

A compilation of case studies by subnational governments





A compilation of case studies by subnational governments

Basque Country (Spain)

Catalonia (Spain)

Fatick (Senegal)

New York (USA)

Ontario (Canada)

Quebéc (Canada)

Rhône Alpes (France)

São Paulo (Brazil)

Wallonia (Belgium)

Summary

Introduction1
 "Deployment of regional climate change policy at the local level through Udalsarea 21"
Case by Basque Country2
2. "Pyrenees Climate Change Observatory – OPCC"
Case by Catalonia5
3. "Territorial Approach to Climate Change (TACC): to emit less GHG, towards climate-resilient territories"
Case by Fatick7
4. Cases by New York
4.1. "The Transportation Climate Initiative (TCI)9
4.2. "Regional Greenhouse Gas Initiative"10
5. "Assessing Climate Change Risk to Stormwater and Wastewater Infrastructure for the City of Welland, Ontario, Canada"
Case by Ontario
6. "The Quebec/California carbon market: Partnership across North American borders"
Case by Quebec
7. "Rhône-Alpes Observatory on Climate Change Impacts (ORECC)"
Case by Rhone-Alpes17
8. "Inventory of Greenhouse Gases Anthropogenic emissions in the São Paulo State between 1990 and 2008"
Case by Sao Paolo
9. "Fast Start Program"
Case by Wallonia21
Contact information

Introduction

This compilation of several subnational case studies on mitigation and adaptation actions aims at presenting exemplar cooperation initiatives among different territorial agents (region-region, city-city, region-city, territory-region and territory-city).

Climate impacts are connected to increasing urbanization levels, and action to tackle causes and effects must necessarily be taken by multilevel actors throughout all sectors of the economy.

In close collaboration with citizens and civil society, subnational governments are responsible for the development and implementation of laws, policies, strategies, standards, programs and fiscal mechanisms in areas that directly influence GHG emissions levels and deal with the impacts of climate change. Therefore the path to successfully tackle climate change relies heavily upon the engagement and contribution by subnational and local actors.

Moreover, all the below programs were created envisaging the best suited climate actions for the territory specificities and reality. This confirms how a territorial dimension has a direct influence on the successful formulation of climate policies and targets, since it enables tailor-made actions adapted to the population dynamics and urban realities, ensuring the most effective outcomes in tackling climate change at the subnational level.

On top of that, this initiative joins the global advocacy that seeks stronger engagement opportunities for local and subnational governments before international decisions. The role of these actors has been increasingly recognized by intergovernmental processes, especially on Sustainable Development and Biodiversity. On the track of a new global climate regime to be defined at COP 21 – Paris, it is fundamental to attest the urgency in adopting a truly inclusive and democratic approach in order to allow the collaboration of all relevant multistakeholder towards an improved climate governance.

This publication contributes to creating a common expertise among multi-level stakeholder. Moreover, the case-studies provide a set of best practices on territorial cooperation for climate action that could inspire and improve policies in other regions. Besides, it exemplifies the importance to strengthen collaboration among all regions, territories and UNFCCC Parties.

1. "Deployment of regional climate change policy at the local level through Udalsarea 21"

Case by Basque Country



BASQUE COUNTRY

The definition of Sustainable Development since the Brundtland Report, in 1987, passing by the Earth Summit in Rio de Janeiro in 1992 and the recently held Rio +20 Summit, has been increasingly recognizing the role of regions and peoples in improving the global environment, through the maxim "Think Global, act Local".

In Euskadi, the platform of action to deploy regional policies at the local level is Udalsarea 21, the Basque Municipalities' Network for Sustainability. Climate change is a clear example of implementing global policies locally.

Udalsarea 21 was established in 2002 with 16 municipalities. Currently it counts with 198 city members, involving more than 99% of Basque's population.

Actions on climate change were intensified after the adoption of "Basque Plan to Combat Climate Change 2008-2012". The regional government comprehended the importance of actions undertaken by municipalities on sustainable mobility, energy efficiency, use of renewables, etc. In consequence, it was aware on the need to develop tools to support action on the local level, initially in inventorying and reducing emissions, and subsequently in adaptation to climate change.

Desde 2007 hasta la fecha se han activado distintos grupos de trabajo en los que han participado más de 50 municipios desde las capitales a municipios de ámbito rural.

Since 2007 several working groups have been established, with the participation of over 50 municipalities, including capitals to rural municipalities.

- The different working groups are set around the following functions:
- Efficient communication and experiences exchange among municipalities with similar needs.
- Group learning focused on concrete expert-led actions.
- Creation of common resources available to all member municipalities of the network.
- Coordination and alignment with regional and international policies.

