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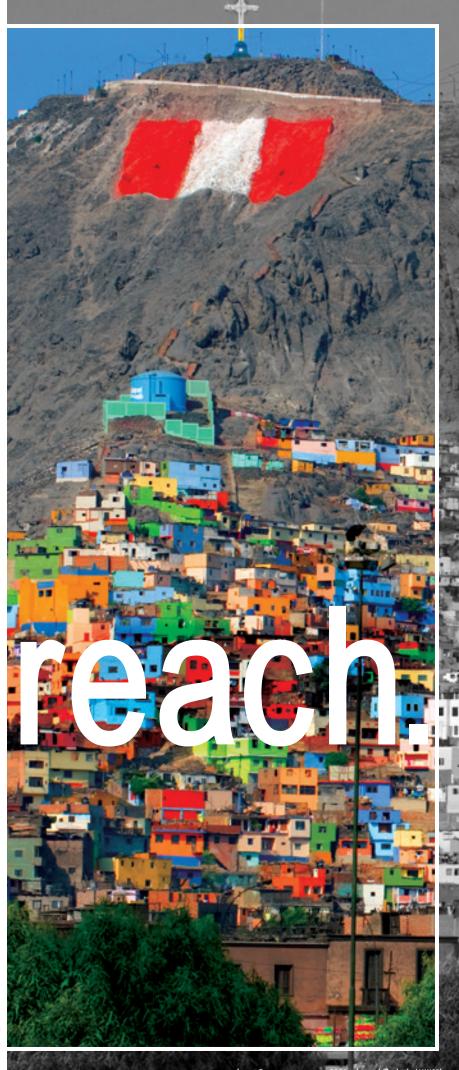
a daily multi-stakeholder magazine on climate change and sustainable development

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Outreach is a multi-stakeholder publication on climate change and sustainable development. It is the longest continually produced stakeholder magazine in the sustainable development arena, published at various international meetings on the environment; including the UNCSD meetings (since 1997), UNEP Governing Council, UNFCCC Conference of the Parties (COP) and World Water Week. Published as a daily edition, in both print and web form, Outreach provides a vehicle for critical analysis on key thematic topics in the sustainability arena, as well as a voice of regional and local governments, women, indigenous peoples, trade unions, industry, youth and NGOs. To fully ensure a multistakeholder perspective, we aim to engage a wide range of stakeholders for article contributions and project funding.

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Cities and climate change: Transforming constraints into opportunities

Stéphane Pouffary and Heather Rogers

ENERGIES 2050

The role that cities can play in the international effort to tackle climate change is increasingly being recognised. After all, cities house the majority of the world's population, and as a result they consume huge amounts of energy and other resources.

While estimations vary on cities' collective carbon footprint, it is clear that they account for a large part of global greenhouse gas (GHG) emissions generated from energy use, particularly from buildings and transport. But as such an important contributor to climate change, cities can also be at the heart of the solutions, and this potential is gaining attention within the UN Framework Convention on Climate Change (UNFCCC). Subnational governments are a crucial part of the solution as they have capabilities and influence on a wide range of sectors that are important for GHG emissions (e.g. public transport, waste management, urban planning).

Cities are also major 'receptors' to the impacts of climate change. As highlighted by the latest Intergovernmental Panel on Climate Change (IPCC) report, "many global risks of climate change are concentrated in urban areas". This observation is particularly pertinent given that every week the urban population increases by about one million inhabitants, and more than half of these 'newcomers' live in urban slums, where the lack of resilient infrastructure leaves communities all the more vulnerable to the effects of climate change. Cities thus face a double challenge of keeping pace with urbanisation, as well as adapting to the changing climate.

Climate change is inextricably linked with development. While meeting basic needs of course remains the priority, it should be emphasised that activities targeting climate change mitigation can bring significant co-benefits for sustainable development too. To help cities design and implement their sustainable development strategies, including provisions for climate change mitigation and adaptation, the Institute of la Francophonie for Sustainable Development (a subsidiary body of the International Organisation of la Francophonie - a network of 80 countries) and ENERGIES 2050 have cofounded the 'Francophonie's Initiative for Sustainable Cities'. This takes a systematic approach to developing sustainable urban strategies that are consistent and comparable, yet also adaptable to each city's situation. As an illustration, one of the concrete actions underway through the initiative is a capacity building programme for architects and urban planners from 14 African countries on integrating energy efficiency and renewables into buildings and urban design.

Climate change mitigation in cities presents several challenges. Firstly, the very nature of cities complicates mitigation activities, with their diverse characteristics and the interrelated sectors and actors involved. Secondly, the GHG emissions profile of a city (the relative contribution



from different sectors to total emissions) varies a great deal from one city to another, making a 'one size fits all' solution virtually impossible. Thirdly, however willing subnational governments may be to take action on climate change, they often face considerable institutional, technical and financial barriers.

Concerning the financial barriers, international climate finance can provide part of the solution, for example through projects under the UNFCCC's flexibility mechanisms, such as the Clean Development Mechanism (CDM). Some promising examples of urban CDM projects have been implemented, for example Bogotá's TransMilenio bus rapid transit system and Mexico's sustainable housing programme. However overall, cities are so far hugely underrepresented among climate finance projects; particularly when compared to their high mitigation potential. It is in this context that the United Nations Environment Programme (UNEP) recently published 'Climate Finance for Cities and Buildings: A Handbook for Local Governments' to raise awareness about climate finance among local stakeholders. This handbook provides an overview of the main climate finance mechanisms, discusses their relevance in the urban context. and presents key considerations for their measurement. reporting and verification (MRV). ENERGIES 2050 is the lead author of this Handbook, which forms part of the NGO's broader efforts to implement the great transition towards a sustainable and equitable energy future •

ABOUT THE AUTHORS

ENERGIES 2050 is a non-profit non-governmental organisation (NGO) working on the 'Great Transition' towards a more humane, plural and united society, bringing peace and respecting the common goods of humanity. Website: www.energies2050.org Email: contact@energies2050.org

MORE INFO

- The Francophonie's Initiative for Sustainable Cities: http://bit.ly/1F9sw(P
- UNEP 2014: Climate Finance for Cities and Buildings: A Handbook for Local Governments: www.unep.org/publications
- ENERGIES 2050 at COP20: http://bit.ly/1zc4PqW

Local authorities: A positive move towards international climate agreement

Monica Sirbu Climate Alliance

There is only one year to go before a new international climate change agreement should be agreed upon in COP21 in Paris, in December 2015. But the challenges ahead are big, time is short and expectations are high. Still, the COP20 Lima Conference has showed that lessons can be learnt by echoing local voices in their fight against climate change.

