STUDY

Requested by the AGRI Committee

European Parliament

Farm certification schemes for sustainable agriculture

State of play and overview in the EU and in key global producing countries, concepts and methods

Volume 1 - main report and annexes 1 to 4

Agriculture and Rural Development

Policy Department for Structural and Cohesion Policies
Directorate-General for Internal Policies
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RESEARCH FOR AGRI COMMITTEE

Farm certification schemes for sustainable agriculture

State of play and overview in the EU and key global producing countries, concepts and methods

Volume 1 - main report and annexes 1 to 4

Abstract

This study presents the concepts and methods of farm certification schemes and provides information on the main existing schemes in the EU and in third countries. It analyses how these schemes can help the EU reach its sustainability objectives in the farming sector and be instrumental in the implementation and monitoring of the related CAP instruments during the upcoming programming period.

This document was requested by the European Parliament's Committee on Agriculture and Rural Development.

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DISCLAIMER

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LIST OF ABBREVIATIONS

AECM	Agri-Environment-Climate Measures
BtoB	Business to Business
BtoC	Business to Consumer
CAP	Common Agricultural Policy
CSBF	Certified Sustainable Beef Framework
EAFRD	European Agricultural Fund for Rural Development
EU	European Union
GAEC	Good Agricultural and Environmental Conditions
GAP	Good Agricultural Practices
GI	Geographical Indication
IFA	Integrated Farm Insurance
IP	Intellectual Property
IPM	Integrated pest management
MS	Member State
NSP	National Strategic Plan
PDO	Protected Designation of Origin
PGI	Protected Geographical Indication
SMR	Statutory Management Requirements
TSG	Traditional Speciality Guaranteed
UAA	Utilised Agricultural Area
WfCP	Wineries for Climate Protection

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EXECUTIVE SUMMARY

KEY FINDINGS

- Certification schemes for agricultural products and foodstuffs provide assurance (through a certification mechanism) that certain characteristics or attributes of the product or its production method or system have been observed.
- This research project has identified a total of 198 certification schemes at EU level and in the main third countries. A typology of nine types of certification schemes has been elaborated and 15 flagship schemes have been selected for detailed analysis. For each of these selected schemes, the contribution to the EU sustainability objectives has been analysed. Some have a broad scope of commitments, likely to provide a direct or high contribution to nearly all EU sustainability objectives. Other schemes can help achieve one to three EU objectives (mainly management of resources, protection of the environment, health and animal welfare, and less frequently climate change). The remaining ones specifically focus on one objective, i.e animal welfare or climate.
- A significant share of the schemes analysed covers some requirements related to the new CAP conditionality framework (statutory management requirements (SMRs) and good agricultural and environmental conditions (GAECs)). Only a few schemes provide guarantees beyond the required practices of a significant number of SMRs and GAECs. Certification schemes could also be instrumental in supporting the adoption or maintenance of farming practices requested by the eco-schemes and the agri-environment climate measures (AECM): most of the schemes analysed cover some of the eco-schemes farming practices (generally less than one-quarter, based on a list of 22 pratices proposed by the Commission in 2021) and a few schemes cover more than one-third of the practices.
- Conversely, it does not sound relevant to use CS in the framework of the result indicators foreseen by the new CAP, as CS do not generally foresee a comprehensive and centralised monitoring system.
- Targeted and relevant certification schemes could prove useful within the CAP national strategic plans to achieve the CAP sustainability objectives, provided that a specific assessment of the requirements and method of implementation of each of these schemes is conducted to prevent any greenwashing risk. From a CAP perspective, certification schemes seem to present a limited risk of competition distorsion between Member States.

OBJECTIVES AND METHODOLOGY OF THE STUDY

This study, conducted from December 2021 to May 2022, aims at providing information to the Members of the AGRI Committee on the state of play of farm certification schemes (CS) and their contribution to sustainable agriculture:

- it presents the concepts and methods of farm CS and provides information on the main existing schemes in the EU and in third countries;
- it analyses how these schemes can help the EU reach its sustainability objectives in the farming sector and be instrumental in the implementation and monitoring of the related CAP instruments;
- it provides policy options to better integrate farm certification schemes in the CAP toolbox.

