Cooperative climate action 2013 – 2018: Global performance and geographic scope

A report of the project “Strengthening non-state climate action in the Global South” (ClimateSouth)

Summary

- This study analyses the performance of the 127 cooperative initiatives registered with the UN Climate Change Climate Action Portal as of October 2018, as well as the geographic distribution of their participants.
- These initiatives show 22,490 instances of participation by cities, businesses, states and regions, civil society groups, and other sub/non-state actors from every part of the world. The initiatives have a significant potential to contribute to implementation of national government initiatives, as well as to drive more ambitious national policies.
- The performance of cooperative initiatives is largely positive. By 2018, around three quarters were producing outputs consistent with delivering on their pledges. The level of performance of initiatives improves from 2013 to 2018, and as initiatives progress in time they also perform better, especially the first five years. Growing output performance suggests that initiatives are starting to deliver, increasing the likelihood – but not guaranteeing – that they will achieve desired environmental and social impacts.
- Despite some positive trends, the study also finds a continuing gap between the global North and South in terms of visibility, participation, and leadership. Only about a quarter of leaders, initiators, and participants in cooperative initiatives come from non-OECD countries. However, Latin America and Africa show sizeable levels of participation.
- The observed North-South gap may be at least partially driven by the higher visibilty of sub- and non-state actors in developed countries. Indicative evidence from India and Kenya demonstrate that many climate actions in these countries go unrecorded in international platforms and databases.

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Project website: https://www.geg.ox.ac.uk/research/climate-south

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ACCCRN	Asian Cities Climate Change Resilience Network
ACTS	African Centre for Technology Studies
ANSCA	Africa Non-State Climate Action
BSE	Bombay Stock Exchange
CIP	Climate Initiatives Platform
DIE	German Development Institute/Deutsches Institut für Entwicklungspolitik
ECBC	Energy Conservation Building Code
FOF	Function output fit
KBA	Kenya Bankers Association
NAZCA	Non-state Action Zone for Climate Action
NDC	Nationally Determined Contributions
NSE	Nairobi Securities Exchange
SAPCC	State Action Plans on Climate Change
SDG	Sustainable Development Goals
SME	Small and medium enterprises
UNFCCC	United Nations Framework Convention on Climate Change

Chapter 1: Introduction – accelerating action for low-carbon and sustainable development

Alongside national governments, cities, states and provinces, businesses, and civil society groups all around the world are working to reduce emissions and adapt to a changing climate. This groundswell of climate action has vast potential. According to a recent report, cooperative initiatives like C40, RE100, and the New York Declaration on Forests could reduce emissions by a third by 2030 if they continue to scale up and achieve their targets.[1] That could be enough to put the world onto a pathway to limit warming to 1.5℃ if national governments also meet their nationally determined contributions (NDCs). The scale of this opportunity means we need to understand how initiatives are performing. Are they scaling up? Are they delivering results?

In addition to overall progress, we also need to understand where and for whom cooperative initiatives are delivering results. To realize its potential, the groundswell of climate action will need to be truly global in scope. But previous research has found more climate action taking place in, and led by actors in, the global North.[2] To what extent are cooperative initiatives delivering results for the global South? And is there climate action in developing countries that is not being fully captured by global platforms and reports?

This report addresses these questions with findings from the research project "Strengthening Non-state Climate Action in the Global South" (*ClimateSouth*), an initiative of the Blavatnik School of Government at the University of Oxford, the German Development Institute/Deutsches Institut für Entwicklungspolitik (DIE), the African Centre for Technology Studies (ACTS), and The Energy and Resources Institute (TERI).[3] The information in this report complements information in the 2018 UN Environment's Emissions Gap Report[4] and the 2018 UNFCCC Yearbook on Global Climate Action.

Our objective is to support the climate action community by providing an honest and transparent tracking of progress around these important activities. This brief analyzes 127 cooperative initiatives, including all those listed on UN Climate Change's Climate Action Portal (NAZCA) in October 2018 plus a number of initiatives launched at high-profile climate action events, in particular the 2017 One Planet Summit, and the 2017 Pacific Climate Action Partnership (see *Appendix 1* for a full list). More recent events, including the 2018 editions of the aforementioned events and the 2018 Global Climate Action Summit, also saw the announcements of many climate commitments and cooperative initiatives. However, these commitments and initiatives are so recent we cannot expect them to have made much progress, and so they are not included in this analysis.

[1] Data Driven Yale, NewClimate Institute, and PBL Environmental Assessment Agency 2018. Available: http://bit.ly/yale-nci-pbl-global-climate-action.

[2] UNFCCC. 2017. "Yearbook of Climate Action 2017." Available: https://bit.ly/2PYVQLT

[3] See https://www.geg.ox.ac.uk/research/climate-south and https://bit.ly/2FI5I7S. The project is generously supported by the Europe and Global Challenges Fund, a joint initiative of the Volkswagen Foundation, the Sveriges Riksbank, and the Wellcome Trust. The project receives additional support in DIE's 'Klimalog' project, generously funded by the German Federal Ministry of Economic Cooperation and Development (BMZ).

[4] Hsu et al. 2018.

The report also presents more anecdotal evidence on domestic climate action in India and Kenya. Looking at these national contexts demonstrates that international cooperative initiatives do not capture the full universe of climate action. This finding should be seen as an important qualification of the findings of this report as well as other reports with a global focus. It also highlights an important area for future research.

The report answers four questions:

- Where do cooperative climate action initiatives work, and at which targets targets do they aim?
- Who leads, funds, and participates in cooperative actions? Are global climate actions delivering results and engaging actors in the Global South?
- Are climate action initiatives taking appropriate steps to deliver their goals? How has their performance changed over the last 5 years?
- What forms of climate action, especially in developing countries, are missing from global platforms and reports? Selected examples from Kenya and India.

Why focus on cooperative initiatives?

Cooperative climate initiatives are transboundary multi-stakeholder arrangements that aim to mitigate the greenhouse gases that cause climate change and/or help to adapt to impacts of climate change. Cooperative initiatives therefore respond to global climate change as a challenge that transcends any particular type of actor, sector, or the borders of human administration and jurisdiction. Alternative terms for 'cooperative initiatives' abound. For instance, researchers and policy-makers also refer to (climate) partnerships, transnational (climate) governance initiatives, or the more generic (multi-stakeholder) networks. This study applies a broad understanding of cooperative initiatives to capture the wide range of activities and institutional collaborations between all types of non-state and local actors.

The attention for cooperative initiatives has increased significantly in recent years, among both scholars and policy makers. One important reason is the possible contributions such initiatives have in closing the global emissions gap. A growing body of research aims to estimate the mitigation potential of such initiatives (see Figure 1). Overall, experts seem to agree on cooperative initiatives' potentially substantive mitigation contributions, although estimates vary widely. For instance, one study estimates the potential to decrease global GHG emissions in 2030 by 15-23 GtCO2e/year, relative to current government policies, bringing global emissions into a range that is consistent with the long-term temperature goals of the Paris Agreement.[5] Other studies, however, give much lower estimates, for instance Roelfsema et al.[6] assume a much larger overlap between cooperative initiatives and NDCs, and consequently conclude that their contributions are insufficient to close the gap between NDCs and the 2°C limit.

[5] Data Driven Yale et al., 2018.

[6] Roelfsema et al. 2018.

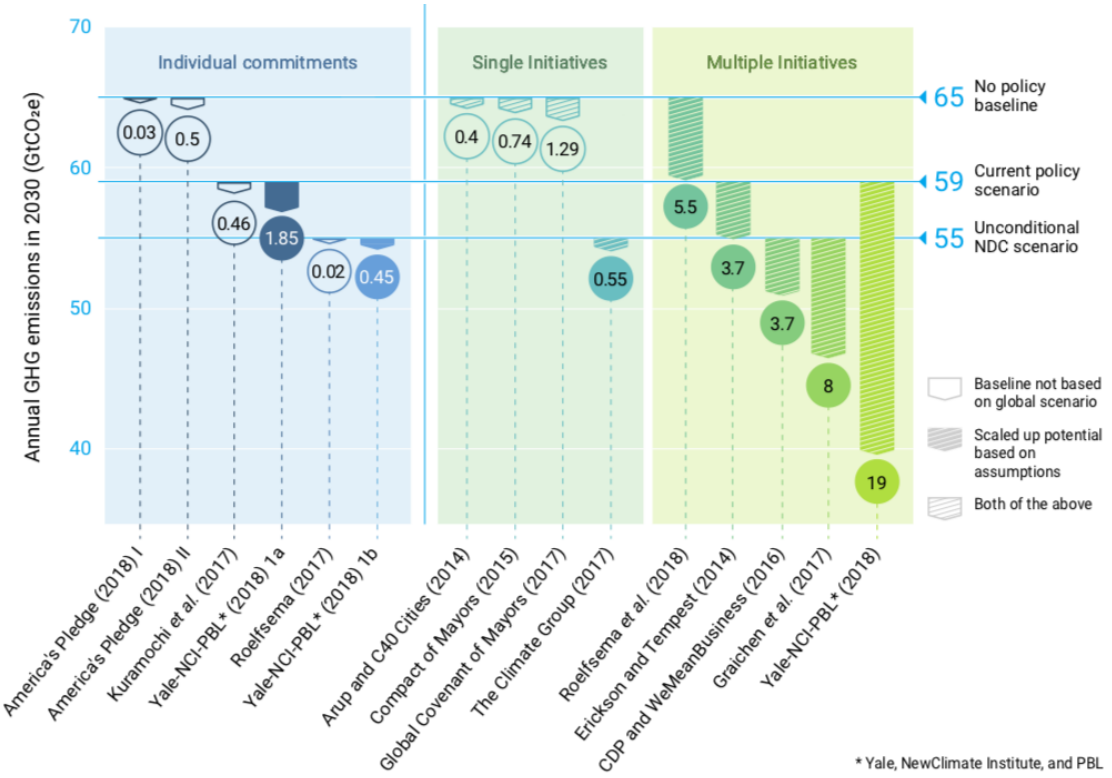

Figure 1: UNEP. (2018). Bridging the emissions gap – The role of non-state and subnational actors. Available: https://bit.ly/2zvDwiU. The left panel shows emissions reduction potential of pledged commitments by NSAs. The right panel shows scaled up potential emissions reductions based on single and multiple initiatives.

In addition to these "direct" impacts on the climate challenge, cooperative initiatives are seen as important tools of experimentation, innovation, and diffusion of knowledge and resources across actors.[7] Approaches to decarbonization or adaptation that succeed in one area, or for one actor, can spread to others, potentially generating system-level changes. In some cases, this diffusion can have a "catalytic" effect on other actors, including on national governments.[8]

Another reason for the growing attention for cooperative initiatives relates to their embedding in the the larger challenge of achieving global sustainable development. Most climate mitigation actions do not only help to reduce GHG emissions, but also contribute to the achievement of multiple Sustainable Development Goals (SDGs).[9] Sector and case-specific studies, for instance, point out the how measures to improve air quality,[10] ecosystems,[11] and urban health and buildings[12] also benefit climate action (and vice versa).

[7] Bernstein and Hoffmann 2018; Hermwille 2018; Abbott 2017.
[8] Hale 2018.
[9] For example, Weitz et al. 2018; Iacobuta and Höhne 2017.
[10] Nemet, Holloway, and Meier 2010.
[11] Munang et al. 2013.
[12] Balaban and de Oliveira 2017.

