



Govern d'Andorra

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# Second Biennial Update report (BUR2) from Andorra

International Consultation and  
Analysis Step 2. Facilitative sharing  
of views (FSV)

Ministeri de Medi Ambient, Agricultura i Sostenibilitat  
Katowice, December 7th, 2018

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# Presentation outline

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## 1 Summary of BUR and recent development

- National context
- GHG inventory
- Mitigation actions and effect
- Barriers and support needed and received

## 2 Experience and lessons learned in participating in the ICA process

## 3 Answers to questions received

## Summary of BUR 2

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.

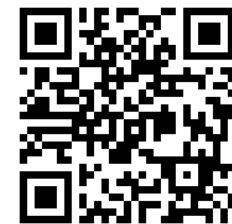
- Andorra submitted the **1<sup>st</sup> BUR** **19 December 2014**



- **Andorra NDC**, compromise of reduction of 37% of greenhouse gas emissions by 2030, in relation to the business as usual scenario **24 March 2017**
- Andorra submitted the **2nd BUR** and its **1st NC** on **2 August 2017** (should be submitted by December 2017)



Andorra used the 2006 IPCC Guidelines for both BURs



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# National context

## The country

**Mountainous country** in the Pyrenees Mountains between France and Spain.



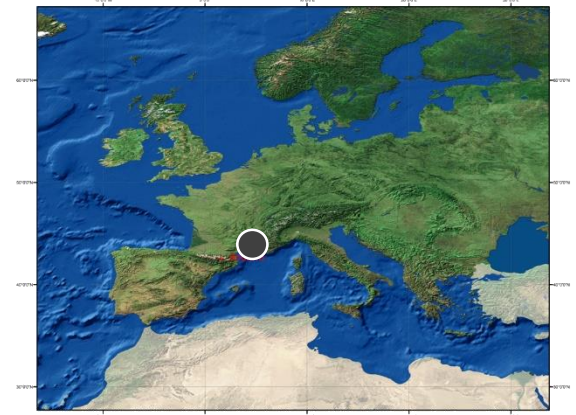
Population: 78,014 (2015)

Area: 468 Km<sup>2</sup>

Average height: 2,044 meters

Highest point: Coma Pedrosa (2,942 m)

The waters of the country cross-border with France and Spain and feed two major European basins: the Ebro and the Garonne



**Forests** land is approximately a **39%** of the territory of the country.

**Services are the most important sector** of the Principality's economy regarding 84% of the country's businesses and 87% of the employees (2014).

Tourism is the fundamental pillar 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 change.

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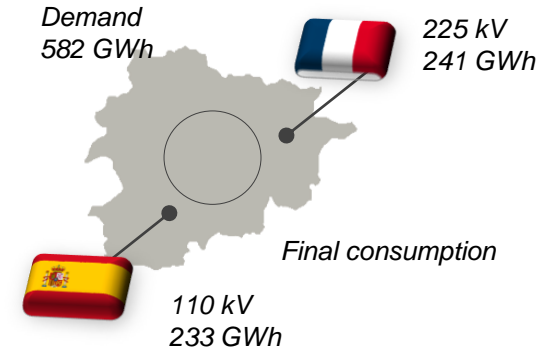
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# National context Energy

**Andorra is heavily dependent on fossil fuels** and importing electrical energy. About 75% 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 electrical production share is less than 17% (Inventory period).



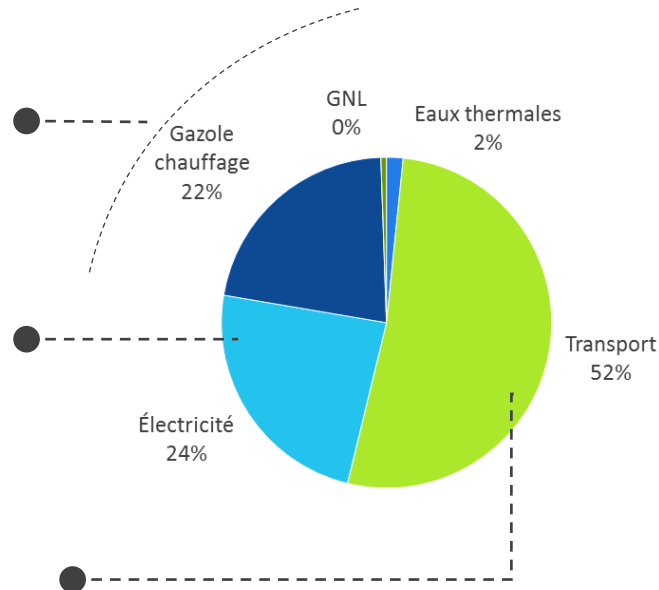
530 GWh/yr



560 GWh/yr



1200 GWh/yr



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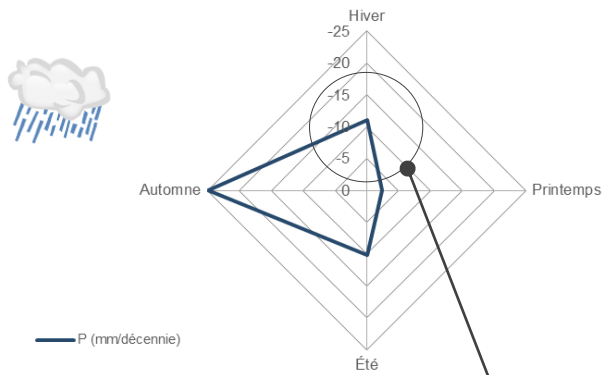
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# National context