Based on desk research, this research project maps the existing CS at EU level and in third countries, elaborates a typology and analyses how selected CS could be used by Member States in their national strategic plans before formulating policy recommendations.

MAPPING AND TYPOLOGY

A total of 198 CS at farm level have been identified. 86% of them are established in the EU (170 schemes) and 28 schemes in third countries. More than two-thirds have been set up by private bodies and one-third is owned by public entities. Most schemes apply to several types of products. The most represented sector is livestock, followed by fruits and vegetables, crops, wine and seafood.

A total of 9 profiles have been identified based on thematic areas covered by the schemes and 15 CS have been selected for further analysis. The profiles identified and the 15 selected CS are:

- "Good agricultural practices": Haute Valeur Environnementale (HVE), Integrowana Produkcja, IP Sigill, Leaf, Sistema di Qualità Nazionale di Produzione Integrata per le Produzioni Agricole (SQNPI);
- "Origin and quality of the final products": geographical indications (GIs): protected designations of origin (PDOs) and protected geographical indications (PGIs);
- "Traceability and safety": no CS from this type has been selected for detailed analysis;
- "Animal welfare and health": Beter Leven, Initiative Tierwohl;
- "Organic +": Naturland;
- "Climate": Label Bas-Carbone, Wineries for Climate Protection (WfCP);
- "Multi-purpose": Bord Bia Quality Mark, Certified Sustainable Beef Framework (CSBF), Equalitas, Global G.A.P. and Integrated Farm Assurance (IFA);
- "Non-GMO": no CS from this type has been selected for detailed analysis;
- "Fairtrade": no CS from this type has been selected for detailed analysis.

CONTRIBUTION OF CS TO EU SUSTAINABILITY OBJECTIVES

Among the 15 CS analysed, some have a broad scope of commitments, and are likely to provide a direct or high contribution to nearly all EU sustainability objectives (for instance: IP Sigill, Leaf, Naturland and Equalitas). Other schemes have been tailored to address one to three EU objectives (mainly management of resources, protection of the environment, health and animal welfare, and less frequently climate change). A few schemes specifically focus on one objective: animal welfare (Beter Leven and Initiative Tierwohl) or climate (Label Bas-Carbone).

COHERENCE BETWEEN CS REQUIREMENTS AND CONDITIONALITY RULES

A significant share of the 15 CS analysed covers some of the good agricultural and environmental conditions (GAECs) and statutory management requirements (SMRs) foreseen by the new conditionality provisions (with a similar or, in some cases higher level of ambition).

The level of coverage falls into the following categories:

- CS focusing on "good agricultural practices" (HVE, IP Sigill, Leaf) as well as "Organic +" (Naturland) demonstrate a high level of coverage.
- other CS focusing on other aspects cover a less significant number of GAECs and SMRs. This is the case for instance of Beter Leven (level 3), Bord Bia Quality Mark, CSBF and Global G.A.P.
- other CS focus on practices defined on a case-by-case basis by stakeholders and therefore do not cover any GAECs and SMRs: examples include Label Bas-Carbone, WfCP and PDOs/PGIs.
- a few CS provide guarantees beyond the requirements of a significant number of GAECs/SMRs: HVE (including options), Beter Leven (level 3 of dairy cattle standard) and to a lesser extent IP Sigill, Leaf and Naturland.

CS USED AS POTENTIAL ELIGIBILITY OR CONTROL CRITERION FOR THE CAP: AGRI-ENVIRONMENT-CLIMATE MEASURES (AECM) AND ECO-SCHEMES

The use of certification schemes as eligibility or control criterion has been analysed through their capacity to comply with the regulatory requirements defined by EU Regulations.

The certification schemes are generally suitable to be used in national strategic plans and fulfil most of the common and specific provisions for both AECMs and eco-schemes.