Many unquantifiable actions have been developed, such as identifying best practices and capacity-building on the following topics: urban planning and sustainable mobility, biofuels, energy saving and efficiency, renewable energy, sustainable building, carbon sinks, municipal solid waste and adaptation to climate change. Furthermore, quantitative aspects also have been developed, such as tools for calculating emissions for both the city and municipal facilities. In conclusion, it has established a roadmap on climate change for the different municipal profiles of the Basque Country.

As a result, Basque cities now have:

- Tool for inventorying local Greenhouse Gases (GHG) emissions, which allows both analyzing and comparing evolution scenarios.
- Guide for the elaboration of Local Strategies to Tackle Climate Change.
- Model with guidelines on Climate Change for the local level.
- Guide to developing local adaptation programs.
- Urban Planning practical handbook on mitigation and adaptation to climate change.

Currently, over 90 municipalities are estimating the reduction of GHG emissions, 6 municipalities have adopted specific bylaws on Climate Change, 30 municipalities have Local Climate Change Programs and 2 municipalities a Municipal Climate Change Program.

En la actualidad, hay más de 90 municipios calculando su reducción de emisiones de GEIs, 6 municipios tiene aprobada una Ordenanza específica en materia de Cambio Climático, 30 municipios tienen Programas municipales de Cambio Climático y 2 municipios un Programa Municipal de Cambio Climático.

La elaboración de la nueva Estrategia Vasca de Cambio Climático 2020 ofrecerá nuevos retos y oportunidades para desplegar las políticas de cambio climático de forma coordinada tanto a escala internacional como en proyectos concretos a escala local.

In addition, since 2008 the annual call for proposals of the Basque Government Department of Environment to local bodies has a specific line to support climate change projects with an annual average emission reduction of 25,000T.

The establishment of the new Basque Climate Change Strategy 2020 will offer new challenges and opportunities for implementing climate change policies, coordinated with both international and local specific projects.

Contact Information

Department for the Environment and Territorial Policy

Ms. Amaia Barredo Martín
a-barredomartin@ej-gv.es

www.udalsarea21.net
www.ingurumena.net

2. "Pyrenees Climate Change Observatory – OPCC"

Case by Catalonia







European Territorial Cooperation initiative integrated by all Governments of the 8 bordering territories i.e. Andorra, Spain (Basque Country, Navarre, Aragon and Catalonia) and France (Aquitaine, Midi Pyrenees and Languedoc-Roussillon).

The OPCC is structured around 3 main bodies:

- Political Council political authorities to ensure economic viability and guidance
- Technical Committee: bringing together territorial CTP decision markers working with a Project Coordinator.
- Scientific Council made up of 25 internationally recognized experts and scientists from the participating territories.

OPCC benefits from EU regional funds (ERDF) under the Operational Programme for Territorial Cooperation Spain-France-Andorra 2007-2013 (POCTEFA).

During its first Action Programme 2010-2013, the project has developed 7 actions: *Adaptation, Biodiversity, Climate, Water, Forest and natural risks, Remote sensing, Human activities and*

Information structuring. To monitor and assess the development of the project were implemented Working Groups integrated by members of the Technical Committee, Scientific Council and the Partners.

One of the actions, Adaptation to climate change at the Pyrenees work carried out as a true partnership between the governments of all territories of the OPCC. This study was presented at the annual meeting about adaptation of the European Environment Agency (EEA), OPCC received an excellent feedback from EEA who highlighted the study goes deep into adaptation measures existing at the territory and not just keeping on monitoring impacts of climate change.

Climate Action is another flagship of OPCC project is the development of a unique database of high quality climate series based on precipitation, temperature, and the definition of common indicators to all territories of the Pyrenees. University and the Met Offices from all territories worked together to achieved this unique case in Europe.

OPCC has participated in many international *fora* and has put on the European map the Pyrenees as a flagship of cross border cooperation in mountains areas OPCC has participated on technical reports of EEA (*Climate change, impacts and vulnerability in Europe 2012 — and Adaptation in Europe - Addressing risks and opportunities from climate change in the context of socio-economic developments — 2013.) and the Opinion of Committee of Regions about adaptation in Europe.*

7th November OPCC organized an International Meeting about Climate change and Mountains to present the results from the first project carried out. The event was attended by representatives of EEA, CoR, Alpine and Carpathian Convention and the CTP.

OPCC organized a meeting with the EEA, CTP and the Alpine and Carpathians Conventions to work on a future European Mountains Network.

At this moment the Political Council is working out to give the necessary economic viability while OPCC is preparing for the new European Territorial Cooperation Programme 2014-2020.

During 2014, OPCC main objective is to share all the knowledge with the local stakeholders to enhance local awareness and capacity building, this action is fully supported by Andorra, the new CTP presidency.