## Climate change

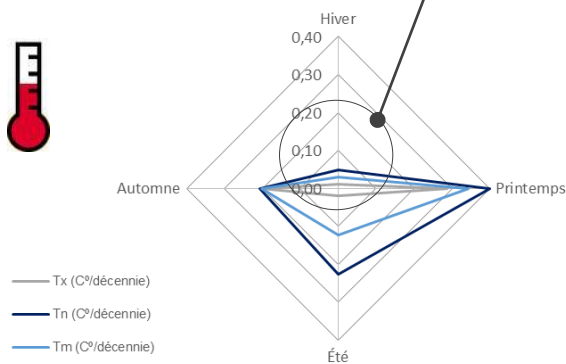
Annual average temperatures of **5.3°C** and rainfall around **960 mm/year** (1950-2015).

Tendance des précipitations en fonctions des saisons (1986-2015)

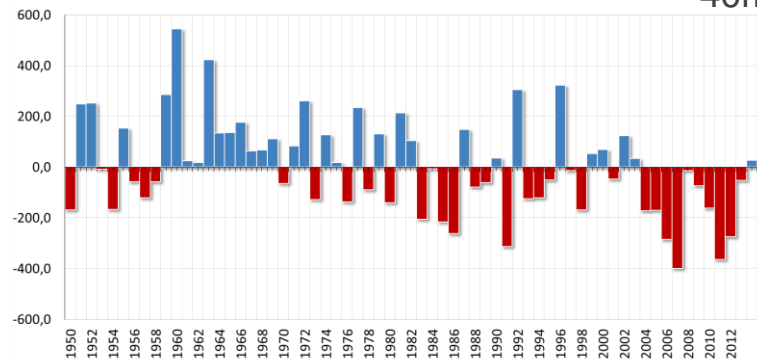


**Negative effects. Impact in winter.**

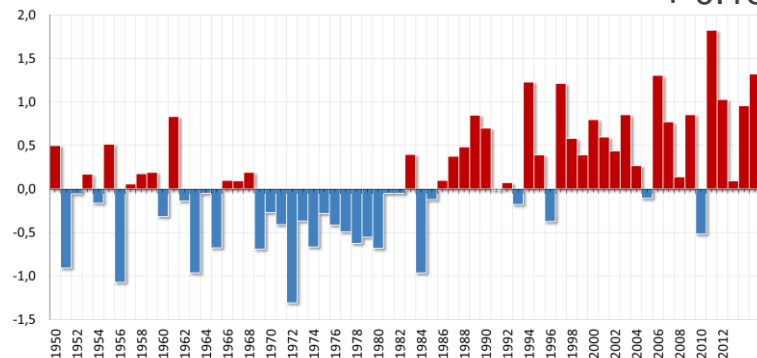
Tendance des températures en fonctions des saisons (1986-2015)



Anomalie de la précipitation annuelle 1950-2015  
(période de référence 1971-2000)



Anomalie de la température annuelle 1950-2015  
(période de référence 1971-2000)