Local action on energy savings, energy efficiency and renewable energy contributes to the achievement of the climate and energy targets set in Europe for 2020. The members of Climate Alliance are taking action towards their objective of halving per capita CO² emissions by 2030, which serves as a motivating and driving force for ambitious local action. In its resolution adopted earlier this year, Climate Alliance advocates – at the European level – the importance of three binding targets: 50 per cent less CO², 40 per cent more energy efficiency and a 40 per cent share of renewable energy. As seen by local authorities, climate action is a trigger for economic development.

The Covenant of Mayors initiative, officially launched by the European Commission in 2008, has today exceeded all the initial expectations and has expanded far beyond the EU borders. This initiative includes today more than 6,000 local authorities spread across 52 countries. Covenant signatories have formally committed to reduce their greenhouse gas emissions by more than 20 per cent by 2020. The respect for territorial diversity in opposition to standardisation has allowed signatory cities to use their own methods, in line with their local context. In Europe, the Covenant of Mayors, is a mainstream movement led by local and regional authorities themselves and based on a set of principles such as long-term commitment, citizens' involvement, and ambitious and integrated climate action. Covenant of Mayors could serve as a model for other continents and countries, and be a start of a global movement.

In October this year, the European leaders agreed on a 2030 framework on climate and energy with a binding greenhouse gas emissions reduction target of 40 per cent. Even if this target has resulted in reactions from United States and China, the overall framework is less ambitious than before, and thus influencing Europe's leading role in the international negotiations. Therefore ambitious climate action by local authorities will be crucial for international climate process and can convey a positive message – even if the national governments struggle to agree on a global climate change agreement. The commitment and



enthusiasm of local authorities should be used as an example triggered from COP20 in Peru and for setting the global deal next year in Paris, during COP21.

Climate Alliance is proud to have co-organised an event together with the Committee of the Regions on "The importance of local action and multi-level governance in reducing greenhouse gas emissions". Only by joining forces can the voices of local authorities be stronger and heard in the international context. It is time to recognise local authorities as important actors in climate mitigation and adaptation and as crucial partners offering solutions for coherent climate action, as well as in pioneering social, political and economic changes towards a real transformation of our society. "The moment for action is building" the Secretary-General of the United Nations, Ban Ki-moon stressed in his speech at COP20. He urged all Parties to stimulate and facilitate cooperation with all actors – cities and other sub-national actors included •

MORE INFO

"Climate Alliance of European Cities with the Indigenous Rainforest Peoples" is the largest city network committed to climate protection and preservation of the tropical rainforests. Since 1990, Climate Alliance has supported a total of now over 1,700 members from 24 European countries in attainment of their voluntary commitments to reduce CO2 emissions by ten per cent every five years and to halve per capita emissions by 2030 at the latest (base year 1990). To preserve the tropical rainforests, Climate Alliance cooperates with indigenous rainforest peoples.

Emissions from aviation: How to move forward?

Ernesto Roessing Neto

Institute for European Studies and Universidade do Estado do Amazonas

Civil aviation is the source of around 1.4 per cent of global emissions of greenhouse gases (GHGs). Various technological advances in airplane design, such as improvements in engine fuel efficiency and in aerodynamics, have led modern aircraft to be 20-30 per cent less energy intensive in comparison to previous models. However, given that there are more airplanes in the skies today, aircraft-related GHG emissions have risen.



In spite of this fact, aviation is currently exempt from the provisions of the Kyoto Protocol, and the International Civil Aviation Organization (ICAO) has yet to yield strong regulatory instruments on the issue. Furthermore, many incentives exist for the civil aviation industry, such as the fuel tax exemption provided for by the Chicago Convention, and various domestic exemptions and subsidies. Although this may be desirable in terms of providing more affordable air travel, these incentives contribute to the perpetuation of a fossil fuel-based aviation sector.

Reducing GHG emissions from aviation is particularly challenging, given that significant improvements have already been made. More reductions may come from the use of lighter composite materials, changes in airport operation (e.g. the use of electric tugs to taxi planes) and in traffic management (more direct routes), but it is

ultimately impossible to achieve zero GHG emissions if fossil fuels are still used to power airplanes.

In addition to the limitations faced by technological improvements, the long service lives of airplanes further complicate reducing emissions in the sector. Even if a new fossil-fuel free technology to power airplanes were to be readily available, it could still take 90 years or more to replace the current stock of fossil-fuel burning airplanes.

What can be done then? Currently, three technological alternatives have emerged as potential pathways to lead aviation out of its reliance on fossil fuels, although all have their own drawbacks: a) electricity, which may ultimately be suitable only to small short-range planes, given limitations in battery technology and particularly in propulsive power; b) liquid hydrogen, which emits water vapor, has been successfully tested by the former Soviet Union in the late 1980s, but would require substantial changes in aircraft and infrastructure design; c) biofuels, which could be chemically adapted to suit current designs and infrastructure, but could also raise other environmental and economic challenges, such as deforestation and increased food prices.

The choice of which technological path to follow will depend largely on the costs and limitations associated with each one of them. Nevertheless, in such a globalised industry, actions towards this technological change will need to be global. The European Union (EU) tried to unilaterally create incentives to reducing emissions in the sector, by including aviation in its Emissions Trading System (EU-ETS): all flights within, to or from the EU, would be subjected to emissions limitations. This led to a diplomatic backlash from key partners such as the United States, Canada, India and China, and eventually only flights taking place within the EU were included.

Initiatives developed jointly by governments, airlines and the ICAO may provide a way forward. In this sense, the performance of various flights around the world partly or fully using biofuels or electricity is encouraging, although some form of global regulation (be it through treaties, technical standards, certifications, etc.) may still be necessary in order to avoid negative environmental and economic consequences from these new sources (e.g. deforestation for biofuels, and use of coal to produce electricity to charge aircraft batteries).

