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The Coordination and Vertical Integration of Climate Actions

Prepared for the Low Emissions Development Global Partnership (LEDS GP) Working Group on Sub-National Integration (SNI-WG). Written by Scott A. Muller, smuller@sig-gis.com.

Non-state actors (NSAs) are fundamental agents to help achieve both national and international development goals. While disparate climate actions by NSAs do contribute towards filling the greenhouse gas (GHG) emissions gap, there are significant additional benefits to be gained by improving the coordination and vertical integration of these sub-national climate actions.

This report summarizes principal themes and observations that have emerged during the past two years of activities from the Working Group on Sub-national Integration of the Low Emission Development Strategies Global Partnership¹. It also briefly highlights informative sub-national and vertical integration themes from the other two major multilateral agreements this year on sustainable development and climate change.

1.0 Scaling-up climate action

Following the 2007 publication of the IPCC's Fourth Assessment Report (AR4), there was a notable increase in national climate change legislation and the formalization of national climate policies. But these efforts, as the IPCC's Fifth Assessment Report (AR5) concluded in 2014, have not resulted in an appreciable change in the trajectory of global emissions (IPCC, 2014). The overall recognition that current mitigation pledges by national governments will not limit the global average temperature increase to 1.5°- 2°C above pre-industrial levels has highlighted the importance of "enhancing actions, and scaling up new efforts to bring untapped mitigation potential to fruition."

In order to leverage the greatest GHG emission reductions possible, two parallel strategic tracks at the international level are discernible in the approach to COP21 of the United Nations Framework Convention on Climate Change (UNFCCC). The first is the innovative ex-ante process whereby national governments submit "intended nationally determined contributions" (INDCs).² These INDCs are likely to play a key role in framing the details to achieve COP21's principal objective—to create a legally binding and universal agreement on climate.³ Concurrently, an appreciable second stream of activities highlights the role of sub-national governments (SNGs), the private sector and civil society to implement additional climate actions and drive new partnerships and green growth.

¹ http://ledsgp.org/home

² http://unfccc.int/focus/indc_portal/items/8766.php

³ http://www.cop21.gouv.fr/en/cop21-cmp11/cop21-main-issues



Although the aggregate INDCs may be inadequate for a 1.5°- 2°C trajectory, there is hope that the climate leadership of mayors and businesses will continue to create new "bottom-up" climate initiatives and additional GHG emission reductions.

2.0 Non-state actors

Use of the term "non-state actor" (NSA) has evolved and is now used to reference both public and private actors. NSA can refer to city, state, and provincial governments and authorities, as well as entities from the private sector, NGOs, multi-stakeholder partnerships and other groups—whether for profit or not-for-profit. In short, NSA can refer to any public or private organization, apart from national governments.

In recent years, there has been a proliferation of ambitious climate initiatives put forward by non-state actors at the sub-national level. While NSA initiatives include specific actions to reduce GHG emissions, the term initiative is also being utilized to simply refer to future commitments, general targets and intentions to mitigate emissions or build resilience to impacts from climate change— be they in urban environments or other domains such as shipping, aviation, agriculture, forestry or the manufacture of consumer goods. The launch of the Non-State Actor Zone for Climate Action (the NAZCA Portal)⁴ by the Government of Peru and the UNFCCC at COP20 in December 2014 provides a clear overview that NSA climate initiatives are becoming increasingly common. Other examples that highlight initiatives by NSAs include the "Climate Initiatives Platform," the "Carbon Disclosure Project," We Mean Business," the "Covenant of Mayors," the "Compact of Mayors," the "Compact of States and Regions," and the "Under 2 MOU." Innovative NSA climate actions are generating environmental, social and economic impacts at multiple levels.

3.0 The LEDS GP Working Group on Sub-national Integration

Since its launch in 2011, the LEDS GP has grown to include the active participation of more than 160 governmental and international institutions. Within the various initiatives of the Global Partnership, the thematic Working Group on Sub-national Integration (SNI-WG)¹² was created in 2013 to support learning and facilitate collaboration between national and sub-national governments for accelerated, effective climate actions. Along with other thematic working groups, the SNI-WG also provides

⁴ http://climateaction.unfccc.int

⁵ http://climateinitiativesplatform.org/index.php/Welcome

⁶ https://www.cdp.net/en-US/Programmes/Pages/CDP-Cities.aspx

⁷ http://wemeanbusinesscoalition.org/take-action

⁸ http://www.covenantofmayors.eu/index_en.html

⁹ http://www.compactofmayors.org

¹⁰ http://www.theclimategroup.org/what-we-do/programs/compact-of-states-and-regions/

¹¹ http://under2mou.org/?page_id=10

¹² http://ledsgp.org/working-groups/subnational-integration-of-leds



targeted remote expert assistance on LEDS upon request via the Remote Expert Assistance on LEDS (REAL) service. ¹³ Today, the SNI-WG has the participation of more than 400 persons.