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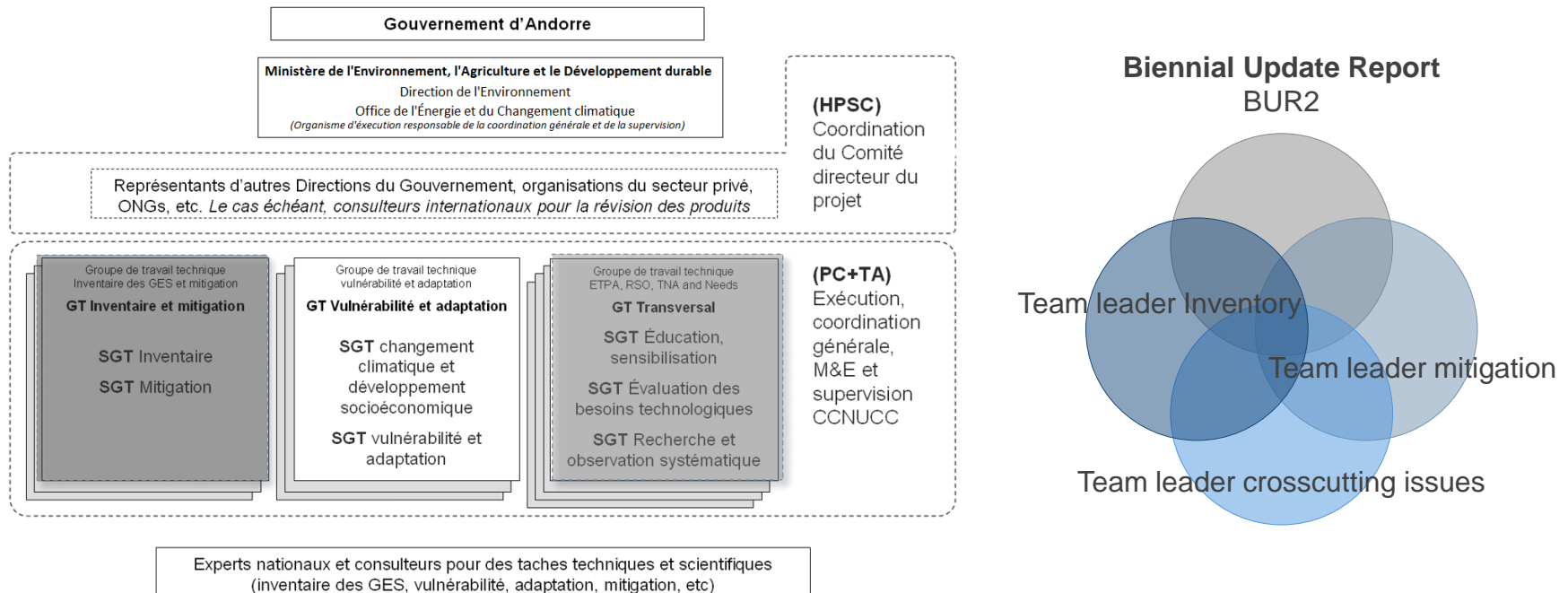
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# National context

## Institutional arrangements

### Functional structure created (2013-2014)



3 working groups: **inventory and mitigation, vulnerability and adaptation and cross-cutting matters**. Human resources available to manage the work of the three working groups are linked to the national circumstances of the country (e.g. small size) and have allowed Andorra to organize, so far, efficient cooperation within working groups and between working groups and different stakeholders.

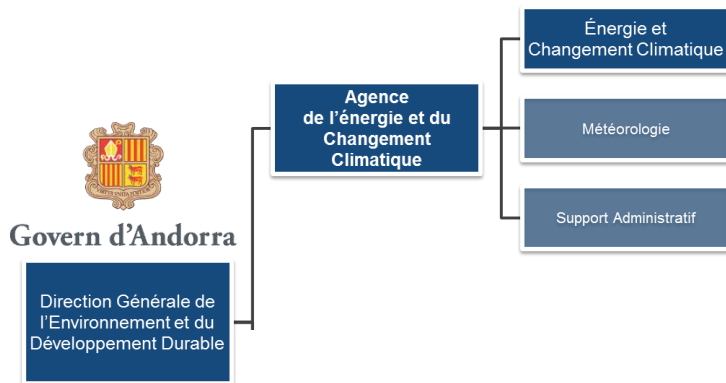
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# National context

## Institutional arrangements



## Functional structure created (2013-2014)

Creation of the **Energy and Climate Change Agency (April 2015)**, under the authority of the General direction of Environment and Sustainable Development, in the Ministry of Environment, Agriculture and Sustainable Development. Competences of energy (deployment of national energy policies) and climate change (study of the phenomenon, mitigation, adaptation and awareness).

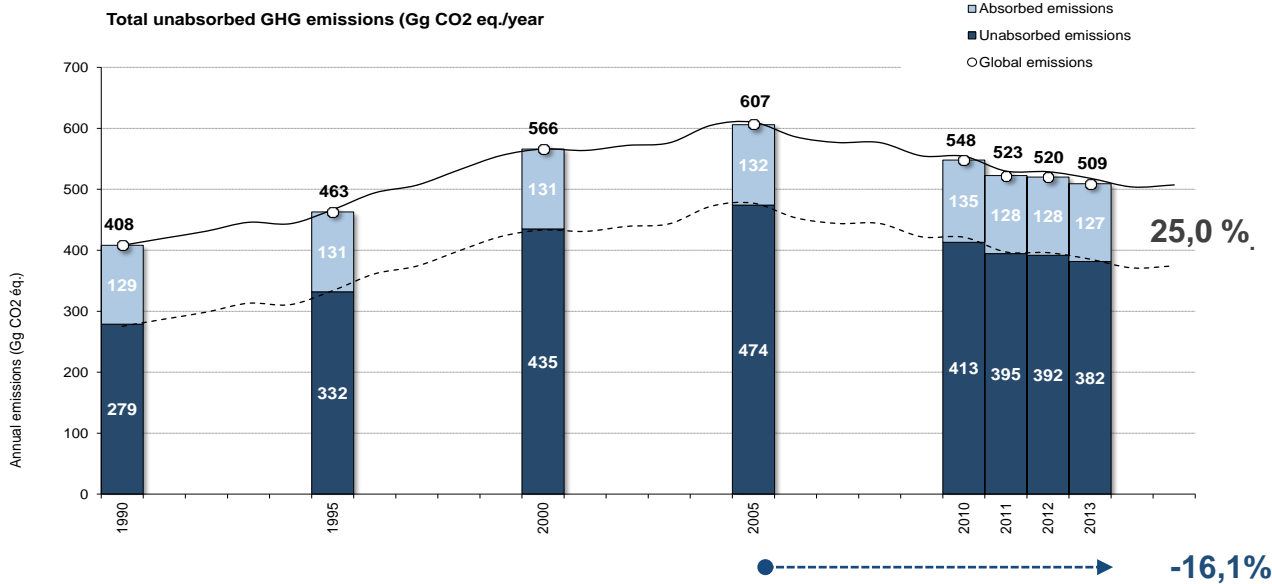
## September 13<sup>th</sup>, 2018 **New law for the energy transition and climate change**



