



Results of the technical analysis of the first BUR of Andorra undertaken by a team of technical experts in accordance with the modalities and procedures contained in the annex to decision 20/CP.19.

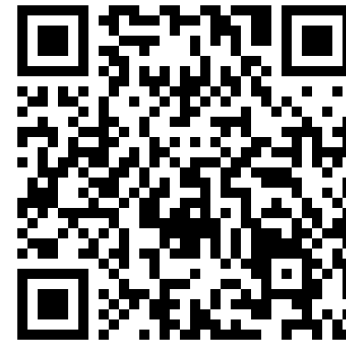
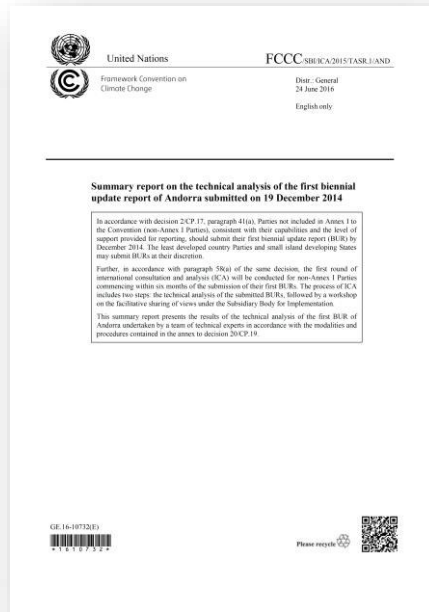
- a) **Most of the elements of information listed in paragraph 3(a) of the ICA guidelines are included** in the first BUR of Andorra;
- b) The provision of more detailed sectorial information, for example, on **sectorial GHG emission drivers**, could have enhanced the information reported on mitigation measures and the national GHG inventory data presented in the BUR (see para. 22 above);
- c) The **GHG inventory of Andorra covers the majority of categories and subcategories**. The additional and supporting material provided by Andorra during the technical analysis facilitated the technical analysis of the GHG emissions and removals calculations (see paras. 27 and 28 above);
- d) The **improvement of inventory data for the AFOLU and transport sectors** will greatly contribute to improving the quality of information on the GHG inventory of Andorra;
- e) The transparency of information on **the approach used to derive uncertainties of activity data and emission factors** needs to be further enhanced;



# ICA - Technical Analysis

f) In general, **Andorra reported in a transparent way on the four mitigation actions included in the BUR**. The transparency of the reporting on the nature of the actions, methodologies to estimate the effects of the mitigation actions and the links to GHG reduction effects could be enhanced (see para. 42 above);

g) Andorra reported **information on financial, technical and capacity-building needs in a transparent manner**.





The TTE, in consultation with Andorra, identified nine capacity-building needs related to the facilitation of reporting in accordance with annex III to decision 2/CP.17 and to the participation in ICA in accordance with annex IV to decision 2/CP.17, taking into account Article 4, paragraph 3, of the Convention. **Key capacity-building needs prioritized by Andorra are summarized** in chapter II.D of the report.

- a) Further **understanding the UNFCCC reporting guidelines on BURs**, the specific reporting requirements and the level of detail expected with respect to reporting information on mitigation actions and their effects, and identifying mitigation actions and how to group them in a coherent manner;
- b) **Establishing methodologies to estimate the GHG emission reduction effects of mitigation actions**;
- c) Developing a domestic **MRV system** that is able to generate the required information in a **more automated way**;
- d) **Enhancing the technical capacity to collect historical data** in order to improve the time-series consistency in the AFOLU sector and to improve the data quality in the transport sector;



- e) **Improving** institutional arrangements for GHG inventories, in particular, **the archiving system**;
- f) **Improving the transparency on uncertainties** associated with activity data and emission factors;
- g) Capacity-building to **reinforce local expertise on QA/QC**;
- h) **Training national experts** on the use of techniques for using a proxy to fill in gaps or lack of **data to estimate emissions of F-gases**;
- i) Capacity-building to reinforce the understanding and the **importance of the reporting of constraints and gaps** in the BUR.



1

2

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## ICA - Facilitative Sharing of Views

Paragraph 6 of annex IV to decision 2/CP17, Parties are allowed to submit written questions in advance of the workshop for the facilitative sharing of views to those Parties undergoing FSV

The period to submit written questions in advance is open to all Parties from **01 to 31 October 2016**



**France** has submitted 2 written questions to **Andorra**

*31/10/2016 10:04*



**New Zealand** has submitted 1 written questions to **Andorra**

*31/10/2016 12:54*



**Peru** has submitted 2 written questions to **Andorra**

*03/11/2016 15:41*



France has submitted written questions to Andorra  
*d) mitigation actions and their effects*

Drivers in the reduction of total emissions between 2005 and 2011

*What have been the main drivers in the reduction in total emissions observed between 2005 and 2011?*

The scenario with existing measures reduces these emissions in 67,37 Gg CO<sub>2</sub> eq. (a reduction of 10,5% compared with the BAU scenario) and its measures already contribute to reduce a 16,7% (2011).