While some National Strategic plans Submitted by Member States (France, Ireland, Italy and Poland) already plan to use some CS to implement the new CAP, a wider use of CS schemes could be envisioned to lead to the adoption or maintenance of practices supported by the eco-schemes:

- most of the CS analysed cover some of the 22 agro-ecological farming practices proposed by the European Commission for eco-schemes in 2021[1]. The number of practices encompassed by each CS varies and covers generally less than one-quarter of the 22 practices suggested;
- a few schemes cover even more than one-third of the practices: Naturland (68%), IP Sigill (option included, 50%) and Beter Leven (level 3, 41%) and HVE (including option, 36%).

Conversely, it does not sound relevant to use CS in the framework of the result indicators foreseen by the new CAP, as CS do not generally foresee a comprehensive and centralised monitoring system.

[1] List of potential agricultural practices that eco-schemes could support DG AGRI, 2021 https://ec.europa.eu/info/news/commission-publishes-list-potential-eco-schemes-2021-jan-14_en

RISK OF GREENWASHING AND COMPETITION RISKS

Since the level of guarantees provided by the different CS on each environmental and climate area differs greatly, these risks must be assessed specifically for each CS for each EU objective.

Overall, a limited risk of competition distortion has been identified as the CS are generally open to all producers and each CS is usually not compulsory to access a specific market.

RECOMMENDATIONS

Based on this analysis, the study recommends:

1. To encourage the use of the relevant certifications' schemes within the CAP national strategic plans to achieve the EU sustainability objectives.

2. To use certification schemes to implement the CAP and achieve CAP objectives; this is particularly relevant for SMRs, GAECs, eco-schemes and AECMs. Practically, this could be supported by the development of tools such as:
   - an equivalence programme between certification schemes and CAP instruments (SMRs, GAECs, eco-schemes and AECMs).
   - guidelines for the assessment of the equivalence of schemes with CAP instruments (SMRs, GAECs, eco-schemes and AECMs). These guidelines shall consider specifically:
     - the contribution to at least one environment or climatic objective of the CAP,
     - clear environmental or climatic added value (measurable achievements),
     - requirements with "clear added value" that are compulsory (and not optional) in the CS,
     - third-party control,
     - implementation of a monitoring system which can feed into the EU monitoring system.

3. To use some certification schemes in the risk analysis for CAP controls (to be assessed on a case-by-case basis).

1. INTRODUCTION

1.1 Objectives of the study

The objective of the study is to assess to what extent certification schemes can prove instrumental in achieving the EU food quality and sustainability objectives. With this end in sight, the study aims to:

- Map the variety of existing farm certification schemes in the EU and in third countries, and present the diverse concepts and methods on which they are based,
- Identify the main schemes and describe their scope and objectives among the numerous certification standards currently operating in the market,
- Analyse to what extent the main schemes could contribute to reaching the EU sustainability targets in the farming sector, by considering how their ambition meet the objectives of Farm to Fork and Biodiversity strategies and how the schemes' commitments fit with CAP green practices requirements (eco-schemes, statutory management requirements (SMR) / good agricultural and environmental conditions (GAEC), AECM etc.). The analysis will mainly focus on the environmental sustainability of the schemes , but the economic and social dimensions will also be considered as needed,
- Suggest concrete policy options on the possible integration of certification schemes in the CAP instruments, taking into account risks and opportunities.

1.2 Methodology

The methodology is based on:

- an overview of the definition of the "certification scheme" in the EU laws and a proposal of definition for this study,
- a comprehensive identification of the certification schemes in the agri-food sector at EU level and the identification of the main schemes used in the third countries (see sources used in annex 1),
- the elaboration of a database under MS Excel in which information on each certification scheme is gathered and the elaboration of a typology based on the information gathered in the database (see annex 3),
- a detailed analysis of 15 selected schemes and an analysis of their possible contribution to CAP sustainability objectives and implementation (in particular into national strategic plans), including qualitative interviews with standard setters or other stakeholders (see list in annex 2),
- the elaboration of policy recommendations.

2. COMPREHENSIVE OVERVIEW OF THE EXISTING SCHEMES (MAPPING AND TYPOLOGY)

KEY FINDINGS

- The term "certification scheme" is used in different EU policies. While the number of schemes is increasing, the EU agri-food policy provides guidelines on their definition and implementation and defines the scope of a possible support by the CAP intervention. The intellectual property (IP) policy aims at providing a definition to "certification marks" which can be registered at EU level as an IP tool.