Identification and carry out of the actions of the **United Nations Framework Convention on Climate Change (UNFCCC)**, and specifically on the reports concerned. Creates a national commission that will oversee the programmes of the national energy strategy and the fight against climate change. The commission will revise, modify and adapt the objectives of strengthening the monitoring and verification of climate change actions in Andorra



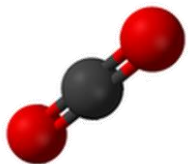
# GHG National Inventory



Inventories for the time series **1990-2013**

**0.001%** of global emissions

**Transport, heating and forestland** explain a 90.3% of the inventories



**CO<sub>2</sub> emissions** represents more than **95%** of the total unabsorbed GHG budget, followed by emissions of nitrous oxide, N<sub>2</sub>O (2.66%) and methane, CH<sub>4</sub> (1.55%). Emissions of SF<sub>6</sub> are residual (<1%)



**96.9%** of equivalent emissions, from the **'Energy' inventory sector.**

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# Mitigation actions and effect

## Scope

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The Nationally Appropriate Mitigation Actions (NAMA) which were considered cover the domains of **energy** (97% of GHG emissions in 2013) and **waste** (1.4% of GHG emissions in 2011).

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# Mitigation actions and effect

## Energy

**Objective:** the actions planned are derived from the *White Book of Energy* (2012), including energy policies in country until 2030 and 2050.

**Expected GHG emission reductions:** 57.7% by 2050 in comparison to BAU scenario.

### Measures:

- Energy industries- Construction of 3 cogeneration plants (55,000 MWh), a wind farm (12,000 MWh) and a photovoltaic park (5,693 MWh) in 2050. The use of the biomass will be increased to 8,000 t per year (30 GWh annually).
- Other sectors-Building rehabilitation to reduce the energy consumption of the residential, institutional and commercial sectors, with the objective of saving 392 GWh/yr by 2050.
- Transportation- New law of electric vehicle and providing financial aids to buy and possibility to test the electric vehicles (2014, 700,000 € for the purchase of low-emission vehicles). The objective is to increase the number of electric cars by 50% by 2050.

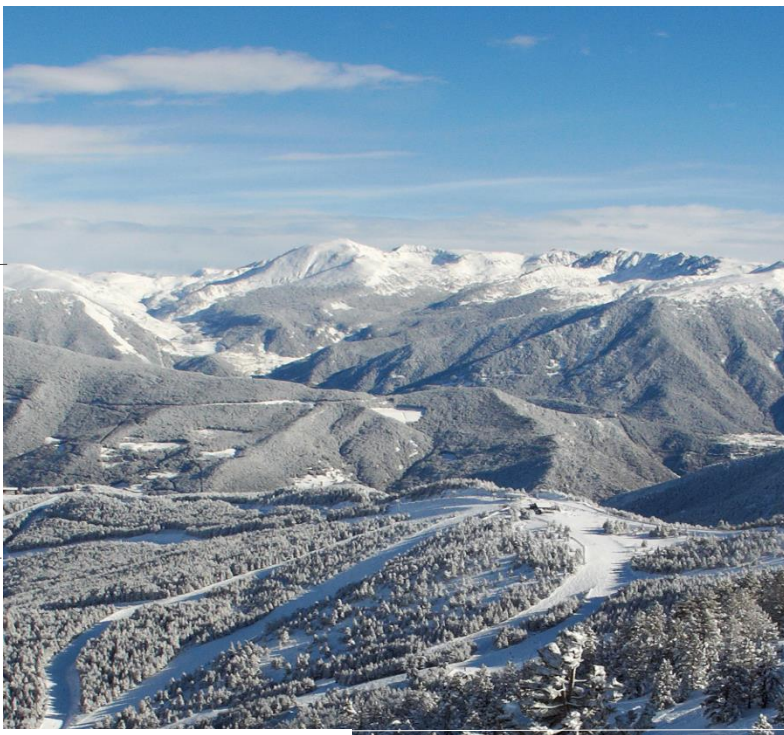


Establishes a legal framework and the quantitative objectives for the mitigation actions