Regardless of the technological pathways eventually adopted, GHG emissions from aviation may only be zeroed if fossil fuels currently used to power airplanes are abandoned. It is likely that the market alone will not lead to such an outcome, in light of the various challenges and costs presented by this technological change. Ultimately, aviation may only be freed of GHG emissions through the joint effort of public and private stakeholders •

The future of cities: Low-carbon, resilient, gender-smart and equitable

Kate Cahoon and Gotelind Alber

Gender((

At the Special Event for Observers last week, the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP) Co-Chair opened by highlighting the growing importance of non-state actors in climate policy, particularly in regards to mitigation and at the level of implementation, emphasising the need for cross-sectoral collaboration and greater involvement of a wide range of stakeholders. An example of where this is particularly evident, in the words of the Co-Chair, is "of course, cities."

While cities face increasing challenges in the context of widespread urbanisation and a rapidly changing climate, they are also gaining recognition as key actors in the response to global climate change. The parallel with another hitherto neglected aspect of the climate issue is striking: gender considerations, too, have been overlooked in the mainstream debate and policy for decades, although women are often placed in even more vulnerable situations by climate impacts and severe weather events, or indeed, by badly designed ("gender blind") policies and response measures which fail to take into account their needs. However, as we saw on Gender Day on Tuesday 9 December, the linkages between climate and gender are becoming increasingly apparent, as is the need to recognise women as key actors in effective climate policy, at every level of planning and implementation.

Here, cities can once again be highlighted as sites of high relevance - and huge potential. In many cities around the world, the divide between the privileged and underprivileged can be as large as the global divide between developed and least-developed countries. The poorest members of the population - those who have the smallest carbon footprint - are often crowded together in areas most exposed to climate hazards, such as landslide or flood-prone areas. Furthermore, the poorest of the poor are often women, limited in their capacity to respond by their more limited access to resources and socially constructed gender roles. As a result, a considerable "gender gap" continues to exist in leadership, decision-making, education, health, wages and access to resources and finance. This gap is particularly apparent at the local level, where maledominated sectors such as transport and energy continue to neglect women's priorities and capabilities. While there is a persistent lack of gender-disaggregated data,

particularly at intra-household level, it is clear that policies are both more equitable and more effective if they speak to the social context in which they are implemented and address the needs of both women and men.

At COP20, we are seeing welcome and in-depth discussions about the need for gender-responsive policy frameworks within the UN Framework Convention on Climate Change (UNFCCC). Until now, the focus has been largely on the international policy process, so what does this mean for local governments? Gender-responsive riskimpact assessments can be used in urban planning to make cities - and their inhabitants - more resilient. At the same time, as major emitters cities are well placed to contribute to emission cuts, using a wide range of policies and measures. Especially when other policy levels fail to deliver on strong and comprehensive agreements, local government commitment and action is crucial. Making progress on gender equality is arguably a worthwhile goal in its own right, yet creating linkages with climate policy presents a unique opportunity for cities to achieve a range of objectives and start working today towards becoming low-carbon, resilient, equitable and gender-smart in the very near future

MORE INFO

gendercc.net



Pedaling towards a greener India

Akshima T Ghate, Megha Kumar and Seema Singh

TFRI

Today, growing energy consumption and emissions from the transport sector have become a key concern in India; and cycling presents an excellent mitigation option to address these issues. At the same time, cycling generates significant health benefits and offers an affordable transport option to a large portion of the population who cannot afford any form of motorised transport.

Despite meeting the mobility needs of millions of Indians, cycling in India has not grown over the last decade, and the ownership level of bicycles in India remains low. Compared to 0.37 bicycles per capita in China, the ownership level was only 0.009 bicycles per capita in India in 2011.

The use of bicycles has declined in most of Indian cities, largely due to the way the cities have been planned, where transport infrastructure is designed to cater to the needs of motorised transport. A case in point is Delhi, where cycling has witnessed a decline of more than 30 per cent in the mode share in the past five decades, decreasing from 36 per cent in 1957 – the highest among all other modes – to four per cent in 2008. In comparison with Chinese cities, the mode share of bicycles ranges from 11 per cent to 47 per cent, and in Beijing the cycle share is as high as 32 per cent. Bicycle shares in Chinese cities are experiencing an upward trend, after witnessing a decline for a long period of time. The common perception of cycling as a poor man's mode has also discouraged the use of cycles as a choice mode of transport in India.

For low income households, the price of bicycles remains a key deterrent. The price of the cheapest bicycle in rural India is about 15 per cent of the annual per capita rural income, compared to about 2.5 per cent in rural China. In addition, there is also a dearth of low cost finance options for the purchase of bicycles, although they are widely used to access employment and business opportunities.

Acknowledging the urgent need to address the decline of ownership and use of bicycles in India, TERI, in association with All India Cycle Manufacturers' Association (AICMA), undertook an extensive research study on 'Promoting Cycling in India'. The study examined the issues constraining the growth of cycling in India and also provided recommendations to address these restrictions.

The key recommendations suggested by TERI include promoting bicycle ownership among low income households by making bicycles affordable. The study recommended the removal of any kind of taxation on bicycles so as to make them affordable. Provision of easy financing options for purchase of bicycles through micro-finance corporations to encourage ownership of



cycles by low income households, was also an important recommendation made by TERI.

The study found that, in order to promote cycling, it was important to address the challenges related to safety of the cyclists, lack of infrastructure to support cycling, and also work towards rebranding the bicycle as an environmentally friendly mode of transport. TERI recommended that, for promoting bicycling as a choice mode, it was crucial to develop bicycle infrastructure in cities, introduce bikesharing schemes, and undertake awareness campaigns. It was not just important to provide the infrastructure, but also maintain the infrastructure, as ample examples exist in Indian cities where the developed infrastructure is encroached, or used for parking of vehicles, dumping garbage, or used by motorised two-wheelers. TERI also suggested that 'provision of infrastructure for nonmotorised transport' should be made a mandatory component for states and local bodies to get central government funding for any kind of transport project.

It will be equally important to promote the health and environmental benefits of cycling to the public and create mass awareness through campaigns. Such campaigns can go a long way in addressing the negative perception about cycling and encouraging the use of cycles •

MORE INFO

To access the study please visit this link: www.teriin.org/eventdocs/files/Cycling_Report_LR.pdf

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Climate action portal to capture and catalyse climate action in support of 2015 agreement

Christiana Figueres

UN Framework Convention on Climate Change (UNFCCC)

The Government of Peru yesterday launched a pioneering initiative that will capture the activities and actions of companies, cities, investors and subnational regions that are demonstrating real commitment to act on climate change.