Over the past two years, the SNI-WG has realized several activities including organizing panels at multiple regional and global forums, hosting peer-learning discussions, publishing reports and case studies, along with facilitating technical workshops, webinars and providing advisory REAL support upon request. This process has generated observations, feedback and insights on the potential of the vertical integration and coordination of sub-national climate actions to accelerate and scale-up both local and global emission reductions. Presentations and discussion notes from these exchanges have been compiled and salient key points are highlighted and discussed below.

The coordination & vertical integration of sub-national climate actions can:

- Raise national government ambitions for more aggressive GHG mitigation commitments.
- Help alleviate domestic political constraints.
- Scale up, as well as unlock, additional and new mitigation opportunities at the subnational level.
- Accelerate the effective implementation of national targets, strategies and development
 priorities by "localizing" them. This can also provide opportunities for "bundled
 approaches" and increasing "co-benefits" by linking local priorities with diverse
 development objectives Improve the consistency of sub-national and national climate
 data sets; strengthening MRV.
- Create a more bankable "low-risk" environment for infrastructure finance and private sector investments.
- Expand and accelerate the flow of international public and private climate finance to cities, urban infrastructure and local priorities.
- Enable safe learning and strengthen domestic institutions.
- Address recognized challenges and limits to sub-national NSA climate actions.
- Help address some of the persistent collective action challenges to multilateral climate agreements.

¹³ http://ledsgp.org/assistance



4.0 Discussion

"Domestic political constraints" has been put forward as a primary obstacle to more aggressive commitments of nationally determined emission reductions (Aakre, 2014; Figueres, 2011; Green et al., 2014). Ostensibly, this is a reflection of the difficulty of both "localizing" national climate targets, as well as the institutional and systemic challenges to bottom-up integration of NSA climate initiatives into national frameworks. Nevertheless, as cities, sub-national governments and the private sector assume an ever-increasing role in creating wealth, building new infrastructure, reducing disaster risks and creating resilience to climate change— the collaboration, coordination and unlocking of synergies at the sub-national level becomes increasingly relevant to meeting both domestic national targets, and resolving the collective action challenges to achieving the global 1.5°- 2°C target.

4.1 Accelerating and scaling

Perhaps the most recurrent observation by SNI-WG participants to date on accelerating emission reductions regards the fundamental importance of establishing communication and dialogue between different tiers of government—along with creating opportunities for authentic participation from the private sector and civil society. Another closely related reflection was the importance of sharing data, resources and experience between government departments, i.e. reducing operational silos. This includes vertical interaction and information/data flow between national, regional and municipal governments; but also horizontally, between different national ministries for example, or between districts in the same metropolitan municipality.

It was noted that regular interaction, whether through ad-hoc advisory councils or existing official government channels, could build relationships, improve trust and accountability, as well as create a sense of shared ownership and responsibility. Linked and regular participation can help create action plans focused on strengthening operations and implementation, with less emphasis on control and enforcement methodologies. Such a process helps make national climate targets more specific, feasible and diffuse, and accelerates the effective local implementation of nationally determined priorities by both the public and private sectors.

Participants in SNI-WG activities have also expressed support for approaches that recognize different levels of decision making at pre-determined levels as an effective way to influence the bottom-up everyday rules and protocols that typically determine local resource allocation. This systemic, legacy-based approach contrasts with the strategy where emission reductions at the sub-national level are driven by nationally enforced penalties, restrictions, top-down monitoring of goals and motivated by either fear or incentives. Importantly, however, it was recognized by many that national development priorities often provided the targets and incentives for NSA climate commitments. Moreover, many NSAs viewed national policy-makers to be in a position to provide top-down incentives, legitimacy and authority that could enable new actions at the sub-national level, unlocking deeper, often profitable emission reduction opportunities.



In summary, scaling up and accelerating climate actions at the sub-national level can be supported by a diversity of coordination and integration strategies that range from formal authority to informal motivations to collaborate.

