



SMART PROTEIN POLICY BRIEF

Policy tools for promoting
alternative proteins in the EU



INTRODUCTION

A fundamental transformation of the ways we produce and consume food in Europe is urgently needed. From environmental degradation and food waste to rising obesity and shrinking generational renewal within the farming sector, the EU's food system is far from sustainable. Because excessive consumption of industrial animal-based products is at the heart of many of these challenges, a transformation of these consumption and production patterns is needed.

The Intergovernmental Panel on Climate Change (IPCC) has identified the shift to more plant-based diets as an important climate mitigation and adaptation strategy due to the lower environmental footprint and greater climate resilience. Healthy plant-based meat and dairy alternatives are a crucial element of this strategy, as they are key in facilitating consumers' transition to more sustainable diets.

The Smart Protein project explores the possibilities of creating such sustainable and healthy plant-based alternatives. The EU-funded project aims to validate and demonstrate the use of nutritious, innovative, cost-effective, and resource-efficient, EU-produced plant and microbial biomass proteins through regenerative organic agriculture and by upcycling side streams from the pasta, bread, and beer industries.

Unfortunately, current EU legislation does not adequately support consumers' shift towards more plant-rich diets and the development and launch of plant-based alternatives that could facilitate such a transition. Regulatory and policy reforms are therefore needed if the EU wants to achieve the goal of making European food systems more sustainable and healthy, as stated in its Farm to Fork Strategy and its Beating Cancer Plan.^{1,2}



KEY POLICY RECOMMENDATIONS

LABELLING AND MARKETING STANDARDS

Create a genuinely level playing field by providing progressive food marketing and labelling standards for plant-based products that will make them more readily available and accessible to European consumers.

1. Allow conventional denominations for plant-based products.
2. Introduce EU-wide definitions of vegan and vegetarian food products.
3. Establish an EU front-of-pack sustainability labelling scheme.

PUBLIC FOOD PROCUREMENT

Tap into the potential of public-procurement processes to facilitate the shift to more plant-based diets.

1. Include plant-based foods in EU minimum criteria for sustainable public procurement.
2. Make fortified plant-based products eligible for organic certification.

EQUAL TAX SYSTEM

Establish EU-wide equal VAT rates for plant-based products and animal-sourced foods and encourage further member states to introduce 0% VAT rates for plant-based whole foods.

SUBSIDIES

Use EU public-funding tools to accelerate the transition to more plant-rich food systems.

1. Revise EU agriculture-promotion policy.
2. Increase R&D funding for plant-based innovation.

STAKES AND CHALLENGES OF THE EU FOOD SYSTEM

Several studies as well as a 2019 report from the IPCC, suggest that about a third of global GHG emissions can be attributed to our food systems.^{3,4,5} The production and consumption of animal-sourced foods are major drivers of this. Animal-based emissions make up at least half,⁶ if not more,⁷ of total global food-related emissions. This pollution, in turn, negatively affects food security. In the EU, recent estimates by the European Commission's Joint Research Centre suggest that by 2050, temperature increases due to climate change could reduce crop yield. Maize yields, for example, are predicted to drop by as much as 22%, with wheat risking an up-to-49% yield reduction in Southern Europe.⁸

The excessive consumption of animal-based foods is also one of the reasons behind widespread unhealthy diets in Europe. Eurostat estimates that only 12% of the EU's population consume the recommended five portions of fruit and vegetables daily.⁹ At the same time, EU meat consumption remains extremely high, with the average annual meat per-capita intake reaching nearly 70 kg in 2018.¹⁰ According to WHO, unhealthy diets are one of the main drivers of non-communicable diseases (NCDs). In Europe, NCDs cause 90% of deaths and 85% of years lived with disability.¹¹ Cardiovascular diseases, in particular, are strongly linked to unhealthy diets.¹²

This also puts an enormous strain on public finance. Unhealthy diets are a major contributor to healthcare costs, which represent the second-largest item of public expenditure in the EU.^{13, 14}



THE BENEFITS OF SMART PROTEIN AND PLANT-RICH FOOD SYSTEMS

The promotion of plant-based food innovation and the transition towards more plant-rich diets can provide a key multi problem solution in this challenging context.