- A total of 198 CS at farm level have been identified in the context of this study. 86% of them are established in the EU (170 schemes), the main MS being Germany, Spain, France and Poland; and 28 schemes are from third countries, mainly from the UK and the United States of America.

- More than two-thirds of the schemes identified have been set up by private entities, either non-profit organisations, processing companies, farmers' co-operatives, professional bodies, inter-branch organisations or certification bodies. The remaining schemes stem from initiatives by EU, national or regional authorities.

- Most of the schemes apply to several types of products. The most represented sector is livestock (28% of schemes), followed by fruits and vegetables (20%), crops (18%), wine (12%), seafood (8%) and other types of products (14%).

- A typology of schemes is proposed, based on the area covered by each of them. A total of 9 profiles have been identified:
    - Good agricultural practices
    - Animal welfare
    - Origin and quality of the final product
    - Organic +
    - Climate
    - Multi-purpose
    - Traceability and safety
    - Non-GMO
    - Fairtrade

2.1 Objectives

This section aims to provide:

- an overview of the definition of "certification scheme" in EU policies,
- a mapping of the CS used at farm level in the EU and in the main third countries,
- propose a typology of CS.

2.2 Definition of the "certification scheme"

The term "**certification scheme**" is used in the EU agri-food and intellectual property policies (IP):

- In the agri-food policy, it aims to:
  - provide guidelines while the number of certification schemes is increasing and their use is in progress,
  - define the scope of a possible support by the CAP intervention.
- In the intellectual property (IP) policy, it aims at providing a definition to "certification marks" which can be registered at EU level as an IP tool.
- **"Certification schemes" in the agri-food policy:**
  - **EU guidelines for voluntary certification schemes in the agri-food sector**[2] define the "certification schemes" as follows: "*Certification schemes for agricultural products and foodstuffs provide assurance (through a certification mechanism) that certain characteristics or attributes of the product or its production method or system, laid down in specifications, have been observed. They cover a wide range of different initiatives that function at different stages of the food supply chain (pre- or post-farm gate; covering all or part of the food supply chain; affecting all sectors or just one market segment, etc.). They can operate at business-to-business (B2B) level (where the supermarket or processing business is the intended final recipient of the information) or at business-to-consumer (B2C) level. They can use logos although many, especially the B2B schemes, do not.*"
  - **EU rural development policy on the period 2014-2020.** The EAFRD (2014-2020) provided support for quality schemes (including "farm certification schemes"). The applicable regulation[3] stated that such schemes should comply with the EU guidelines for voluntary certification schemes mentioned above or comply with the following rules:
    - "the specificity of the final product under such schemes is derived from clear obligations to guarantee any of the following:
      1. specific product characteristics,

[2] EU best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs, a certification scheme for agricultural products and foodstuffs (2010/C 341/04) - https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:341:0005:0011:en:PDF

[3] Article 16 of Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005

2. specific farming or production methods, or
3. a quality of the final product that goes significantly beyond the commercial commodity standards as regards public, animal or plant health, animal welfare or environmental protection;

- the scheme is open to all producers;
- the scheme involves binding product specifications and compliance with those specifications is verified by public authorities or by an independent inspection body;
- the scheme is transparent and assures complete traceability of products;"

- **CAP Post 2020:** the Regulation for the CAP post 2020 CAP[4] does not provide a specific definition for certification schemes. However, the regulation indicates that national strategic plans (NSP) may provide support to these certification schemes:
  - In its article 39, regarding the interbranch organisations in the cotton sector (development of marketing strategies to promote cotton via quality certification schemes),
  - In its article 47, regarding the intervention in the fruit and vegetables sector, the hops sector, the olive oil and table olives sector and in the other sectors referred to in Article 42. The CAP intervention may cover the implementation of traceability and certification systems, in particular the monitoring of the quality of products sold to final consumers.
  - In its article 77 related to the support for cooperation, including the support quality schemes. Article 84 provides details on this article 77 and indicates that the Commission is empowered to adopt delegated acts concerning the conditions for granting support for the quality schemes as regards:
    - the specificity of the final product,
    - the access to the scheme,
    - the verification of binding product specifications,
    - the transparency of the scheme and the traceability of the products,
    - the recognition by Member States of voluntary certification schemes.

