

## Appendix Under 2 MOU - Sardinia Region



REGIONE AUTONOMA DELLA SARDEGNA

### Overview

In the last decades, Sardinia has experienced major transformation processes that have led to a significant improvement of the social and economic conditions, associated with the gradual shift of population toward coastal areas resulting in the reduction of inhabitants of the inland areas and in the substantial increase of environmental pressure.

The insular condition has always influenced - for better or for worse - the history of Sardinia and growth opportunities. Because of its geographical location and the configuration of the land, Sardinia experiences first-hand the effects of climate change in terms of periods of drought, intensification of extreme events such as heavy rains and heat waves, increased risk of fire, mean-level sea rise and related coastal erosion.

Should islands be really considered characterized by a kind of innate drawback compared to the mainland? Sardinia, due to its central location in the Mediterranean Sea, has recognized the importance of undertaking significant and effective actions to face the effects of climate change and to use its distinctive characteristics to seize related opportunities.

Signing the "Under 2 MOU", Sardinia pledges to lower its greenhouse gas emissions (CO<sub>2</sub> eq) at least by 83% within 2050 compared with 1990 levels to limit the emissions to 2 tons per capita in 2050.

### STARTING POSITION

Population (2015): 1.663.286

GHG emissions baseline (1990): 19,5 Mt CO<sub>2</sub> eq (source: Regional Environmental Energy Plan)

GHG emissions baseline (2013): 17,24 Mt CO<sub>2</sub> eq (source: Regional Environmental Energy Plan)

GHG emissions target (2030): 9,75 Mt CO<sub>2</sub> eq (-50%) political objective stated by the President

GHG emission target (2050): 3,4 Mt CO<sub>2</sub> eq (-83%)

### SPECIFIC ACTIONS AND COMMITMENTS

#### Renewable energy and energy efficiency

Sardinia has witnessed a significant transformation of the energy system in the last decade, with a reduction of 28.5% of final energy consumption, a relevant increase in production of electricity from renewable energy sources (45.8% of regional electricity final consumption) and the consequent reduction in the consumption of fossil fuel products (-52%), with a transition from a centralized model of both production and consumption towards a distributed approach.

The main purpose is to guide the transformation of the regional energy system to overcome the infrastructural weaknesses due to the insular boundary, with a strategy based on innovation and effective activities in the energy field, rather than on the amount of energy produced and consumed, experimenting and developing models, products and services that can be reproduced in the European energy market to captivate the international awareness toward Sardinian territory.

The strategical objective summary is to achieve by 2030 a 50% reduction in greenhouse gas emissions related to the final energy consumption in Sardinia.

## **Sustainable Mobility**

An ambitious policy has been launched to balance the internal transport system toward public transport modes and to encourage the use of public transport through tariff integration policy and the automation of planning and management services.

Sardinia Region supports the development of the light rail network in the urban areas of Cagliari and Sassari, gathering nearly 97% of the domestic travels. This network will be connected to the modernized and innovated regional rail system. The first experimental light rail line metropolitan area of Cagliari was built in October 2014.

Bike paths are considered by the Regional Government vision as essential mobility network with a low environmental impact. Because of that, an important survey of urban and suburban tracks has been launch to define an island-wide network. Two plans for realizing urban mobility system of pedestrians and cyclists in the urban areas of Cagliari and Sassari have been started, while the development of a cycling mobility network in the inland areas is related to the new strategy of attracting tourism flows throughout the year and beyond the coastal areas.

## **Forests and agriculture**

More than half (52%) of the Sardinian territory is covered by forests (1,213,250 ha) nearly a quarter of it (24%) is formed wooded area (583,472 ha) whereas agricultural sector contributes with a negative balance of greenhouse gas emissions (-1,536 Mt CO<sub>2eq</sub> in 2014).

Starting from these strengths, the Sardinia Region invests heavily in forest and agricultural sectors to promote a low carbon economy, both through policies aimed at conserving forests to fight climate change, and with specific measures included in the rural development programmes, in which greenhouse gas emissions reductions is a strategic and horizontal objective.

In the Rural Development Programme 2014-2020 (RDP), Sardinia Region supports actions aimed at increasing the ecosystems resilience and the endorsing the mitigation of climate change impacts (Priority 4 of the RDP) as well as encouraging the production and consumption of renewable energy, reducing emissions and promoting carbon sequestration (priority 5).

## **Role model of the Region**

The Sardinia Region is actively involved in the national and European institutional boards on environment and climate change. The President of Sardinia Region is currently Chair of the Commission Environment Climate Change and Energy (ENVE) of the Committee of the Regions (CoR) and Sardinia has been identified as the coordinator of the interregional Board on the Italian Strategy for Adaptation to Climate Change (SNAC). On both levels, Sardinia Region underlines the relevant role of the regional and local governments in facing and managing the effects of climate change.

Therefore signing the "Under 2 MOU" represents a further commitment to recognize the crucial role of the regional and local levels in the governance of climate change issue.

## **Emission trading**

Regional companies take part in the carbon market and they are revising their business plans in the view of the Emission Trading System (ETS) reform that will strongly affect the energy starting from since 2020. The policies and sectorial planning should support companies during the transition period to allow local businesses to stay on the market when the exchange mechanisms are fully operational. Thus, the underlying strategy of the regional environmental energy looks at the reform and at the strengthening of the carbon market as an opportunity for a structural adjustment of the regional energy system in a global perspective of reducing emissions.