The possibility of productive linkages between multiple actors -- acting individually or through cooperative initiatives -- and between public goals relating to both sustainable development and climate action, has garnered theoretical reflection. This work has asked whether and how the fragmentation of climate and sustainability governance could produce optimal outcomes through "catalytic linkages?"[13] Scholarly debates on "polycentric governance," suggest that the regime, even without central coordination, could effectively address global challenges such as climate change.[14] Earlier theoretical discussions on "regime complexes" posited that the existence of multiple institutions, including cooperative initiatives, does not preclude a certain clustering or hierarchy in climate governance.[15] Moreover, despite the dispersed nature of a multitude of climate actions, they may still converge towards certain operational rules and rule-making systems.[16]

This growing literature lacks evidence, however, about the performance and effectiveness of cooperative initiatives and their emergence and operation in developing countries. The lack of ex-post data regarding performance and scope of climate initiatives is compounded by difficulties of comparability. Instead, different initiatives have been evaluated by their design,[17] which may give a better indication of the likelihood that desired impacts will be achieved. ClimateSouth aims to help fill these gaps by evaluating the scope, nature, and performance of cooperative initiatives, and also look in detail at the actors who lead, fund, and participate in them. The analysis below considers 127 initiatives, which includes all of the initiatives listed on the UNFCCC's Climate Action Portal (also known as NAZCA or 'Non-state Action Zone for Climate Action') as of October 2018, plus a number of other initiatives from key events including the One Planet Summit and the Pacific Climate Action Partnership.

We collected information by looking at initiatives' outputs, relying chiefly on published reports, websites, and online information. In some cases, our research team spoke directly with initiatives' secretariats to find additional information, but in most cases, we relied on publicly available sources.

The analysis performed below is able to track initiatives and the actors that engage in them, as well as their outputs, across different countries. We are therefore able to see how initiatives engage around the world. The analysis below relies on descriptive statistics and "function output fit" (FOF) analysis.[18] FOF measures the different outputs that an initiative produces and evaluates how it measures against the functions it seeks to perform. FOF is therefore a way to track whether initiatives are producing the kind of results that demonstrate progress toward their goals. This methodology is appropriate for comparing very heterogeneous initiatives with a wide range of targets, many of which are significantly in the future. Methodological details of the FOF method can be found in *Annex 2*.

[13] See Betsill et al. 2015.
[14] Dorsch and Flachsland 2017.
[15] Keohane and Victor 2011.
[16] Green 2013.
[17] For example, Michaelowa and Michaelowa 2017.
[18] See Pattberg et al. 2012.

The present analysis exhibits certain limitations. FOF values are a minimal indicator for effectiveness. A high value, rather than guaranteeing desired impacts, indicates a greater *likelihood* that desired outcomes are achieved. By contrast, a very low value almost certainly rules out attributable environmental or social impacts. To ensure inter-coder reliability, coders discussed on a continuous basis, and random initiatives were coded by multiple coders. In some cases, coders and researchers corresponded with individual initiatives to obtain more data.

Chapter 2: Emergence and targets of cooperative climate action

The number of cooperative initiatives has increased remarkably over time (*Figure 2*). Particularly strong spikes are seen in 2014, with the UN Secretary General's climate summit; 2015, with the Lima-Paris Action Agenda; and 2017, with the One Planet Summit. We also expect a spike in 2018 that is not captured in our current findings, as our sample does not yet include recent initiatives launched at the Global Climate Action Summit or the 2018 One Planet Summit, for instance.

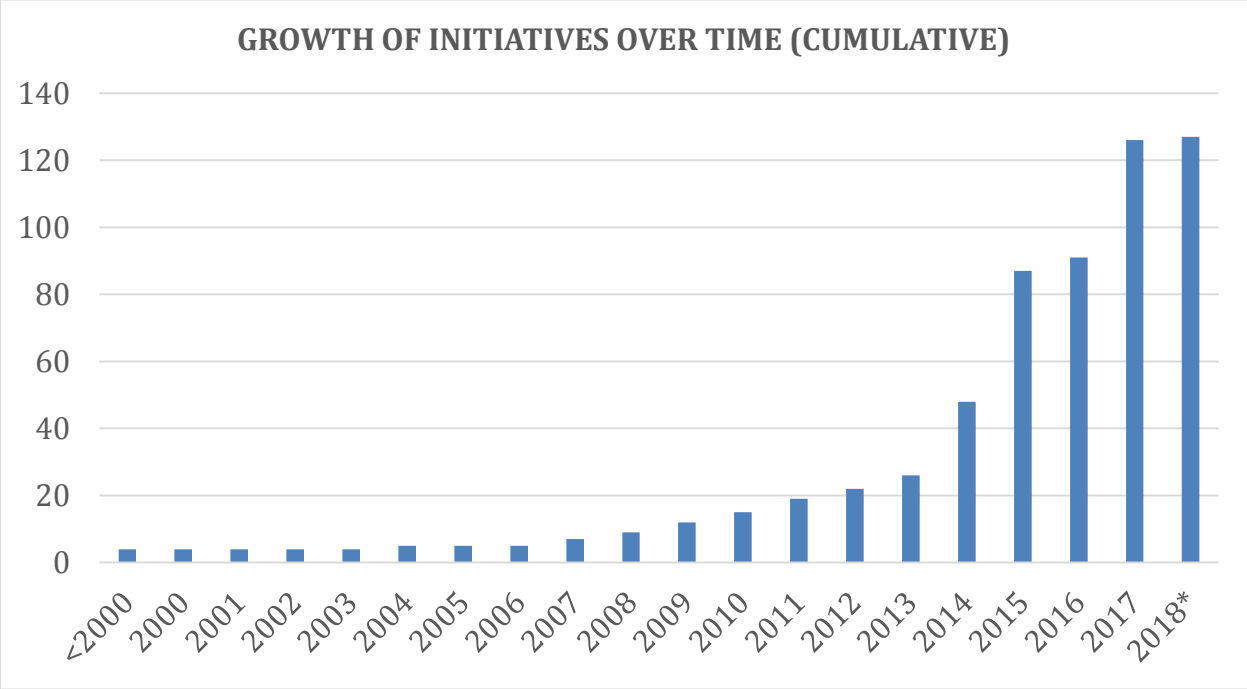

Figure 2: Growth of initiatives over time

Initiatives work across many different areas, though there are three times as many initiatives working on mitigation as on adaptation. Mitigation is the main focus of 67% of initiatives, while only 13% focus primarily on adaptation. However, 20% of initiatives include equal emphasis on the two areas of work.

Figure 3 shows the distribution of initiatives across the seven thematic areas of the Marrakech Partnership for Global Climate Action. As is expected, industry, transport, and especially energy make up the bulk of partnerships. “Nature-oriented” initiatives like land use, oceans, and water are fewer in number.

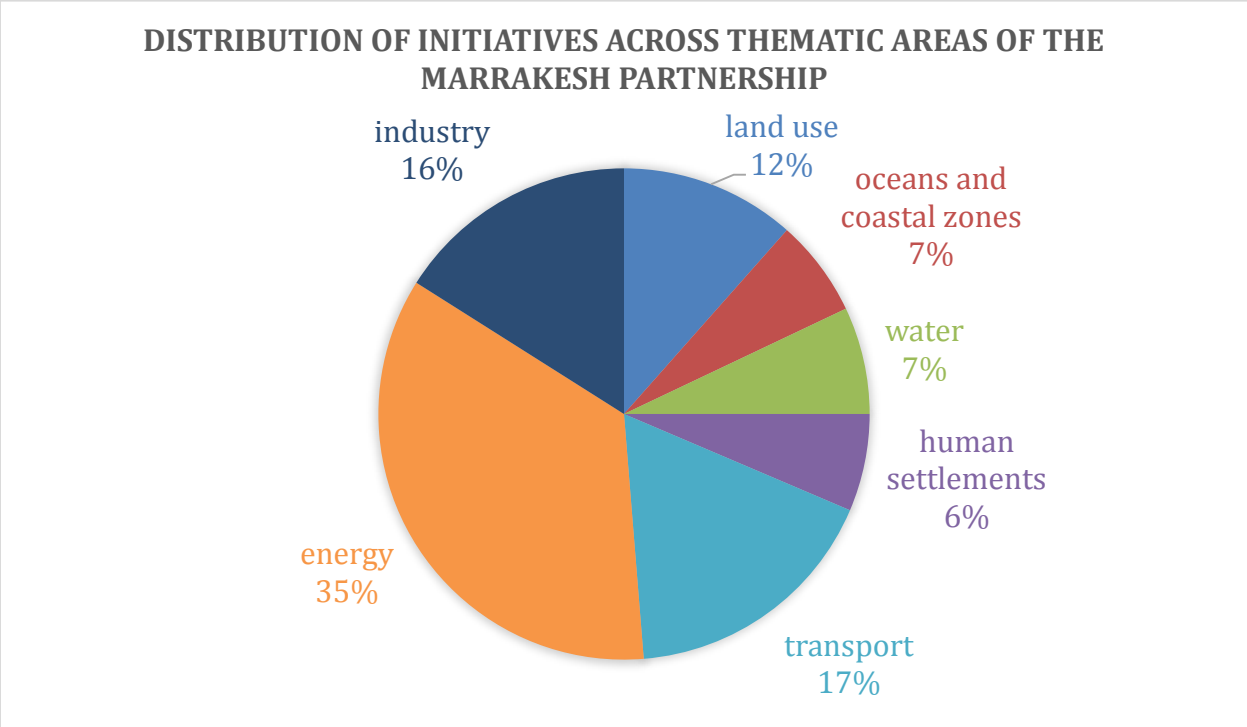

Figure 3: Breakdown of initiatives across thematic areas of the Marrakech Partnership

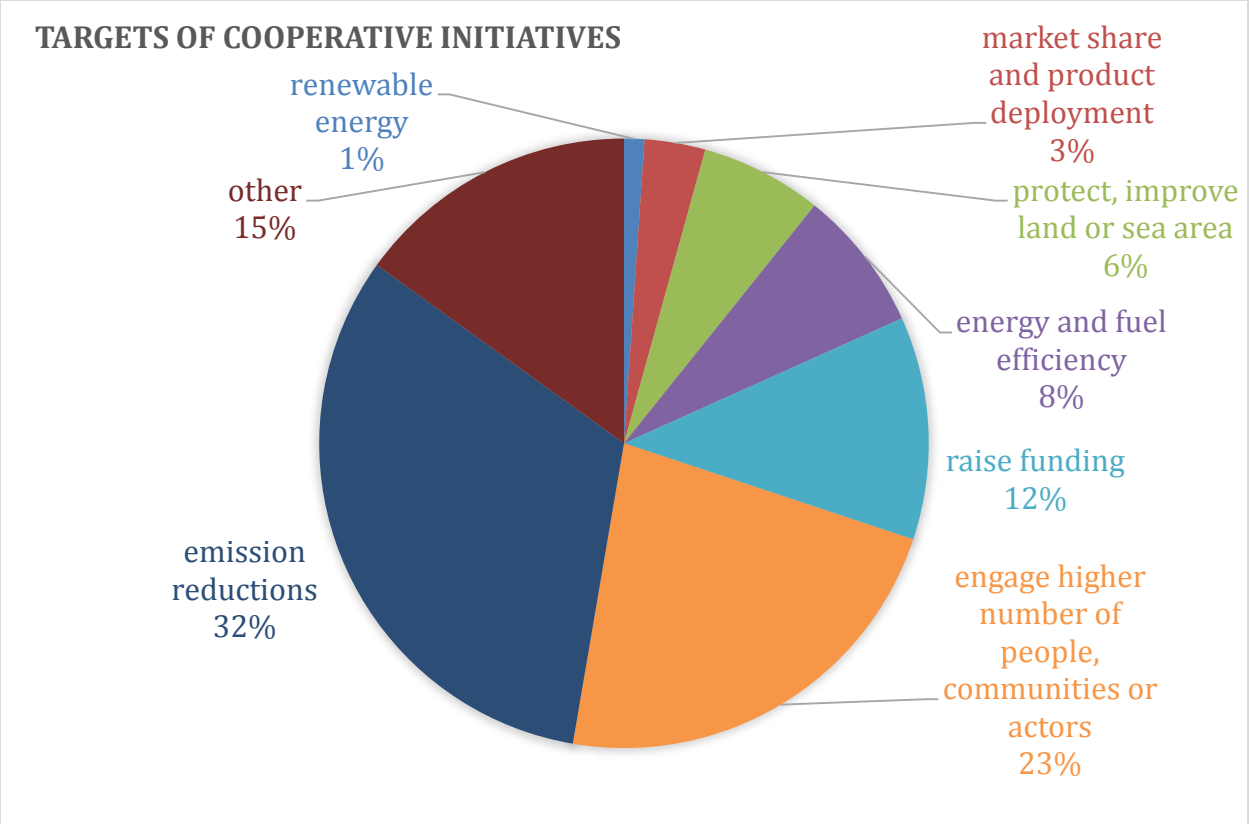

Figure 4: Targets of cooperative initiatives

Cooperative initiatives target a range of outcomes (Figure 4). The largest share, nearly a third, seek direct emissions reductions. A number of initiatives have comparatively indirect targets, like like engaging more actors, mobilizing financial resources, or generating new products, but these are also essential to effective climate action.