- **"Certification mark" in the IP policy:** "certification marks" are a recent tool, available since October 1st 2017. The definition of certification adds the concept of goods and services which can be distinguished from other goods and services:

[4] Regulation (EU) 2021/2115 of 2 December 2021 establishing rules on support for strategic plans to be drawn up by Member States under the common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulations (EU) No 1305/2013 and (EU) No 1307/2013

- Based on Article 27 of Directive (EU) 2015/2436[5]: "'*guarantee or certification mark*' *means a trade mark which is described as such when the mark is applied for and is capable of distinguishing goods or services which are certified by the proprietor of the mark in respect of material, mode of manufacture of goods or performance of services, quality, accuracy or other characteristics, from goods and services which are not so certified.*"
- More specifically, Article 83(1) of Regulation (EU) 2017/1001 on the European Union trade mark[6] sets that *"EU certification mark shall be an EU trade mark which is described as such when the mark is applied for and is capable of distinguishing goods or services which are certified by the proprietor of the mark in respect of material, mode of manufacture of goods or performance of services, quality, accuracy or other characteristics, with the exception of geographical origin, from goods and services which are not so certified."*

Based on the aforementioned elements, and in order to encompass the largest number of schemes, **the definition "certification schemes" in this study** refers to schemes:

- Which are in line with EU laws for the support by the CAP and registration as a trademark and:
  - are based on a certification process (based on an internal control or a third-party control by an accredited body),
  - provide guarantees on certain characteristics or attributes of the product or its production method or system,
  - may be Business to Business (BtoB) or Business to Consumers (BtoC).
- Which may not fully comply with EU laws (CAP and IP laws) but which should be included in the analysis to enlarge its scope. These schemes:
  - may include guarantees covering the compliance to EU or national laws or go beyond these laws,
  - may be open to all stakeholders or may concern only a group of stakeholders (from one MS or member of a specific professional body).

2.3 Mapping and typology of the existing schemes

The desk research conducted to identifying **198 certification schemes** (see list in annex 4). All these schemes include practices to be implemented at farm level. A database was built to analyse the main characteristics of the certification schemes regarding their scope (geographical, supply chain and sectoral coverage), the main objectives pursued, the private/public nature of the scheme and its economic importance (see structure of the database in annex 3).

[5] Directive (EU) 2015/2436 of the European parliament and of the council of 16 December 2015 to approximate the laws of the Member States relating to trade marks

[6] Regulation (EU) 2017/1001 of the European Parliament and of the Council of 14 June 2017 on the European Union trade marks.

2.3.1 Geographical scope

A large majority of schemes identified are established in the EU member states (170 schemes, 86% of the total).