The event, which formed part of 'Lima Climate Action Day', unveiled a new online portal that gives visibility to the strategic action being taken by non-state actors, either individually or as part of cooperative initiatives.

The site, developed with the support of the UN Framework Convention on Climate change (UNFCCC) has been named the NAZCA Climate Action Portal after the vast ancient lines found in the landscape of Peru.

As I mentioned in my opening statement last week, the Nazca Lines are an emblematic and symbolic aspect of Peru.

These world-famous works of art depict, among other things, the agility of the hummingbird, the creativity of the monkey and the soaring ambition of the condor – all key qualities that are needed now and in the future for realising short and long-term climate action leading to climate neutrality or net zero in the second half of this century.

This portal showcases how we too can put those qualities into practice as we go forward in our efforts on the Path to Paris next year, and beyond.

The NAZCA Climate Action Portal will be continuously updated throughout 2015, progressively showcasing the extraordinary range of game-changing actions being undertaken by thousands of cities, regions, investors and corporations.

Many of these – ranging from increases in energy efficiency and deployment of renewables to carbon pricing policies and investments in adaptation – are happening in partnership with governments, organisations and international bodies, including the United Nations.

In addition, NAZCA will draw on data from established, credible data sources with a strong track record of reporting and tracking progress. The launch data partners are the Carbon Disclosure Project (CDP) and the Carbonn Climate Registry developed by ICLEI – local governments for sustainability, C40 Cities and the United Cities and Local Governments. More data partners will be added throughout the year.



The NAZCA portal features the cooperative initiatives launched at the Secretary General's Climate Summit in September 2014, covering a broad range of actions on climate change from reducing deforestation along supply chains to greening the investments of the insurance industry.

The NAZCA Climate Action Portal is a great leap forward in galvanising climate action by showcasing for the first time in one place the momentum for change that is happening everywhere – East and West, North and South – in support of government efforts and ambitions to act nationally with global effect. We congratulate the Peruvian Presidency in taking this pioneering step forward.

In order to deliver a universal agreement in Paris that is also meaningful, we need all hands on deck. While the portal is not intended to be exhaustive, it nevertheless will over time capture a great deal of the many hands working to deliver climate action – action that will be vital not only now but in the years and decades to come.

The NAZCA portal shows that we can and we will address climate change $\ensuremath{\blacksquare}$

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Christiana Figueres is the Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC).

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NAZCA Portal: Capturing and catalysing climate action at all levels

Sander Chan and Pieter Pauw German Development Institute Harro van Asselt

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In the eleventh hour to prevent dangerous climate change, we need an all hands on deck approach. In addition to governments agreeing on and implementing ambitious targets, social and environmental organisations, businesses, cities and regions, academia, youth and all other societal actors need to step up their efforts for a transformation towards a low-carbon and climate-resilient future.

The launch of the NAZCA portal at yesterday's Lima Climate Action High-Level Meeting is an important step forward. By giving the most comprehensive overview yet of individual and cooperative climate initiatives, the portal contributes to a broader effort to catalyse sub-national and non-state climate actions and cooperative initiatives. These actions are themselves important drivers of national ambition and a strong Paris agreement. However, a portal by itself does not guarantee higher non-state and subnational ambition on the long-term.

Therefore, building on its successful launch, we present four recommendations for the further development of the NAZCA portal, and for a more comprehensive framework to bridge non-state and sub-national actions and the multilateral climate regime.

Providing a better overview of the wide and varied landscape of climate action

The landscape of climate action is vast and diverse. Yet there is little overview of the myriad climate actions, and the information that is available is scattered. The NAZCA portal deserves praise for integrating existing registries and databases of climate actions, improving their visibility and enhancing access to information on individual actions. Further development of the portal can provide a more complete overview by engaging with more existing registries and platforms, such as the climate-related elements of the United Nations Department of Economic and Social Affairs' 'SD in Action' platform.

Highlighting, replicating and scaling up climate actions

A greater overview of climate actions offers opportunities to strategically highlight actions that should be scaled up or replicated. It would also help governments, non-state and sub-national stakeholders, Conference of the Parties (COP) presidents, and possibly the United Nations framework Convention on Climate Change (UNFCCC) Secretariat to broker new initiatives and promote climate actions where they are most needed, for instance in areas that are not yet addressed by existing non-state and subnational climate actions.



Encouraging transparency and traceability to support implementation

Some climate actions are more ambitious and effective than others. The NAZCA portal improves transparency by featuring individual and cooperative initiatives that have committed to reporting and to demonstrating impacts. The emphasis on transparency in the NAZCA portal should encourage other registries and databases to step up and promote the transparency of featured initiatives by providing further information on their actions and impacts.

Embedding NAZCA in a more comprehensive framework

Ultimately, we believe that the NAZCA portal would gain relevance and be more effective when it is embedded in a larger and comprehensive framework that builds trust between governments, sub- and non-state stakeholders, and recognises particularly ambitious or effective initiatives. A comprehensive framework could build on NAZCA's tracking function to highlight ambitious, scalable or replicable climate actions. This could help set in motion an upward cycle of non-state and subnational activities and ambition, which can themselves inspire greater national ambition and a strong outcome in Paris and beyond.

Ensuring contributions at all levels

The NAZCA portal is an excellent first step. A comprehensive framework would ensure real contributions at all levels and help motivate non-state and subnational stakeholders become front-runners in the transformation towards a climate-resilient and low-carbon future

MORE INFO

NAZCA –The Non-state Actor Zone for Climate Action: http://climateaction.unfccc.int

Chan, Sander and Pieter Pauw (2014) Proposal for a Global Framework for Climate Action to Engage Non-State and Subnational Stakeholders in the Future Climate Regime. DIE Briefing Paper 15/2014: http://bit.ly/lryDWbs

Workshop summary. "Designing a global platform for climate action." Blavatnik School of Government, Oxford University. July 24-25, 2014. Available at: http://tinyurl.com/n7zk8ec

Transport tackles climate change: Will UNFCCC help?

