



# First Biennial Update report (BUR1) from Andorra

International Consultation and Analysis Step 2. Facilitative Sharing of Views (FSV)



Ministry of Environment, Agriculture and Sustainability
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### **Submission BUR1**

In accordance with decision 2/CP.17, paragraph 41(a), Parties not included in Annex I to the Convention (non-Annex I Parties), consistent with their capabilities and the level of support provided for reporting, should submit their first biennial update report (BUR) by December 2014.



## Andorra submitted its first BUR on 19 December 2014

- Introduction
- National circumstances
- GHG Inventory
- Projections of greenhouse gas emissions
- Mitigation actions and their effects
- Information on constraints and gaps, finance, technology, capacity building needs and support received



### Annexes

- Short summary tables and summary tables
- KCA tables
- Data used and information sources identified
- Calculation methods and assumptions made in the inventory and in the projections



### Submission BUR1. Introduction

Although the purpose of these reports is to provide updated information regarding the information already submitted to the Secretariat by means of national communications (NC), **Andorra opted for submitting the first BUR within the time limit for the Parties Non-Annex I**, and to present in a second stage at the end of 2016, the first national communication report.

Functional structure created (oct. and dec. 2013)

Initial briefing (Feb. 2014)

Andorra used the 2006 IPCC Guidelines

The first BUR of Andorra covers inventories for the time series 1990–2011 (years 1990, 1995, 2000, 2005, 2010 and 2011)

Andorra reported emissions of  $CO_2$ ,  $CH_4$ ,  $N_2O$ ,  $SF_6$ . Other gases not controlled by the Montreal Protocol, such as  $SO_x$ , included in the Revised 1996 IPCC Guidelines, may be included at the discretion of the Parties:  $SO_2$  emissions are reported.

This first BUR constitutes not only the first exercise for all the Non-Annex I Parties, but also the first statement of Andorra in the UNFCCC.



### Submission BUR1. Introduction

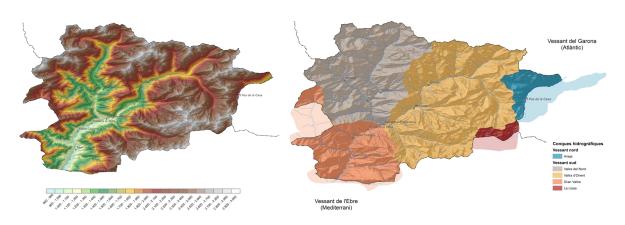
### **Biennial Update Report** BUR1 **Functional structure created** Cabinet of Ministers Team leader Inventory Team leader mitigation Ministry of Tourism and Environment **Department of Environment** Team leader crosscutting issues (Implementing Agency responsible for overall coordination and supervision) Representatives of Government Departments, Private sector Organizations, NGOs, CSOs, etc, and International Consultants for reviewing outputs Technical Technical Technical Monitoring and Working Group Working Group Working Group Evaluation **GHG** Inventory Vulnerability and ETPA, RSO, International - AD: Activity data and Mitigation Adaptation - BUR: Biennial Update Report TNA and Needs Negotiation - CSO: Central Statistics Office - EF: Emissions factors - ETPA: Education, training and public awareness - GEFTF: GEF Trust Fund - GHG: greenhouse gases - GHG-IMS: greenhouse gases inventory management system - INC: Initial national communication - LDCF: Least Developed Countries Trust Fund NC: National circumstances NPIF: Nagoya Protocol Implementation Fund National experts and Consultants for technical and scientific tasks (GHG inventory, V&A RSO: Research and Systematic Observation - SCCF: Special Climate Change Trust Fund assessment, Mitigation assessment, etc) - TNA: Technology Needs Assessment - UNECCC: United Nations framework convention on climate change

### Submission BUR1. National circumstances



### Andorra is a mountainous country

enclosed in the Pyrenees Mountains between France and Spain, it has an area of 468 Km², rugged terrain, an average height of 2.044 meters and its highest point is the peak of Coma Pedrosa (2.942 m). The waters of the country cross-border with France and Spain and feed two major European drainage basins: the Ebro, in the South, and the Garonne, in the North.



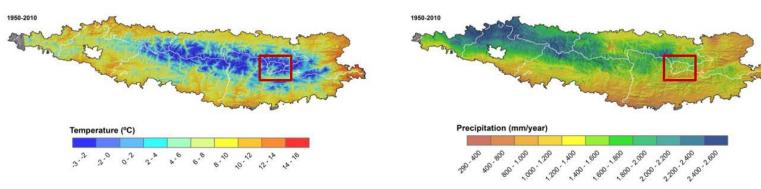
Forests recovered land from the heaths and meadows (approximately a 39% of the territory of the country)



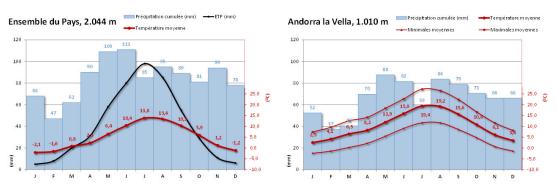


### **Submission BUR1.** National circumstances

The climate of Andorra is a wet mountain climate of mid-latitude with a Mediterranean influence in the southern area, which is characterized by a continental Mediterranean climate (rich biodiversity, with unique or even endemic species)



The temperatures evolve according to the temperature charts of the north hemisphere zones, with an annual average of 4,9°C. The average rainfall is around 1.000 mm/year (1950-2010).