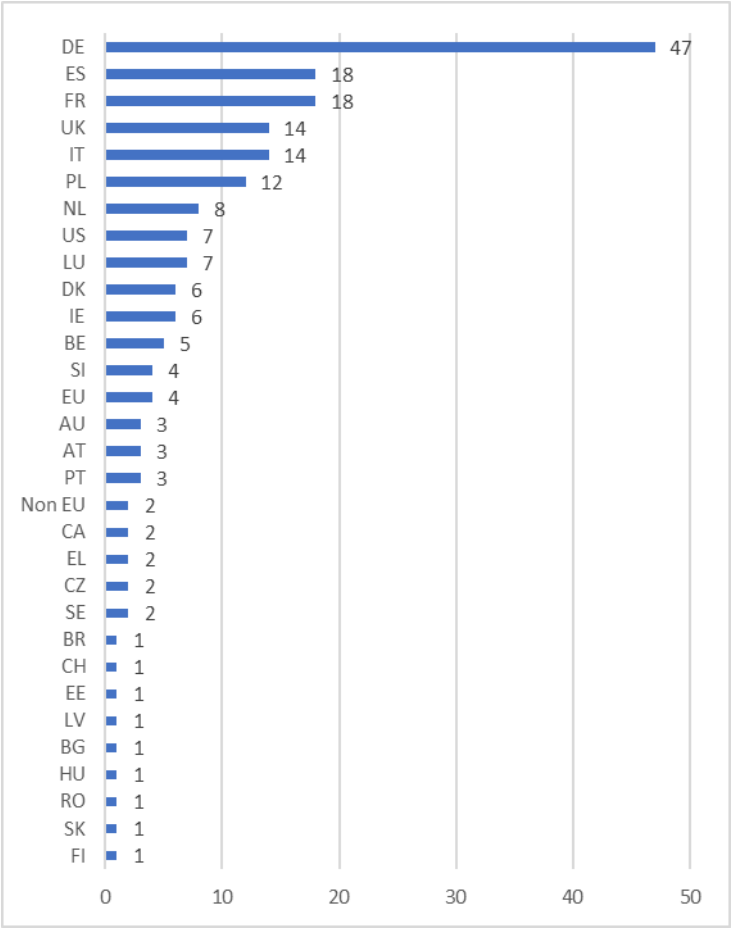
Germany is the first MS in terms of number of schemes (28% of EU schemes), followed by Spain, France (11% each), Italy (8%), and Poland (7%).

At EU Level, four international schemes have been identified:

- EU organic scheme,
- geographical indications (GIs) (protected designations of origin (PDOs) and protected geographical indications (PGIs)),
- traditional specialities guaranteed (TSGs),
- ESTA Certification System (developed by Euroseed organisation).

Other schemes have an international coverage, but the location of the standard setter has been considered (for instance GLOBAL G.A.P. in Germany). Among third countries (28 schemes identified), the UK is the first country by number of schemes identified with 14 schemes, followed by the USA with 7 schemes.

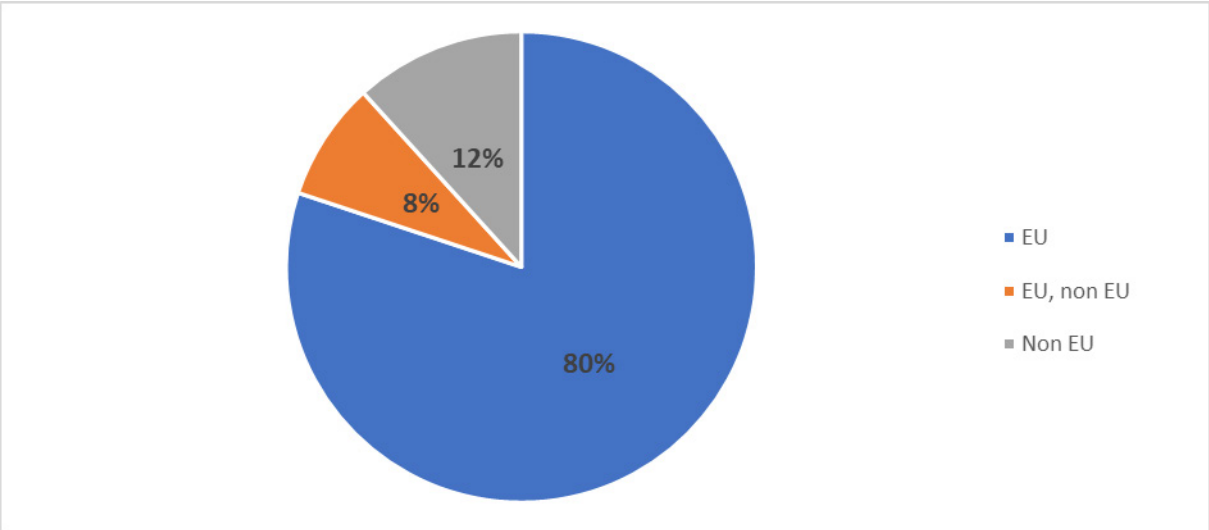
Figure 1: Number of schemes by country of the standard setter



Source: AND International

In terms of geographical scope, 88% of the schemes are used in the EU (from which 8% are used both in the EU and in third counties) and 12% of the schemes identified are not used in the EU.