Cornie Huizenga

Partnership on Sustainable, Low Carbon Transport (SLoCaT)



Transport is responsible for 1.24 million traffic fatalities per year, as well as high levels of urban air pollution and congestion in many cities.

At the same time, transport is the second largest sector in terms of energy-related greenhouse gas (GHG) emissions and it is clear that without a substantive contribution from the transport sector, it will not be possible to limit global warming to a maximum 2°C temperature increase.

The following are three broad strategies – tested at scale in both developed and developing countries – that can improve accessibility of passenger and freight transport, while reducing GHG emissions, air pollution, road fatalities and congestion:

- Avoid travel or reduce travel distance by motorised modes of transport;
- Shift to more environmentally and socially sustainable modes for passenger and freight transport; and
- Improve the energy efficiency of transport modes.

The transport sector responded to the call for bold action on climate change by Secretary General Ban Ki-moon at his Climate Summit in September 2014 by announcing five major transport commitments on urban public transport, rail transport, urban electric vehicles, fuel economy, and green freight. Collectively these actions can reduce the carbon footprint of at least half of all passenger and freight trips made by 2025. The International Energy Agency (IEA) has estimated that these actions, if implemented at a global scale, can result in cumulative savings of \$70 trillion by 2050, due to reduced investment needs for vehicles, fuel and transport infrastructure.

Within the sustainable transport community there is disappointment on the manner that the UN Framework Convention on Climate Change (UNFCCC) process is relating to the growing momentum on sustainable, low carbon transport. There is a widely felt belief that mechanisms under the UNFCCC are not particularly effective in spurring the transport sector into action. This does not mean that the Conference of the Parties (COP) should have

specific discussions on transport, but it is important that mechanisms under the UNFCCC catalyse action on climate change mitigation (and adaptation) in transport.

Much of the mitigation action in the developing countries that has been initiated in recent years is not captured in the National Communications by these countries, as these typically lag behind in reporting with the latest available National Communications typically reporting on the status in 2007-2010. At the same time, the Intended Nationally Determined Contributions (INDCs) focus on post-2020 actions. As a consequence, reporting to UNFCCC on the transport sector (as for other sectors) for developing countries has a gap of 10 years. It is the period from 2010-2020, with rapid increases in transport activity, that will lockin GHG emissions from transport for the next 30-50 years.

With transport being responsible for 23 per cent of energy related GHG emissions, it is important that the technology mechanism under the UNFCCC includes a focus on sustainable, low carbon transport. Yet, it appears that the philosophy driving the choice of sectors in the technology mechanisms is still based on the idea that winners can be selected from among sectors, rather than ensuring a focus on all sectors that contribute in a sizeable manner to climate change, those that will have to change in order to realise the 2°C scenario.

The UNFCCC process is also ineffective in providing guidance on how to arrange the funding required to implement sustainable, low carbon transport at the necessary scale. Climate finance is still focused on the implementation of specific projects rather than on the use of international climate finance to build capacity and policy, and leverage public and private finance.

The public sector needs to lead efforts on sustainable, low carbon transport, but the involvement of non-state actors is critical. The track record of the COP to involve non-state actors is not impressive and discussions in the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP) are not hopeful •

MORE INFO

The SLoCaT Partnership tracks COP 20 negotiations at: www.slocat.net/trackingunfcccnegotiations

Improving municipal finance for climate smart cities' governance

Arshed Rafiq

Sustainable Business Solutions pvt ltd

Pakistan is the eighth most climate vulnerable country in the world, with the country experiencing major natural disasters and epidemics during the last decade. High urbanisation and population growth rates have further aggravated the situation and have put enormous pressure on urban infrastructure, municipal finance and service delivery systems.



The 18th amendment to the constitution of Pakistan heralded an era of devolution of powers from the centre to the provinces. However, city level local governance has received little attention in the devolution plan. The capacity and resources of city governments and their associated entities remain at low levels, due to poor municipal finance systems. Some steps have been taken in Punjab province of Pakistan to improve the situation. For example:

- The Punjab Cities Governance Improvement Programme has been started with a funding injection of 150 million dollars from the World Bank. The project is streamlining different financial streams of the five largest cities of Punjab, and improving transparency in their operations;
- Waste management and energy efficient mass transit systems have been introduced, which can potentially improve resource productivity of municipalities in the long run;
- Urban immovable property tax system has been upgraded through digitisation of land records. This has resulted in an enormous increase in financial resources of the municipalities;

- Resource efficiency has been brought in, with the introduction of new technologies for different municipal functions and services. These include remote sensing and GIS mapping for disaster management, health, land and infrastructure management;
- City level cooperation, especially with Istanbul, has been promoted to build new infrastructure, water and sanitation and solid waste management projects in Punjab; and
- Some revenue generation best practices have emerged in different city districts. New areas of revenue generation have been identified to improve the resource capacity of the municipalities.

These efforts can be scaled up and replicated in other districts and regions to increase the resources and coping capacity of the country for urbanisation and climate induced risks. Internationally, city level governance should be given the foremost importance, and municipalities equipped with necessary resources for improved preparedness and response from the municipal authorities.

In addition to local initiatives, research is needed to identify, implement and evaluate international best practices and draw lessons for the improved governance and municipal finance system in Pakistan and elsewhere. Some of the best practices include:

- Improving the creditworthiness of cities through self generation of revenues and other measures. Getting an international or local credit rating takes an average of three to five years. The city of Lima took about five years to achieve creditworthiness status;
- Investing in greening of infrastructure through private financing mechanisms. The World Bank estimates that every dollar invested in the creditworthiness of a developing country city is likely to mobilise more than \$100 in private sector financing for low-carbon and climate-resilient infrastructure;
- Planning for compact cities development by developing greenhouse gas inventories and tools for emissions reduction potential;
- Financing resource efficient systems such as energy efficient street lighting. This will result in improved financial health of municipalities;
- Exploring international funding streams, technical assistance and best practices such as World Bank's Low carbon Liveable Cities Initiative, Green climate fund and project linked bonds.

With an improved municipal finance system, achieved through a right mix of local and international best practices, climate smart cities can be developed and maintained in Pakistan under the existing institutional framework of the country \blacksquare

Sustainable Development Goals bring renewed focus to cities and human settlements

Matthew Boms

Communitas Coalition

"People want decent jobs, social protection, robust agricultural systems and rural prosperity, sustainable cities...resilient infrastructure and sustainable energy for all. These transformations will also help tackle climate change."

