

## **A PROGRESSIVE APPROACH TO CLIMATE CHALLENGES:**

### **THE EUROPEAN UNION AND THE LATIN AMERICAN AND CARIBBEAN REGION WORKING TOGETHER**

Climate change is a common challenge that requires common answers. Working together, sharing experiences, improving mutual respect and trust will be key conditions for success. The European Union and the Latin American and Caribbean (LAC) region have already got an increasing experience of cooperation in this field, either under the context of EUROCLIMA or other specific EU programmes or on the basis of bilateral cooperation between different countries in each region. Building on those experiences, it's time to shape some additional concrete and innovative fields where possible common work would be mutually beneficial.

This short paper does not intend to be fully comprehensive but to suggest some new precise proposals, complementary to the ongoing work on many different subjects such as REDD, agriculture, early warning systems, etc.

It is in that context, as suggestions for discussion that we select six key topics with a high impact on climate action:

#### **1. Coastal management and climate resilience: addressing climate vulnerability in coastal areas**

Public policymakers have got a key role in land management regulation, public budget decisions, impact assessment ruling and risks insurance requirements. As highlighted in 2014 in the IPCC 5<sup>th</sup> Assessment Report (especially Working Group II on Impacts, Vulnerability and Adaptation), coastal vulnerability is extremely high in a large extent of Latin America and, in particular, in the Caribbean, due to both current and future climate-related one-set and gradual changes (heavy precipitations, sea level rise, storm surges, etc.) and anthropogenic drivers such as coastal urbanisation, coastal-related economic activities and coastal environmental degradation (dunes and beaches, mangroves, etc.). In Europe also, vulnerabilities might be increasing due to both climate change and trends in human activities in coastal areas. Physical, infrastructural, economic and social vulnerabilities in areas that represent a high share of human settlements, tourism facilities and industrial and transport infrastructures will require a better knowledge on the drivers of vulnerability over the last decades and smarter regulation.

Both continents have got experiences to share in terms of how to avoid maladaptations and enhance relevant adaptation options, both targeting short- to medium- and long-term. At the EU level, the EU Commission adopted in March 2013 an initiative on Maritime Spatial Planning and Integrated Coastal Management, which requires Member States to coordinate relevant policies affecting coastal areas in integrated coastal management strategies.

Many European and Latin American countries are already taking action on integrated coastal management, including actions to assess flood and coastal erosion risks, to improve erosion control, to inform society on coastal risks, to restore saltmarshes and dunes, and to implement 'soft' protection interventions. But we can expect increasing pressures on coastal areas in fast growing

Latin American economies. In this region, many countries are building new big coastal infrastructures (harbours/ports) and tourism resorts where a proper management of coastal dynamics and climate impacts are key in resilience and viability terms.

According to this, major benefits can be expected for better cooperation, including the strengthening of countries' adaptation. However, there is still a clear need to improve the awareness (on what to expect from climate change) and capacities (on how to deal with such changes) in order to count on a deeper understanding and preparedness on the cascading effects induced by climate change as well as on the role of anthropogenic features in the increase in risks, and thus of the current rooms for manoeuvre to deal with future threats. Improving the culture of risk is indeed key to ensure a proper alignment and coherence of the responses at the legislation level, while this latter is well known as being a powerful driver of adaptation initiatives at all sub-national levels.

**Proposal:** Issue a report pointing out the main recommendations to improve coherence and a systematic approach in related legislation, especially on controlling urban dynamics, diversifying the economic and subsistence activities, preserving coastal environments playing a buffer function in the face of sea-related hazards, etc. In addition, organise joint workshops with key institutions and stakeholders to introduce and discuss on best practices to improve resilience and proper management.

## 2. Cities

Both Europe and the LAC region have high urbanisation rates – over 70 percent of Europeans live in cities, while in LAC this surpasses 80 percent, the highest urbanisation rate of any region across the world.

Cities are thus a critical arena for action on climate change in both continents, although it is important to point out some differences between the two regions. Taken globally, cities are responsible for over 70 percent of energy-related GHG emissions, although evidently European cities have a higher per-capita carbon footprint than their LAC counterparts. In turn, LAC cities are particularly vulnerable to the impacts of climate change, including the rise in weather-related disasters (hurricanes, El Niño episodes, etc.).

Both mitigation and adaptation actions are already occurring across European and LAC cities. In Europe, local city governments are taking on a variety of climate mitigation and adaptation actions. A major vector of strategy in this arena is taking place through the Covenant of Mayors, launched by the European Commission in 2008 after the adoption of the EU Climate and Energy Package, which aims to bolster GHG emission mitigation measures taken on by city-level governance, and currently includes over 5700 European signatory cities. These cities create Sustainable Energy Action Plans outlining how they intend to reach their CO<sub>2</sub> reduction targets, notably defining activities and measures taken to reach the target (e.g. increasing energy efficiency and use of renewable energy on their territories), as well as the timelines and how responsibility is divided up. In addition, the Mayors Adapt initiative, which is implemented through the Covenant of Mayors, brings together over 100 European cities who commit to design a local adaptation strategy or integrate adaptation into existing relevant local plans.

