Dutch Research Institute for Transitions

CONFERENCE BRIEF

Searching for transformations in "Our Common Future Under Climate Change"

International scientific conferences with the ambitious goal of motivating action on climate change can be overwhelming. In this Conference Brief, the DRIFT and GATE (Governing and Accelerating Transformative Entrepreneurship) research team offers reflections and messages from the Paris Conference on climate change research entitled 'Our common future under climate change' held in UNESCO headquarters in Paris, July 7-11, 2015.

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Searching for transformations in
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by the ARTS project
Accelerating Transitions


From present knowledge
to future solutions.
Image: Michael Theis
Paris, July 7-10
commonfuture-
paris2015.org
#CFCC15
OUR UNDER
COMMON CLIMATE
FUTURE CHANGE
TWEETS 444
FOLLOWING 606
FOLLOWERS 1,694
FAVORITES 193
LISTS 6
Following

At a historic moment in time in Paris

During the first two days of the conference keynote speakers set the scene for a common message: Climate change is happening and adaptation to extremes needs to be complemented with transformative actions.

During the 4-day conference, we observed that there are dominant ways on how climate change and governance for climate change are framed from the presenting researchers. From our reflections and critical summary notes, we gather five key messages:

- *Message 1: We need to escape the climate science communication lock-in of doom and gloom towards creating narratives of hope and opportunity;*
- *Message 2: We need to understand climate change as an opportunity for sustainability and the delivery of multiple co-benefits;*
- *Message 3: Climate change is happening on multiple (nested, interconnected) scales involving multiple actors;*
- *Message 4: Cities offer tested solutions to deal with climate change transcending sectoral boundaries;*
- *Message 5: Climate scientists are navigating between science and policy/politics.*

Message 1: We need to escape the climate science communication's narrative lock-in of doom and gloom towards creating new narratives of hope.

The dominant framing on climate change can be simplified and summarised in the following four sentences:

- Climate change is accelerating, driven by rapidly increasing emissions of greenhouse gases, linked in large part to global consumption and the coal renaissance in developing countries;
- The climate change science community is primarily concerned with deepening understanding of climate change models and impacts instead of understanding the underlying drivers;
- They therefore primarily seek to develop and suggest solutions (both to further understanding as to deal with the 'problem' they see) that address climate change as a symptom of unsustainability (carbon pricing, adaptation, CCS, etc);
- Those who communicate climate change science often rely on rhetoric of fear and catastrophism with the intention of catalyzing action.

Overall, the debate on climate change is moving in the direction of a greater emphasis on coupling climate and development agendas, but still is a long way away from focus on root causes. Much of the conversation about transformation is not based on deeper understanding of the underlying dynamics of radical systemic change but rather a general plea for major change and a recognition that limits or planetary boundaries are being exceeded. Simultaneously, there is much attention on surprises in the negative sense, but none on positive surprises like disruptive social innovations.

The shift: Climate scientists have long focused on highlighting the (escalating) risks associated with climate change, discussing global to local vulnerabilities and risks. While it has been important to point to the urgency for acting upon climate change – meaning both mitigation and adaptation – it also creates the sense that the challenge is overwhelming and unstoppable.. As a result, climate change appears unmanageable and decision-makers looking to scientists for consensus and solutions find it difficult to discern intervention points. As pointed out by some speakers, it is worthwhile to become more aware of the already existing initiatives, projects and programmes that are exploring and creating alternative pathways for a zero carbon world. The presentation of David Tabara from the IMPRESSIONS project also emphasised the need of new narratives of hope to mobilise and align action for transformation. Hans Joachim Schellnhuber (Potsdam Institute for Climate Impact Research) in the final panel discussion called for an implosion of the carbon economy in the next few decades, raised the question why anyone would want to be part of an economy that is destroying us and emphasised that global social movements are happening already including Pope Francis' recent encyclical, and the rapidly expanding divestment movement.

Message 2: We need to understand climate change as an opportunity for sustainability

Governance for climate change has revolved around five overarching frames that reflect how action is understood and expected:

- The dominant understanding of governance and policy is very traditional in the climate science community, mainly thinking in terms of formal institutions and the role of government(s) and governmental legislation;
- There is a lack of understanding about the idea of network governance and the roles of other actors outside states and formal government;

- 'Bottom-up' is conceived as small scale and thus deemed insignificant to deal with climate change threats and impacts;
- Social innovation is only just emerging as important topic but dealt in a very peripheral way;
- Talks on 'managing transitions' suffer from a very general use of the words, technology focused solutions and general recommendations to policymakers;
- Shifting the governance frame from one of climate change to sustainability reveals new potential for synergies, co-benefits, and potentially transformative governance solutions.