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# Energy infrastructures Sectoral plan

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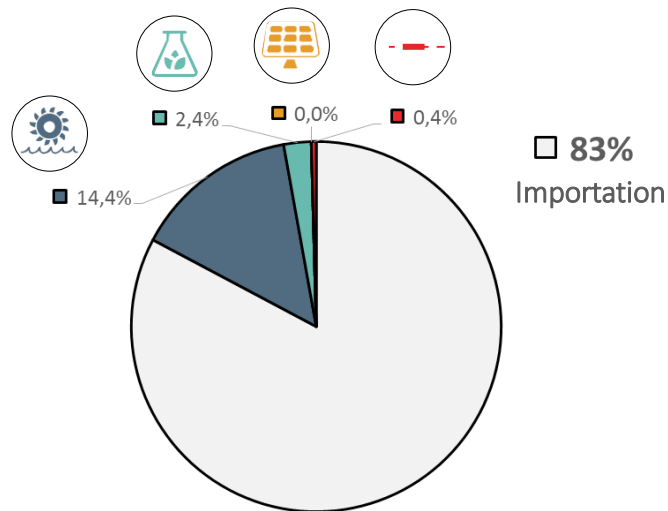
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# Mitigation actions and effect

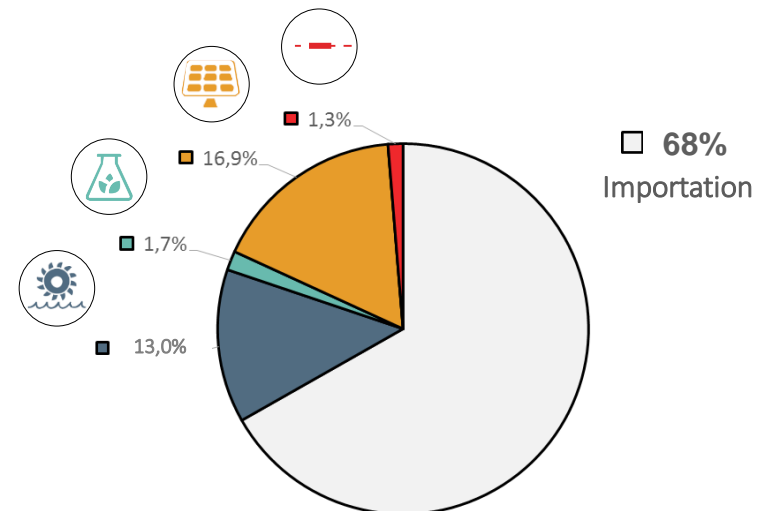
## Energy infrastructures sectoral plan

Increased and diversified production from renewable energies

Current scenario



2030 Scenario



- Importació
- Producció nacional hidràulica
- Producció nacional valorització
- Producció nacional fotovoltaic
- Producció nacional Cogeneració

**+170.6<sub>e</sub> GWh/yr**    **[ +53.4<sub>t</sub> GWh/yr ]**

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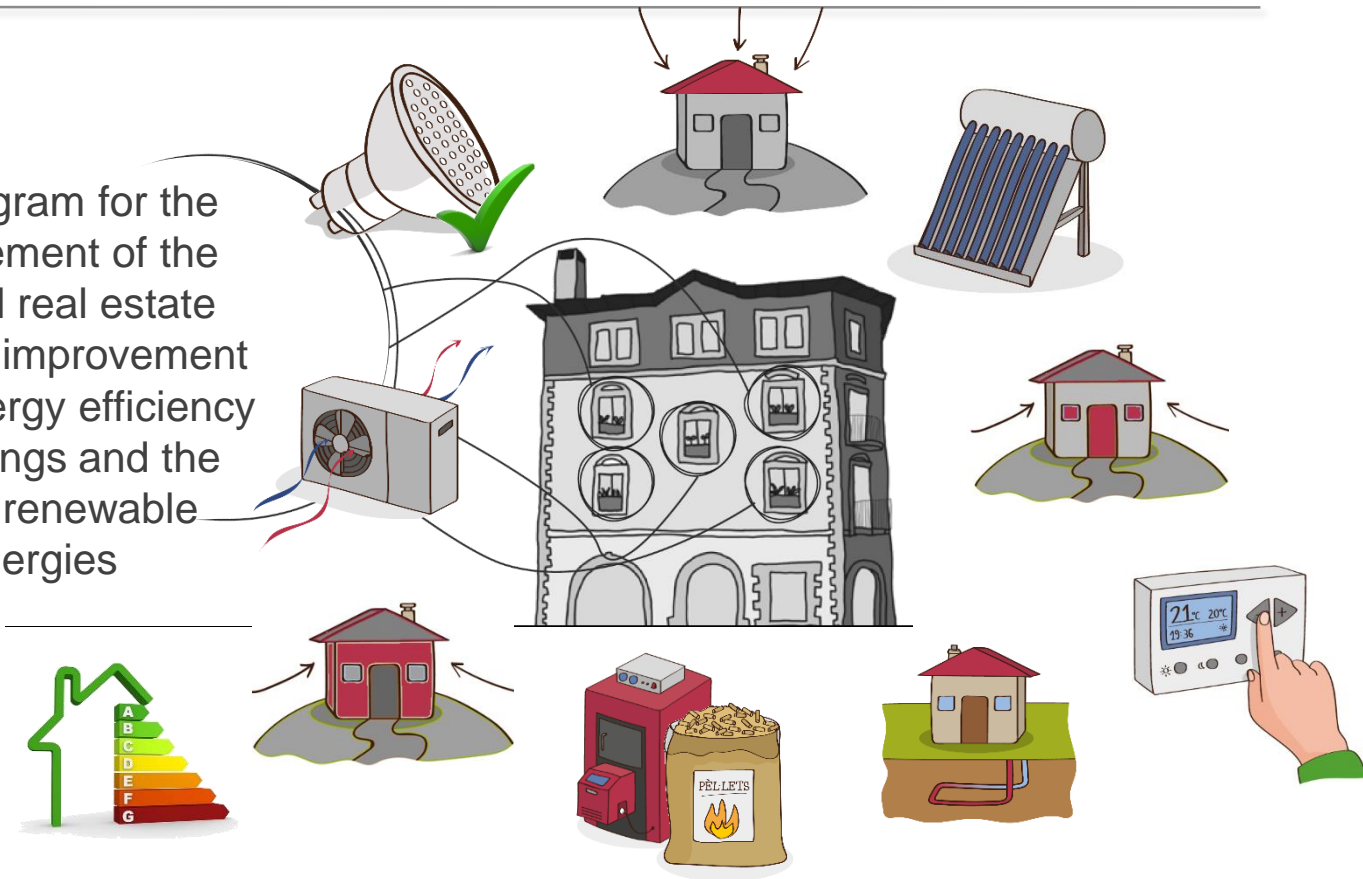
# Mitigation actions and effect