Climate change action is also occurring throughout cities in Latin America. On mitigation, a few types of actions include sustainable transportation actions, including a commitment by several cities to

reducing emissions and improving air quality through the introduction of low- and zero-emission buses in their fleets. There are also a number of positive examples of improving adaptive capacity of LAC cities, including avoiding the settlement of low-income populations on dangerous sites, and regenerating ecological areas. A growing number of LAC cities are developing ambitious climate action plans, including several cities such as Bogotá, Buenos Aires, Caracas, Curitiba, Lima, Mexico City, Quito, Rio de Janeiro, and São Paulo which have signed a Declaration on the Compact of Mayors, the world's largest cooperative effort among city leaders to reduce GHG emissions, track progress and prepare for the impacts of climate change. However, regional cooperation between these cities is only nascent—indeed, the first ever Latin American Mayors Forum was held in March 2015 in Buenos Aires, in which it was announced that 20 Latin American mayors joined the Compact of Mayors, and 20 global C40 cities committed to pursuing clean buses. This is a very promising start, but there is still a way to go to reach the level of regional cooperation and sharing that European cities participating in the Covenant of Mayors have developed over the past few years.

However, there is still enormous potential for reducing GHG emissions, and much room for improvement on adaptation. Adaptive capacities remain relatively low across the region, with disasters typically taking a toll on cities. Despite innovative public transportation schemes, passenger car transportation rates keep increasing in many major cities, significantly contributing to cities' overall carbon footprint and bringing along many health side effects and other social negative side effects to their population. In Latin American cities an important link can be made between responses to climate change and measures of sustainable and more equitable urban development.

Potential areas for dialogue and best practice sharing on cities between Europe and LAC regions include: governance of climate related issues, regulation of building standards, public procurement, urban planning, and services. Positive interactions between national and subnational parliaments would be a game-changer in climate efficient action.

**Proposal:** Promote dialogue between the EU network of cities (the Covenant of Mayors) and Latin American cities that are leading on climate change mitigation and adaptation, to share lessons on how cities can work together and help each other at a regional level, and in this way accelerate the development of a regional network of LAC cities taking action on climate change.

### 3. Transforming energy systems

The combustion of energy for power generation, transports, industry and buildings represents 70% of global GHG emissions. Reducing the overall energy consumption and energy intensity of the economy as well as enabling a massive switch towards low-carbon energy sources thus represents the main single driver to effectively reduce greenhouse gas emissions and mitigate climate change.

Latin America and the Caribbean countries are currently experiencing an important rise in energy demands. From 2000 to 2010 energy demand rose by 34%,<sup>1</sup> and it is projected to nearly double by 2030,<sup>2</sup> thus surpassing historical rates of energy demand increase. While the current LAC energy

<sup>1</sup> Banco de Desarrollo de America Latina (2013), *Energia: Una visión sobre los retos y oportunidades en America Latina y el Caribe*, p.28.

<sup>2</sup> World Bank (2011), *Meeting the Balance of Electricity Supply and Demand in Latin America and the Caribbean*.

matrix has a relatively low carbon-intensity compared to that of other regions, due to an important part of hydroelectric and bioenergy resources, reaching the levels of energy supply needed in the future will demand important investments in the sector. Faced with this reality, LAC countries are facing challenges and difficulties in building the most appropriate frameworks to ensure access to clean energy at predictable and affordable prices. The LAC region still has a significant currently untapped level of hydrological resources, but there is a need for better environmental and social safeguards. The integration of wind and solar resources has seen some progress but technical and regulatory challenges remain. As for energy efficiency, it has only recently become an area of focus in the region, and has not yet been fully integrated into public policies, and national energy efficiency goals are often still lacking.

Consisting of more mature economies, EU Member States' energy demand and supply is much higher, but future demand is projected to remain much more stable (in other words, the increase in demand is much less steep than in LAC). Through the 2020 climate and energy package adopted by the EU Parliament in 2008, EU countries have already started gaining extensive experience in key areas of policy: carbon pricing, renewable energy, energy efficiency, etc. A number of lessons from this might be interesting to share with LAC, especially since the package entails regional policies that address countries with varying levels of GDP per capita, different energy mixes – a heterogeneity between countries also present in the LAC region.