Contact Information

Catalan Office for Climate Change. Catalan Government

Mr. Salvador Samitier

Head of Catalan Office for Climate Change

salvador.samitier@gencat.cat

www.opcc-ctp.org

www20.gencat.cat/portal/site/canviclimatic?newLang=en GB

3. "Territorial Approach to Climate Change (TACC): to emit less GHG, towards climate-resilient territories"

Case by Fatick



Within the partnership launched by the UNDP in collaboration with 6 regions of Senegal, the TACC program started-up with the support of the Government of Senegal. The program is also supported by Catalonia, Belgium, and the French provinces of Rhone Alpes and Poitou Charentes. Action is taken in the regions of Fatick, Kaffrine, Matam, Tambacounda, Saint-Louis, and Louga.

The main aim of the program is to enable the mentioned Senegal regions to have an Integrated Territorial Climate Plan (ITCP) that may:

- 1. Enable the creation of a governance framework adapted to CC.
- 2. Reinforce the capacities of local actors towards CC adaptation and mitigation.
- 3. Integrate the CC issue in the sustainable planning.
- 4. Start-up adaptation pilot projects (environmental training and raise of awareness, promotion of renewal energies, reforestation and biomass....)

The results achieved up to the moment by the program are very significant:

- a) In each pilot region, a Regional Commission for Climate Change was created to establish a governance framework and to harmonize the actions to be taken in the field of CC.
- b) Local actors have participated in numerous sessions addressed to the reinforcement of their capacities. Today, they are enough efficient to integrate the constraints that climate and carbon bring to their lives.
- c) The ITCP are currently on-going in the Fatick region. Currently, Fatick holds an environmental profile as well as a vulnerability/resilient study on the region.
- d) With regards to pilot projects, the program successfully brought electricity to 10 villages thanks to solar photovoltaic power; 22 schools in the region are currently developing the Fatick Green School Project; and, the experience on biogas and improved households is being disseminated in rural areas of the region.

Despite the above results, an important number of challenges still need to be addressed. In particular:

- The need to count with more partners that may provide technical and funding assistance. In this sense, nrg4SD members with similar experiences to the ones described above are called to provide us their technical expertise.
- The need to count with more funds in order to benefit the maximum number of citizens in our region.
- The need to reinforce the technical capacities of those development agents, in order to improve the approach to CC within the different developing options.

Contact information:

Regional Council of Fatick
Mr. Mamadou Touré
ndongtoure@gmail.com
www.regionfatick.org

4. Cases by New York

4.1. "The Transportation Climate Initiative (TCI)



The Transportation and Climate Initiative (TCI) is a regional collaboration in the United States that seeks to develop the clean energy economy and reduce oil dependence and greenhouse gas emissions from the transportation sector. The group strives to support innovative technologies, smart planning, and the identification of greater efficiencies in the transportation sector.

Twelve northeast and mid-Atlantic jurisdictions in the United States participate in the TCI: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

TCI has four core work areas. The collaboration is:

- 1. Working to expedite the deployment of electric vehicles and alternative fuels in the region. At the end of 2011, the TCI launched the Northeast Electric Vehicle Network to help travelers drive their electric vehicles seamlessly from northern New England to Washington, D.C., and everywhere in between. Since its launch, the number of publicly available charging stations for electric vehicles (EVs) has tripled. States in the region have made significant investments in EV charging infrastructure, and developed policies and incentives to encourage growth in zero-emission vehicles. TCI has developed and issued a series of planning and guidance documents to help local jurisdictions and businesses in the region become EV-ready.
- 2. Developing state-level tools and policies that promote more sustainable communities throughout the region. These efforts seek to expand transportation options that minimize environmental impacts, enhance economic prosperity and natural resource protections, and advance healthy and livable communities. TCI states have agreed to regional sustainability principles that make sustainable development a top regional transportation goal.
- 3. Adopting innovative communications technologies that will make transportation more energy efficient and sustainable. Examples of this work include promoting public transit, reducing travel times and traffic congestion, and expanding the use of real-time information about traffic, alternative routes, and transit arrival and departure times to help travellers make wise choices.

4. Advancing more efficient freight movement. The group seeks to identify and advance regional initiatives to promote sustainable economic development, minimize traffic congestion, and reduce greenhouse gas emissions through more efficient goods movement and technology.

Contact Information

Transportation and Climate Initiative

Kate Zyla

zyla@law.georgetown.edu

http://www.transportationandclimate.org

4.2 "Regional Greenhouse Gas Initiative"

Regional Greenhouse Gas Initiative

an Initiative of the Northeast and Mid-Atlantic States of the U.S.