4.2 Capacity building

Another important theme expressed during the SNI-WG interactions has been the role that targeted coordination and integration of disparate NSA climate actions can have on building cross-cutting, multi-disciplinary domestic capacities in general. Specifically, linking jurisdictions, authorities, emission inventories, initiatives, trade associations or informal networks, creates opportunities for learning, cooperating and problem solving. These linkages strengthen institutional and systemic abilities to manage information, take new actions, improve efficiencies, form new relationships and pursue transformational change. These additional benefits (beyond mitigation and resiliency) of improved domestic institutional and systemic capacities will allow for the pursuit and uptake of bundled initiatives with complimentary development objectives (e.g. improved disaster response).

It was also clear that NSA climate initiatives at the sub-national level have a crucial exploratory and pioneering function as well. In both developed and developing countries, the absence of regulations, formal obligations, limits or penalties marks a low-barrier to entry to innovate or to publicly commit to a popular target with collective benefits— in essence, creating a safe space for learning by doing. With appropriate coordination, this can be a productive way to scale-up participation in emission reduction strategies. It has been observed that enhancing interactions and information exchange between existing initiatives and taking a gradual, incremental approach to vertical integration, can effectively navigate the trade-offs between political feasibility and the actual efficiency of decarbonizing the economy (Green et al., 2014). Over time such a voluntary and scaled approach can begin to order methods and test new measurement standards, leading to more explicit metrics, market and rule-bound emission reduction mechanisms, improved MRV, and/or enforceable carbon limits (Abbot et al., 2015).

When this experimentation and learning at the sub-national level can be shared and integrated among NSAs, it not only enables convergence and synergies, but it can also help build strong sub-national institutions and soften domestic political constraints.

4.3 North - South equity

While 195 countries have signed and actively participate in the UNFCCC, recent research concludes that the vast majority of NSAs currently taking part in transnational climate initiatives are located in the global north (Widerberg et al., 2015). Therefore, with the increasing growth of GHG emissions from developing countries, frameworks and tools to assist and support the coordination and vertical integration of NSA climate actions represents more than just a means to scale up GHG abatement. It can also improve the equitable distribution of the benefits of decarbonization, i.e. increasing the participation of sub-national NSAs in developing countries will provide more opportunities to become



involved in development activities as well as capture more co-benefits to climate action (e.g. reduced volatility of energy prices, less air pollution, etc.)

Along these lines, various general experiences and anecdotes shared by participants in the SNI-WG support this important equity point. They conveyed the potential support of national governments to:

- provide unique opportunities to NSAs to identify lessons from foreign development initiatives;
- support the building of "critical mass" and "risk sharing" at the sub-national level;
- stimulate excellence through both cooperation and competition;
- enable the international mobility of local practitioners and experts for learning, as well as to accelerate tackling of transboundary and global scientific and societal challenges; e.g. smoke/haze from wildfires, infectious diseases, disaster risk response, etc.;
- improve sub-national NSA access to international climate finance opportunities;
- help NSAs achieve strategic benefits, such as improved reputations and expanded reach; and,
- better distribute and share research, data, tools and infrastructure that can be prohibitively expensive to local initiatives.

4.4 Some challenges for sub-national climate actions

Coordination and vertical integration can also have an important function in overcoming challenges particular to local climate actions by NSAs. For example, as described above, it can improve monitoring and verification, boosting the accuracy, consistency and utility of data sets or markets.

However, another important issue highlighted by increased NSA participation in global climate discussions is the realization that effective climate action at the sub-national level requires more than just downscaling global GHG mitigation strategies. For example, more immediate to many cities than climate change impacts caused by atmospheric drivers are the direct local impacts from land based drivers and short-lived climate pollutants (SLCPs). Specifically, many communities have become painfully aware of urban heat island costs due to physical land-based drivers of climate change, such as widespread impermeable surfaces, narrow streets, high concentrations of particulate matter, or a dearth of green areas in their urban environment. This has come with significant costs to human health, energy use and air quality, among other direct and indirect impacts. Around the world, subnational governments are striving to address these land-based drivers of climate change. Improved coordination between national and sub-national governments can help share data sets and strategies to explore programs traditionally unfamiliar to city governments, such as forestry, ecosystem services, peri-urban agriculture or the energy-water-food nexus.

Lastly, despite the increased awareness and study of development trends and mitigation opportunities in urban environments, the hard truth is that at current rates, overall urban metabolism is completely unsustainable (UNHABITAT, 2012). Globally, cities are physically expanding twice as fast as their population growth. In Latin America and the Caribbean, the most urbanized region in the world, cities are swelling three times faster than their populations (UNHABITAT, 2013). Even when technological



advancements in energy and material efficiency are considered, the net resource consumption in cities is still increasing (Moore, 2015). While indeed thousands of sub-national governments are defining city-based climate action plans, the actual total impact on global GHG emissions is not clear. There has been insufficient analysis of the impact of city climate action plans on overall city-wide emissions (IPCC, 2014). In addition, the majority of urban climate actions are focused on energy efficiency improvements and do not address land-use policies or cross-sectoral measures to reduce urban area expansion; nor do they consider the consumption of goods and services (UNFCCC, 2014). The latter is quite significant considering that as much as 40% of per capita GHG emissions in developed countries are related to purchases of consumer goods (food and other products) (Lee et al., 2014).