A better understanding of the challenges and opportunities, as well as an exchange between regions of experiences on the design, implementation and evaluation of climate and energy policy instruments (with particular attention paid to the role of the Parliaments and the legal frameworks) could be a very practical way to support the transformation towards a low-carbon future in both regions. Considering regional strategies and policy tools, some areas for dialogue and policy learning could be:

- Lessons learned on carbon pricing experiences, both in the EU and LAC countries.
- The energy market integration process is a decisive tool to foster the harmonisation of climate and energy policies at the regional level, supporting the transition towards low-carbon energy, while delivering additional benefits in terms of energy security and economic efficiency. The two regions have got different experiences in this field. The evaluation of its benefits and limits could nourish a strategic reflection on the advantages of a more regionally integrated energy and climate strategy and possible ways to implement this on the long term.
- Improving the efforts on energy efficiency as the world's "first fuel": the effort made by the European Union to improve energy efficiency in all sectors might be one of the biggest successes of its internal energy policy and shows the importance of policy coordination in this sector to drive innovation and trigger further policy efforts in all Member States. In particular, the regulations implemented on eco-design of appliances (following the *fronrunner principle*), CO<sub>2</sub> standards for cars and the harmonisation and strengthening of thermal regulations for buildings (both new-built and retrofits) have proven to be decisive to drive industrial developments and innovation. Considering that LAC countries are already facing a rapid increase in energy demand in line with the prospects of future economic growth, developing comprehensive energy efficiency strategies and sector-specific policy instruments appears to be an issue of high priority in order to develop energy access while improving the sustainability of the energy system and reducing costs.

- Most of the LAC countries do count on a very clean electricity mix, but the increase of the demand represents a huge challenge in order to keep the current performance. On the European side, the policy experiences with renewable energy gained in the various EU Member States might be of great value for partnering countries and regions. Indeed, with a great variety of support mechanisms and regulatory frameworks within the Member States, the European Union disposes of a significant feedback on the effectiveness and efficiency of the various tools.
- Eventually, mechanisms implemented on the regional and national level to finance the energy transition might be a relevant topic for further cooperation, drawing on the experience of institutions such as the German *Kreditanstalt für Wiederaufbau* (KfW), the European Investment Bank (EIB), the Inter-American Development Bank (IADB), the Corporación Andina de Fomento (CAF) or the BNDES in Brazil -among others-, as well as innovative funding schemes implemented at the local and national level (such as third-party financing for building retrofits, community-led renewable projects and energy cooperatives, etc.).

**Proposal:** Shape a joint programme, including key stakeholders, in order to develop better understanding of existing experiences of energy transition, assessing the challenges of a decarbonised energy system and develop a better understanding of the role of Parliaments in this context.

#### 4. Phasing out fossil fuels

Many LAC countries, as well as some EU Member States are producers (or high importers) of fossil fuels. This represents a relevant share of their GDP. Understanding the economic and social challenges of phasing out fossil fuels will be increasingly relevant. An early strategy to assess possible scenarios could be very useful (nationally driven but sharing basic info, improving capacities to assess risks otherwise, identification of concerns, ideas, possible answers, etc). Among the related challenges we can identify related pieces of legislation, including perverse incentives and subsidies, questions of risks and fiscal regulations, issues of liability, carbon intensity of public funds and investments. Building a national approach to tackle these issues, including the phase out of subsidies and the reorientation of the energy production and consumption patterns in a different manner is not an easy task, but shaping a first context to explore what these challenges mean, what opportunities can ensure a smooth approach, how to tackle the difficulties and what options and timeframes do help into identifying ways to address this issue.

**Proposal:** The development of some concrete learning tools would be extremely helpful. ECLAC, together with Ministries of Finance and Energy on the LAC side and the EU Commission together with the Ministries of Energy and Finance on the other could work to jointly assess with the central bank regulators the financial and economic risks of high dependence on fossil fuels, the share of the subsidies in the GDPs, the possible steps and different scenarios to phase them out.

## 5. Fiscal reform and public services

An environmental fiscal policy reform can be a very useful tool to take better account of negative environmental externalities entailed by the rapid growth rate of LAC countries, all while aiming to improve social inclusion.

Most LAC countries are now undertaking a deep revision of their fiscal systems and have to face the challenge to improve the quantity and quality of public services for a growing middle class. Among these public services, mobility strategies and public transport systems will define the carbon footprint in the years (and decades) to come. A proper combination of modern fiscal schemes with an engaged policy answer in high quality public services is much welcome in terms of social cohesion, fairness and improvements in the environment and health impacts.

Over the past years, the Economic Commission for Latin America and the Caribbean (ECLAC) has been working to impulse fiscal reforms in the region to help countries better incorporate environmental externalities, including CO<sub>2</sub> emissions. Their work notably encompasses the following: identifying the possibilities of green fiscal reforms in each LAC country, providing technical assistance to countries on green fiscal instrument design and evaluation, designing proposals of green fiscal instruments, undertaking research on the social, economic and environmental impacts of fiscal instruments implemented, and working to place green fiscal reform on countries' political agendas.