- UN Secretary-General Ban Ki-moon, 'The Road to Dignity by 2030'

The recent Synthesis Report of the Secretary-General on the Post-2015 Agenda, 'The Road to Dignity by 2030', has generated the latest in a series of invigorating moments for cities and human settlements on a global scale. With Habitat III (officially the 3rd UN Conference on Housing and Sustainable Urban Development) on the horizon in October 2016, the proposed Sustainable Development Goals (SDGs) have at once situated cities at the nexus of both a new climate framework and the UN post-2015 development agenda.

But why are cities so pivotal to these two pending international agreements? A quick refresher might prove helpful on the proposed SDG 11 - 'Make cities and human settlements inclusive, safe, resilient and sustainable.'

Target 11.1 aims to ensure universal access to adequate, safe and affordable housing and basic services while upgrading slums.

Target 11.2 aims to provide universal access to safe, affordable, accessible and sustainable transport systems for all while improving road safety.

Target 11.3 aims to enhance capacities for participatory, integrated and sustainable human settlement planning and management in all countries.

Target 11.4 aims to protect and safeguard the world's cultural and natural heritage.

Target 11.5 aims to significantly reduce the number of deaths/affected people and decrease the economic losses relative to GDP caused by disasters.

Target 11.6 aims to reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management.

Target 11.7 aims to provide universal access to safe, inclusive and accessible, green and public spaces.

Collectively, these seven targets form an aspirational and transformative vision for cities and human settlements in



the 21st century. However, they also point cities on a clear path towards mitigating climate change and ending extreme poverty. For example, SDG 11 has the capacity to apply universally sustainable practices to modern developments in urban transport, buildings and construction, disaster risk reduction, green and public space, and per capita environmental impact of cities. All of the above would transform the planet, not just by improving quality of life for nearly four billion urban dwellers, but also by mitigating climate change at a city-region level, where approximately two-thirds of the world's energy is consumed and roughly 70 per cent of global CO2 is emitted.

The seven targets also confront extreme urban poverty head on. Namely, Target 11.1 has opened up the possibility for meaningful indicators that will empower and improve the lives of one billion slum-dwellers. A major fault of the Millennium Development Goals (MDGs) was their limited approach to slums, seeking to achieve a 'significant improvement' in the lives of just 100 million slum dwellers. The SDGs are poised to improve on this approach, bringing basic services, universal housing, grassroots data collection and comprehensive urban planning to the most vulnerable urban residents.

Today the megatrend of urbanisation presents us with a double-edged sword. On the one hand, unprecedented patterns of migration are driving people to cities that already find themselves in deep infrastructural and financial straits. On the other, humanity is headed towards a level of agglomeration and interconnectedness that has never before been witnessed on Earth. With the global proportion of urban residents expected to rise to 70 per cent by 2050, the SDGs are uniquely poised to harness urbanisation for mitigating climate change and bringing a universal end to extreme poverty •

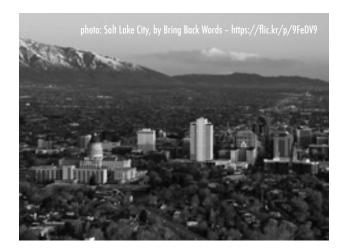
MORE INFO

The Road to Dignity by 2030 can be found at: http://bit.ly/ltK9vQn

Sustainable development at the city level: The Climate Protection Agreement

Caitlin Buhr

Bowling Green State University



During each round of United Nations
Framework Convention on Climate
Change (UNFCCC) talks, I find myself
cautious in hoping my home country
of the United States will contribute
something new. As a consequence of the
US' consistent opposition to including
legally binding actions in UNFCCC
negotiation documents, climate change
action in the US is perhaps better
observed at the local level.

Former Seattle Mayor, Greg Nickels, established the US Conference of Mayors Climate Protection Agreement in 2005. The pledge recruited cities to meet the terms of the Kyoto Protocol, despite the fact that US federal government still had not ratified it. Mayor Nickels' initial goal was for mayors of 141 cities to sign on, representing the 141 countries that had ratified the Kyoto Protocol. The number of participating mayors has now reached over 1000. With innovative city plans, including retrofitting buildings, cleaning up neighborhoods and developing renewable energy projects, Nickels' proactive plan for cities turned into the picture of local action.

Through this programme, Salt Lake City's former Mayor, Rocky Anderson, implemented a system to capture the methane emissions from the city's water treatment plant, and use them to power the plant's operations. This project has only gained traction since 2005, and today reduces Salt Lake City's greenhouse gas emissions by 2,700 tons per year. Mayor Anderson and the city's public utilities department recognised not only that methane is a potent greenhouse gas that should be contained, but that it can be utilised to the citizens' benefit.



The city of Asheville, North Carolina also responded to Nickels' call when former Mayor, Terry Bellamy, signed on with plans to make Asheville a green leader. Under Bellamy, the city's River District and Kenilworth neighbourhoods received hundreds of LED lights to replace regular streetlights. These LED lights are not only extremely energy efficient, but also work to decrease both glare and light pollution. Mayor Bellamy's lighting project not only addresses greenhouse gas emissions through energy efficiency but also makes key areas of Asheville more livable.

A prominent chair of the US Conference of Mayors Energy Independence and Climate Protection task force, Mayor Jim Brainard of Carmel, Indiana emphasises city-level action: "We need to start at the local level, cleaning up pollution, planting trees, making every city a better place to live." One of Brainard's key policies for his city was his replacing traditional traffic light intersections with roundabouts, which decrease vehicle emissions from idling. As a Republican, Brainard feels compelled to remind policymakers that the Environmental Protection Agency was initiated under a Republican President, Richard Nixon, in 1970. Since Brainard's constituents reelected him four times, he has proven that city politics can exist outside the realm of the federal government's partisan gridlock.