Cooperative climate initiatives can also be expected to make significant contributions to the SDGs, which are especially urgent in developing countries. Many cooperative climate initiatives explicitly refer to sustainable development co-benefits, in particular regarding “affordable & clean energy” (SDG 7), “industry, innovation & infrastructure” (SDG 9), “responsible consumption & production” (SDG 12), “sustainable cities and communities” (SDG 11), and “partnerships for the goals” (SDG 17) (*Figure 5*).

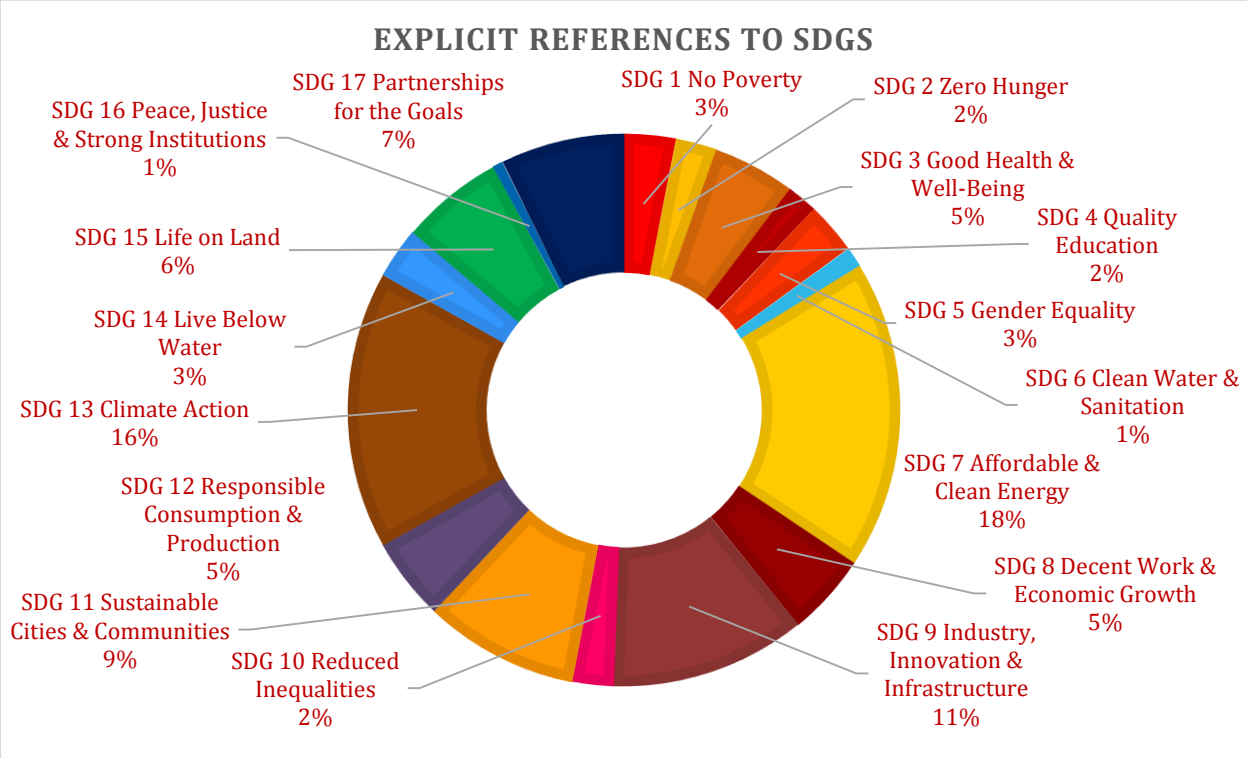

Figure 5: Explicit references to SDGs by cooperative climate actions

Chapter 3: Who makes up and drives cooperative climate action?

The 127 initiatives encompass 22,490 instances of participation from a large and growing cohort of cities, businesses, states and regions, civil society groups, and other sub/non-state actors, as well as national governments and intergovernmental organizations. We count "instances of participation," not "participants" to account for the fact that some actors participate in more than one initiative.

Strikingly, actors from every single member state of the UNFCCC participate in cooperative initiatives. Moreover, nearly every member state's national government participates in at least one of the cooperative initiatives studied. The only national governments not involved in currently registered initiatives are North Korea, Libya, Albania, Montenegro, Macedonia, Georgia, Slovakia, Bosnia and Herzegovina, Cyprus, Belarus, and Greece.

However, despite progress to expand inclusion over the past years, a North-South gap remains (*Figure 6*). Only 31% of participation in initiatives and only 24% of lead partners come from non-OECD countries. Perhaps surprisingly, nearly 30% of organizations that fund initiatives are from developing countries, although we do not have statistics on the magnitude of funding from different regions.

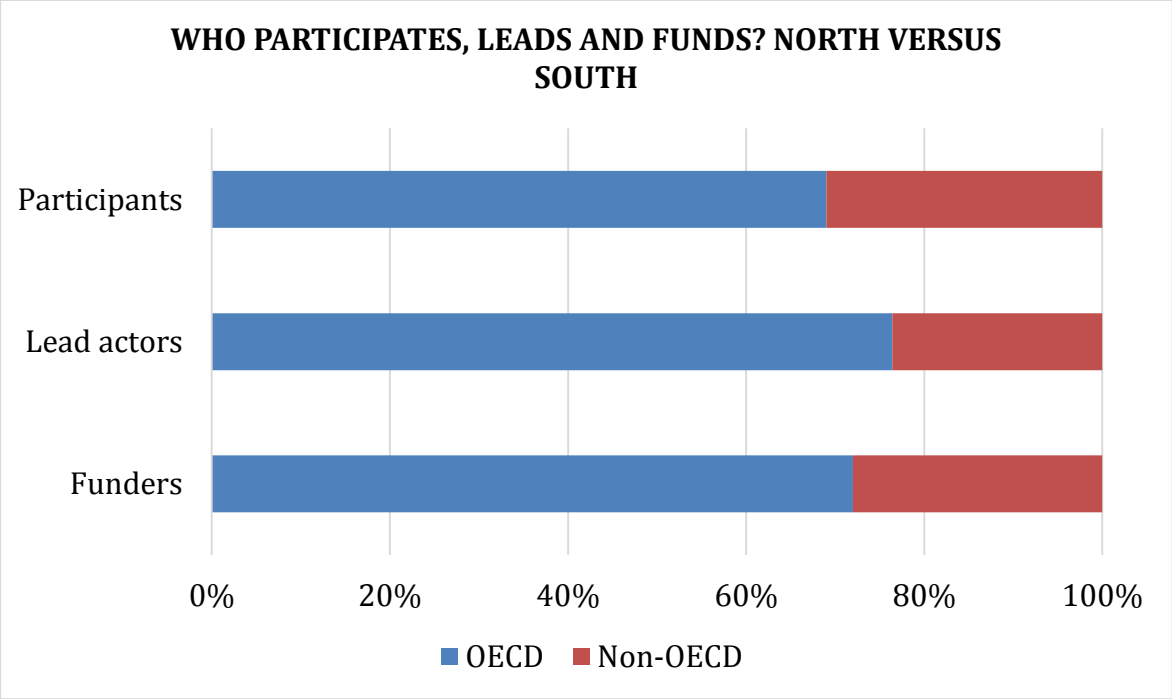

Figure 6: Who participates, leads and fund cooperative climate actions? North versus South

Looking more closely at participation reveals further trends of interest. Sub-national governments account for the majority of participation in cooperative initiatives. Businesses are the second most prominent group accounting for one quarter of total participants. However, most of the leaders of cooperative initiatives are national governments (30%) and international organizations (20%), as shown in Figure 7.