**Proposal:** Provide a green paper on environmental fiscal policy reform and public services in LAC and EU countries, as well as annual reports to the Parliaments on fiscal treatment of energy and carbon in each country as well as a system to track improvements in public transport services and its impact in the households' economies. These efforts could be undertaken in cooperation with ECLAC.

## 6. Tracking decarbonisation and resilience

To achieve the 2°C target, we all need to stay between 1.5 / 1.7 tons per capita in 2050. This means each country needs to start figuring out the different long term pathways countries can take to ensure a resilient society/economy to a 2°C warmer world and to ensure national emissions stay within the limits of 1.5 tons per capita.

In 2009, the European Commission adopted a roadmap that suggests the EU should reduce, by 2050, emissions by 80-95 percent below 1990 levels to be in line with the 2°C goal. The roadmap sets out several milestones for achieving a cost-effective pathway to this goal: reductions of the order of at least 40% by 2030 and 60% by 2040. The 2030 target was reiterated in the EU's international climate change cooperation commitment in advance of the COP21 (its Intended Nationally Determined Contribution—INDC), and how this EU level target will be divided up between countries will be legislated progressively over the course of the following years up to 2020. Based on several different low-carbon scenarios, the 2050 roadmap also suggests sectoral emissions reductions (across the power, industry, transport, residential and services, and agriculture sectors) of how the 2050 goal could be reached in a cost-effective manner. However, this 2050 goal has not yet been operationalised—many unknowns remain on how to reach necessary deep decarbonisation levels by 2050.

In spite of its lower responsibility and capacities compared to other countries, the LAC region is making significant policy efforts to reduce emissions and increase resilience to climate change. All LAC countries have ratified the Kyoto Protocol, several countries (notably Brazil, Mexico, Chile, Colombia and Peru) have used the Clean Development Mechanism (CDM), and others (including Antigua and Barbuda, Argentina, Brazil, Chile, Colombia, Costa Rica, Dominica, Mexico and Peru) have presented Nationally Appropriate Mitigation Actions (NAMAs) to the UNFCCC or participated in projects, programmes and collaborations for low-carbon planning. LAC countries are also preparing their INDCs, with Mexico having already submitted an ambitious INDC which includes an unconditional 25 percent GHG emission reduction target for 2030 (relative to a Business As Usual baseline).

Nevertheless, “business-as-usual” scenarios for the region indicate that the level of emissions is projected to be around 9.3 tons/capita in 2050.<sup>3</sup> In the upcoming decades, unless major changes are taken to invest in renewable energy sources, improve energy efficiency and reduce the dependence on fossil fuels, the projected rise in energy demand throughout the region is expected to drive emissions increases in the energy sector. Moreover, its exports depend heavily on natural resources-based products, making the region quite vulnerable to potential climate change measures including trade limitations.

The LAC region is, however, full of opportunities. Innovative policies to promote green growth and protect the environment are being undertaken across the region. These include policies to prevent deforestation and the mitigation of natural disasters, encouraging the development of low-carbon energy sources, developing water and sanitation systems, and improving and expanding public transport, especially through an emphasis on sustainable urban planning. Many studies have demonstrated how such policies could further help the development of the region, while combating climate change, improving health and creating jobs. The challenge now lies in unlocking this potential, expanding and mainstreaming the innovative policies that have already demonstrated their success. Such unlocking will require a significant shift in private investment towards low-carbon development and new ideas and mechanisms to finance these transformations at the required scale.

Deep uncertainties remain on how such a process to ensure very low carbon emissions will occur by 2050 (this is the case more generally at the global scale). This is why modelling projects such as the Deep Decarbonisation Pathways Project, in which research teams from the 15 largest emitting countries identify technically feasible pathways for achieving the 2°C goal, are so important. They have notably already identified difficulties in specific sectors, and some potential solutions. They also underscore the need for undertaking a global push of low-carbon technologies, some of which are not yet fully commercialised or affordable. At the moment, there are only 5 EU and LAC countries participating in this project (France, Germany, UK, Brazil and Mexico), yet there are other initiatives that are taking on similar scenario projects across a broader set of countries.

**Proposal:** An annual tracking report to be submitted to Parliaments and/or the EuroLat Parliamentary Assembly that identifies implementation of decarbonisation policies would allow a national constructive debate while keeping the consistency between the short and long term needs.

<sup>3</sup> GEA Scenarios Database of the International Institute for Applied Systems Analysis (IIASA), in Inter-American Development Bank (2013), The Climate and Development Challenge for Latin America and the Caribbean.