

State and Regional Government Profile of Leading Climate Change Policies 2010

for Climate Leaders Summit at COP 16 in Cancun

Thank you in advance for providing information on your government's leading policies to address climate change. This information will be used by The Climate Group as part of our commitment to report back on what has been achieved since COP15 in Copenhagen. It will also be used to profile your government on our website. It will also be a valuable resource for all our State and Regional government members to share their policies.

We would be grateful if you could indicate under the sectoral headings achievements made since Copenhagen. This includes new commitments made as well as progress made or milestones achieved during the year towards existing commitments. You need not list all the policies; rather select those that you consider leading examples.

Ideally, we are after a **one line summary** on a) leading policy measures introduced since Copenhagen (such as introduction of a fund, tax, rebate, etc) as well as, b) any progress indicators on the delivery of existing policies in 2010 (such as delivery of X MW of solar towards a target), and **where possible** a **link to the webpage** where detail on this policy can be found.

We have also pulled out specific headings relating to programs that The Climate Group is progressing on electric vehicles, LED lighting and Smart Cities, as well as specific commitments made at past Climate Leader Summits, such as the Billion Trees Initiative. Information on your activity in these areas would be particularly useful. These are highlighted in green.

We have provided some examples below to assist you.

New Targets

The Ministry of the Environment and Housing has published "Catalonia and theGHG emissions reduction targets. First progress report". According to the GHG emissions Inventory of Spain 1990-2008, Catalonia's 2008 emissions have been 54,3 Mt CO2 eq., 5% less than 2007.

Regarding the non-ETS emissions, GHG emissions were 35.45 Mt CO2eq.in 2008. Catalonia, in the first year of the Kyoto period, stood below the average emissions necessary to meet the target set by the Catalan Framework Plan for Climate Change Mitigation 2008-2012 (36.55 Mt CO2 eq.). During the period 2005-2008, 0.8 Mt CO2eq.annual average were reduced, 2007 reduction has been the largest, being 5.2%, which equals almost 2 Mt CO2 eq.

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Voluntary Agreements Program: The Catalan Framework Plan for Climate Change Mitigation 2008-

2012 establishes actions for promoting voluntary agreements, as well as the creation of a voluntary registry of organizations joining the program. According to the Plan, this initiative will contribute to an annual reduction of 590.000 tons CO2eq./ year up to 2012. The Voluntary Agreements Program is a voluntary commitment undertaken by any public or private organization to reduce GHG beyond legal requirements. Likewise, the initiative offers the possibility to carry out the compensation of the non reduced emissions. 6 organizations have joined the program so far (the program has been launched July 22).

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According to the **monitoring report 2008-2009 of the Framework Plan for Climate Change Mitigation**, 41 actions of the Plan have been developed by means of 279 performances of the Government. Of these actions, 85% have passed the initial implementation phase and 46% have progressed to an advanced or very advanced stage.

The **Strategy for the Sustainable Development of Catalonia** is the Catalonia's road map which establishes the strategic objectives towards a secure, eco-efficient and low carbon economy, based on the efficient use of energy and natural resources and minimizing negative impacts on health and on the environment. An extensive and intensive participatory process of the Strategy and the creation of the Interdepartmental Working Group, the Local Round Table and the Consultative Council have been key points on the elaboration of the Catalan strategy on sustainable development. The Strategy for the Sustainable Development of Catalonia (2010-2026) describes a sustainable model for the Catalan territory and society. The description of this model is based on 7 topics defined as follows:

- Topic 1. Land of biodiversity with cities and villages
- Topic 2. Energy efficiency and climate action
- *Topic 3.* Intelligent mobility
- Topic 4. Eco-efficiency, competitiveness and innovation
- Topic 5. Rational consumption
- Topic 6. Being inclusive, cooperative, healthy and secure
- Topic 7. Governance, participation and open administration

Each topic is developed in 2-3 strategic lines which set a total of hundred strategic objectives; half of them with a quantitative target value

http://www.2026.cat

Energy Efficiency

Policy measures/ initiatives introduced in 2010:

According to Catalan Energy Plan 2006-2015, 14.1% reduction in final energy consumption (for trend scenario) and 11.5% renewable energy participation by in 2015.

http://www.gencat.cat/economia/ambits/energia_mines/energia/pla_energia/index.html