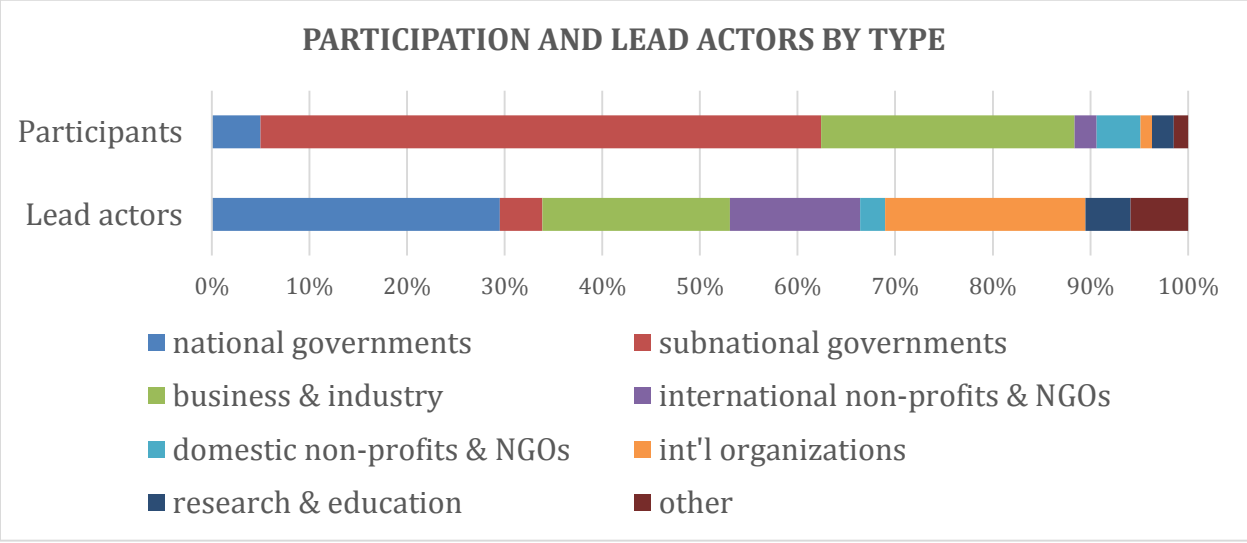

Figure 7: Participation and lead actors by type

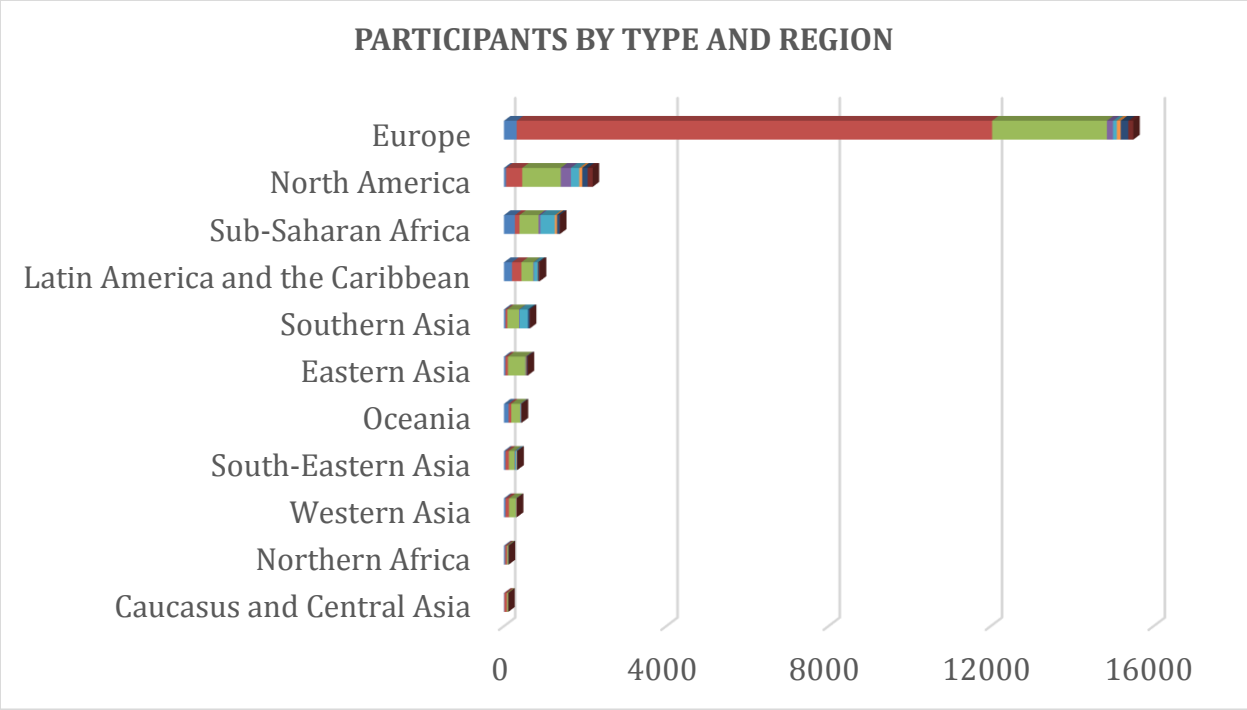

Figure 8: Participants by type and region

Moreover, the Europe-based actors of almost every type except domestic NGOs form the overwhelming majority of participants (*Figure 8*). Europe-based subnational governments alone outnumber the total number of all other participants of all types. This is can largely be explained by one initiative, the EU Covenant of Mayors, which engages thousands of cities mostly in the EU as participants.

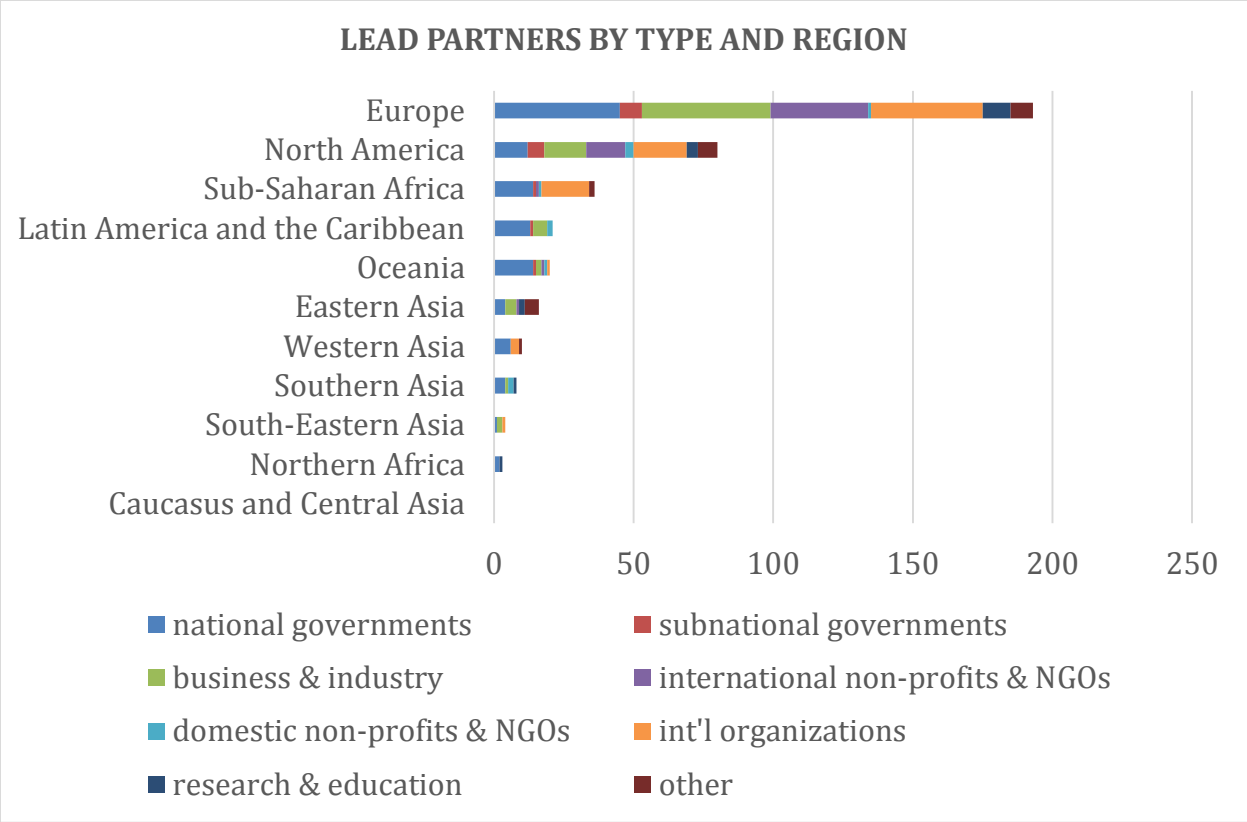

Figure 9: Lead partners by type and region

The striking imbalances between Europe and the rest of the world can also be observed among lead partners, as shown in Figure 9. EU and North America based actors lead the overwhelming majority of cooperative initiatives.

Figure 10 shows the interplay of public and private actors across the initiative. While two thirds of participants and over half of lead actors are public actors (national or subnational governments and international organizations), nearly three-quarters of funders are private. This mix of actors shows the importance of collaboration between public and private actors, the critical role national governments and international organizations play in “orchestrating” cooperative climate action, and the importance of philanthropy and other funding sources.

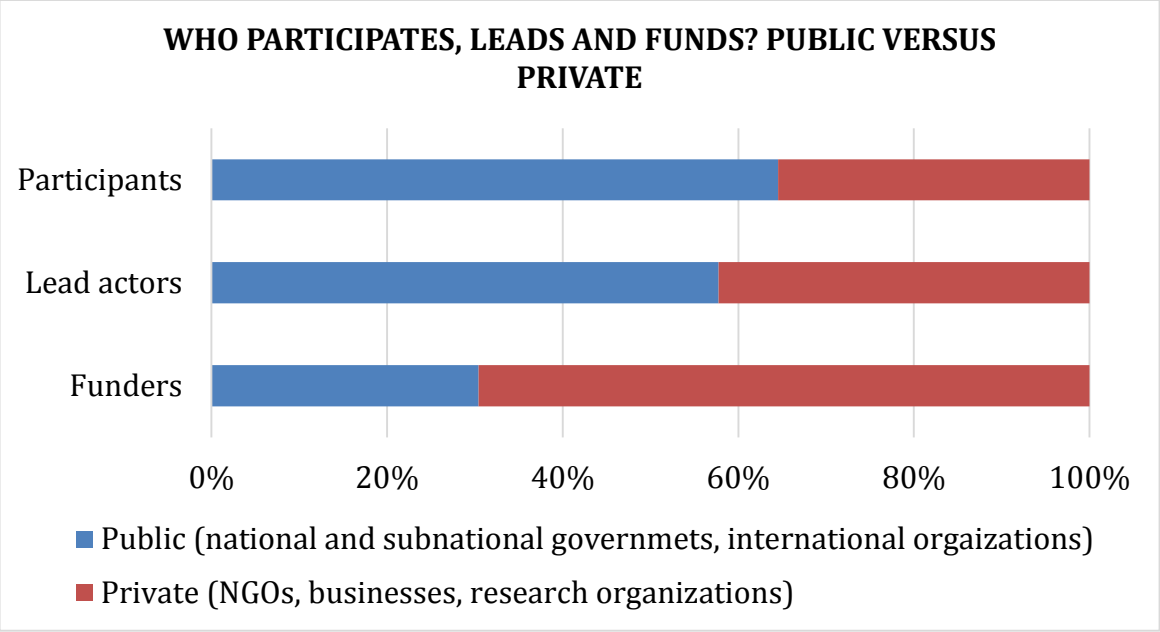

Figure 10: Who participates in, leads, and funds cooperative climate action? Public versus Private?

Cities, businesses, NGOs, and other stakeholders from some countries participate much more in cooperative initiatives than their peers in other countries. Figure 11 shows the 10 countries with the most instances of participation. Given the large size of the EU's Covenant of Mayors, European countries top the list. This implies that there is significantly more scope for climate action to expand globally.

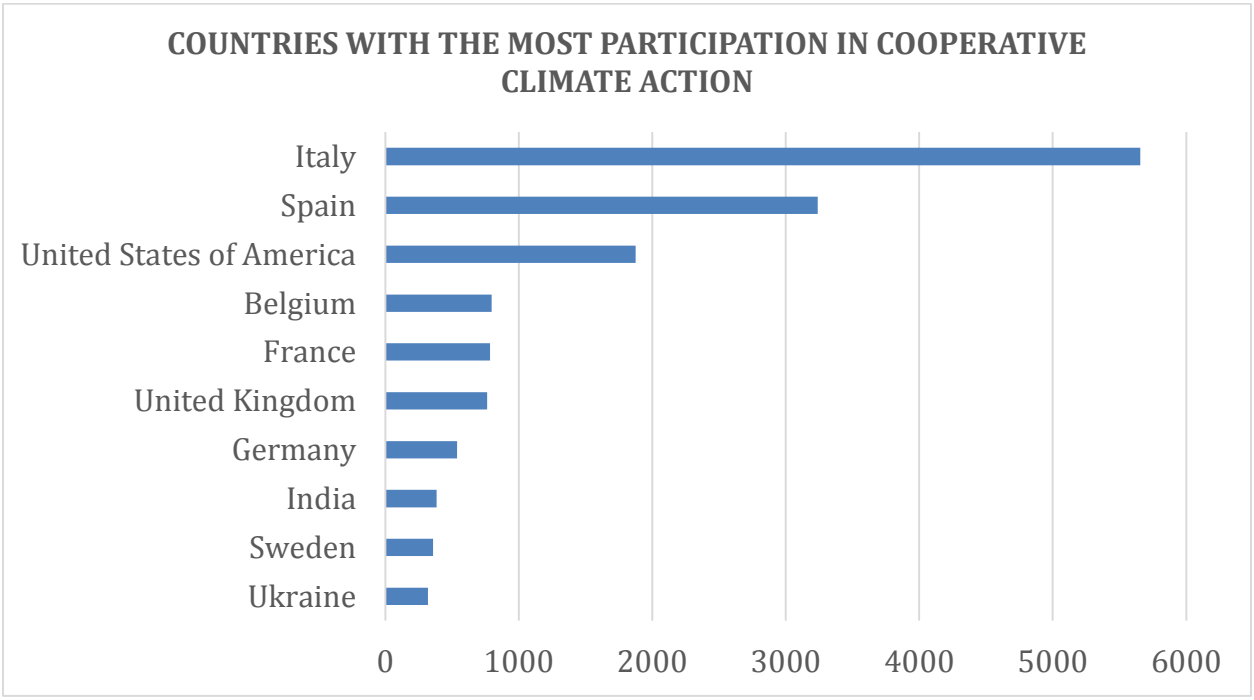

Figure 11: Countries with most participation in cooperative climate action

However, if we instead look at where initiatives are aiming to implement climate action, a more balanced picture emerges. Figure 12 shows how many initiatives being implemented or will be implemented in each region. Around 80% of initiatives have ongoing or planned implementation activities in the Global South.