Certainly increased attention to sustainable urban development by national authorities can help subnational governments and other NSAs to more efficiently harness opportunities and address direct and indirect impacts of climate change. But also, this increased "domestic collaboration" on internal development has impacts that accrue across the local, national, regional and global scales, with potential ramifications on some of the persistent collective active challenges to multilateral climate agreements.

5.0 Lessons on multi-level governance from the Millennium Development Goals (MDGs) and disaster risk reduction (DRR)

One recurrent point that has arisen in SNI-WG discussions on scaling sub-national climate actions regards the availability of multi-level governance lessons from the other major multilateral agreements under discussion this year; the Post-2015 Development Agenda and Post-2015 Framework for Disaster Risk Reduction.

5.1 The MDGs and the Post-2015 Development Agenda

The MDGs were adopted in the year 2000, when nations committed to domestically achieve eight measurable human development targets before 2015. Among the ambitious goals were: halving extreme poverty, providing universal primary education and ensuring environmental sustainability.

Aware of the hard limitations and cross-cutting challenges to rapid scale-up, pursuit of the MDG targets on the short 2015 timeline required countries to confront and transform traditional development practices. Historically, countries planned their domestic economic and social development via gradual, step-by-step improvements and incremental investments in infrastructure and services. But early on during the adoption of the MDGs, it was recognized that achieving the targets would require a transformation in conventional plans of action and require working backwards from the 2015 objectives; mapping key actors and dimensions, conducting needs assessments and sketching out intermediate milestones (UN Millennium Project, 2005). For example, the independent advisory body of the UN Millennium Project identified that many interventions to improve human health could be best implemented via coordinated district local level health systems with integrated monitoring, surveillance and evaluation systems. Another example is the early prioritization to closely



engage the private sector in order to help support the foundational economic growth during this transformative period.

Along these lines, countries adopted strategies for decentralizing the target and milestone setting, as well as the decision-making, budgeting and implementation, to the level of local governments. The MDGs, as new domestic development targets, thus necessitated a multi-level governance approach, and active partnerships between national and sub-national governments, NGOs, civil society and the private sector.

In program reviews, the involvement and ownership of communities during implementation of the MDGs was identified as crucial for scale-up and new opportunities. Communities had a foundational role, not just as recipients of program actions, but also to serve as strategy architects and to lead implementation. Numerous and diverse initiatives from many developing countries emphasized the importance of "localizing the MDGs", i.e. adopting implementation approaches that embraced the new roles for both central and sub-national governments in achieving development objectives (Crosta, 2010). A key lesson learned was the implication of local context and localized agendas in successfully achieving targets, including the fundamental role of local governments, involving diverse local stakeholders and the importance of investing in local capacities and resources for implementation, ownership, monitoring and accountability.

Some of the coordinating and integrating actions pertaining to national governments that were identified as essential to achieving the MDGs include: setting explicit overarching development objectives; establishing robust multi-level governance systems and; providing "exogenous" interventions (e.g. conditional grants and incentives) that were critical to "unlock" specifically identified constraints or opportunities for local progress.

In addition, MDG project consultations identified at least six key areas where sub-national and local governments could more efficiently deliver on national as well as local objectives (Crosta, N., 2010). They include;

- Delivering services
- Fostering local economic development
- Building climate change resilience
- Achieving food security
- Supporting state-building and democratization in post-conflict settings
- Promoting gender equality

MDG targets were achieved in developing countries more often when sub-national governments (inline with national objectives) assumed increased responsibilities to foster and accelerate development. Data gathered at the local level recurrently proved critically helpful. In many cases, sub-national monitoring of indicators efficiently identified gaps, misaligned investments, or uneven rates of progress. There are many examples where this information was utilized by local and national governments to implement key MDG projects bundled with local priorities (UN, 2015b).



Stemming in part from some of the lessons learned on localizing the MDGs, cities and SNGs have emerged as a critical axis for delivering the new Post-2015 Agenda (UNHABITAT, 2012; REDS, 2015), with action to combat climate change and environmental degradation has become one of the key priorities of the Post-2015 Development Agenda.