The Regional Greenhouse Gas Initiative (RGGI) is the first marketbased regulatory program in the United States to reduce carbon dioxide (CO₂) pollution. It is a cooperative effort among nine Northeastern and Mid-Atlantic states – Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont – to cap and reduce CO₂ pollution from the power sector.

The RGGI participating states have established a regional cap on CO₂ pollution from the power sector and are requiring power plants to possess a tradable CO₂ allowance for each ton of CO₂ they emit. This approach allows market forces to determine the most economic means of reducing pollution and creates the market certainty needed to drive long-term investments in clean energy.

Since 2005, CO₂ pollution from the power sector has declined more than 40 percent across the RGGI region, as energy efficiency programs have contributed to reduced demand and generation has shifted from coal and oil to renewable power and natural gas. RGGI currently applies to approximately 167 electricity generation facilities in the Northeast and Mid-Atlantic. Together,

these facilities account for approximately 90 percent of CO₂ emissions from electricity generation in the region.

The RGGI states have distributed approximately 90 percent of their CO₂ allowances through quarterly auctions. As of September 2013, cumulative auction proceeds total more than \$1.4 billion. The RGGI states reinvest auction proceeds in consumer benefit initiatives, including energy efficiency, renewable energy, direct bill assistance, greenhouse gas abatement, and climate change adaptation programs. **To learn more about RGGI visit the RGGI website at:** http://www.rggi.org

State investments in energy efficiency and renewable energy have benefited the region's families and businesses. These investments help families reduce their energy bills and businesses become more competitive. They also accelerate the development of local clean and renewable energy sources, limit the release of harmful pollutants into the air and atmosphere and spur the creation of jobs in the region. These RGGI investments, in concert with the broader energy policies of each RGGI state, are making the region a national leader in energy efficiency, clean and renewable energy, and greenhouse gas emissions abatement. For example, six RGGI states were ranked among the top ten states nationwide for energy efficiency investments by the American Council for an Energy Efficient Economy in 2011.

These investments have also had a positive impact on the region's economy. An independent report by the Analysis Group found that the investment of RGGI proceeds from the first three years:

- Generates \$1.6 billion in net economic benefit region-wide through the end of the decade;
- Puts \$1.1 billion in electricity bill savings back into the pockets of consumers in the region over the next decade;
- Creates 16,000 job-years in the region; and
- Keeps \$765 million in the local economy due to reduced fossil fuel demand.

In February 2013, the RGGI participating states agreed to make significant revisions to the program, capping CO₂ emissions at 91 million short tons per year in 2014—a 45 percent reduction from the previous cap of 165 million short tons. The cap will then be reduced by 2.5 percent each year from 2015 through 2020.

Analyses indicate these changes will generate approximately 80 - 90 million tons of cumulative pollution reductions by 2020, when compared to the current RGGI program. In addition, these changes are projected to increase gross state product by more than \$8 billion, real personal income by more than \$7 billion, and add more than 125,000 job-years.

RGGI is providing a successful model for national consideration as the United States Environmental Protection Agency (EPA) develops new rules to regulate carbon pollution from

existing power plants. RGGI demonstrates that market-based carbon pollution reduction programs can reduce carbon pollution while supporting economic growth.

Contact Information

Regional Greenhouse Gas Initiative
Nicole Singh
Executive Director
nicole.singh@rggi.org
www.rggi.org

5. "Assessing Climate Change Risk to Stormwater and Wastewater Infrastructure for the City of Welland, Ontario, Canada"