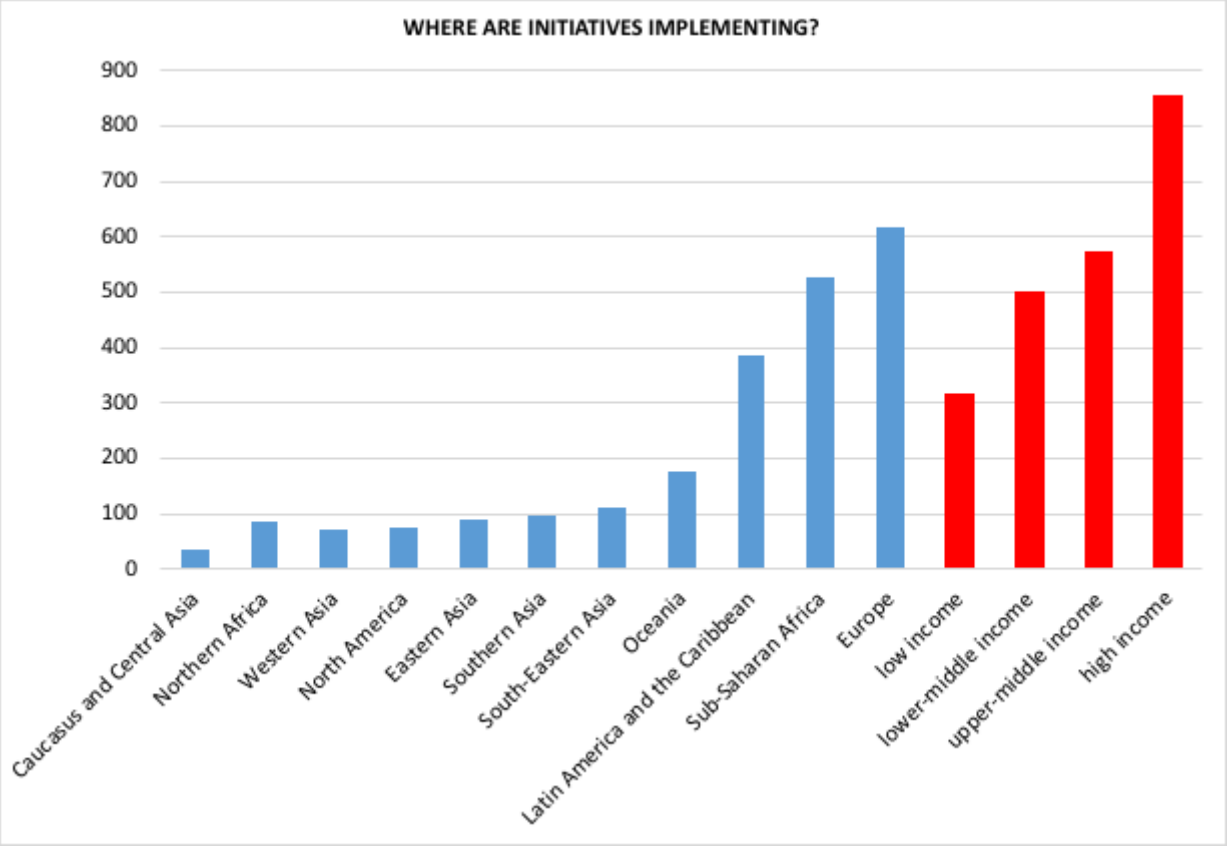

Figure 12: Where are initiatives implementing?

This more balanced picture is reinforced by looking in detail at where "outputs" of initiatives are produced geographically. Outputs include conferences, workshops, capacity-building sessions, publications, standard-setting, project development, and other activities designed to further the initiatives' goals (see *Appendix 2*). As Figure 13 shows, the number of location-specific outputs has grown substantially over the last several years. Moreover, the share of outputs produced in developing countries has increased through 2016, although in the most recent year developed countries have seen outputs nearly double, reducing the overall share of developing countries even as these continue to grow.

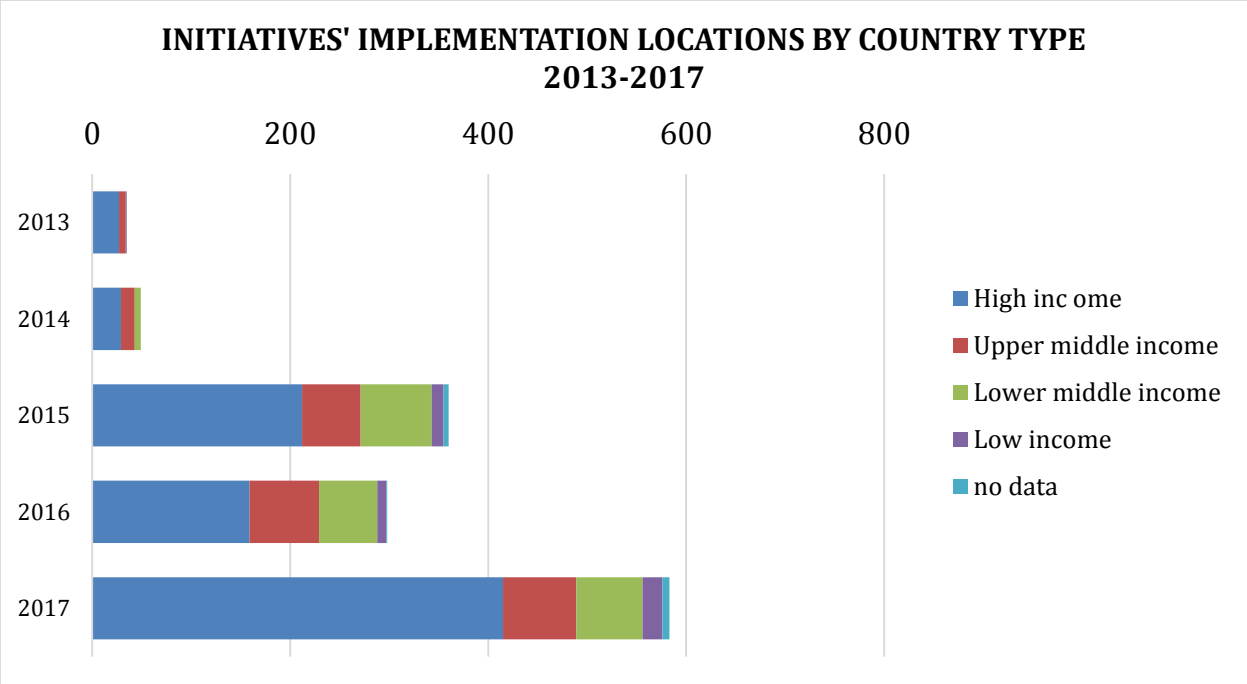

Figure 13: Initiatives' outputs by country group by year

Chapter 4: How are cooperative climate initiatives performing?

Recent studies demonstrate the great potential of cooperative initiatives, especially in terms of mitigation; cooperative initiatives could even put the world on track for a 1.5℃ development pathway.[19] We also need to track how cooperative initiatives are actually performing. Moreover, mitigation is only one of many possible aims of climate actions.

A first evaluation of initiatives' effectiveness can be obtained from looking at their institutional robustness. Do they have monitoring arrangements? Secretariats? Budgets? Without these basic institutional features, initiatives are unlikely to achieve their goals. Figure 14 looks at how the pool of initiatives score on two dimensions of institutional robustness. Because we expect initiatives to strengthen over time, we separate them by the number of years since their founding. As can be seen from the figure, initiatives do strengthen over time, and are performing well on the two dimensions of institutional robustness (monitoring and secretariats).

[19] For example, Data Driven Yale et al., 2018.

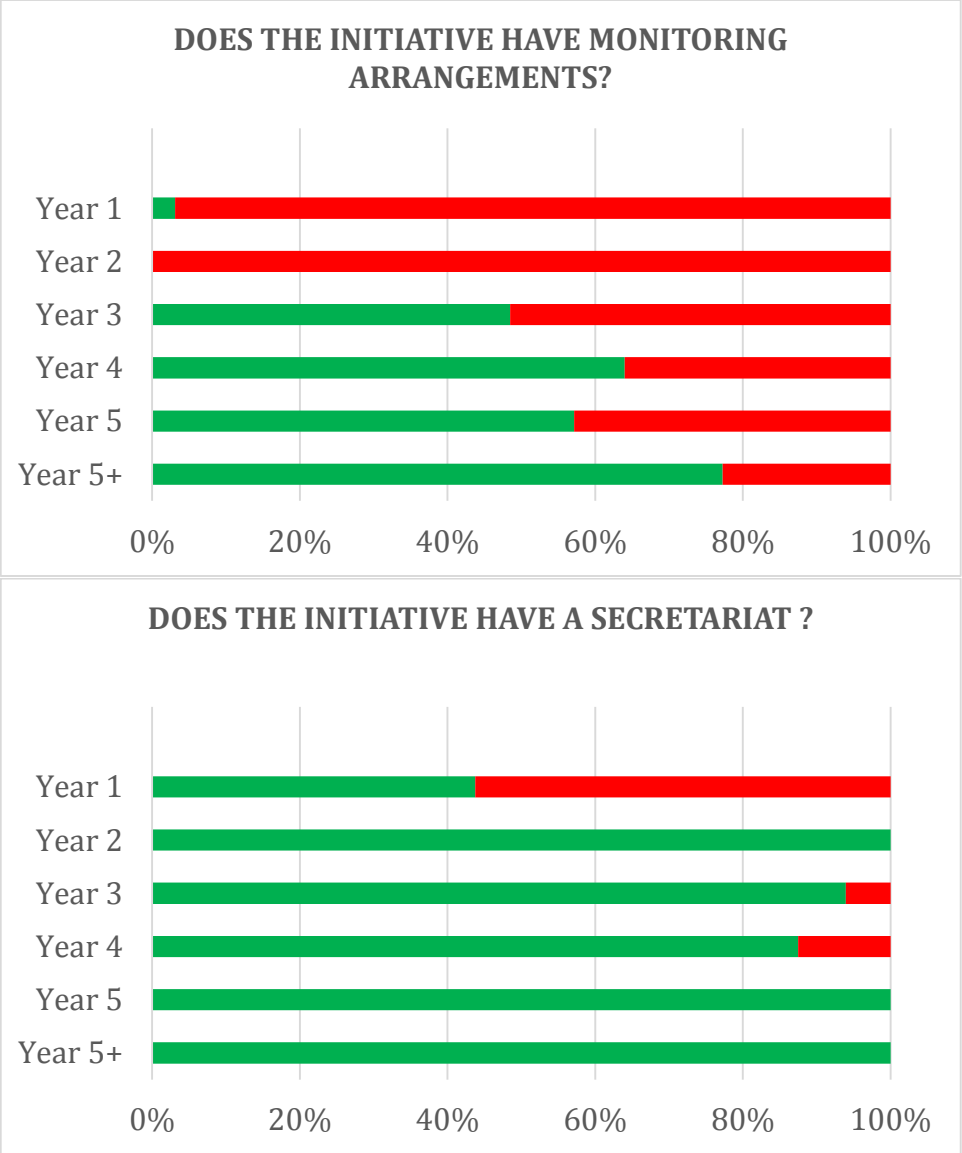

Figure 14: Institutional robustness of initiatives over time

To better indicate the performance of non-state and subnational climate actions, we applied the Function-Output-Fit (FOF) methodology that assesses the fitness of initiatives' functions and their respective produced outputs (see *Annex 2*).[20] For instance, an initiative that aims at flood risk reduction through infrastructural adjustments should be expected to enhance or install new infrastructure for it to have desired impacts. An initiative that aims at raising awareness can be associated with very different expected outputs, such as campaigning materials and public events. To calculate output performance, we combined data on functions of climate initiatives (12 function data categories) with data on tangible and attributable outputs (26 output data

[20] See: Pattberg, P. H. (Ed.). (2012). *Public-private partnerships for sustainable development: Emergence, influence and legitimacy*. Edward Elgar Publishing; Chan et al 2015, Chan et al 2018; Chan, S., Falkner, R., Van Asselt, H., & Goldberg, M. (2015). Strengthening non-state climate action: a progress assessment of commitments launched at the 2014 UN Climate Summit; Chan, S., Falkner, R., Goldberg, M., & van Asselt, H. (2018). Effective and geographically balanced? An output-based assessment of non-state climate actions. *Climate Policy*, *18*(1), 24-35.

categories). High output performance does not necessarily mean that initiatives reach their targets; however, initiatives that produce outputs that fit their functions are more likely to generate desired environmental or social outcomes, such as emissions reductions or sustainable development benefits.[21]

Using this method, we assessed the output performance of 127 cooperative initiatives for the period between 2013 and 2018. The assessment of cumulative outputs (*Figure 15*) shows accelerated growth of the share of higher performing initiatives in recent years. By August 2018, about 63% of NAZCA registered cooperative initiatives achieved high or medium-high performance, producing relevant outputs that they need to achieve desired changes in environmental and social indicators.

