraat, 8 – 9000 Gent, Belgium. Mathieu.Blondeel@ugent.be Gerhard Fuchs, Institut für Sozialwissenschaften Abteilung für Organisations- und Innovationssoziologie, Universität Stuttgart. Seidenstr. 36 - 70174 Stuttgart, Germany. Gerhard.fuchs@sowi.uni-stuttgart.de

Eleni Kavvatha, Centre de recherche en science politique, Institut d'Études Européennes, Université Saint-Louis — Bruxelles. Boulevard du Jardin botanique, 43 — 1000 Bruxelles, Belgium. eleni.kavvatha@usaintlouis.be

Delphine Misonne, Centre d'étude du droit de l'environnement, Institut d'Études Européennes, Université Saint-Louis — Bruxelles. Boulevard du Jardin botanique, 43 — 1000 Bruxelles, Belgium. Delphine.misonne@usaintlouis.be

Irene Niet, University of Amsterdam, lrene.niet@gmail.com

Marielle Papin, Département de science politique, Université de Laval. Pavillon Charles-De Koninck 1030, avenue des Sciences humaines, 1030, Bureau 3449, Québec G1V 0A6. marielle.papin.1@ulaval.ca

Authors are grateful to Dr. Bonno Pel from Université Libre de Bruxelles for comments on earlier draft. The authors are also appreciative to the Jean Monnet - Erasmus + Programme - Grant Agreement/Decision Nr 2016 - 2161/001-001 - Project Title: EU Environmental Policies and Law (POLLEN) Interdisciplinary Module; and to the participants to the 12th WIRE workshop (www.wire-series.com). Any opinion or recommendations expressed in this essay are those of the authors.

References

Avelino, Flor, Wittmayer, Julia M., Pel, Bonno, Weaver, Paul, Dumitru, Adina, Haxeltine, Alex, Kemp, René, Jørgensen, Michael S., Bauler, Tom, Ruijsink, Saskia and Tim O'Riordan. (2017). *Transformative social innovation and (dis)empowerment*. Technological Forecasting and Social Change. DOI: https://doi.org/10.1016/j.techfore.2017.05.002.

Bernstein, S., Hoffmann, M. (2018). The politics of decarbonization and the catalytic impact of subnational climate experiments. Policy Sciences 51(2): 189-211.

Bulkeley, H., Betsill, M., Compagnon, D., Hale, T., Hoffmann, M., Newell, P., Paterson, M. (2018). *Transnational Governance.*Charting New Directions Post-Paris. In: Jordan, A., Huitema, D., Van Asselt, H., Forster, J. (2018). *Governing Climate Change. Polycentricity in Action?*.

Cambridge: Cambridge University Press.

Chan, S., Van Asselt, H., Hale, T., Annott, K. W., Beisheim, M., Hoffmann, M., Brendan, G., Höhne N., Hsu, A., Pattberg, P., Pauw, P., Ramstein, C., Widerberg, O. (2015). Reinvigorating International Climate Policy: A Comprehensive Framework for Effective Nonstate Action. Global Policy.

Cipolla, C., Afonso, R., Pel, B., Bartholo, R., Renato Silva, E., Proenca Junior, D. (2017). Coproduced game-changing in transformative social innovation: reconnecting the "broken city" of Rio de Janeiro. Ecology and Society 22(3):3.

Dubuisson-Quellier, S. (2018). *La consommation engagée*. SciencesPo Les Presses.

Griffin, P. (2017). The Carbon Majors
Database CDP: Carbon Majors Report 2017.
1-15. Retrieved from:
https://b8f65cb373b1b7b15febc70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf
3.rackcdn.com/cms/reports/documents/000/0
02/327/original/Carbon-Majors-Report2017.pdf?1499691240

IPCC. (2018). Summary for Policymakers. In: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Masson-Delmotte, V., Zhai, P., Pörtner, H. O., Roberts, D., Skea, J., Shukla, P. R., Pirani, A., Moufouma-Okia, W., Péan, C., Pidcock, R., Connors, S., Matthews, J. B. R., Chen, Y., Zhou, X., Gomis, M. I., Lonnoy, E., Maycock, T., Tignor, M., Waterfield, T. (eds.). World Meteorological Organization, Geneva, Switzerland.

IPCC. (2014). Summary for Policymakers. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlomer, C. von Stechow, T. Zwickel and J.C. Minx (eds.), Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Jordan, A., Huitema, D., Schoenefeld, J., Van Asselt, H., Forster, J. (2018). *Governing Climate Change Polycentrically: Setting the Scene*. In: Jordan, A., Huitema, D., Van

Asselt, H., Forster, J. (2018). *Governing Climate Change. Polycentricity in Action?*. Cambridge: Cambridge University Press.

Kalkbrenner, B.J., and J. Roosen (2016). Citizens' willingness to participate in local renewable energy projects: The role of community and trust in Germany, Energy Research and Social Science, 13:1, 60–70.

Moran, D., Kanemoto, K., Jiborn, M., Wood, R., Többen, J., Soto, K. (2018). *Carbon footprints of 13 000 cities*. Environmental Research Letter 13(6).

Pel, Bonno. (2016). Trojan horses in transitions: A dialectical perspective on

innovation 'capture'. Journal of Environmental Policy & Planning, 18(5): 673-691.

Pel, B., Haxeltine, A., Kemp, R., Dumitru, A., & Avelino, F. (2018). *Transformative Social Innovation: Implications for Transitions Research*. International Sustainability Transitions Conference. Manchester, UK. Retrieved from:

http://documents.manchester.ac.uk/display.as px?DocID=37364

UNFCCC. (2018). NAZCA 2018. Retrieved from

http://climateaction.unfccc.int/views/about.ht ml

United Nations. (2015). *Paris Agreement*. Paris. Retrieved from https://unfccc.int/sites/default/files/english_paris_agreement.pdf

TSI Manifesto. (2017). *Transformative Social Innovation Manifesto*. Retrieved from https://tsimanifesto.org/about/

Van der Heijden, H.A. (2010). Social Movements, Public Spheres and the European Politics of the Environment. 1st ed. Basingstoke: Palgrave Macmillan.

Van der Ven, H., Bernstein, S., Hoffmann, M. (2017) Valuing the contributions of nonstate and subnational actors to climate governance. MIT, Global Environmental Politics.

Wirth, S. (2014). Communities matter: Institutional preconditions for community renewable energy, Energy Policy, 70:1, 236–246.