The overall reflection is that there is an increasing amount of knowledge about the impacts and vulnerabilities of climate change and what the governance challenges for climate change are, however there is limited understanding of the triggers of transformative change towards sustainable development pathways. The global focus on the main symptom of unsustainability leads to a pessimistic assessment and search for global solutions that are impossible to implement given the context of multilateral negotiations amongst nation states. There thus is a clear need to bring the transition perspective as we take it more prominently to the debate.

The shift: Climate change is inextricably linked to sustainable development. In fact, climate change is induced by the current unsustainability of human production and consumption patterns, and its impacts have detrimental effects on sustainability and human welfare. As such, and in reference to the increasingly recognised need for societal transformation, co-benefits can be created from jointly addressing climate change and sustainable development. According to Joseph E. Stiglitz in his keynote, the real problem in addressing climate change is the failure in private financial markets to bring savings together with climate as well as infrastructure investments. This would enable to both strengthen the global economy and address climate change. Especially in a developing country context it was pointed out that it is critical to link sustainability and development objectives to climate change action in order to engage stakeholders and raise urgency. Artificially separating the underlying drivers of vulnerability (ie poverty, illiteracy, poor sanitation) from the impacts of climate change and need for adaptation leads to inefficient allocation of adaptation funds and potentially ineffective solutions. Tackling development and climate change together can be mutually reinforcing when action is aligned to both to avoid dangerous consequences and achieve equality. According to Hans Joachim Schellnhuber, it is important to talk about immediate social benefits of actions that also have a long-term benefit.

On a more conceptual level, speakers debated the linkages between the concepts of resilience, sustainability and transformation, which need to be better understood. In general, all terms are often used as buzzwords, and there is a need to better define them. Especially resilience is often misused, as has been debated in the panel with Johan Rockström, Alexandra Gavilano and Luis Fernández Carril, as well as by several speakers during the parallel sessions (e.g. Thomas Elmqvist). It was pointed out that many resilience scholars view this concept as non-normative, but link it to the planetary boundaries and required adaptation and transformation processes across scales. Hence, it remains important to debate what resilience is desirable, adding a deeply normative dimension to this discussion.

Message 3: Climate change is happening on multiple (nested, interconnected) scales involving multiple actors

Climate change needs to be addressed at multiple levels, which each have their comparative advantages and need to interact and support each other (multi-level governance). Current international top-down approaches have produced sub-optimal results, therefore much of the focus has shifted towards emergent bottom-up solutions (e.g. from first-moving nation states, cities, civil society innovations). However, it is unclear whether these will lead to success, and it seems unlikely that isolated actions can achieve the necessary changes on their own. In fact, interrelated actors and actions take places in very diffuse manners, and new ways of steering across and between levels are needed. For example, Joseph E. Stiglitz highlighted the need for some sort of enforcement mechanisms on an international level – e.g. cross-border taxes that change the political economy, and change the incentive to join the agreement. Jan Corfee-Morlot outlined vertical and horizontal (regional) governance. For example, national governments need to empower sub-national governance through tools and capacity building (e.g. partnerships, support for national-urban learning and action networks). Collaboration can also be based on innovative funding approaches and new partnerships. Because of trade-offs across levels, however, a systemic approach is required.

Prof. Sarah Burch presenting on the role of SMEs in climate change governance.

To devise mechanisms for steering communities towards sustainable development pathways, the diversity of actors involved in multi- and trans-level governance processes need to be better understood.

- Diversity of actors: Not just governments but also communities, SMEs

- Ana Marquez (ICLEI): different actors need to collaborate – government focus: tools to establish knowledge on e.g. city emissions needed;
- Sarah Burch: new research agenda on transformative potentials of SMEs (GATE project);
- Youba Sokona (key note): People move ahead of general consensus – how to reflect that in Paris COP (e.g. a company can sign up for a call for carbon prices).