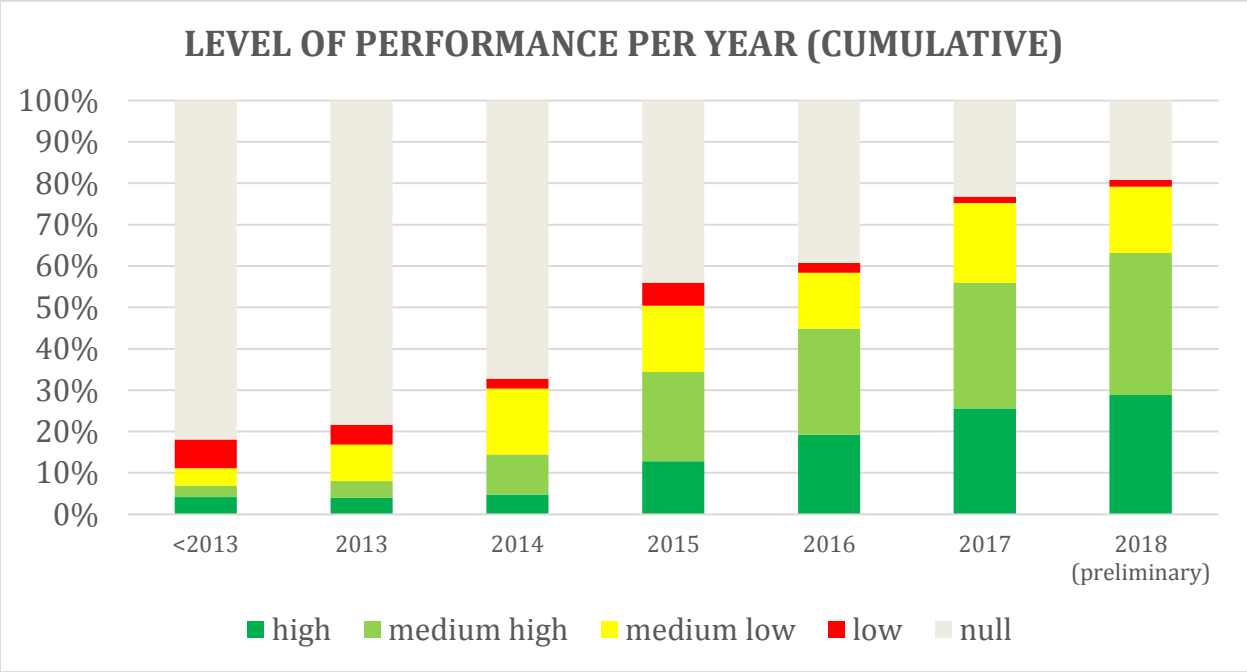

Figure 15: Cumulative output performance measured by FOF

We also looked at how initiatives' performance changes over time. We expect initiatives to strengthen over time as they institutionalize, attract resources, and implement activities. To investigate this trend we measured initiatives' performance at different "ages" since they were initiated. Figure 16 shows that initiatives do indeed strengthen over the first several years of their lifespan. More worryingly, however, it seems that the oldest initiatives are beginning to perform less well. This decay may simply reflect the kinds of initiatives that were founded over seven years ago, or it may indicate that many initiatives have a relatively short lifespan.

[21] We indicate '*high output performance*' for initiatives that produce fitting outputs for >75% of their functions; '*medium-high*' performance indicates fitting outputs for >50-75% of functions; '*medium-low*' indicates >25-50% fitting outputs; 'low' indicates >0%-25% fitting outputs; finally, some initiatives produce no output.

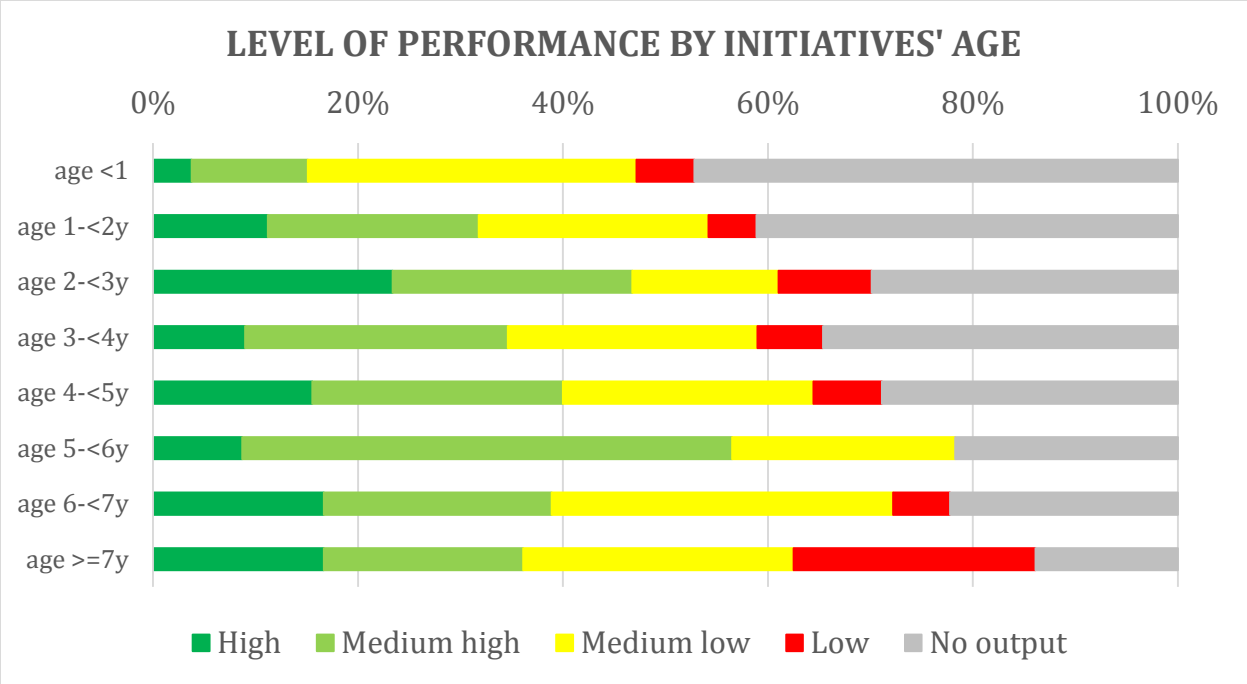

Figure 16: How initiative performance changes over time

We can also look at the breakdown of initiatives by different target areas. Figure 17 shows the cumulative output performance of mitigation versus adaptation initiatives. As shown, nearly equal numbers of both kinds of initiatives are performing well, but a larger portion of adaptation initiatives are not producing any outputs.

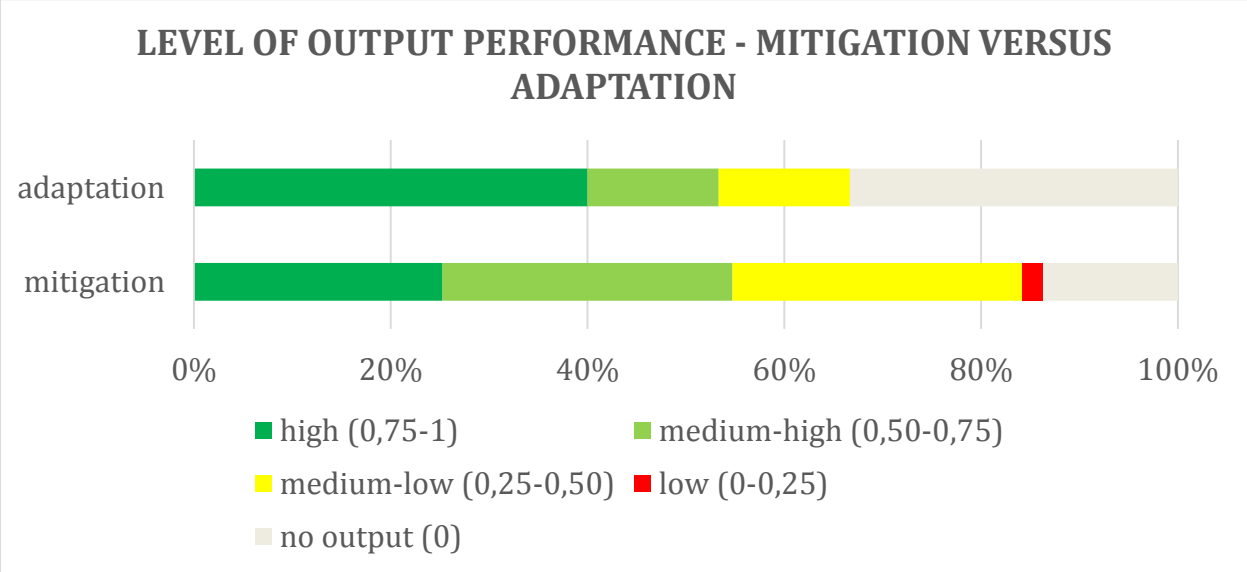

Figure 17: Cumulative output performance measured by FOF, mitigation versus adaptation

Chapter 5: Domestic climate action

While international platforms such as NAZCA and the Global Initiatives Dataset capture a significant amount of initiatives, there is a "visibility" around much sub- and non-state climate action, including around cooperative initiatives, in the Global South. This section presents evidence from two developing countries, Kenya and India, that suggests that global platforms and analyses like those above are missing an important part of the picture. This remains a fruitful area for further research.

Kenya

Emerging trends

Preliminary findings from the ClimateSouth Project in Kenya underscore this observation and reveal several trends. First, even though it is widely acknowledged that Kenya has a robust set of climate change policies and legislation, there is plenty of non-state climate action in the Kenya that remains uncaptured. For instance, most of the stock-listed companies in the Nairobi Securities Exchange (NSE) often include climate change in their annual reports and engage in domestic and transnational initiatives on climate change. Moreover, several counties in Kenya have been active in climate change projects, especially in collaboration with transnational actors, alongside developing the requisite policies.

Second, non-state climate action in Kenya is primarily framed within the broader context of sustainable development. For instance, most of the companies and SMEs that have been surveyed placed their climate actions within the broader context of SDGs, focusing on water, energy and creating awareness. This may point to the challenge of reporting such initiatives through discrete or binary categories such as mitigation or adaptation.