Plant-based alternatives to meat and dairy, along with plant-based whole foods and plant-based diets in general, tend to have a much lower environmental footprint than their animal-based counterparts. Replacing animal-based products with plant-based products has the potential to reduce product-related emissions by up to 90%.¹⁵ An overall shift to more plant-rich diets can reduce annual agricultural emissions in high-income countries by as much as 60%.¹⁶

Moreover, a shift to plant-rich food systems can help to reduce food loss and bolster food security. Conventional livestock farming tends to be very wasteful, as vast amounts of natural resources such as land and water are used to feed animals instead of directly growing crops for human consumption. Around 80% of global agricultural land is used for livestock farming, although it provides less than 20% of the global calorie supply.^{17, 18} Being far less resource-intensive, plant-based foods are not only less wasteful but are also more resilient in the face of the impact of climate change and supply-chain disruptions, thus reducing the risk of food insecurity. Furthermore, as the Smart Protein project demonstrates, nutritious plant-based foods can be produced from food-industry 'waste products' such as pasta residues and side streams from beer production.

Lastly, shifting to more plant-rich diets has proven health benefits when compared to the average European diet. Those include a reduced risk of cardiovascular diseases^{19, 20} and type-2 diabetes,^{21, 22, 23, 24} a lower Body Mass Index (BMI),^{25, 26, 27} and, according to some studies, higher protection against common types of cancer.^{28, 29, 30, 31}



POLICY RECOMMENDATIONS

Labelling and marketing standards

I) Allow conventional denominations for plant-based products

The current regulatory framework for food marketing and labelling standards – the Food Information to Consumers (FIC) Regulation and the Common Organisation of Markets (COM) Regulation – prohibits the use of several dairy terms such as ‘milk’, ‘cheese’ and ‘yoghurt’ for non-dairy products. However, using traditional names and concepts helps consumers know what taste and texture they can expect from a product. Surveys suggest that a majority of European consumers are not only not confused by the use of conventional names for plant-based products, they also support this labelling approach.^{32, 33} EU regulation should therefore allow plant-based products to use these conventional denominations.

II) Introduce EU-wide definitions of vegan and vegetarian food products

Clear product descriptions are vital to help citizens incorporate more sustainable plant-based foods into their diets. ‘Vegan’ and ‘vegetarian’ are popular and commonly understood terms used to designate partially or fully plant-based products. However, there currently exists no common European definition of these terms, despite the fact that the FIC Regulation calls on the Commission to provide one. In order for European citizens to be able to make informed choices towards more plant-based food consumption, clear and consistent EU-wide definitions on what constitutes a vegan or vegetarian food product are needed.³⁴

III) Establish an EU front-of-pack sustainability-labelling scheme

Front-of-pack (FOP) labelling has been identified as a particularly effective way to empower citizens to make more-informed food choices.³⁵ In the same vein as the proposal for a mandatory front-of-pack nutrition label, EU decision-makers should establish a transparent, inclusive, and comprehensive EU front-of-pack sustainability scheme with a mandatory sustainability label or common rules for food-sustainability labelling. This would perfectly complement the commission’s Sustainable Food Systems Framework.



Public food procurement

Public food procurement has been recognised as a central tool in facilitating the shift to more sustainable food systems, notably by WHO and the FAO.^{36, 37, 38}

However, recent findings suggest that the potential of public procurement as a climate policy tool remains largely untapped in the EU.^{39, 40}



I) Include plant-based foods in EU minimum criteria for sustainable public procurement

The European Commission's Sustainable Food Framework Initiative has taken up the idea of mandatory sustainable public-procurement criteria. While these developments are promising, sustainable public procurement can only properly help shift our food systems and diets if its minimum criteria integrate the negative environmental impacts of food products when making cost assessments. Since plant-based foods tend to have a lower environmental footprint, a logical addition would be a mandatory minimum proportion of plant-based foods in public food procurement.