Message 4: Cities offer tested solutions to deal with climate change transcending sectoral boundaries

During the third and fourth days, urban-focused panels presented a plethora of approaches and experimental solutions already applied in cities that can serve as examples for tactical and practical climate change governance. General consensus of some sessions and last day plenary: Transformation is local and will generate a lot of local solutions – these need to be appreciated and fostered – involve a variety of actors. It is important to tap into solutions and what is already going on especially in cities. Examples of innovative activities can be found especially at local and regional levels, and are developed by diverse actors, including governmental, business and community actors. Identifying and fostering them is critical to enable staying below the (diminishingly feasible).

In the urban session on 'Managing transitions in cities – diving into the urban pool of dynamics and opportunities', Xuemei Bai opened the session by proposing to look at cities also to identify actions for climate change adaptation and mitigation posing four questions: (a) what are the forces behind rapid and low carbon urbanization, (b) complex interlinkages between systems (c) experimentation, innovation and upscaling and (d) governance of transitions in cities, can cities do it alone? While we often examine the impacts of cities on resources and their carbon footprints, the effectiveness of their policy frameworks should also be better understood. With this in mind, the question of urban experimentation and sustainability transitions revolves around the following empirical findings and observations according to Prof. X. Bai: (a) many cities become frontrunners in sustainability with success stories (b) some of the experimentation by cities are multiplied by others and up-scaled to change-systems of practice and (c) understanding the roles and mechanisms of urban sustainability experiments is essential.

Cynthia Rosenzweig started her presentation with stating that cities are both the cause and effect of climate change. Cities are highly vulnerable to climatic extremes and varying impacts like heatwaves and floods. However vulnerability is varying across different urban citizen groups depending on material resources, lifelines (e.g. cars and telephones), access to information, race and ethnicity, impervious environments and age. In parallel, cities are acting as world leaders in advancing action for

climate change, mitigation and adaptation and resiliency showing the striking progress that cities have made in fostering city-to-city networks (like C40, World Mayors Council on Climate Change, Compact of Mayors 2014 UN Climate summit with more than 2000 cities by now) and promoting daring action to respond to climate change. However, there remain many challenges for cities' responses including: (a) multiple jurisdictions, the multilevel governance is very challenging and more coordination is needed, (b) financing mitigation and adaptation measures, (c) uptake by cities and within cities and across cities with some cities being first responders and other being slow adopters,(d) moving beyond large cities to understand successful responses and actions and (e) considering momentum.

Related messages to take home from the urban sessions with a focus on cities as grounds for climate change solutions:

- Harnessing innovation and learning from experimentation in cities is essential since it can feed in the multilevel governance processes that facilitate and can accelerate sustainability transitions in cities;
- Following on how cities aggregate and share their knowledge and experiences of responding to climate change via creating city-to-cities networks and platforms, urban scientists also form global networks and platforms to collectively assess and analyse urban patterns and their dynamics to unveil controversial and surprising findings as well as global urban messages to steer more daring action.

Message 5: Climate scientists are navigating between science and policy/politics

The role of scientists in addressing climate change has been implicitly and explicitly underlying the discussions during the conference. What role should they play and how should they pursue this role? Some voices argue for a more active role in these processes. Interdisciplinary knowledge integration is a critical aspect, yet this is hampered by different terminologies and assumptions as well as approaches to climate change. Specifically, Sheila Jasanoff (final panel) suggested that transformative solutions will not be achieved without transforming how we see problems. According to Dr. Jasanoff, we need to account also for how science knows and what it does not know and how to overcome this. Science tends to overemphasise the knowable, and similarly policymakers need to understand that looking to science does not equal solutions. Rather, there is a need to look for diverse, multi-disciplinary knowledge and ways of knowing. Social and human sciences can develop new technologies of humility (reframing questions about vulnerability, learning, distribution). David Victor argued that social sciences need to get better organised – embedded in climate policy – and they need to get more involved to help people understand what we don't know, building governance systems that are adaptive to knowledge insights. Alexandra Gavilano during the panel discussion

suggested that at conferences like the CFCC scientists should also show how to act differently (e.g. vegetarian food, no plastic).