Catalan Institute of Energy 2010 call for proposals for projects of energy saving and efficiency (30.725.000 €) for projects and actions undertaken in the technology investment to improve energy efficiency; energy audits in industry and buildings, exterior lighting and existing non-industrial services; acquisition and installation of efficient lighting technologies within existing public and private buildings; improving the energy efficiency of heat installations in existing buildings; rehabilitation of thermal power envelope of existing buildings; construction of new buildings with high energy efficiency rating; acquisition and installation of efficient technologies and existing exterior lighting of buildings; feasibility studies and pilot actions in the context of urban mobility plans (PMU) and plans for companies; pilot in mobility plans electric vehicle, recharging stations for electric vehicles registered, public bike systems;

incorporation of energy management technologies in truck fleets (passengers or goods), renewal of fleet type tourism, etc.

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According to the **Program of Saving and Energy Efficiency in buildings and facilities of the Government** of Catalonia (GENERCAT), the goal is to achieve by 2015 a 11% savings in energy consumption in buildings.

The Media-TIC building, promoted by the Consortium of the Zona Franca and the company is situated in 22 @ district in Barcelona. The building is designed as a meeting point and communication for IT and media companies and institutions. MEDIA-TIC will have a 20%energy saving and meets 42 points of the 57 points established by the Decree of Environmental Criteria and Energy Ecoefficiency in Buildings. Principal architect Enric Ruiz Geli (23,104 m2 built surface, 20,791,486 € budget)

PROJECT LIMA (Low Impact Mediterranean Architecture) win the Environment Award for Research,
Development and Innovation, 18,000 € prize for Associates Sabaté-Saas Architecture and Sustainability
−SaAS. The project aims to demonstrate the technological and economic feasibility of reducing the
impact of buildings in the Mediterranean area, while improving comfort and habitability. For this
purposes, a prototype has built to monitor a large number of parameters during 2 years. The analysis of
these data has provided comfort and resources demand conditions.

Progress in 2010 on the delivery of policy commitments:

During 2009 the Ministry of Environment and Housing has allocated 3.778.800 € for rehabilitation with energy efficiency purposes in 1.836 homes.

Clean Energy

Policy measures/initiatives introduced in 2010:

Catalan Institute of Energy 2010 call for proposals under the program of renewable energy (5.434.575,66 €) for projects and actions using wood biomass; solar thermal energy for sanitary, heating, pool heating, air conditioning, heat processes, industrial, etc.; solar and power wind energy for domestic premises and electrification of farming premises; production and energetic use of biogas; installation of equipment of geothermal energy; etc.

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The Government of Catalonia has approved 7 **zones of priority development (ZDP)**, delimiting the areas for the location of wind farms in the next years. The establishment of these ZDP contributes to achieve the targets of the Catalan Energy Plan 2006-2015, which establishes 3.500 MW wind power capacity for 2015. At present there are 775 MW in service, 196 MW under construction and 928 MW with administrative authorization.

Introduction of geothermal energy resources in public facilities. Two Fire Stations have installed a HVAC system reducing 67% emissions with respect to traditional systems.

Progress in 2010 on the delivery of policy commitments:

Transportation

Policy measures/initiatives introduced in 2010:

Passenger Transport Plan for Catalonia 2008-2012 (PTPC) aims to achieve 4.66% energy consumption reduction below the trend scenario which means a 6.47%CO2 emissions reduction below the trend scenario.

Transport Infrastructure Plan in Catalonia 2006-2026 (PITC) aims to increase an 8.5% rail freight per year and limit the mobility increase by means of private car up to 60% in 2026 which means a 10% CO2 emissions reduction by 2026.

0.42 Mt CO2 eq reduction for 2008-2012 by means of promotion public transport by bus in Catalonia. 2.96 Mt CO2 eq reduction for 2008-2012 by means of mobility management.

L9 is a metropolitan subway which, at present, has 9 stations in 8.2 km. After completing its construction in 2014, L9 will be the longest in Europe with 47'8 km long (43'71 km are under ground). The service is operated by Transports Metropolitans de Barcelona (TMB) and along the L9 line runs L10(also under construction) and L2 with 52 stations.