-39,4%/BAU



-57,7%/BAU



### Waste sector

The subcategory «Waste Water Treatment and Discharge» has decreased with the introduction of wastewater treatment plants (WWTPs) included in the sanitation plan of Andorra (1998-2010) and the selective sorting that reduced waste incineration (1995) and waste to power plant (2006). The combination of emissions and GHG projections in categories C and D of Chapter 4 of the inventory allows to estimate a 44.6% reduction (-8.0 Gg CO<sub>2</sub> eq.) In terms of emissions dioxide carbon equivalent, between the scenario with existing measures and the business as usual scenario, by 2050.



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### Energy sector

- Implementation of stringent technical requirements for energy efficiency in buildings (2010)
- Opening of the photovoltaic power generation from small producers (less than or equal power to 500 kW) (2010)
- Economic and preferential loans and aids for the rehabilitation of the building, by rewarding energy efficiency, improving heat producing elements (2011)

*Engega* program, which provides a help line for the purchase of low-emission vehicles (below 120 g CO<sub>2</sub> / km).

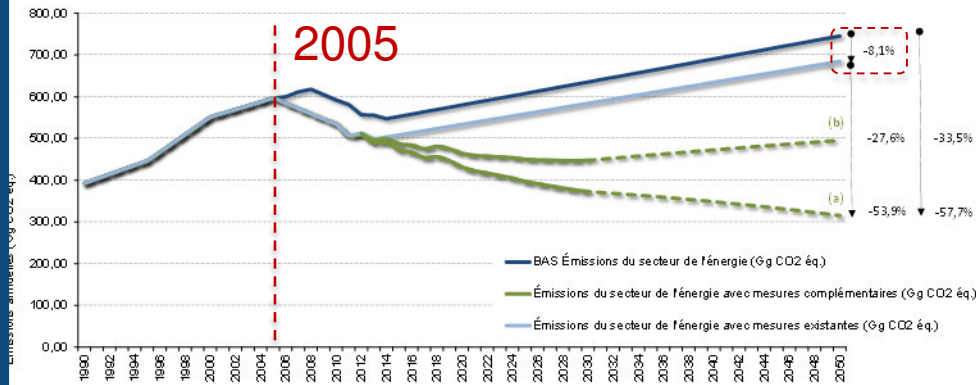
*Transport: 387 to 351 Gg CO<sub>2</sub> eq.*

*Commerce / Institutional / Residencial: 194 to 144 Gg CO<sub>2</sub> eq.*



## Energy sector

1.A. Énergie. Activités liées à la combustion (Gg CO2 éq./an)

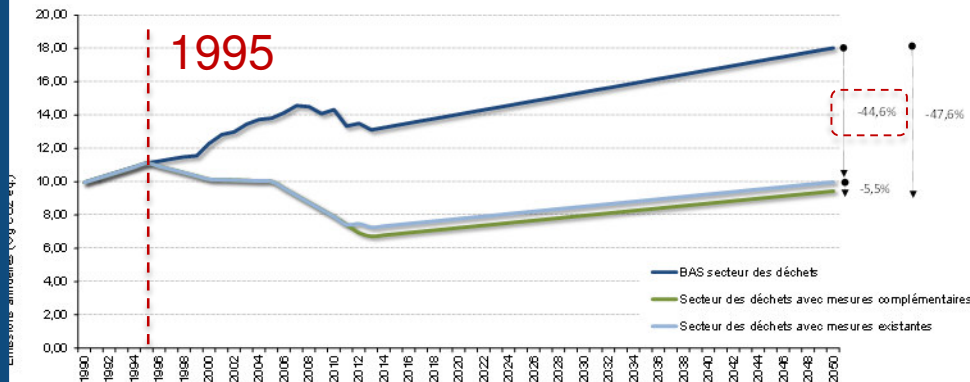


## Other sectors

Stabilization or increase in emissions or removals

## Waste sector

4.C. et 4.D. Déchets (Gg CO2 éq./an)







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*d) mitigation actions and their effects*

Impacting actions contributing to the reduction expected in the with additional measures projection

*The with additional measures projection shows a significant reduction of emissions compared to the business as usual projection. What are the most impacting actions contributing to this reduction?*

### Assumptions presented in Annexe VI

Energy efficiency in the building: Values from the White Paper on Energy. Target of reducing 20% of heating diesel consumption for 2020.