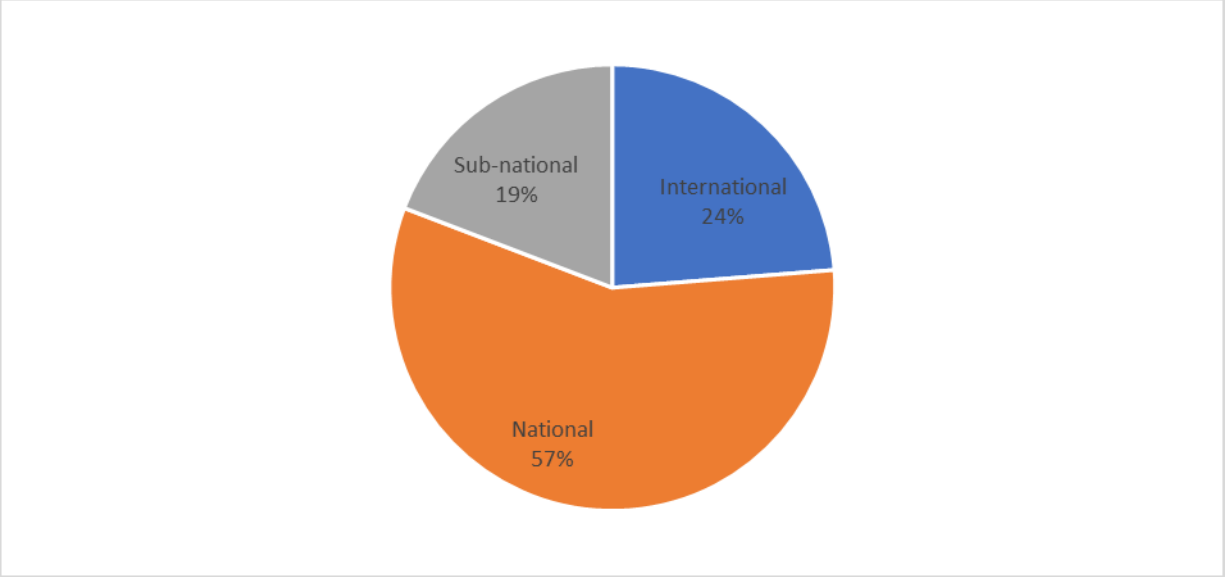
Figure 2: Breakdown of schemes depending on the geographical scope



Source: AND International

More than half of the schemes identified have a national scope (57%), a quarter of them are implemented at international level (EU or world levels for instance) and 19% of them are implemented at a sub-national scale (for instance at NUTS 2 level).

Figure 3: Breakdown of schemes depending on their scale of deployment



Source: AND International

2.3.2 Type of stakeholder

More than two-thirds of the schemes identified have been developed and are owned by private entities, either non-profit organisations, processing companies, farmers' co-operatives, professional bodies, inter-branch organisations or certification bodies.

In some cases, private schemes demonstrate a significant involvement of public authorities, through financial contribution to the scheme management body, or consultation for standards definition. In other cases, management of public-owned schemes is delegated to private entities.

Table 1: Breakdown of schemes depending on the type of standard setter

	Number of schemes
Private	69%
Public	31%
Total	**100%**

Source: AND International

2.3.3 Level of specialisation

Only 22% of schemes identified are specific to a single type of production (e.g., eggs, beef or pork meat, potatoes, wine etc.). Most of them relate to several productions.

