

Agrifood sector in Portugal (part II): the challenges of the European Green Deal and the new Common Agricultural Policy

The new Common Agricultural Policy (CAP), which is due to enter into force in 2023, will make it easier for the agricultural sector to meet the objectives set out in the European Green Deal. An important pillar of this plan is the new Farm to Fork Strategy, which aims to ensure that people have access to healthy and sustainable food at affordable prices, while also combating climate change, helping to protect the environment and preserve biodiversity, ensuring producers are paid fairly and increasing the land area dedicated to organic farming.

To this end, a series of targets were established which include reducing the use of pesticides and fertilisers by 50% and 20%, respectively, and increasing the land area occupied by organic agriculture to 25%. In addition to these more agriculture-specific goals, there is a target to cut greenhouse gas emissions by 55%.

The efforts to meet these goals will receive a significant boost from the vast amount of European funds that will be available over the next six years, including those allocated under the Next Generation EU programme. In this sphere, under component 5 of the Recovery and Resilience Plan devoted to business capitalisation and innovation, the Agenda for Research and Innovation for the Sustainability of Agriculture, Food and Agrifood was

launched, which aims to promote the sustainable growth of the agrifood sector. This scheme has a budget of 93 million euros, of which 80 million euros are earmarked for the climate transition and 13 million euros for the digital transition. Two programmes have already been launched under this scheme, each amounting to 4 million euros: Agriculture 4.0, which aims to boost digitalisation and the application of information and communication technologies, and Sustainable Territories, which aims to promote sustainable development and efficient management of natural resources.

The first goal set in order to mitigate the effects of climate change in Europe is a 55% reduction in greenhouse gas emissions by 2030 compared to 1990 levels. The role of the agricultural sector in achieving this goal is fundamental. Specifically, the aim is to reduce emissions of methane (CH₄), which is produced in the digestive process of livestock, in manure management and in rice cultivation; nitrous oxide (N₂O), which is produced by soils fertilised using nitrogen and manure; and carbon dioxide (CO₂), resulting from alterations in soil use. The agricultural sector can also contribute to the reduction of these emissions by increasing the land area occupied by forests or plants, which help to absorb CO₂.

Portugal: objectives of the European Green Deal for the agrifood sector

Objective	Target	Level in the year of reference	Latest figure	Year	Is the target attainable?	
Reduction of greenhouse gas emissions	55% of 1990 levels by 2030	7,141	Thousand tonnes	6,870	2019	Yes, maintaining the same rate of reduction as in 2018-2019 (approx. 3,500 tn/yr)
Use of chemical pesticides	50% of the level of 2011-2013	100	Harmonised risk indicator	75	2019	Yes. On average, between 2017 and 2019, their use fell by 30%
Sale of chemical pesticides	50% of the level of 2011	14,024	Tonnes	9,866	2019	Difficult. Achieving the goal will require significant effort
Reduction of soil nutrient loss - nitrogen	50% of the level of 2012-2014	42.5	Gross balance of nutrients/utilised agricultural area (kg/ha)	45.2	2019	Achieving the goal will require reversing the current trend
Reduction of soil nutrient loss - phosphorus	50% of the level of 2012-2014	3.9	Gross balance of nutrients/utilised agricultural area (kg/ha)	5.8	2019	Achieving the goal will require reversing the current trend
Full access for rural populations to broadband internet	100% by 2025	44	% of rural areas with access	74	2020	Yes
Agricultural land area occupied by organic agriculture	25% of the utilised agricultural area in 2030	-	% of the utilised agricultural area	8.2	2019	Additional conversion effort required In 2017-2019, the average annual increase was 0.6%. Meeting the target will require an annual increase of 1.8%
Agricultural land area occupied by high-diversity landscape features	10% of the utilised agricultural area in 2030	-	% of the utilised agricultural area	7.6	2018	-

Source: CaixaBank Research, based on data from Eurostat.

Portugal: number of processors in the organic food industry

	2015	2016	2017	2018	2019	2020	% of the total	Average annual growth
Total	604	650	794	788	880	1,019		11.0
Fruits and vegetables	227	278	310	337	330	387	38.0	11.3
Oil and fats	98	97	165	233	241	274	26.9	22.8
Beverages	45	54	83	125	147	171	16.8	30.6
Cereals and legumes	42	46	67	63	66	77	7.6	12.9
Flour-based products	48	47	55	65	63	67	6.6	6.9
Meat	35	34	35	36	40	47	4.6	6.1
Dairy products	17	16	21	17	24	36	3.5	16.2
Fish	13	11	17	18	17	22	2.2	11.1
Animal feed		6	7	11	13	15	1.5	25.7
Other food products	291	254	322	397	456	480	47.1	10.5

Note: The sum exceeds the total, probably because most processors produce more than one product.
Source: CaixaBank Research, based on data from the Portuguese State of the Environment Portal.