Energy consumption: Values from the White Paper on Energy. Increasing of 1,5% annually until 2014, 15% in 2020 compared to 2009 (savings), average percent reduction declining between 2014 and 2020 and after 2020, gradual decline starting from -1.5%, - 1.4% -1.3%, etc.



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Impacting actions contributing to the reduction expected in the with additional measures projection

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**Power consumption:** Adapted values from the White Paper on Energy, based on population projections and population equivalent used for BUR1 of Andorra, and in the same ratio between energy sources of the White Paper 'energy. Increased consumption until 8 MW.h / pers. in 2016, and gradual reduction until 2030 with 6.6 MW.h / pers.

**Photovoltaic electricity:** Values from the White Paper on Energy. annual increase of 15% from 2014, to 5.693 MW.h estimated in 2030.

**Production of wind power:** Values from the White Paper on Energy.



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**Cogeneration systems:** Adapted from the values of the White Energy, according commissioning (1) of the Soldeu cogeneration plant in 2016 (15,000 MW.hélec 20,000 MW.htherm, consumption 159 TJ.. LPG), (2) the central Comella in 2018 (25,000 MW.hélec. 30,000 MW.htherm., 270 LPG consumption TJ) and (3) of the center of Pas de la Casa in 2020 ( MW.hélec 15,000. 20,000 MW.htherm., 161 LPG consumption TJ).

**Heating:** Suitable values from the White Paper on Energy, based on the assumptions below, and in detriment of heating diesel consumption.

**Penetration of electric vehicles:** Values from the White Paper on Energy. expected penetration for 2050 of 50% of electric vehicles compared to the national fleet, and constant linear projection between 2011 and 2050.



New Zealand has submitted written questions to Andorra

*a) General*

Preparations of second BUR

*What specific findings from the technical analysis report is Andorra considering to prioritize for the preparation and publication of its second BUR?*

It is important to note that Andorra has been working for months on drafting the BUR2. Taking into account that the ICA process of the BUR1 is not finished yet, it is difficult to consider certain aspects of the methodology or improving certain aspects of hypothesis or national emission factors.

Improvements can possibly be considered for incorporation of information about sectoral report tables in the inventory section of the BUR (Decision 2/CP.17, annex III, paragraph 6), even if Non-Annex I Parties are only encouraged to. Idem for information on international market mechanisms.

Note the 9 capacity-building topics identified



Peru has submitted written questions to Andorra

*e) constraints and gaps, and related financial, technical and capacity building needs, included support needed and received , f)*

*information on domestic measurement, reporting and verification*

Methodology to define support need

*Do you use any methodology to define support need for the preparation of your BUR?*

**No.** The Principality of Andorra was new to this process as the country ratified the Convention on 2<sup>nd</sup> March 2011 and it came into force on 31<sup>st</sup> May of the same year. To fulfill its obligations, and as a non-Annex I, Andorra submitted a project to the GEF

The project proposal was also in accordance with Objective 6 of GEF-5's Climate Change Focal Area Strategy and Strategic Programming, which provides support for enabling activities and capacity building of Non-Annex I countries that is funding for the preparation of NCs in a timely manner at a full-agreed cost. The project was estimated to 852,000 \$, and was worked in collaboration with the expert appointed by UNEP to assist Andorra in its beginning.



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Main challenges on the gathering information process

*What are the main challenges that you face on the gathering information process? And how do you address those challenges?*

On one side, Andorra has a department of statistics with data in different sectors. On the other hand, data concerning the areas of energy and waste are relatively well known. Andorra has faced a lack of information regarding retail developments about land use and land use changes. In this sense, to remedy it, the use of "other uses" was needed in the inventory category "LULUCF". This same lack of information is highlighted on the use of industrial products such as F-gases.



Govern d'Andorra

# First Biennial Update report (BUR1) from Andorra

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

Andorra  
*Principat d'Andorra*  
*Andorra la Vella*

	
<i>Bandera</i>	<i>Escut</i>

**Lema:** Virtus Unita Fortior (*la unió fa la força*)

**Himne nacional:** el Gran Carlemany

**Codi ISO:** 020 / AND



**0,00112%**  
global emissions

Thank you for your attention

Ministry of Environment, Agriculture and Sustainability  
Marrakech, november 10, 2016

Carles MIQUEL | carles\_miquel@govern.ad

Juanjo LÒPEZ | juanjo\_lopez\_lavado@govern.ad