Case by Ontario

	Performance Response												nate	Pai	rame	eters	6																
Infrastructure Component	Structural Dersign	Functionality	Watershed, Surface Water and Groundwater	Operations, Maintenance, Materials Performance	Emergency Response	Insurance Considerations	Policy Considerations	Social Effects	Water Quality	Economic Considerations	Other	High Temperature	HeatWave	Heavy Rain	5 day Total Rain	Freezing Rain	lce Storm	Hurricane / Tropical Storm	Drought / Dry Period	Heavy Snow	Snow Accumulation	Freeze Thaw Cycles	Winter Rain	Blowing Snow / Blizzard	Lightning	Hailstorm	High Winds	Tornado	Heavy Fog	Low Temperature	Cold Wave	Extreme Diumal Temperature	Flooding (100 year) (aka Regulatory)
Administration																																	
Personnel		Υ		Υ	Υ	Υ	Υ	Υ				16	16	20	10	15	12	8		25	6	6	10		20	12	12						
Storm Collection System																																	
Catchbasins	Y	Υ	Υ	Υ		Υ		Υ	Υ					20	15	10	6	10					10					2					1
Manholes	Y	Υ	Υ	Υ		Υ		Υ						10	10	10	6	4					5					2					1
Pipes	Y	Υ	Υ	Υ			Υ							15	15			6					15							3			
Outfalls	Y	Υ	Υ	Υ			Υ	Υ						25	25			10					25							3			
SWM Ponds	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ				16	20	25							6							12					
Oil Grit Separator	Y	Υ	Υ	Υ			Υ							15	20																		
Major System - Old	Υ	Υ		Υ	Υ	Υ	Υ	Υ				12	16	20	10	10	9	10		10	6		25					10					
Major System - New	Υ	Υ		Υ	Υ	Υ	Υ	Υ				12	16	20		5	6	8		10	6		25					10					
Sanitary Collection System																																	
Manholes	Υ	Υ		Υ	Υ	Υ		Υ						20	15	10				10	4	4	20					6					
Pipes	Y	Υ		Υ	Υ	Υ	Υ	Υ						20	20			8					20										
Forcemains	Y	Υ					Υ																										
Inverted Syphons	Y	Υ		Υ					Υ					25	25			10															
Reservoirs		Υ			Υ		Υ	Υ						10	15			6															
Pump Stations		Υ			Υ			Υ						25	20			10							28								
Flow Control Structures	Y	Υ	Υ	Υ	Υ		Υ	Υ	Υ					25	25			10					10				4						3
CSO's	Y	Υ	Υ	Υ	Υ		Υ	Υ	Υ					25	25			10					5				4						3
WWTP																																	
Main Pumping Station	Υ	Υ		Υ	Υ	Υ	Υ	Υ				16	16	15	10		9	10						8	12			14	8	2			
Screening, Grit Removal, Flow Splitter	Υ	Υ		Υ	Υ			Υ		Υ			12	20	20		6	8					15					14		2	4		
Plant Systems	Y	Υ	Υ	Υ					Υ									6										10					7
Outfall to Welland River		Υ																															2
BioSolids Management		Υ		Υ			Υ	Υ						15	15	10	6	14		10	4		15	8				10	8				
Electric Power																																	
Transmission Lines	Y	Υ		Υ	Υ							8	8	10		5	15	12							12		12	12					
Standby Generators		Υ		Υ	Υ	Υ			Υ																								5
Transportation																																	
Supplies Delivery		Υ		Υ	Υ	Υ			Υ					10	10	15	21	12		10	4							14	8				
Communications																																	
Telephone, Telemetry	Υ	Υ		Υ	Υ											5	9	12							8			8					

City of Welland Stormwater/Wastewater System Climate Risk Matrix

This study assessed current and future climate risks to the stormwater and wastewater infrastructure owned and operated by the City of Welland, a municipality serving approximately 50,000 people located in the Province of Ontario, Canada near the Great Lakes of Erie and Ontario, and the Niagara fruit belt. The project was a partnership of the Region of Niagara Water Strategy, the Great Lakes and St. Lawrence Cities Initiative, the Ontario Ministry of Environment, Environment Canada and the City of Welland, together with Engineers Canada, the national organization for Canada's engineers. AMEC Environment and Infrastructure, a consultancy, was contracted to execute the assessment and prepare the final report.

The principle objective of the assessment was to identify those components of the stormwater and wastewater systems that are at risk of failure, damage and/or deterioration from extreme climatic events or significant changes to baseline climate design values.

The nature and relative levels of risk were determined to establish priorities for remedial action. The assessment was carried out using the Public Infrastructure Engineering Vulnerability Committee (PIEVC) Engineering Protocol, a screening level infrastructure climate risk assessment tool developed by Engineers Canada. Risks from current climate as well as two future time frames, 2020 and 2050, were defined.

The assessment produced a total of 44 infrastructure-specific recommendations classified into categories defined by the Protocol. Categories included additional study as a pre-requisite for management and/or operational action.

Costs to implement recommendations ranged from less than \$100,000CAN to \$500,000CAN.

Timeframes to implement actions as well as who should undertake the action – the City, Region or both were also provided. These details enable the infrastructure owner and manager to properly plan and manage actions to ensure due consideration of climate change risks along with other risks and considerations for infrastructure operations, maintenance and renewal.

The results of the assessment were incorporated into a growing national knowledge base managed by Engineers Canada that combines and analyses assessments of similar types of infrastructure to develop recommendations around reviews and adjustments to infrastructure codes, standards and engineering practices to account for current and future climate risks.

The results of this study and the more than 25 others completed across Canada to date (October 2013) are being used to establish a Canada-wide assessment of the risks and vulnerabilities of public infrastructure to current and future climate.