Progress in 2010 on the delivery of policy commitments:

Ministry of the Environment and Housing 2010 call for proposals address to local administrations for promoting local sustainability (1.000.000 €) for projects and actions for renovating of municipal fleet vehicles; implanting computer systems to control energy consumption and promoting of sustainable mobility (use of bikes and carpooling)

Inauguration of subway L9 i L 10.

Electric Vehicles:

The Government of Catalonia has approved the Introduction **Strategy of the Electrical Vehicle in Catalonia (IVECAT)**, for period 2010-2015. This Strategy establishes 76.0000 electrical vehicles' target for 2015. These electrical vehicles include those that are plugged into an external source of energy, the pure electrical ones, as well as, the connectable hybrids. It does not include the non connectable hybrids. It also establishes 91.200 points of reload (83.600 private and 7.600 public access).

Low carbon technology/Industrial sector

Policy measures/ initiatives introduced in 2010:

Progress in 2010 on the delivery of policy commitments:

Smart Cities:

Energy Efficient Lighting:

Actions in this field included in the **Catalan Institute of Energy 2010 call for proposals for projects of energy saving and efficiency**

Sustainable forestry and agriculture

Policy measures/ initiatives introduced in 2010:

The Ministry of Agriculture, Food and Rural action has approved the **Action Plan for Organic Food and Farming 2008-2012**. The Plan includes actions to achieve the increase and improvement of production

and consumption of organic food products in Catalonia. Among these actions, it is plan to carry out a study to improving water balance of organic farming. By implementing these practices crops vulnerability in front of CC will reduce.

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Progress in 2010 on the delivery of policy commitments:

Renewal of the farm machinery park in Catalunya. Reduction 900 t CO2 equivalent/year for 2009-2010 Pig Manure Biodigestion Promotion Plan 2008-2012. Treatment of 1.350.000m3 slurry, total reduction of 545 kt CO2 eq in 2012

Commitment to the Billion Trees Initiative:

65% of Catalonia's territory (around 20.000 ha.) is Mediterranean forest, this environmental asset provides a net carbon sequestration of 4.550 kt /year, which represents a 7,84% of Catalonia's total GHG emissions in 2007. The Government's priority is to carry out a sustainable management of this forest, rather than reforestation activities. Nevertheless, 230 ha have been reforested, around 175.000 trees.

Land-use planning

Policy measures/ initiatives introduced in 2010:

The Government of Catalonia has approved seven **zoning plans**, covering 100% of the territory, thus providing a framework for urbanization containment, protection areas and territorial balance and mobile infrastructures.

At the same time has approved **landscape guidelines**, according to regional catalogues, for each landscape unit and identifying their vulnerabilities.

The Government of Catalonia, along with other public administrations, has been carried out some activities that will help to reduce the impacts of CC on the Catalan coast. These local and specific actions include naturalization of infrastructures, correction of beaches' erosion processes, biodiversity conservation and sustainable management of land and maritime public domain.

In the field of strategic **environmental assessment of plans and programs**, climate change variable has been incorporated. Regarding mitigation aspects, calculation tools are used to quantify emissions, and proposal of concrete reduction measures have been made. With regard to adaptation aspects, the process is still in a preliminary stage. When general sectoral planning is carried out, general recommendations have been made (mostly regarding rational use of water). When planning refers to an specific region particularly vulnerable to climate change impacts, unfavorable reports have been issued if the best scientific information have shown that the purposes are contrary to adaptation (some examples in the Ebro River Delta reports)

Progress in 2010 on the delivery of policy commitments:

Waste management

Policy measures/initiatives introduced in 2010:

Municipal Waste Management Program 2007-2012 (PROGREMIC) aims to achieve 10% reduction of waste production per capita in 2012 (comparing with 2006). Regarding material recovery, aims to increase a 55% of organic matter and 60% of packaging which represents an emissions savings of up to 159,000 t CO2 equivalent annually.