II) Make fortified plant-based products eligible for organic certification

The current regulation of the production and labelling of organic foods ((EC) No 834/2007) does not allow the use of fortification in organic products. This means that many plant-based foods developed on the Smart Protein project would not be eligible for organic certification and therefore not included in the organic targets for sustainable food procurement. If the intake of nutritious plant-based foods in public procurement is to be increased, it is vital that fortified plant-based products be eligible for organic certification.

III) Establish European Sustainable Dietary Guidelines

Dietary guidelines are an important public policy tool to guide citizens in their food choices. They also significantly influence public food procurement, as they inform the development of official food and public-health policies. Guidelines should promote not only healthy diets, but also sustainable ones. Plant-based foods play a central role here as they are good for both human health and the planet. Establishing EU-wide Sustainable Dietary Guidelines could be a cost-effective tool to help European citizens make the shift towards more plant-rich diets.

An equal tax system

When compared with animal-sourced products, many plant-based alternatives with a lower ecological footprint still face higher VAT rates in several EU member states than animal-based foods. While some member states do not have different VAT rates for plant-based and animal-sourced milk and dairy (including France, Netherlands, Portugal, Finland, Belgium, Ireland), others do differentiate (Germany, Italy, Greece, Spain, Austria, Slovakia). In Italy, for example, the VAT rate for plant-based milk is 450% higher than it is for animal-sourced milk.⁴¹ This tax discrimination hinders consumers' uptake of more sustainable options and also goes against European citizens' preferences.⁴²

In order to facilitate access to more sustainable plant-based foods, it is vital to establish EU-wide equal VAT rates for plant-based products and animal-sourced foods and to further encourage member states to introduce 0% VAT rates for plant-based whole foods. Changes to the EU's VAT rules from April 2022 now allow Member States to introduce 0% rates on certain basic necessities, including food, but so far only few countries have taken up this possibility.⁴³





Subsidies

I) Revise EU agriculture-promotion policy

Every year, the EU's dedicated promotion programme for agricultural products invests millions in promoting EU farm products in Europe and across the globe. Fruit and vegetables already receive substantial amounts of funding, which is very encouraging. However, manufactured plant-based products such as those explored by the Smart Protein Project are barely included in the policy. At the same time, the programme funds the livestock sector, which is accountable for a major share of agriculture's ecological footprint. It is crucial that the EU agriculture-promotion programme be revised to extend the scope of products eligible for promotion, as listed in Article 5 of Regulation 1114/2013 in order to include sustainable and healthy plant-based food innovations such as those being developed by the Smart Protein Project.

II) Increase R&D funding for plant-based innovation

With the Smart Protein Project and its sister projects funded under the same H2020 'Alternative Proteins' call, the EU is already funding plant-based food innovation through the Horizon 2020 and Horizon Europe frameworks. However, the €32 million of funding for sustainable protein is only a fraction of the current €95.5 billion Horizon Europe budget. Increased R&D funding for plant-based innovation is critical as there are still significant research needs in the plant-based-protein space. The EU must urgently scale up its investments in plant-based research, innovation, and development by using the money saved from reducing climate-harming subsidies.

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SMART PROTEIN

Smart Protein is a €10-million EU-funded project that seeks to develop a new generation of foods that is cost effective, resource efficient, and nutritious. Alternative protein sources such as legumes and side streams from beer and pasta production are used to generate plant-based ingredients and plant-based meat, seafood, dairy products, and baked goods.

Visit us at: www.smartproteinproject.eu

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PROVEG INTERNATIONAL

ProVeg International is a food awareness organisation working to transform the global food system by replacing animal-based products with plant-based and cultured alternatives.

ProVeg works with decision-making bodies, companies, investors, the media, and the general public to help the world transition to a society and economy that are less reliant on animal agriculture and more sustainable for all humans, animals, and our planet.

ProVeg has offices in ten countries across four continents and is active around the world. ProVeg has permanent observer status with the UNFCCC, special consultative status with ECOSOC, is accredited for UNEA, and has received the United Nations' Momentum for Change Award.

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