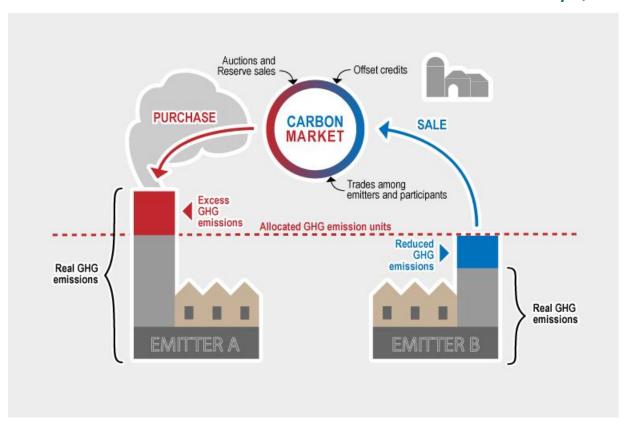
Understanding the nature and severity of climate risks enables infrastructure owners, managers, engineers and operators to plan and execute actions that reduce climate risks to an acceptable level. Risk reductions are achieved through adjustments to operations and maintenance, planning and design of existing infrastructures or in constructing new ones.

Contact Information

Engineers Canada
David Lapp, FEC, P.Eng.
david.lapp@engineerscanada.ca
www.engineerscanada.ca

6. "The Quebec/California carbon market: Partnership across North American borders"

Case by Quebec



January 1, 2013, marked the beginning of a new era in the fight against climate change in Québec – On that day, the very first compliance period for the Québec cap-and-trade system began.

A cap-and-trade system for GHG emission allowances (C&T system) is an economic tool that reduces total greenhouse gas (GHG) emissions. An overall cap on GHG emissions is imposed annually to all emitters covered by the system. This cap will be lowered gradually over time, generating absolute reductions in GHG emissions. Using market forces to encourage the cheapest reductions, the C&T system provides flexibility to emitters with respect to the means of complying with the requirements, thereby reducing overall mitigation costs.

The development of Québec's C&T system is inextricably linked to the creation of the WCI. This forum was created in 2007 by California and other US States and Canadian provinces. The goal was to develop a common approach to reducing greenhouse gas emissions, including the creation of a regional carbon market. Québec joined the Western Climate Initiative in 2008 and became a very active member in the development of WCI rules, in collaboration with the other partners. The following year, the Quebec National Assembly adopted a bill allowing for the implementation of a GHG emissions cap-and-trade system on its territory.

In 2011, the Canadian provinces of Québec, Ontario, and Manitoba along with California created WCI Inc., a non-profit organization providing administrative and technical services to support the implementation of C&T systems. These services consist in developing and operating a tracking system for GHG emission allowances, overseeing government sales of emission allowances, implementing a market monitoring system, and providing assistance to participants.

That same year, the Québec government adopted amendments to its GHG mandatory reporting Regulation to bring it in line with the rules adopted by the WCI. Companies emitting more than 10,000 tons of CO2 into the atmosphere have since been required to declare their GHG emissions. This data allowed the government to identify Québec's major emitters and create its C&T system. Also in 2011, Québec adopted a regulation setting out the system's operating parameters, which are based on the WCI guidelines published in 2008 and 2010. The Québec regulation was amended in 2012, in order to make room for the linking between Québec's and California's carbon markets, which are the first two WCI jurisdictions to implement C&T systems.

The Quebec C&T system presently covers large emitters in the industrial and electricity production sectors. The threshold is 25 000 t co2 eq annually. Starting in January 2015, fossil fuel distributors will be covered by the C&T system. At that time, it will cover around 86 % of Quebec GHG emissions.

A first auction sale will be held on December 3rd, 2013. Revenues generated by the annual auctions will be reinvested in GHG reduction measures and adaptation initiatives. It is presently estimated that the Quebec C&T system will generate more than 3 billion dollars from now to 2020. The official linking of Québec and California's carbon market has been completed and will take effect in January 2014. The partners are aiming to hold their first joint auction in the spring of 2014.

The collaboration shown by Québec and California within the WCI framework is an excellent example of North American regional cooperation that is economically and environmentally beneficial for both partners. Québec and California are also working towards expanding their carbon market, and are hopeful that other North American partners will join it.

Contact information:

Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs (MDDEFP)

Mr. Claude Côté, Advisor

Office of climate change, MDDEFP

claude.cote@mddefp.gouv.qc.ca

www.mddefp.gouv.qc.ca/index en.asp

7. "Rhône-Alpes Observatory on Climate Change Impacts (ORECC)"

Case by Rhone-Alpes

Climate change is ongoing the work led by Rhone-Alpes and the regional delegation of the French Environment Ministry (DREAL) during the elaboration of "schema regional climat air energie" has highlighted the already existing impacts and their likely increase in the future: a rise in average temperatures, melting glaciers, changes in rainfall...