Industrial Waste Management Program 2007-2012 (PROGRIC) aims to achieve a 5% reduction of the amount of waste generated in 2012, which represents a 10% reduction of CO2 emissions by 2026. http://www20.gencat.cat/portal/site/arc/menuitem.60fb2478680e61fd624a1d25b0c0e1a0/?vgnextoid=4e6c53a2012d6210VgnVCM1000008d0c1e0aRCRD&vgnextchannel=4e6c53a2012d6210VgnVCM1000008d0c1e0aRCRD&newLang=es_ES

Progress in 2010 on the delivery of policy commitments:

Two new waste treatment plants in Vacarisses and Mataró with a capacity of 245.000 t/year and 190.000 t/year respectively. Mataró premises will generate 80 MKWh/year as result of incinerating the waste and will produce 13 KWh/year from biogas. It has also installed solar panels which will be producing 400.000KWh/year

Community

Policy measures/initiatives introduced in 2010:

Progress in 2010 on the delivery of policy commitments:

Adaptation

Policy measures/initiatives introduced in 2010:

The Ministry of the Environment and Housing leads adaptation working group of the Spanish Office for Climate Change which are developing methodologies to carry out adaptation plans.

In the framework of the Working Community of the Pyrenees, Catalonia, together with other Spanish and French regions and Andorra, participates in the development of **Pyrenees Climate Change Observatory**

http://www.ctp.org

Catalan Meteorological Service is the competent body to set, implement and manage a system for predicting and monitoring weather and perform the diffusion. Regarding CC issues, this Service advises and assists public agencies in coordination with the competent bodies in this area. Among its working lines related to systematic climate observation, it highlights the evolution of climate in Catalonia during the twenty-first century climate projections in Catalonia regionalized for the XXI century. http://www.meteo.cat/servmet/canvi climatic/informe escenaris SMC JUN2010.pdf

Climate change Outlooks in Catalonia is a Catalan regional scale approximation of future scenarios, climate change impacts and alternatives for action. They are based on scientific knowledge and are carried out by the Catalan Expert Group on Climate Change. First Climate Change Outlook in Catalonia was published in 2005, and the first conclusions of the **Second Climate Change Outlook** in Catalonia has been presented in June 2010.

http://www20.gencat.cat/docs/canviclimatic/Home/El%20canvi%20climatic/Evidencies/Mediterrania/Documents/1r%20Informe%20canvi%20clim%C3%A0tic CA.pdf

Research and Innovation Plan of the Ministry of Environment and Housing (PRI DMAH) establishes the conditions and defines the basic guidelines to manage the operational Research- Development - Innovation system of the Ministry within a complex socio-economic context where sustainability has become strategic. This plan, aligned with the Research and Innovation Plan 2010-2013 approved by the Government, responds to the need to define priorities for action that are strategic for the future of environmental research and innovation

http://www20.gencat.cat/portal/site/dmah/menuitem.198a6bb2151129f04e9cac3bb0c0e1a0/?vgnext

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The Ministry of the Environment and Housing has also identified **centers of excellence for climate change** R + D + i in Catalonia, which are the followings: IC3 (http://www.ic3.cat/), ICTA (http://icta.uab.cat/), CREAL (http://www.creal.cat), IREC (http://www.irec.cat/) i CTFC (http://www.irec.cat/) i CTFC (http://www.ctfc.cat)

Natural Hazard

The Government of Catalonia has also developed specific action plans relating to different natural hazards, which can be augmented as a result of climate change. The Plan (**PROCICAT**) is a multi-hazard territorial emergency plan, used to manage, in a coordinated manner, risks not covered by **specific emergency plans**. Catalonia has the following specific plans: floods, blizzards, forest fires, landslides, droughts and heat waves

This year the Interdepartmental Climate Change Committee integrated by one representative of each of the Ministries of the Government directly affected by CC, has focuses its efforts on biodiversity and health issues.

Biodiversity

Currently, the **draft Law on Biodiversity and Natural Heritage** is under public information. It establishes the legal framework for protection, conservation, sustainable use, management, improvement and restoration of natural heritage. It includes the necessary instruments to ensure greater response capacity to the impacts caused by climate change and habitat fragmentation.

The Catalan Office for Climate Change has organized a "Climate Change and Biodiversity" workshop address to public biodiversity managers in order to share experiences and identify proposals to integrate CC in their activities. The Office also has elaborated an internal position paper regarding the issue.

Health

So far the Catalan Office for Climate Change has complete an internal report regarding the issue after several, meetings with the Ministry of Health.

Progress in 2010 on the delivery of policy commitments:

Support for Adaptation and Mitigation in Developing Countries

The Government of Catalonia has been working with the United Nations Development Programme to launch in Senegal the Territorial Approach on Climate Change (TACC) Program.

Thank you very much for your time in completing this document.