## Energy and buidings (an example)



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Aid program for the improvement of the national real estate park, the improvement of the energy efficiency of buildings and the use of renewable energies





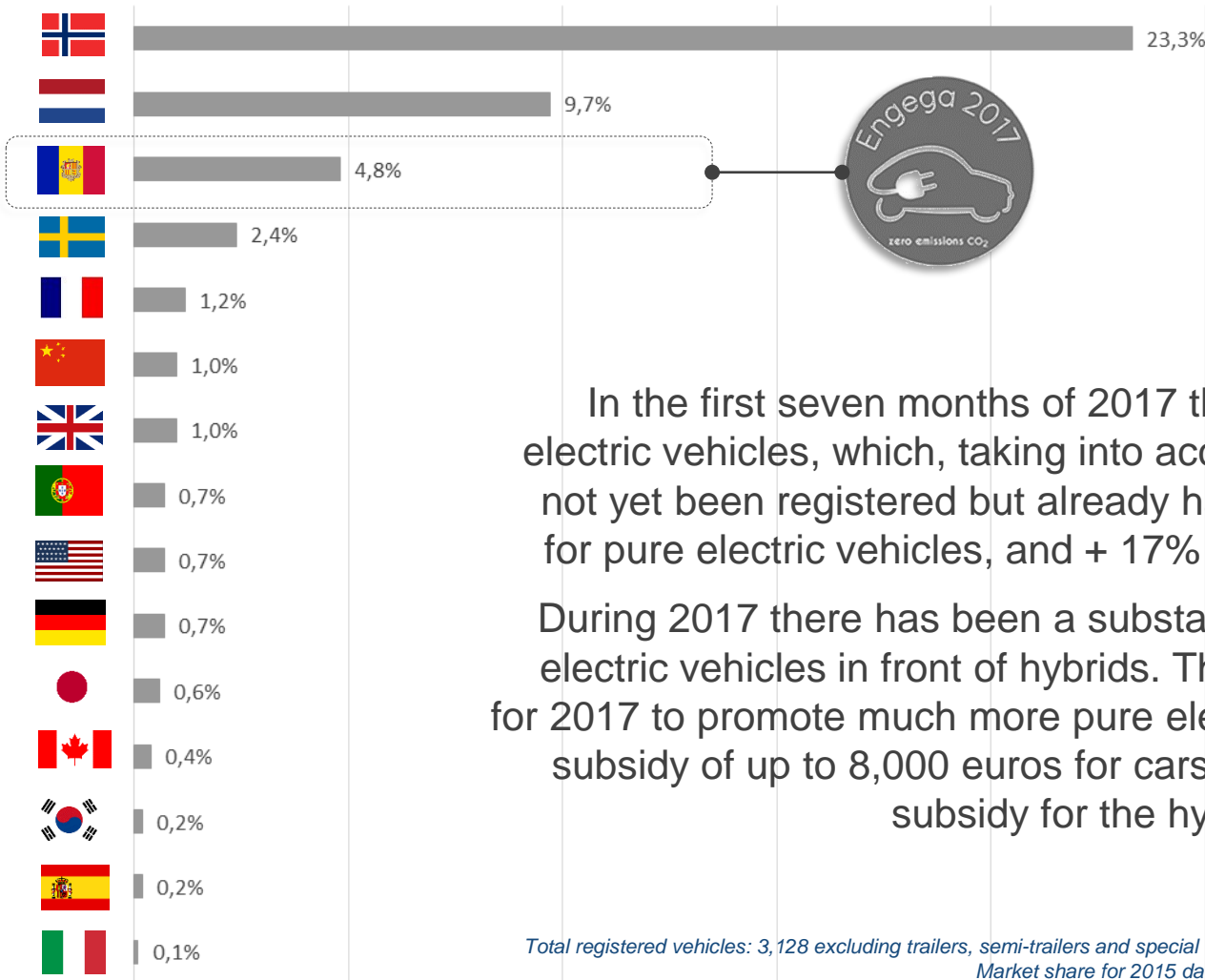
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# Mitigation actions and effect