Third, in a workshop that convened State and non-State actors in October 2018 in Nairobi, Kenya, most participants underscored the need for a regional platform, Africa. Although most of the initiatives could somehow be captured by the global platforms, there is need to develop a regional platform to fully capture non-state climate action. Such a platform would not be limited to mapping action, but also serve as a mechanism to catalyse and strengthen such action. Towards this end, the Africa Non-State Climate Action (ANSCA) platform was endorsed and launched during the workshop. It is anticipated that ANSCA would serve as an appropriate regional platform, but also be a bridge and complement existing platforms.

Preliminary findings

Various non-state and subnational actors in Kenya are taking climate action, but many of these initiatives are not yet captured by global reporting platforms. Kenya's NDC recognizes the private sector and counties as key stakeholders. ClimateSouth analyzes efforts by counties, companies, and small and medium enterprises (SMEs). All 64 NSE listed companies were analyzed, as well as 47 counties, and 46 SMEs. The presented results are preliminary; comprehensive data collection through using surveys is currently underway. The following discussion highlights some of the specific initiatives undertaken by non-state actors in Kenya.

Companies: Forty three NSE-listed companies have highlighted impacts of climate change on their business in their annual reports. Companies in financial services, and the industrial and agricultural sectors make up a majority of companies taking climate action, with energy efficiency and renewable energy as major focus areas. While industrial and financial service companies tend to focus more on mitigation, companies in the agricultural sector companies also address climate adaptation. Moreover, companies link their climate actions with SDGs. For example, Safaricom, one of the largest telecom companies in Africa, and the developer of the M-Pesa mobile payment system, has developed a SDG strategy that addresses climate action (SDG 13). Banking and other financial service institutions promote green and climate financing as an emerging area of action. The Kenya Bankers Association (KBA), in collaboration with NSE and other financing partners, launched the Kenya Green Bond Programme in 2017, to finance, among other initiatives, climate change action. Major companies in Kenya have also tapped into international mechanisms for climate finance. National airline carrier Kenya Airways participates in a collaborative carbon-offset project that leverages REDD+ projects for Voluntary Carbon Offsets. In the agriculture sector, tea companies have taken up major solar energy projects.

SMEs: SMEs form the backbone of Kenya's economy. Forty-six SMEs have currently been analyzed, most of them bigger than average in terms of financial capital and human resources. These SMEs cover a diverse set of climate actions, primarily addressing energy, water (especially in the agricultural sector), and other SDGs. Energy is a major area of concern for SMEs. About 60% of SMEs set emissions targets, while only 22% set resilience targets. The high cost of energy remains to be a challenges in efforts to improve efficiency. Most SMEs use or aim to increase the use of renewable energy, such as solar energy, and take part in certified energy efficiency schemes. A large majority of SMEs (94%) have also adopted broader sustainability targets.

Counties: Since decentralization in 2013, counties have become an integral component of the two-tier government system in Kenya and therefore play a key role in the implementation of national policies. Various counties have taken extra steps to address climate action. Makueni and Wajir counties, for example, have developed and adopted county climate policies. Others such as Isiolo have developed county climate change funds. These actions have been spurred by national climate policies and legislation, but also by the vulnerability of counties. Much of the county-level climate action, however, remains unmapped. This is a gap that the surveys, which have been administered to all counties, seek to fill.

Domestic initiatives: Sixty domestic initiatives have so far been analysed. Because these are not international, none of them have been captured on global platforms like NAZCA. Of those initiatives fully analysed, thirty-nine are primarily focused on mitigation, nine on adaptation and three on both mitigation and adaptation. The service industry, especially banking, accounts for a third of the initiatives, the rest are spread across agriculture, manufacturing, and industrial manufacturing. Unlike the global initatives, most Kenyan initiatives have the dual objectives of climate change mitigation and adaptation. Moreover, there is strong presence of transnational actors in these initiatives, such as UN agencies, multilateral and regional development banks

such as the World Bank and the African Development Bank, and international research institutions, among others.

In sum, the preliminary findings from the Kenya case study indicate that there is indeed a significant amount of non-state climate action, but which has not yet been captured by most global platforms. Moreover, a wide range of actors, including the stock-listed companies, SMEs, county governments, and civil society organizations are actively engaged in climate action. Transnational actors such as UN agencies, multilateral funding agencies such as the World Bank and African Development Bank are also active mainly through funding and technical support. Crucially, most of the climate action analysed is framed in the broader context of sustainable development, especially SDGs.

India

Preliminary findings

States: Climate action across various states in India is characterized by the federal structure of the government, where actions are often a result of directives from superseding governance layers. For example, State Action Plans on Climate Change (SAPCC) are based on the National Action Plan on Climate Change. The variety of state actions seek to address climate risks either directly or indirectly through policy measures. Based on an initial analysis of seven Indian states, we found that an overwhelming majority of these states have specific climate change and energy offices to help formulate new actions and promote inter-departmental coordination. It has also been observed that a majority (83%) of natural risks were already being addressed by these states through various policy measures not necessarily branded as climate action. Mitigation actions across these states are also pervasive. Although, a majority of risk-based and mitigation actions taken by states are based on overarching policy directives issues by the National Government, as observed in the case of SAPCCs. We have also observed a few states willingly adopting non-mandatory policy provisions from the National Government, like in the case of the Energy Conservation Building Code (ECBC). This notion of "willingness" to adopt and experiment with new policy provisions could be emblematic of complex politico-economic conditions, and casts a vivid picture of evolving drivers of climate action amongst Indian states.

Cities: Not only do cities in India bolster a growing population and economy, they are also serving as ecosystems driving climate action. Through our analysis of 14 Indian cities, we have observed ideal cases of "leadership and innovation." In what is touted as South Asia's first Heat Wave Action Plan, Ahmedabad developed a comprehensive action to tackle its growing risk to relentless heatwaves. Another city, Surat, launched its own City Resilience Strategy in 2017, to climate-proof the city. Cities like Pune and Hyderabad, amongst others plan on transforming the current fleet of public buses from diesel to electric – a considerable pledge towards reducing carbon emissions from the transportation sector. Another emerging narrative is towards actions on waste management; of the 14 cities we have analysed thus far, only one city lacks waste management action plan. Akin to the notion of "willingness" in states, we have also observed cities innovating and implementing energy efficiency strategies, like Hyderabad, which is purported to have one of the first online ECBC compliance systems in India. This was achieved through a multistakeholder

engagement strategy, and echoes Digital India, a national campaign. Cities are also promoting rooftop solar power generation. For example, one of Delhi's power distribution companies is actively promoting solar rooftop as a push towards distributed power generation. We also observe growing transnational city partnerships promoting climate action, predominantly catalyzed through external agents, like in the case of Surat which is a part of the Asian Cities Climate Change Resilience Network (ACCCRN), or Bangalore which is part of the C40 initiative.

Companies: Energy efficiency and renewable energy dominate the mitigation strategies taken up by the top 14[22] analyzed companies listed on the Bombay Stock Exchange (BSE). It is worthwhile to note that these strategies have quantified outcomes that are reported publicly through Annual Reports and Sustainability Reports published by companies. A handful of fossil fuel and automobile companies that make-up these top 14 companies also have registered with Clean Development Mechanism projects. We have also observed four instances where climate risk is explicitly disclosed to investors. Analysing the nature of Corporate Social Responsibilities initiatives amongst these 14 companies, we have observed 26 initiatives related to climate change/disaster risk reduction and 58 initiatives related to the environment more broadly.

Initiatives: Analyzing 13 domestic initiatives in India that are not registered on international platforms (e.g. NAZCA/CIP), we observed a considerable focus on the energy sector. These initiatives are funded through a range of national and international funding sources and companies occupy the maximum proportion of actors involved in these domestic initiatives. The Indian offices of Domestic and International NGO's are predominantly lead partners in these initiatives, and policy planning as their main activity.

Emerging trends

During this exercise, we have however encountered issues in identifying climate action because the actions relevant to climate are not always labelled as such. Inconsistent and non-comparable data labels create a sense of ambiguity, and, in many instances, determining the "voluntariness" of actions itself is difficult. However, based on a secondary data mining process for climate actions and several expert interviews, we have been able to develop an understanding of emerging trends that subnational action, taken by Indian states and cities, exhibit. We will discuss emerging trends in the following paragraphs.

Informality of partnerships: Despite many examples of knowledge sharing and cooperation among various actors at the local level, e.g. city governments, civil society, and private sector, formal structures of partnerships or initiatives are rarely sustained over time. Cooperation instead relies on informal exchanges between interested agents leading to continued cooperative action. Over longer periods, cooperation between government actors and non-government actors may take the form of semi-formal partnership structures. For instance, in the state of Maharashtra the government department concerned with energy management takes responsibility for coordinating knowledge exchange and dialogue. Such informal arrangements are difficult to track in global platforms, but can be critical vehicles of climate action.

[22] Ranked by market capitalization.

Event-driven spontaneity: Innovation, experimentation, increased civic participation, and greater cooperation amongst the local governments and civil society groups, are more likely to emerge as a result of an event, or in anticipation of a probable event. These events include biophysical threats, growing socioeconomic vulnerabilities, and public pressure and opposition. In India, cooperative climate action tends to echo the context of multilevel governance, forging both horizontal and vertical links amongst local governments, non-state actors, civic groups and other regional and international agencies.

Catalytic role of external (whether national or international) agents: Many initiatives involving cities or companies have been catalyzed by national or international drivers. Initiatives such as Smart Cities (by the Indian National Government), C40, ACCCRN (non-state initiatives promoting pro-climate action in cities), or the Council for Business Sustainability (network of Indian businesses leaders working to mainstream sustainability practices) provide platforms to convene stakeholders; create an enabling environment for joint planning; and provide platforms for cooperation and action amongst actors within and across scales. Other initiatives involve informal and semiformal decision making, targeting and mobilizing actors towards cooperation to achieve common goals. Examples of these include informal partnerships between civil society and local administrations in the cities of Pune and Chennai to promote sustainable transportation, waste management, and sanitation.

Chapter 6: Conclusion and discussion

This study presented analysis of 127 cooperative climate actions registered with the UN and announced at large climate conferences and summits since 2013. Encouraging findings include rapidly expanding scale, scope and number of cooperative climate actions. By now, these initiatives encompass 22,490 instances of participation by cities, businesses, states and regions, civil society groups, and other sub/non-state actors. They implement their activities worldwide and have great potential to contribute to implementation of national government initiatives, as well as to drive more ambitious national policies.

Trends in terms of performance by cooperative climate initiatives are, for the most part, encouraging. The level of performance of initiatives improves year-on-year; and, as initiatives progress in time they also perform better, especially the first five years. Growing output performance suggests that initiatives are starting to deliver, increasing the likelihood – but not guaranteeing – that they will achieve desired environmental and social impacts.

The tentative finding that of initiatives seem to decrease in terms of output performance after six years, suggests a need for continuous mobilization and orchestration of initiatives to keep the momentum for climate action over an extended period of time. Finally, the study finds major differences in output performance between different types of initiatives. For instance, a larger share of adaptation initiatives performs worse than mitigation actions.

Despite some positive trends, the study also finds a continuing gap between the global North and South in terms of visibility, participation, and leadership. Investigations by the ClimateSouth project in India and Kenya demonstrate that many climate actions in these countries go unrecorded in international platforms and databases. Among internationally recorded initiatives participatory and leadership patterns are highly imbalanced. For instance, the number of instances of participation by Europe-based subnational actors is greater than all other types of actors worldwide. The large majority of recorded initiatives are led by actors based in the global North.

In the following we present recommendations for some of the main actors in global climate action.

Recommendations for secretariats and lead-organizations of international cooperative initiatives

- Strengthen efforts to track and report on progress, both at the initiative-level (e.g. through an annual progress report) and by feeding into the UNFCCC Climate Action Platform through appropriate data providers.
- Engage with national governments at the domestic level as they look to enhance NDCs and Long-term Strategies in advance of 2020. Explain how your initiative can add value by identifying opportunities for both governments and sub/non-state actors to raise ambition and help generate the resources and knowledge to implement targets.
- Increase efforts to engage sub- and non-state actors from the global South.