The need to improve and to share climate knowledge, its evolutions and effects on regional territory has been identified as a key issue. To carry this out, Rhône-Alpes region and the DREAL have decided from 2012 to create a "ORECC" to enable all the stakeholders, including local governments in charge of the implementation of climate programmes, to:

- have access to data;
- share knowledge;
- make accessible methods and analyses to elaborate strategies and implement actions to adapt to climate change.

As a sensibilisation tool, this "ORECC" is designed to be used by everybody: public bodies, NGOs, the economic sector, universities, the public at large...

A multi-level governance, reflecting the partnership and the "co-building" nature of the project.

The management and the operation of the "ORECC" are provided by several bodies.

- Steering committee, made up of the 3 founders and main funders of the projetct: the State (Direction Régionale de l'Environnement, de l'Aménagement et du Logement), the Rhone-Alpes Region, and the ADEME (Agence nationale de l'environnement et de la maîtrise de l'énergie), it is in charge of the agreement of the operative program and the key outcomes. The steering committee is supported by a secretariat and a technique operator.
- Policy committee, which is the heart of the network of ORECC's partners. It is composed of elected representatives and leaders of the following member structures:
 - Local communities (specifically those engaged in a "Plan Climat Energie Territorial")
 - State and public institutions
 - Research organizations
 - Civil society: economic sector, NGOs...

Its role is primarily to guarantee the utility of the observatory's production in representing the interests and needs of the users of the data and analyzes produced. Fo this, it debates and proposes strategic orientations for the work of the ORECC, it gives its opinion on the ORECC's annual program and publications.

- Working groups composed of representatives of institutions, local communities, economic actors and experts, build on foccused topics, using a socio-economic process approach. Two working groups were created: "tourism" and "agriculture-forestry"", which are 2 sectors specifically vulnerable to climate change in Rhône-Alpes. These working groups will:
 - Bring together actors involved in one vulnerable to climate change economic sector, and create a dynamics on the subject,
 - Share knowledge about climate change concerning the chosen topic,
 - Produce indicators to help to adapt economic activities to climate change.
- An annual regional meeting, to disseminate on a large scale the results of the work of ORECC and generate commitment of new partners in the project.

Thought of as a "partnership and co-built" tool, ORECC aims at pooling, organizing, and making available all the data produced concerning climate change in Rhône-Alpes, including in a more understandable way and in a more easily accessible form.

It also acts as a "think tank", enabling the emergence of new initiatives, whether in the field of knowledge or in the implementation of strategies or action plans.

Finally, it also seeks to connect itself to the already existing tools, whether national or subregional levels.

Contact information:

Région Rhône-Alpes

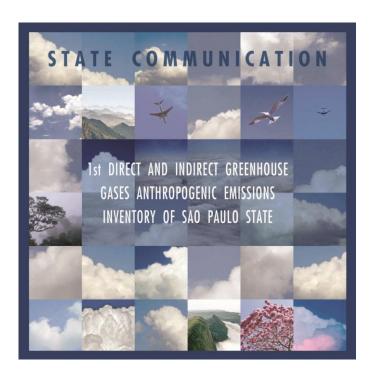
Ms. Sandrine Descotes

sdescotesgenon@rhonealpes.fr

www.rhonealpes.fr

8. "Inventory of Greenhouse Gases Anthropogenic emissions in the São Paulo State between 1990 and 2008"

Case by Sao Paolo



The project "Support to São Paulo State Climate Policy" was initiated by CETESB and State Secretariat for the Environment, through the Climate Change Program (PROCLIMA) initiated in 2008, with the support of the British Embassy in the elaboration of the Inventory of Greenhouse Gases (GHG) of the State of São Paulo, following the methodological guides developed by the Intergovernmental Panel on Climate Change (IPCC), and also adapted to the circumstances of an inventory elaborated by a subnational government, compatible with the Brazilian's National Inventory. It is noteworthy that, at the moment, São Paulo is the only Brazilian State that has emissions inventoried this way for the period 1990-2008.

The Climate Change Policy, defined by the State Law 13.798 of 2009, set the challenge of publishing the GHG Inventory in November 2010, which has been possible, mainly due to this cooperation.

To accomplish this goal, PROCLIMA established a group that gathered 120 partner institutions, and 320 researchers and experts from the inventoried sectors, working to raising data displayed at the Inventory. The resources provided by the cooperation were used to establish and implement accords with about eight institutions that supported directly the elaboration of the main reference reports from each of the five sectors (defined by the IPCC to conduct the

inventory, namely: land and forests use and change; solid waste and wastewater; energy; industrial processes; and agriculture) and of the 23 subsectors inventoried, which compose this State Inventory.