## Promoting the electric vehicle



2016

Market share: 4.8%  
(2017: 4.8%; 2018: 3.7%\*)

August 2017

In the first seven months of 2017 there is an increase in electric vehicles, which, taking into account those that have not yet been registered but already have a grant, is + 63% for pure electric vehicles, and + 17% in the plug-in hybrids

During 2017 there has been a substantial increase in pure electric vehicles in front of hybrids. The government opted for 2017 to promote much more pure electric vehicles, with a subsidy of up to 8,000 euros for cars, twice the maximum subsidy for the hybrids of 4,000 euros.

*Notes:*

Total registered vehicles: 3,128 excluding trailers, semi-trailers and special vehicles. Engega registered vehicles: 151  
Market share for 2015 data. Source: Global EV Outlook 2016 (IEA)

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# Mitigation actions and effect

## Waste

**Objective:** reuse and recycle 45 % of waste and to recover 5 % from organic waste by 2050.

**Expected GHG emission reductions:** In the waste sector the wastewater treatment and the waste management categories will account for emission reductions of 57.7 and 39.4 %, respectively by 2050 in comparison to BAU scenario.

### Measures:

- Periodic characterization of household waste composition, identification of alternative means of management of organic waste and concrete actions to reuse and recycle collected waste.



Establishes a legal framework for the mitigation actions, including circular economy



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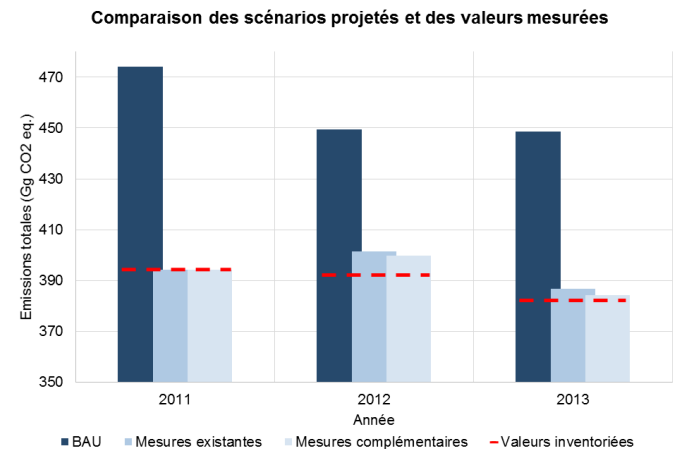
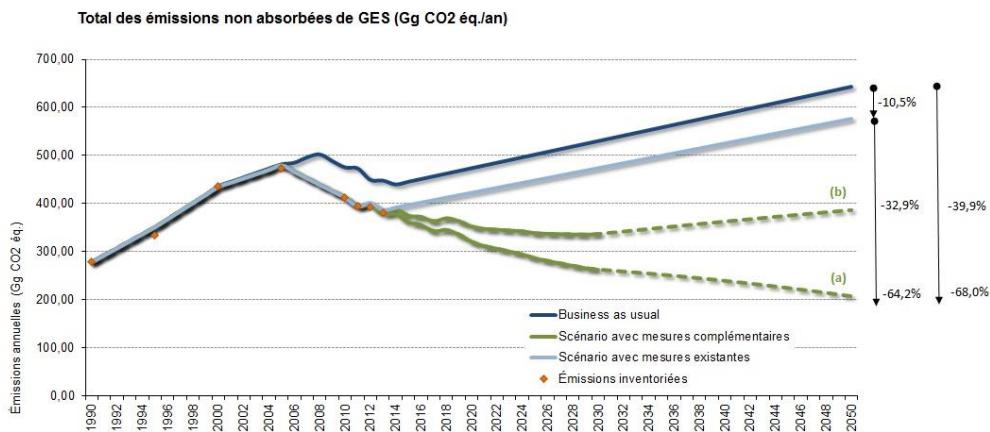
# Mitigation actions and effect

## Scenarios and GHG inventory comparison

### Scenarios

- a) *business as usual or BAU*: opposition to change in the sense of attenuation
- b) *with existing measures*: actions of mitigation already underway
- c) *with additional measures*: planned actions of mitigation.