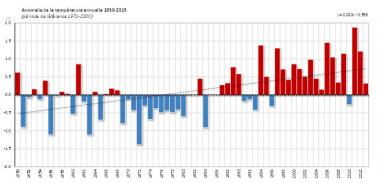


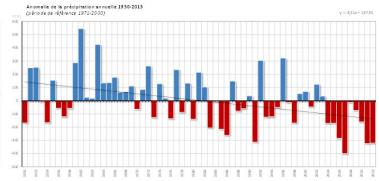
### Submission BUR1. National circumstances

In 2007, the Intergovernmental Panel on Climate Change (IPCC) identified the mountainous areas as particularly sensitive to climate change. And indeed, the climate has already evolved, with an **increasing tendency of approximately** +0,20°C/decade in average temperatures and a reduction of at least 45 mm/decade (1950-2012) in annual rainfalls.

For the end of the 21<sup>st</sup> century, the country can expect a rise of 3,6°C in temperatures and a decrease of 16,8% in rainfall.

The water resources of Andorra will also be affected, estimated at 282 Hm<sup>3</sup>/year on average for period 1961-1990, the expected future trends based on this period are -42 Hm<sup>3</sup> for 2021-2050 (-14,9%) and -106 Hm<sup>3</sup> for 2071-2100 (-37,6%).







### **Submission BUR1.** National circumstances

### **76.098 inhabitants** (2013)

The **agriculture** sector, based on a traditional farming management system insuring a sustainable balance between livestock and agriculture land-coverage, only represents **a 0,6% of the country's GDP** (2013) but plays an important role providing a large number of environmental services

Andorra is heavily dependent on fossil fuels and importing electrical energy. 74% of the total consumed energy depends on petrol (totally imported). Electricity consumed in Andorra (around 600 GWh/year) is primarily imported from France and Spain. Domestic production only attained a 16,7% in 2010 and 13,7% in 2011.

Services are the most important sector of the Principality's economy regarding 90,2% of the countries businesses and 83,1% of the employees.

Tourism is one of the fundamental pillars of the Andorran economy, directly or indirectly responsible of 60% of GDP with about 8 million visitors per year. In winter, products related to skiing are predominant, but very vulnerable to climate changes.



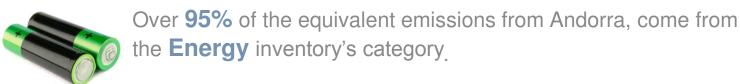


### Submission BUR1. GHG Inventory

Unabsorbed emissions 394 Gg CO<sub>2</sub> eq.





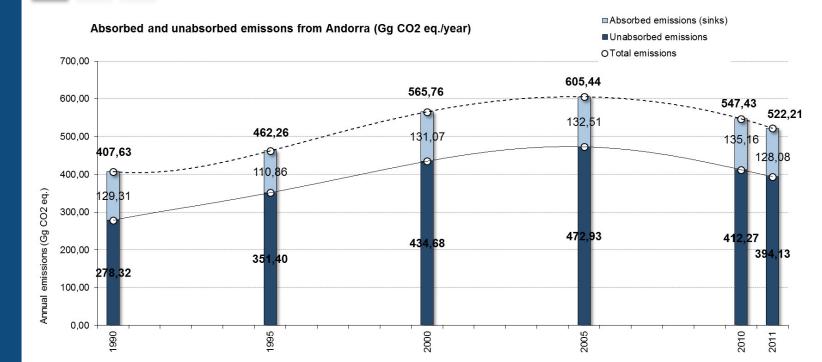




A special national feature on the transport needs to be made clear. The inventory made on the basis of hydrocarbon imports does not reflect the reality of consumption and domestic emissions because the "fuel tourism".

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### Submission BUR1. GHG Inventory



| National balance sheet (Gg CO 2 eq.)                    | 1990    | 1995    | 2000    | 2005    | 2010    | 2011    |
|---|---------|---------|---------|---------|---------|---------|
| 1 - Energy  | 393,03  | 446,77  | 551,42  | 596,90  | 534,07  | 506,75  |
| 2 - Industrial processes and product use                | 0,11    | 0,26    | 0,18    | 0,09    | 0,16    | 2,79    |
| 3 - Agriculture; land use, land-use change and forestry | -124,78 | -106,76 | -127,07 | -128,15 | -129,86 | -122,83 |
| Agriculture and forestry                                | -129,31 | -110,86 | -131,07 | -132,51 | -135,16 | -128,08 |
| Livestock and manure management                         | 4,53    | 4,11    | 4,01    | 4,36    | 5,30    | 5,25    |
| 4 -Waste  | 9,97    | 11,12   | 10,15   | 4,10    | 7,91    | 7,43    |
| 5 - Other   | 0,00    | 0,00    | 0,00    | 0,00    | 0,00    | 0,00    |
| Total unabsorbed emissions                              | 278,32  | 351,40  | 434,68  | 472,93  | 412,27  | 394,13  |
| Total emissions   | 407,63  | 462,26  | 565,76  | 605,44  | 547,43  | 522,21  |
| Total absorbed emissions (sinks)                        | -129,31 | -110,86 | -131,07 | -132,51 | -135,16 | -128,08 |