Recommendations for national-level policymakers

National governments have a key role to play in creating and leading cooperative initiatives, supporting and strengthening those that already exist, and helping cities, businesses, civil society groups, and other sub- and non-state actors from their countries take advantage of the benefits that cooperative initiatives provide.

- Conduct a national review of engagement in cooperative initiatives to identify gaps and opportunities. Starting with the UNFCCC Climate Action Portal, national governments can review the extent to which their country is currently engaged in international cooperative initiatives, and identify where more engagement might be beneficial.
- Create national or regional platforms for sub- and non-state actors to learn about domestic and international initiatives, and also to communicate to governments and to the outside world what climate action they are taking domestically.
- Create new cooperative initiatives with peer and partners to fill thematic gaps.
- Link domestic stakeholders to international cooperative initiative to help them take advantage of the transnational flow or resources, knowledge, and innovations.
- Work with the UN Climate Secretariat to help identify data and reporting platforms that can feed into the Climate Action Portal.

Recommendations for sub- and non-state actors

- Improve efforts to track and report progress made toward the targets you have set, and work to make sure that these efforts are feeding into data providers that populate the UN Climate Action Platform.
- Use the Climate Action Portal and the Climate Initiative Platform to seek out initiatives that can help you reach your goals.
- Where the current landscape of initiatives does not meet your needs, considering working with like-minded partners (either peers or other kinds of actors) to generate a new initiative that addresses your needs. If you see a gap, it is likely that others do as well.

Recommendations for international organizations

- Continue efforts to close the “visibility gap” between North and South by seeking out national and regional platforms, as well as data providers, in the Global South. Link these efforts to the Climate Action Platform, the Yearbook of Climate Action, the Marrakech Partnership activities, and other appropriate fora.
- Focus future mobilization efforts on the Global South, where the potential for growth and impact is greatest.

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Annex 1: List of initiatives

List of initiatives
4/1000 Initiative: Soils for Food Security and Climate
Adaptation for Smallholder Agriculture Programme (ASAP)
Adaptation of West African Coastal Areas
Africa Renewable Energy Initiative
African Clean Energy Corridor Initiative
Airport Carbon Accreditation
Blue Growth Initiative
Bonn Challenge
Breakthrough Energy Coalition
Building Efficiency Accelerator Platform
Business Alliance for Water and Climate
Business Leadership Criteria on Carbon Pricing
C40 Cities Clean Bus Declaration
Carbon Neutral Cities Alliance
Caring For Climate
CEM Global Lighting Challenge
Cement Sustainability Initiative
Cities and regions 5-year vision
Cities Climate Finance Leadership Alliance
Climate Change Reporting and Fiduciary Duty
Climate Risk and Early Warning Systems (CREWS)
Collaborative Climate Action Across the Air Transport World
Compact of Mayors

Compact of States and Regions
Corporate Engagement in Climate Policy
Covenant of Mayors
Divest-Invest Global Movement
en.lighten Initiative
Food Security Climate Resilience Facility (FoodSECuRe)
G7 Climate Risk Insurance Initiative
Global Alliance for Buildings and Construction (Global ABC)
Global Alliance for Clean Cookstoves
Global District Energy Accelerator
Global Energy Efficiency Accelerator Platform
Global Fuel Economy Initiative (GFEI)
Global Geothermal Alliance (GGA)
Global Green Freight Action Plan
Global Resilience Partnership
Great Green Wall for the Sahara and Sahel Initiative (GGWSSI)
Industry Energy Efficiency Accelerator (BEIS Industrial Energy Efficiency Accelerator (IEEA)
International Solar Alliance
International Zero-Emission Vehicle Alliance
Life Beef Carbon
Lima Challenge
Low-Carbon Sustainable Rail Transport Challenge

Maritime Regions in Action against Climate Change (CPMR)
Megacities Alliance for Water and Climate
Mission Innovation
MobiliseYourCity
Montréal Carbon Pledge
Municipal Solid Waste Initiative
Oil & Gas Methane Partnership
Paris Declaration on Electro-Mobility on Climate Change
Paris Pact on water and adaptation to climate change in the basins of rivers, lakes and aquifers
Phasing Down Climate Potent HFCs
Portfolio Decarbonization Coalition
Promotion of Smart Agriculture towards climate change
Protection of 400 million hectares of forests by Indigenous Peoples
Public Transport Declaration on Climate Leadership
R4 Rural Resilience Initiative
RE100
Refrigerants, Naturally!
Remove commodity-driven deforestation
Renewables LCTPi
Save Food Initiative
Science based targets
SIDS Lighthouses Initiative
Smart Risk Investing (SRI)
Statement by Financial Institutions on Energy Efficiency Finance
Taxi4SmartCities

The 1-in-100 Initiative
The New York Declaration on Forests
Under 2 MOU
United for Efficiency
Urban Electric Mobility Initiative
WWF Climate Savers
Zero Deforestation Commitments from Commodity producers and traders
Planners for Climate Action
Below50
Task Force on Climate-related Financial Disclosure (TCFD)
Global Covenant of Mayors for Climate & Energy
EV100
LCTPi (Low Carbon Technology Partnership initiative)
Net-Zero 2050
Reduce short-lived climate pollutant emissions
Responsible Corporate Engagement in Climate Policy
EP100
Caribbean Climate-Smart Coalition / Accelerator
Land Degradation Neutrality Fund
The Sustainable Finance Facilities
Tropical Landscape Financing Facility
GAFWAC Incubation Platform - 100 Water and Climate Projects for Africa
One Planet Fellowship/Agriculture R&D

Global Urbis
The Call for Vertical Integration of Local Authorities in NDCs
Towards Carbon Neutrality
Paris Collaborative on Green Budgeting
Space Climate Observatory (SCO)
Powering Past Coal alliance
International Solar Alliance
Transport Decarbonisation Alliance
"Tony de Brum" declaration
Carbon Pricing for the Americas
Carbon Pricing in EU
Greening the Financial System Network
One Planet Sovereign Wealth Fund Working Group
Climate Action 100+ Coalition
Philanthropists Task Force
The Sub-national Climate Fund for Islands and Coastal Regions (SnCF Islands)
Pacific Climate Finance and Insurance Incubator (known as the Drua Incubator or CFIIP)
Address Climate Change Impact on Health in Small Island Developing States
Fiji Water Resilience
The Bonn-Fiji Commitment
Renewable Energy Solution for Rural Communities
Ocean Pathway Partnership
High-Level Declaration Nature-based Solutions for water management under climate change
Sidewalk Challenge
Transformative Urban Mobility Initiative
People Centered Accelerator
Climate Action Pacific Partnership

One Planet Charter
Super Efficient Equipment and Appliance Deployment
Zero routine Flaring
European Wind Initiative
Solar Europe Industry Initiative
Salud sin daño / Health Care Without Harm
Carbon Pricing Leadership Coalition

Annex 2: Detailed description of FOF methodology

The *ClimateSouth* Initiatives Database (CSID) contains data on 77 cooperative actions registered on the NAZCA platform and gathers four types of data: *actors*; *organizational characteristics*; *geography of implementation*; and *output performance.* CSID is modeled after the Global Aggregator for Climate Actions (GAFCA) developed by DIE and the London School of Economics and Political Science. To measure output performance CSID uses the Function-Output-Fit (FOF) method, earlier applied to sustainability partnerships and climate actions.[23] Building on political systems theory and log-framing methods common in development studies, FOF assesses the consistency between functions and attributable and tangible production (outputs). To measure fitness between outputs and functions, the research team identified functions of initiatives (see *Table I*), distinguishing 12 inductively derived categories.[24]

Function categories			
Institutional capacity building	Lobbying	Norm & standard setting	Campaigning
Knowledge dissemination	Participatory management	Product development	Funding
Technical/on-the-ground implementation	Training	Knowledge production	Policy planning

Table I: Function categories

Subsequently, data was gathered on 26 output categories for every initiative (see *table II*).

Output categories			
Publication (Research, *PUB_RES*)	Publication (Advocacy, *PUB_ADV*)	Publication (Standards, *PUB_STA*)	Publication (Education, PUB_EDU)
Publication (Policy, *PUB_POL*)	Publication (Emissions Reports, *PUB_EMR*)	Publication (Reports, *PUB_REP*)	Event Participation (Popular, *EPA_POP*)
Event Participation (Policy to Policy, *EPA_POL*)	Event Organization (Science to Science, *EVO_S2S*)	Event Participation (Science to Science, *EPA_S2S*)	Event Participation (Science to Policy, *EPA_SCP*)
Funding Provided (*FUN_PRO*)	Institutions (Tools, *INS_PIN*)	Funding Raised (*FUN_RAI*)	Event Organization (Popular, *EVO_POP*)
Commercial Services - Advice (*COM_CON*)	Institutions (Established, *INS_ORG*)	Institutions (Partners, *INS_PAR*)	Commercial Products (*COM_PRS*)
Infrastructure (*ITT*)	Other (*OTH*)	Social Media (*SOM*)	Data aggregator (*DTB*)
Event Organization (Science to Policy, *EVO_SCP*)	Event Organization (Policy to Policy, *EVO_POL*)		

[23] See, Pattberg, P. H. (Ed.). (2012). *Public-private partnerships for sustainable development: Emergence, influence and legitimacy*. Edward Elgar Publishing; Chan, S., Falkner, R., Goldberg, M., & van Asselt, H. (2018). Effective and geographically balanced? An output-based assessment of non-state climate actions. Climate Policy, 18(1), 24-35.
[24] For an extended description of the methodology used and definitions of individual categories, see: Chan et al 2018.

Table II: Output categories

Finally, outputs and functions data were combined to assess consistency between functions and outputs (*Table III*). For instance, an initiative aiming to build capacity through training should at least produce training manuals, training seminars, etc. to have any desired impact.

Function	**Fitting outputs**
Knowledge production	PUB_RES; DTB; EVO_S2S; EPA_S2S;
Knowledge dissemination	PUB_EDU; DTB; EVO_S2S; EVO_SCP; EVO_POL; EVO_POP; EPA_SCP; EPA_POL; EPA_POP; SOM
Technical and on-the-ground implementation	ITT; PUB_EMR
Institutional capacity building	INS_ORG; INS_PIN; EVO_POL; EPA_POL
Norm & standard setting	UB_STA
Campaigning	PUB_ADV; EVO_POP; EPA_POP; SOM
Lobbying	PUB_POL; COM_CON; EVO_POL; EPA_POL
Participatory management	INS_PAR; PUB_REP; EVO_POP
Training	PUB_EDU; EVO_POP
Funding	FUN_RAI; FUN_PRO
Product development	COM_PRS
Policy planning	PUB_POL; EVO_SCP; EVO_POL; EPA_SCP; EPA_POL; INS_PIN

Table III: Functions and fitting outputs

Based on this assessment output performance is designated a value that corresponds with the percentage of functions that is matched by fitting outputs (*Table IV*).

No output	**Low**	**Medium-low**	**Medium-high**	**High**
No outputs have been produced	For >0%-25% of the initiative's functions fitting outputs have been produced	For >25-50% of the initiative's functions fitting outputs have been produced	For >50-75% of the initiative's functions fitting outputs have been produced	For >75% of the initiative's functions fitting outputs have been produced
The initiative remains a promise on paper; it has not produced any output except for expressing a willingness to take action.	First steps have been taken towards implementing the initiative. Outputs are produced, even when they fulfill few or none of the declared functions.	Significant steps are taken towards implementation. Outputs are produced, even when they are not enough to fulfill most functions.	Relevant outputs are produced for most functions that the initiative wants to fulfill. It is likely to generate some of the desired environmental and social impacts.	The initiative produces relevant outputs for nearly all declared functions. The initiative is likely to generate desired environmental and social impacts.

Table IV: FOF values/performance levels