Mayors Anderson, Bellamy and Brainard proved themselves leaders in shrinking their cities' carbon footprints, as well as addressing community nuisances. In response to Mayor Nickels' push, they transformed major parts of their cities to create healthier environments for their constituents. To achieve sustainable development, sometimes local leaders – like mayors – must take charge when federal officials lag behind. This solidifies the UNFCCC's mission even further. If international alliances cannot be secured, the United States Conference of Mayors has demonstrated that any document the UNFCCC creates can effectively guide leaders and citizens at the city level •

Including gender considerations in transportation: An important step towards mitigation

Beatrice Mauger and Gina Stovall

Women's Environment and Development Organization

In the past few years, sub-national governments worldwide have been mobilising to reduce greenhouse gas emissions. The fact that cities account for over 70 per cent of global energy-related CO2 emissions, according to the Intergovernmental Panel on Climate Change (IPCC), is not lost on sub-national leaders.

As we saw in September at the UN Climate Summit, over 200 cities signed the Compact of Mayors, volunteering to reduce greenhouse gas emissions by 13 gigatons by 2050. This week, during COP20, city representatives gathered in Lima to continue to discuss and work on adaptation and mitigation initiatives, which is also encouraged in the non-paper for the Ad-hoc Working Group on the Durban Platform for Action (ADP).

Cities began developing climate policy in the 1990s, and the recent proposed Sustainable Development Goals (SDGs) include a target (11.b) to increase the "number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change". However, according to Gotelind Alber (2011), the "gender dimension is virtually absent in [city] plans, policies and programmes" for reasons including "underrepresentation of women in decision-making, a lack of awareness of gender issues, and a lack of data, knowledge and skills on methodologies to address gender." A recent WEDO survey of selected US and international cities found the same.

Climate change has differentiated gender impacts, and so do mitigation efforts. The transportation sector, which accounted for over one-quarter of total direct emission in 2010, presents an opportunity to drastically reduce emissions at the local level. But these climate change policies and measures must be gender-responsive, and women's rights must not be forgotten in the rush for solutions. Otherwise, responses may reach and involve only part of cities' overall populations, making them less effective.

The transport system must recognise a diversity of users, because mobility is critical for all urban citizens. Care work – often the responsibility of women – requires different and more frequent travel than a traditional commute to work. In addition, some studies show that women tend to use public transportation and walk more than men, and

when deciding on private transportation, tend to value fuel economy more so than men. By increasing their density and expanding their public transportation network, cities can encourage more and safer cycling and walking, and less carbon-intense transportation overall, while increasing mobility for everyone. The latest IPCC report states that these actions can "reduce transport GHG emissions by 20-50 per cent in 2050 compared to baseline."

How can transport policy and planning be gender-responsive? Collect and analyse gender differentiated data. Engage a participatory approach to planning and design – reach out to women, men, young, old, wealthy, poor, minority, vulnerable and impacted – and incorporate the results. Ensure women and gender experts are effective decision-makers in the process. This gender perspective should be incorporated into policies and programs from the start.

In the case of Bogota's Bus Rapid Transit system, established in 2000, the initiative had both a mitigation and a gender-sensitive component, although gender was incorporated later in the project. The mass transit system reduced emissions by over 1.6 million tons from 2001 to 2008 by providing an alternative mode to private cars and mini buses. Notably, to attract new riders, attention was given to gender differentiations, including designating seats for women and children and having separate entry doors for pregnant women and other vulnerable riders. This helped to maximise the riders and use of the system, contributing to its success. This initiative also created direct and indirect job opportunities. To provide a better gender balance in the workforce, the system prioritised employment of different groups, including single mothers. As a result, women now make up 24 per cent of the workforce.

To ensure effective climate mitigation policies and programmes, particularly in areas such as transportation, it is therefore crucial that cities include women in the decision-making process by providing women and women's organisations with financial and other resources and by incorporating their leadership at all institutional levels. This will also advance gender equality and women's human rights •

ABOUT THE AUTHORS

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Side events calendar

DATE	TIME	VENUE	TITLE	ORGANISERS
FRIDAY 12th DECEMBER	11:30–13:00	Machu-Picchu	Showing What's Possible: Computer Simulation and GIS Mapping for Decision Makers	New Venture Fund (NVF), Regional Environmental Center for Central and Eastern Europe (REC)
	11:30-13:00	Sipan	Building human resilience: Adaptation in policy and practice	The Royal Society, BirdLife International (BL)
	11:30–13:00	Caral	Goals and objectives of the Russian climate policy up to 2020 and prospects for 2030	Russian Federation, NGO Center for Environmental Innovation (NGO CEI)
	11:30–13:00	Maranga	Economic assessment of the impacts of climate change in Uganda: Early results and lessons	Uganda, Environmental Management for Livelihood Improvement Bwaise Facility (EMLI Bwaise Facility)
	13:15–14:45	Paracas	Achieving Universal Energy Access: A development imperative in addressing climate change	UN Foundation, Women Environmental Programme (WEP)
	13:15–14:45	Sipan	Biological Sequestration & Storage (BSS): pathways for global deep decarbonization	Sustainable Amazonas Foundation (FAS), Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)
	13:15–14:45	Maranga	Tools for Climate Finance Readiness: building capacity to support increased finance flows.	Transparency International (TI), Adelphi Research (AR)
	13:15–14:45	Caral	Low-carbon development for Latin America: Analytical support tools and integrated analyses	Stockholm Environment Institute (SEI), Energy Research Centre of the Netherlands (ECN)

Local government climate roadmap – Lima Communiqué

On Monday, alongside COP20, Lima convened the biggest gathering of Mayors and climate action experts since the New York Climate Summit. The meeting's key outcome – the "Lima Communiqué" – outlines the scientific basis for climate action, and cements the commitment of local governments to step up collaborative climate action and scale down greenhouse gas (GHG) emissions. The Communiqué will feed into the ongoing UNFCCC negotiations, where over 190 countries are negotiating the draft text of new international climate change agreement.