These reference reports of each one of the 5 sectors defined by IPCC and the sector-specific reports were available for public consultation. Contributions were made through this consultation process, which last for 8 months. It was a complex process and it is documented on the internet (in Portuguese).

[http://www.cetesb.sp.gov.br/mudancas-climaticas/inventario-gee-sp/Consulta-P%C3%BAblica/168-Consulta].

The State Inventory, along with other technical studies, is a fundamental tool to guide mitigation public policies, because it allows precise identification of sectorial emissions' origin. Besides it supports the definition of mitigation policies and the achievement of the Climate Policy CO₂ reduction target.

The cooperation with the British Embassy, among other: enabled capacity building, as a CETESB technical team visited UK to learn from their inventory, climate policies and experiences; put us in contact with relevant national partners, who also developed cooperation with the UK embassy; and above all, it expedited the whole process. Therefore, it was an extremely important and strategic cooperation, and somehow at that time, it fostered the proposition of São Paulo's law. This cooperation completed at the end of 2011, still shows positive results, since some of the sectorial reports were reviewed, and consequently, new editions of the document are being published.

The inventory is available on the internet (in English).

http://www.cetesb.sp.gov.br/inventario-gee-sp/inventario-esp/282-1st-direct-and-indirect-greenhouse-gases-anthropogenic-emissions-inventory-of-sao-paulo-state].

Contact Information

São Paulo State Environmental Agency - CETESB

Ms. Josilene Ferrer

jferrer@sp.gov.br

www.cetesb.sp.gov.br

9. "Fast Start Program"

Case by Wallonia





Following Copenhagen Accord of December 2009 and the commitments from developed countries to provide fast start financing to developing countries, the Walloon Region (Belgium) decided to act accordingly and to develop amongst others a bilateral program named "Initiative Fast-Start Wallonie".

In 2010 and 2011, the Walloon region launched two calls for projects in partner countries: Benin, Burkina Faso, Burundi, Democratic Republic of Congo, Rwanda, Senegal and the Republic of Haiti. The main objectives of this program are to offer a concrete response to the local impacts of climate change either by adaptation actions, mitigation actions or improved management of energy efficiency. Areas such as fight against soil erosion, water management, agriculture, fight against desertification, reforestation and forest management or waste management are considered as priority sectors.

Furthermore the goal is also to empower local communities, to reinforce their capacities and allow them to become key actors of their success so as to truly share with them the benefits of such actions. The program seeks to encourage projects which are sustainable and that eventually could become self-supporting or an example that could be replicate in other communities.

The projects submitted are developed through a collaborative process. Concretely, that means that when a draft proposal is accepted by the Advisory Committee it is further elaborated by the project proponent with the help of experts and a financial assistance.

Projects are funded by means of grants and supervised by the Walloon Agency for Air and Climate. Wallonie Bruxelles International is also involved in the program as a member of the Advisory Committee. The Institute of Sustainable Development of La Francophonie (IFDD) supports also the program.

In total 18 projects were selected and are running today or will start soon. Together with other subventions they amount for a total of 8.4 million €. The funds are new and additional to the traditional Official Development Assistance.

The projects selected are very diverse: improvement of artisanal production of charcoal, wood-efficient cooking stoves and plantations in Benin; micro-irrigation of vegetable crops in Senegal, plantations in rain-eroded land slopes in Rwanda; waste management system (waste collect, valorisation) in Haiti; adaptation of agriculture practices to climate change in RDC...

The first results of this bilateral program are encouraging. It is a flexible collaboration initiative that has been able to get quick impacts on the ground while it was a totally new program for the Walloon Region and their partners. Results show that these local oriented projects have been able to address climate change impacts as well as to contribute or tackle other issues (such as poverty, women participation, capacity building...).

Contact Information

Walloon Air and Climate Agency
Ms. Martine Leroux
martine.leroux@spw.wallonie.be
http://airclimat.wallonie.be/spip/FAST-START-Wallonie-Construisons-I.html

Contact information

The Climate Group

Libby Ferguson States & Regions Director Iferguson@theclimategroup.org

nrg4SD - Network of Regional Governments for Sustainable Development

Rodrigo Messias **Policy Officer** rmessias@nrg4sd.org

Natalia Vera Internal Affairs Coordinator nvera@nrg4sd.org

CMCC - Centro Euro Mediterraneo sui Cambiamenti Climatici

Eva Banos de Guisasola Senior Scientific Manager eva.banosdeguisasola@cmcc.it







www.nrg4sd.org

www.theclimategroup.org

www.cmcc.it