### GHG inventory comparison



# Obstacles and barriers

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## To keep in mind

**Andorra is a small country** of 468 km<sup>2</sup> with 78,000 inhabitants (2015) and 380 Gg CO<sub>2</sub> eq / year of unabsorbed emissions (0.00112% global emissions of the world).

With **limited administrative capabilities**

**The scale** of the country is important to understand the teams and structures put in place to respond to the Convention's agreements and should be in accordance to the detail and updates on national GHG inventories.

The reporting must **be in accordance to the support received** and under the **principle of *common but differentiated responsibilities***

## Main obstacles and barriers

- Difficulty in the sustained construction of technical teams to maintain capacity and expertise
- Multiple assignments of teams, often small, with multiple responsibilities and limited resources
- Additional workload for the national coordinating body,
- Lack of incentives to ensure the continuous commitment of the actors, etc.
- Establishing and applying methodologies to obtain certain estimations

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# Support received and needed

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## To keep in mind

**No support received** for the preparation of BUR2

**April 2013:** Andorra received the support of an external consultant appointed by the United Nations Environment Program (UNEP) to identify the circumstances country-specific, the steps to follow (documentation, deadlines, etc.) and the possible ways of funding.

## Main obstacles and barriers

Early 2014 the country submitted a funding proposal to the Global Environment Facility for the preparation of the 1<sup>st</sup> BUR1 and its first National Communication NC1, which has not yet received a reply.

Andorra 2<sup>nd</sup> BUR includes information on financial resources needed: EUR 897 million, to implement the mitigation actions: building energy efficiency and power generation from renewable energy.

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## Experience and lessons learned in participating in the ICA process

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*Has participation in the ICA process raised the profile of climate actions at the domestic level?*

*Has the BUR preparation enhanced domestic coordination/ domestic MRV in providing climate related information? If so, how?*

*What's the value addition of the technical analysis of BURs by the team of technical experts?*

*Has the ICA process supported the country to identify capacity building needs?*

*Did the technical analysis supported the country to facilitate its reporting?*

Considering that the mitigation actions identified by Andorra are consistent and in accordance with the NDC, the profile has not been raised. Nevertheless, the ICA has improved Andorra treating the basic data to better consider them in the decision making process of the country.

Concerning the MRV, the TTE noted that Andorra did not report in the BUR on its plan to develop the overall domestic MRV system or its capacity-building needs. During the technical analysis, Andorra stated that it was carrying out legal arrangements to establish a domestic MRV system (Cf. Law 21/2018).

In consultation with Andorra, the TTE identified 16 capacity-building needs related to the facilitation of the preparation of subsequent BURs and participation in ICA.

Aspects identified by the TTE in the BUR1 report helped Andorra to improve the 2<sup>nd</sup> BUR.

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## Experience and lessons learned in participating in the ICA process

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FCCC/SBI/ICA/2017/TASR.2/AND

### As a conclusion, the TTE:

- considers that the **reported information is mostly** consistent with the UNFCCC reporting guidelines on BURs.
- concluded that **the information analysed is mostly transparent.**
- during the technical analysis, **additional information was provided by Andorra** on the GHG inventory, mitigation actions and their effects, capacity-building and support needed and received.
- **commends Andorra** for the progress made on the institutional arrangements.
- **notes improvements in the reporting in the second BUR** compared to the first BUR. Information on GHG inventories, mitigation actions and their effects, needs and support reported in the second BUR demonstrates that the Party has taken into consideration the areas for enhanced transparency noted by the previous TTE in the summary report on the technical analysis of the first BUR.
- in consultation with Andorra, **identified 16 capacity-building needs**

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# Response to questions received

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*Paragraph 6 of annex IV to decision 2/CP.17, Parties are allowed to submit written questions in advance of the workshop for the facilitative sharing of views to those Parties undergoing FSV. Period to submit written questions in advance: 1<sup>st</sup> October –to 3<sup>rd</sup> December 2018*



## United States of America

**Category:** National circumstances and institutional arrangements

*What changes did you make in the compilation process with BUR2 from BUR1? Were there any efficiencies gained from BUR1? What advice do you have for other parties preparing plans for initial or next BURs?*

Andorra has taken into consideration the areas for enhanced transparency noted by the previous TTE in the summary report on the technical analysis of the first BUR. These include accurate allocation of emissions from biomass burning in the energy sector, correction of errors in AD for cropland and livestock in the AFOLU sector, inclusion of the nature of mitigation actions and the GHG emission projection drivers, and information on finance, technology and capacity-building. Andorra identified the areas for enhanced transparency noted by the previous TTE in the first BUR that were not addressed in the second BUR as areas for enhancing national capacity.

Talk and take into account other BUR submitted by other Parties will help to prepare or initiate next BURs.



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# Thank you for your attention

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