- 1. LATEST SCIENCE SIGNALS THAT WE ARE CLOSE TO AT A POINT OF NO-RETURN WHICH NO CITY/REGION CAN BEAR: Global warming and related climatic changes are approaching a "point of no-return". No city or region is climate-proof from catastrophic impacts and slow-onset changes. Ambitious commitments and actions by local and subnational governments can help nations move to a climate-friendly track addressing both mitigation and adaptation as equal focus areas.
- 2. WE ASK FOR AN INCLUSIVE AND AMBITIOUS CLIMATE REGIME: Initiatives at the national (like Resilient Communities for America or CB27 in Brazil), regional (like the European Covenant of Mayors) or global (like the Mexico City Pact, Durban Adaptation Charter and finally ambitious commitments announced at the Climate Summit 2014, in particular Compact of Mayors and Compact of States and Regions) level should be taken into account in the preparation and implementation of Intended Nationally Determined Commitments (INDCs), Nationally Appropriate Mitigation Actions (NAMAs), Low Emissions Development Strategies (LEDS) and National Adaptation Plans (NAPs), amongst others.
- 3. WE PRAISE THE VISION AND EFFORTS OF ALL ADP CO-CHAIRS; TROIKAOF COP19-20-21; THE UNFCCC SECRETARIAT; FRIENDS OF CITIES AND THEIR ALLIES: We warmly welcome the participatory process throughout the ADP, including key policy proposals and findings discussed at Technical Expert Meetings (TEM) and captured in Technical Papers, in particular the establishment of an action plan for nations to work with local

and subnational governments. The vision laid out in para37a and 37b of ADP Co-Chairs Draft Text of 11 November 2014, which refers to further enhancement of financial mechanisms and regulatory frameworks for local and subnational governments should be fully reflected in the final Lima Outcomes.

- 4. WE COMMIT TO CONTINUE OUR PARTNERSHIP WITH ALL ACTORS AND AT ALL LEVELS OF GOVERNMENT TO SCALE UP CLIMATE ACTION. A joint declaration between local governments and representatives from all constituencies engaged in the UNFCCC process, with a focus on climate change and the Sustainable Development Goals, was launched at the Climate Summit in New-York on 23 September 2014. We invite all actors of civil society as well as parliamentary and judicial bodies to expand and enrich collaboration with their local and subnational governments. We are committed to continue our work with national delegations aligned around the Friends of Cities Group and expand its effectiveness at the UNFCCC negotiations.
- 5. WE COMMIT TO ACCELERATE OUR GLOBAL ADVOCACY AND RAISE OUR CLIMATE AMBITION: We commit to accelerate our global advocacy coalition under the Local Government Climate Roadmap and the Global Task Force, raise our ambitions through our initiatives mentioned in para.2, enhance our global transparency and accountability through regional process like the Sustainable Energy Action Plan of the European Covenant of Mayors and at the global level through the carbonn Climate Registry which is connected to other national, regional, global reporting platforms as appropriate by enabling reporting through local, national and regional methodologies and tools. We support the Lima Climate Action Agenda of COP20/CMP10 Presidency and we will convene the Local Government Pavilion 2015 and Summit of Cities in Paris at COP21/CMP11 to kick-off "100 Transformative Actions for a Global 10-Year Action Plan of Low-Carbon, Low-Emissions, and Climate-Resilient Urban Development" •

The Lima Communique facilitated by ICLEI · Local Governments for Sustainability and United Cities and Local Governments.

Reflections from COP20, Day 10

Atayi Babs

Pan-African Media Alliance for Climate Change

Upon entering the COP20 conference venue on Wednesday, I was met by over one hundred delegates from countries around the world, including leading representatives of the African civil society under the aegis of the Pan-African Climate Justice Alliance (PACJA), who stood together for two minutes of silence to show solidarity with the people of the Philippines who are suffering in the wake of Typhoon Hagupit.

At the venue, civil society representatives called on Ministers who arrived early this week to make progress towards a mechanism that effectively addresses Loss and Damage from climate impacts. Vulnerable countries like the Philippines are already counting the costs, with last year's Typhoon Haiyan leaving more than 7,000 dead or missing.

"We stand in solidarity with the Philipines today because we are one," Robert Chimambo of PACJA declared. "Africa is in the same vulnerable boat with Philippines and that is why we are calling on those with historical responsibility and capacity to act now, or we sink together in this titanic" Chimambo added.

Maria Theresa Nera-Lauron from IBON international in the Philippines said that her country does not want sympathy but action in solidarity. "You cannot talk about sympathy, while at the same time putting us on a path to more devastation – a path that will result in more severe weather events, more severe Bophas and Haiyans and Hagupits. We refuse to become a poster child for devastation and climate impacts. We in the Philippines are not drowning. We are not dying. We are fighting. We are fighting, and we need you to fight with us."

Delegates arriving at the conference centre on Wednesday were greeted with images from the aftermath of these storms, to remind them that climate vulnerable communities need to see urgent progress in Lima. Despite this, some countries, including the UK and the USA, are actually undermining efforts in negotiations to develop a comprehensive Loss and Damage mechanism that would provide support for countries already suffering climate impacts that are 'locked-in.'

Responding to the show of solidarity, Dewy Sacayan of the Aotearoa Youth Leadership Institute said "we thank you for your sympathy, but we need more. We need real action to put us on the path to a safe climate future. We have had enough. My family back home are already telling me grim stories about Hagupit. When I went to Tacloban after Haiyan to lead relief work, I saw things that I will never forget. My people have had three unseasonal typhoons in three years."

Cristina Dalla Torre and Sara Cattani

Youth Press Agency

Yesterday was International Mountain Day.

Mountains cover 27 per cent of the planet and are where 12 per cent of the world's population lives. However, mountains today are exposed to a phenomenon of depopulation in favour of an increasing rate of urbanisation. We have to consider that mountains are not only a natural ecosystem, but also a cultural one. People living in the mountains have created their own identity, customs, traditions, ways of producing and economical systems in a very close relationship to nature, particularly compared to an urban context. Therefore the effects of climate change, such as glaciers melting, increases in temperature and more intense precipitation, are issues that these mountain dwellers have to cope with in their everyday lives.

We all know that mountains are main sources of water and contain a quarter of the world's biodiversity. But at the same time, each mountain system has its own specific characteristics in terms of different ecosystems, cultures and societies. Although a global response for acting towards climate change is needed, a good way to protect these specific territories is through regional cooperation. An example of this is the institution of the Alpine Convention in Europe, which aims at being the channel of communication of different countries composing the alpine puzzle, as mentioned by Doris Leuthard, Deputy Prime Minister of Switzerland, at the lunch time side event on mountains and water – from understanding to action.

Mountain territories can be laboratories of innovation; starting from the cultural and natural heritage that they already possess. Therefore, it is important to combine resources to create opportunities of personal and community development for the populations settled in those contexts •



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