Decarbonization and Short-Term Environmental Change: Musing from COP23
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What impact does short-term environmental change have on decarbonization pathways?

When we think of the long-term effects of climate change, it’s easy to envision a global cataclysm in the style of (admittedly over-dramatic) films like The Day After Tomorrow, 2012 or the more recent Geostorm. Yet, as the increasingly large forest fires and flooding across Canada and the massive hurricanes that ravaged the US and the Caribbean demonstrate, it is clear climate change is having devastating effects now in the short term. These short-term environmental changes, really brought to the fore of COP23 by the Fijian COP Presidency, necessitate more near term mitigation action but also provide an opportunity to increase climate action among previously recalcitrant actors.

These short term environmental effects clearly necessitate a ramping up of efforts to bolster adaptation and climate resilience more broadly and there is a real sense of optimism here at the COP that with the Fijian presidency, the first Small Island Nation to preside over the COP, climate change adaptation issues will finally be given the attention they deserve. Indeed, dealing with extreme weather events and rising seas levels is a key priority for the Fijian COP Presidency (http://newsroom.unfccc.int/unfccc-newsroom/political-priorities-outlined-for-cop23-by-in-coming-fijian-presidency/). Thus far, this has involved discussions among negotiators in the Bula Zone around loss and damage from climate change impacts and ongoing resource mobilization for the Adaptation Fund (https://www.adaptation-fund.org/cop23/). There are also numerous side events in the Bonn Zone put on by a broad swathe of stakeholders around adaptation issues.

However, short term environmental change isn’t only relevant to adaption but also has implications for mitigation and decarbonization pathways more broadly. Not only do we need to help vulnerable populations adapt to these environmental changes but we need to mitigate, as much as possible, climate change effects in the near term. So what would short term mitigation efforts look like?

For the first time, the most recent emissions gap report (https://www.unenvironment.org/news-and-stories/press-release/emissions-gap-report-2017-governments-non-state-actors-must-do-more) included short-lived climate pollutants (SLCPs), such as methane, hydrofluorocarbons and black carbon (soot) as a key action area. SLCPs are powerful climate forcers and do contribute to warming in the long term. While their reduction would contribute to achieving the 2 degree Paris temperature goal it would also have the potential to decrease the rate and degree of warming within the next decades.

More importantly, reducing SLCPs can have benefits for air quality, human health, agricultural yields and rainfall stability, all of which are negatively affected by short term environmental change. As Diamid Campbell-Lendrum (World Health Organization) argued as part of a COP23 panel on SLCPs, “it matters that we tackle short lived climate pollutants first because they are
urgent and important”. Thus, decarbonization should and can tackle short term environmental change while also contributing to longer term temperature goals.

What is also striking, is that it might actually be these short-term environmental effects that finally get unmotivated stakeholders to get their act together on climate change. The short term physical impacts of climate change clearly embody a risk that needs to be managed by companies. These impacts can cause disruptions in the supply chain, affect employees and destroy infrastructure, for example. The financial sector, too, is not immune to the effects of short term environmental change. If extreme weather events become more common and intense, it may become more difficult and expensive to insure. Similarly, droughts or floods can cause major market shocks. In other words, climate change is beginning to affect the bottom line, now and not in 50 years.

In a COP23 panel on climate risk in the boardroom, which included representatives from PwC, The Kellogg’s Company, B&P Paribas and S&P Global, it was clear that climate change effects occurring now are contributing to a change of heart in the finance world. Financial services firms like B&P Paribas have taken a number of steps, including divesting from sectors which potentially have the worst climate impacts and looking more and more at how potential clients are managing both the physical risks of climate change and the risks posed by carbon pricing or other mitigation measures. The representative from Kellogg’s also mentioned that there is an increasing interest among shareholders around climate and environmental related risks given that short term environmental change has an impact on their suppliers (often in developing and climate vulnerable countries in South East Asia). Stock exchanges are also more vulnerable to shocks caused by short term environmental change, driving some like the Brazilian Exchange B3 to follow a (still voluntary) “disclose or explain” approach ([http://www.sseinitiative.org/factsheet/bovespa/](http://www.sseinitiative.org/factsheet/bovespa/)). What was also clear from the panel, however, was that civil society efforts in this area are maybe not as important in driving pro-climate behavior in the corporate and financial sectors. Nevertheless, short-term environmental change might have unintentional benefits to long term decarbonization efforts by driving positive behavioural change in the private and financial sectors.

When we think about decarbonization, then, it is crucial to take into consideration the short term environmental changes being experienced in the present and how these drive behavior towards decarbonization, as well as the opportunities they present for nascent decarbonization pathways.