### **Submission BUR1.** NAMAs and Projections of GHG emissions

### The document gathers all the actions that Andorra is currently

conducting as well as the short, medium and long-term plans and strategies in the energy and waste management sectors, among others. These actions have enabled the country to generate predictions of greenhouse gas emissions until 2050, for *business as usual* scenarios with existing and supplementary measures

The Nationally Appropriate Mitigation Actions (NAMA) which were considered cover the domains of **energy** (97% of GHG emissions in 2011) and **waste** (1,4% of GHG emissions in 2011).

For the energy sector, the planned additional actions come from the Andorran White Book of Energy (2012). This document promoted and adopted by the Andorran Government, defines the energy policy of the country for 2030 and 2050. The considered actions are diverse and aim to reduce energy dependency, to increase national electricity production, to promote and support the implementation of new sources of renewable energies, to improve thermal conditions and building isolation especially following severe technical requirements and energy labelling, and to favour the penetration of electrical vehicles in the market, among others.





### **Submission BUR1.** NAMAs and Projections of GHG emissions

### **Energy sector**

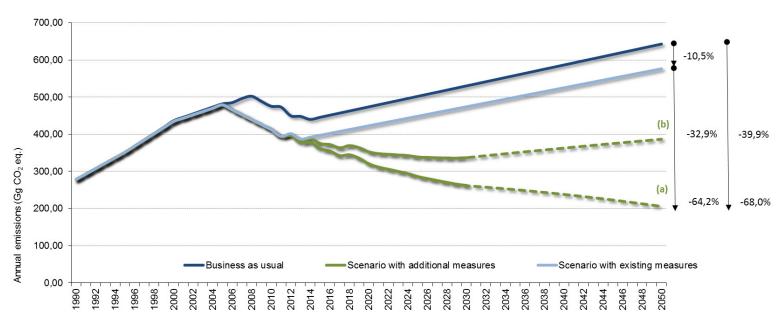
- Category "energy industries" (which provides emissions from the 2016 inventory year, with the commissioning of the combined first cogeneration plant -Heat and electricity-, and 2 others in 2018 and 2020);
- "Other sectors" with the energy consumption of the residential, institutional and commercial (which will consider the impact of the commissioning of heating networks and the increase in electricity consumption for heating, all two in detriment of heating diesel consumption, and reducing the building's energy needs);
- And finally the "transportation" category (which considers the effect of the penetration into the electric vehicle market).

### **Waste sector**

- The scenario with additional measures considering the objectives of 45% in terms of the preparation for reuse and recycling (2015), with 5% of specific value for the recovery of organic matter.

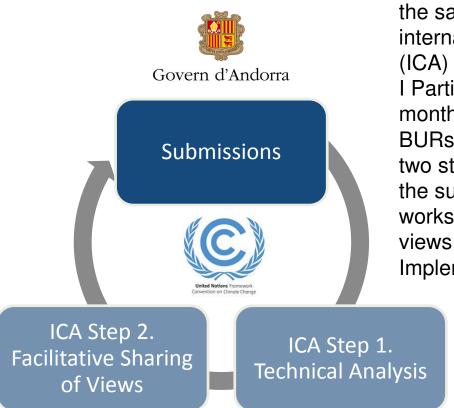
- (1) the scenario *business as usual* or BAU, which considers an opposition to change in the sense of attenuation,
- (2) a scenario with existing measures defined on the basis of actions of mitigation already underway and,
- (3) a scenario with additional measures on the basis of planned actions of mitigation.

Total unabsorbed GHG emissions (Gg CO<sub>2</sub> eq./year)





### **ICA - Technical Analysis**



ICA process: conducted in a manner that is non-intrusive, non-punitive and respectful of national sovereignty. Discussion on the appropriateness of domestic policies and measures is not part of the process.

In accordance with paragraph 58(a) of

the same decision, the first round of international consultation and analysis (ICA) will be conducted for non-Annex I Parties commencing within six months of the submission of their first BURs. The process of ICA includes two steps: the technical analysis of the submitted BURs, followed by a workshop on the facilitative sharing of views under the Subsidiary Body for Implementation.





### ICA - Technical Analysis. Team of technical Experts (TTE)



**Mr. Rodrigue Abourou Otogo** (Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) member from Gabon)



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Ms. Patricia Grobben (CGE member from Belgium)



Mr. Ghislain Hippolyte Sabin Guendehou (Benin)



Mr. Ayité-Lô Ajavon (Togo)



Ms. Silke Christina (Sina) Wartmann (Germany)



Ms. Sylvie Marchand and Ms. Victoria Novikova (secretariat) provided administrative support to the TTE