The final draft of the outcome document for the UN Summit in September 2015 to adopt the Post-2015 Development Agenda is titled "Transforming our World: The 2030 Agenda for Global Action" (UN, 2015). It presents seventeen cross-cutting and integrated Sustainable Development Goals (SDGs) and 169 associated targets. Importantly, many of these are related to sub-national climate actions that will depend on careful coordination and vertical integration. Taking the MDG lessons into account, strategies for the localization of the SDG targets and will continue to be key in the Post-2015 Development Agenda.

5.2 Disaster risk reduction

There are also relevant lessons regarding the importance of multi-level governance, the engagement of NSAs and accountability to accelerate and improve disaster disk reduction (DRR) strategies and results. An appropriate system of norms, institutions and their interactions is considered to be core to the successful implementation of future DRR initiatives (UNISDR, 2013).

5.2.1 The Sendai Framework

Under the coordination of the UN Office for Disaster Risk Reduction (UNISDR), the March 2015 agreement on the Sendai Framework¹⁴ for Disaster Risk Reduction 2015-2030 was the first of the three major multilateral agreements this year on sustainable development and climate change. The Sendai Framework built upon the experience and lessons learned from the Hyogo Framework¹⁵ for action 2005-2015.

With nearly 90% of disasters caused by weather and climate extremes (UNISDR, 2015a), review of the Hyogo Framework concluded that the exposure of persons and assets in all countries has increased faster than vulnerability has decreased. There has also been a notable increase at the local level of both disaster-related losses and new risks. A very high percentage of losses was due to recurring small-scale disasters and localized slow-onset disasters that impact communities, households and small and medium-sized enterprises.

During the process of formal consultations on a Post-2015 Framework on DRR, participants encouraged stronger linkages between national and local governments. The importance of improved community involvement was repeatedly called out. Many requests were made for a new Post-2015 simplified framework that reflected the realities of both local decision-makers and citizens. Because local actors are the primary implementers of DRR, it was viewed that more emphasis needed to be

¹⁴ http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf

¹⁵ http://www.preventionweb.net/drr-framework/hyogo/



put on local actors' capabilities and experiences. Several participants in the consultations requested the new framework to clearly delineate the different responsibilities at the central, provincial, district or municipal levels. Preferences were also expressed for an explicit decentralization of resources and responsibilities. There was consensus that integrated approaches and a greater emphasis on monitoring and accountability mechanisms would improve results. (UNISDR, 2013)

Therefore, among the seven specific targets utilized by the Sendai Framework, the key role of local governments is highlighted. For example, one of the Framework's guiding principles calls out the key importance of coordination mechanisms within and across sectors and stakeholders at all levels, in order to strengthen mechanisms to improve implementation and cooperation between international, regional, sub regional and transboundary organizations and initiatives. As well, highlighted in the Sendai Framework's priorities for action is the need to focus on cross-cutting actions by states within and across sectors at local, national, regional and global levels (UNISDR, 2015b). This will require the full engagement of all state institutions as well as executive and legislative bodies at both national and local levels, with a clear articulation of responsibilities across the public and private sectors.

5.2.2 U.S. FEMA

Since 1980, the U.S. Federal Emergency Management Agency (FEMA) has been granting money to U.S. states and territories as part of the federal Disaster Preparedness Program— to reduce risk as well as improve readiness. Since 2010, the program has annually awarded approximately US\$ 1 Billion in grants to improve disaster preparedness and risk reduction. However, strain has been mounting on the program due to the fact that the number of "billion-dollar-plus" weather disasters in the U.S. has been increasing by 5% a year since 1980 (Smith et al., 2013).

Under new federal hazard mitigation guidelines, to commence in March 2016, U.S. states and territories must now address the risks and impacts from climate change to their communities in their official risk reduction plans in order to qualify for grants from FEMA's disaster preparedness program.

This is one example of conditional grants and formal national guidance to strengthen the vertical integration of national priorities with sub-national governments, that will increase local and nation-wide resilience to the direct and indirect impacts of climate change.

6.0 Conclusion

As conveyed by the NAZCA Portal, the increase in NSA climate initiatives at the sub-national level is undoubtedly bringing much needed and untapped GHG mitigation potential to fruition. While indeed this may help fill the "emissions gap" towards achieving the 1.5°- 2°C trajectory, the concerted coordination and vertical integration of climate initiatives is a unique opportunity to capture significant additional values. It not only increases the probability of achieving more aggressive INDCs, but it can also improve synergies with concurrent national development objectives and other multilateral agreements.



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