Session: Transformative solutions for urban sustainability governance: Multi-level government and cross-sectoral collaboration for efficient climate action

Chaired by: Thomas Elmqvist, SRC, Sweden

c Conference 7-10 JULY 2015 | PARIS, FRANCE

Urban transitions

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Urban transformati¬ons are complex and shockwise processes of change cocreated by formal and informal types of governance. This presentati¬ons draws from the experiences with urban transi¬tion labs to reflect upon the dynamics of urban sustainability transi¬tions, its inherent poli¬cal dimension and their governance. Ci¬ties are the breeding ground for transformati¬ve changes. Not only are ci¬ties confronted directly with the impacts of unsustainability, they are also the contexts in which the high density of actors, technologies, capital and knowledge leads to experimentati¬on and social innovati¬on. This presentati¬on will build upon transiti¬on studies to reflect on the mechanisms, dynamics and patterns underlying the complex and shockwise process of urban sustainability transi¬tions. One of the features of such urban transi¬tions is that they are inherently poli¬tical: new forms of agency and governance challenge mainstream thoughts, structures and cultures to create space for transforma¬tion. It will introduce the idea of governance panarchy in this contexts: the emerging contexts in which different actors at different levels develop informal and formal governance structures to address specific complex problems. These range from local coopera¬ves to public¬private partnerships, ci¬zen juries, par¬cipatory planning and social entrepreneurship. Urban transiti¬on management takes this emerging context as the basis for developing the meta¬governance framework of urban transiti¬on labs.

sharing of best practices, vertical¬integration of policies and investment plans across multi¬ levels of government, mainstreaming low¬carbon strategies into all sectors of urban planning and development, and fast¬tracking climate action.

(*ICLEI – Local Governments for Sustainability is an international association of Local Governments which has more than 1000 members in 86 countries.)

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Sustainability governance: the role of entrepreneurs in triggering transformative development pathway shifts

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Sustainability transitions are fluid and multi¬faceted phenomena, and may be characterized by multiple 'false starts,' punctuated equilibria, and contradictory pressures (such as a shifting political landscape and economic stressors). Many of these transitions are taking place at very small, community¬based scales, and are driven by grassroots or bottom¬up initiatives. While the idiosyncrasies of a particular urban context may strain our capacity to garner lessons that apply to other cities, social learning is a crucial dimension of accelerated sustainability transitions. In particular, cases of established leadership and innovative responses to sustainability challenges provide important insights into the roots, enabling factors, and various pathways that sustainability transitions might follow.

The transformative solutions panel in full!

After very lively presentations from Prof. Derk Loorbach, Prof. Sarah Burch, Prof. Webb and Ms. Marques, a discussion revolved around the 'what' and the 'how' of transformative solutions. The notes below summarize the discussion points.

A question on what we consider transformative in Chinese and Indian cities, but is that the transformation to sustainability we all talk about?

S.Burch: When a decision is made in China, it also changed rather rapidly. It is crucial that decisions are designed locally to not import western models without judgement. It is important to consider what fits and what makes the most synergies in the local context.

D.Loorbach: From our work with the World Bank on "Global Public Goods' is exactly on this, understanding dynamics at play and focus on how to reorient on-going transitions to sustainability. In terms of the international scientific community, it is the responsibility to provide evidence on solutions to slow down unsustainability transitions.

A.Marques: The local dynamics vary across developing and developed countries.

What is the missed or not seized opportunity for scaling transformative solutions from your experience and expertise?

S.Burch: SMES as untapped resource for sustainability transitions.

What is the first roadblock to remove for making transformative solutions diffuse?

S.Burch: Policy inconsistency between levels of governance

B.Webb: The cross cutting issues are often not in the policy agendas. It needs leadership to bring topics from grassroots to policy that is often a missing link.

D.Loorbach: The biggest barrier is the way we address the problem, asking of what is the problem. It is an egocentric approach that asks for silver bullet solutions. Why are those solutions emerging and experimentation happens despite the fact that there is still no consensus between scientists and policy officers on the issue at hand.

A.Marques: The key barrier is leadership towards transformation. Leadership can also be the catalyst for change. National governments are hesitating in taking chances, so the weight is on the local governments to take action and risks.

How do we engage with politicians and policy officers in a meaningful way in a way that understanding it, innovate and take it forward?

D.Loorbach: It is important to be engaged and step in with an open mind and start work from there.

S.Burch: It is also the way we communicate research inputs. Visualisations as tools to trigger thinking and change the way we engage with stakeholders.

Last but not least we also attach the poster presentation of the DRIFT's IMPRESSIONS' team led by Katharina Holscher. The focus on the poster is on the multiple governance capacities required to mobilise and coordinate action across a diverse set of actors for climate change.