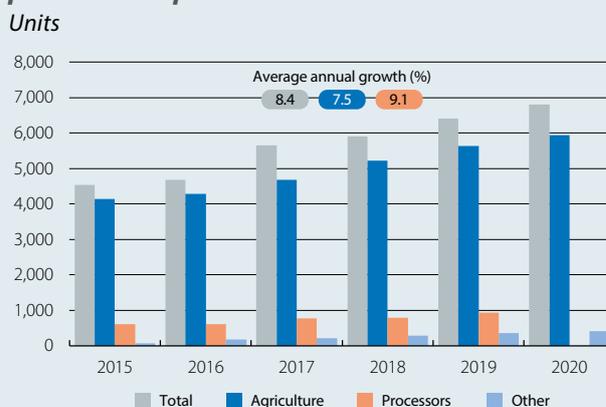
In Portugal, the overall trend in these emissions since 2005 has been promising, and if the current emission reduction rates are maintained it is expected that the target set by the EU can be met. Despite this, the agricultural sector is on a different path to the economy as a whole, as it has seen a rise in these emissions since 2011. In 2019, the sector’s emissions amounted to 6.9 million tonnes, almost 4 million above the level that would be consistent with meeting the reduction target, contributing around 12% of the economy’s total emissions (11% in the EU and 13% in Spain). However, if we look at this indicator taking the utilised agricultural area (UAA) into account then the sector’s efforts become clear: between 2005 and 2019, greenhouse gas emissions per hectare fell from 23 to 16 tonnes, a clear indication of the improvements it has made from an environmental perspective.

The second target that has been set is a 50% reduction in the use of chemical pesticides by 2030. If we take the harmonised risk index as a measure of the reduction in pesticide use,¹ Portugal fairs well, having cut their use by 25%. Nevertheless, this target will need to be monitored closely, as although significant reductions were achieved up to 2016, there has been some stagnation since then. Similarly, there has been a significant reduction (–30%) in the sale of pesticides since 2011, but in the last three years this trend has reversed. To meet the target, an average annual reduction of 780 tonnes per year will be required. This is well above the 32-tonne annual reduction recorded in the period 2017-2019.

Another important aspect where the agricultural sector can contribute to complying with the European Green Deal is the target to cut soil nutrient losses by 50% by 2030, which will help reduce the risk of soil, water and air pollution. Progress against this target is measured

1. The harmonised risk indicators are used to measure the progress achieved in meeting the objectives of Directive 2009/128/EC on the sustainable use of pesticides (Eurostat).

Portugal: number of organic production operators



Source: CaixaBank Research, based on data from the Portuguese State of the Environment Portal.

by calculating the nutrient balance,² and in this regard Portugal shows unsatisfactory results. This is particularly the case for nitrogen, which in recent years has been showing a growing surplus, reaching 45 kilogrammes per hectare of utilised agricultural area in 2019. The phosphorus balance is also on the rise, although the surplus is smaller: 5.8 kilogrammes.

Another objective set out in the European Green Deal concerns the reduction of the isolation of rural areas, for instance through providing rural populations full access

2. The nutrient balance (nitrogen and phosphorus) is calculated as the difference between the incorporation of these nutrients into the soil and their removal by crops. The nutrient balance is necessary for monitoring Rural Development Programmes. It is proposed as an indicator of the potential threat of the surplus or deficit of two major soil and plant nutrients on agricultural land (nitrogen and phosphorus), as it provides a picture of the interrelationship between the sustainable use of the nutritional resources in soil, the use of agricultural fertilisers (both inorganic and organic) and the respective losses to the environment. The so-called *Prado ao prato* (Farm to Fork) strategy, launched within the scope of the European Green Deal, sets the EU target of reducing nutrient losses by at least 50% and fertiliser use by at least 20% by 2030.

to broadband internet. The target is to achieve 100% coverage of these areas by 2025, and on this point Portugal is well positioned, since it already has 70% of these areas covered.

The final target for the sector is for 25% of agricultural area to be devoted to organic farming. According to Eurostat, in Portugal this percentage was 8.2% in 2019 and rising, but the pace of progress appears to be insufficient. The same applies to the proportion of agricultural land area that is occupied by high-diversity landscape features. On this point, the European Green Deal has a target to achieve 10%, with Portugal currently standing at 7.6%.

The trend in the amount of cultivated land used for organic farming reveals the shift towards more sustainable production methods

According to the Portuguese State of the Environment Portal, in 2019, 293,000 hectares were occupied by organic farming methods, including pastures (62%), permanent crops (21%) and temporary crops (18%). The increase in the land area used for organic farming was accompanied by an increase in the number of operators using organic production methods, which in 2020 stood at 6,795, some 90% of which were engaged in agricultural activities. The rise of organic production methods is also evident in the food and beverage industry. In 2020, there were 1,019 firms using organic methods in the processing of foodstuffs, with the largest number operating in the sectors of fruit and vegetables, oils and fats, as well as other food products such as sugar, chocolate, coffee and tea, condiments and pre-cooked foods.

In conclusion, in the field of sustainability, the agricultural sector still faces major challenges ahead. Nevertheless, many of the indicators show that the sector is attentive to the main issues, which will facilitate the acceleration of the changes needed to achieve the objectives set out in the European Green Deal and in the new CAP.

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