Table 2: Breakdown of schemes depending on the number of productions involved

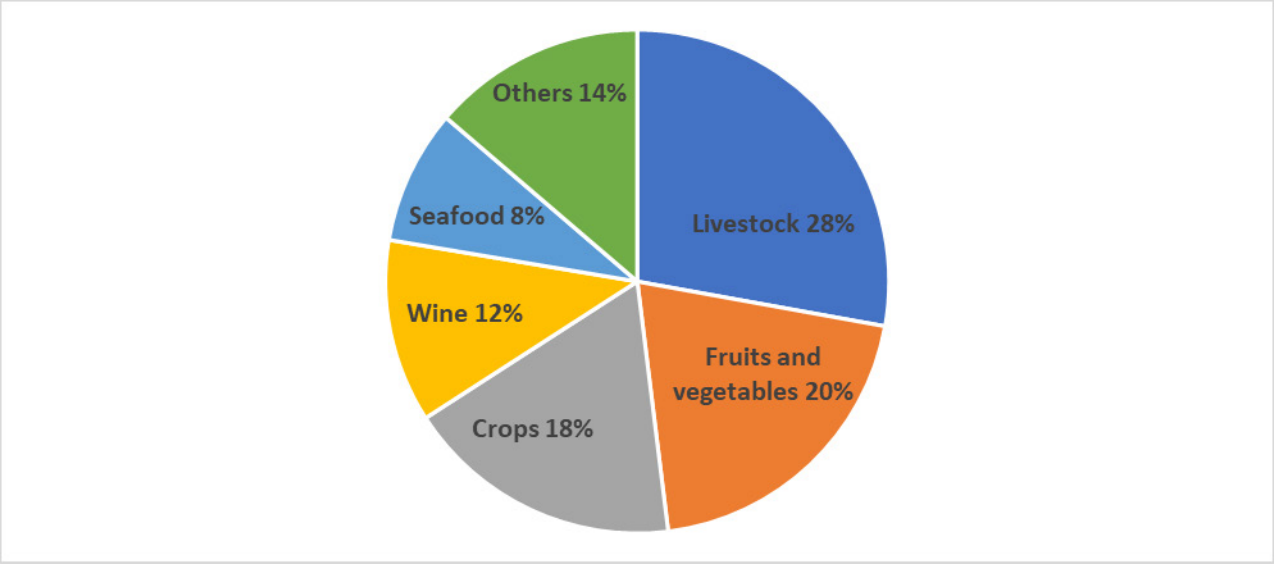
	Number of schemes
Mono production	22%
Multi production	78%
Total	**100%**

Source: AND International

2.3.4 Type of productions involved

The most represented sector of production in the database is livestock (28% of schemes). It is followed by fruits and vegetables (20%), crops (18%), wine (12%), seafood (8%) and other types of products (14%).

Figure 4: Breakdown of schemes depending on the type of productions involved

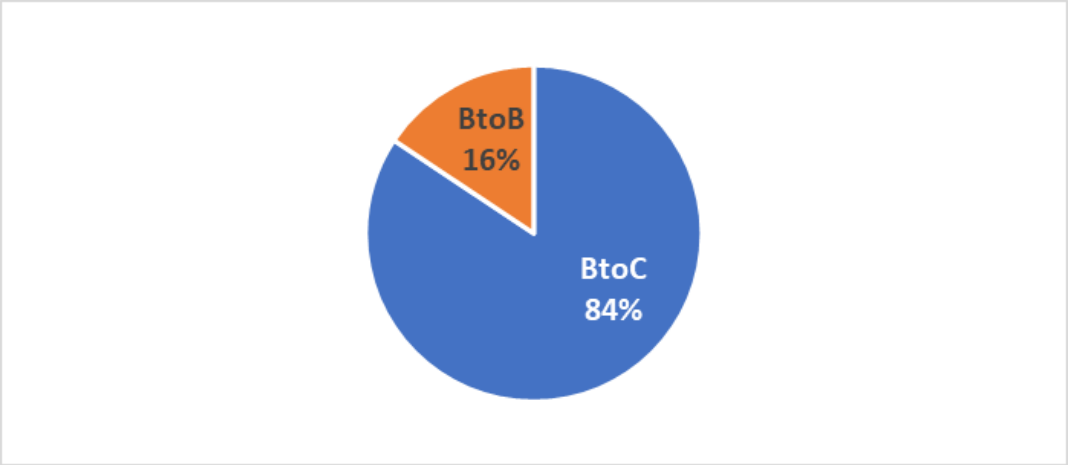


Source: AND International

2.3.5 Target of certification

A large majority of schemes target the consumers (BtoC), while only 16% of schemes are specifically designed for a Business-to-Business relationship (BtoB), without communication to the final consumer.

Figure 5: Breakdown of schemes depending on their target



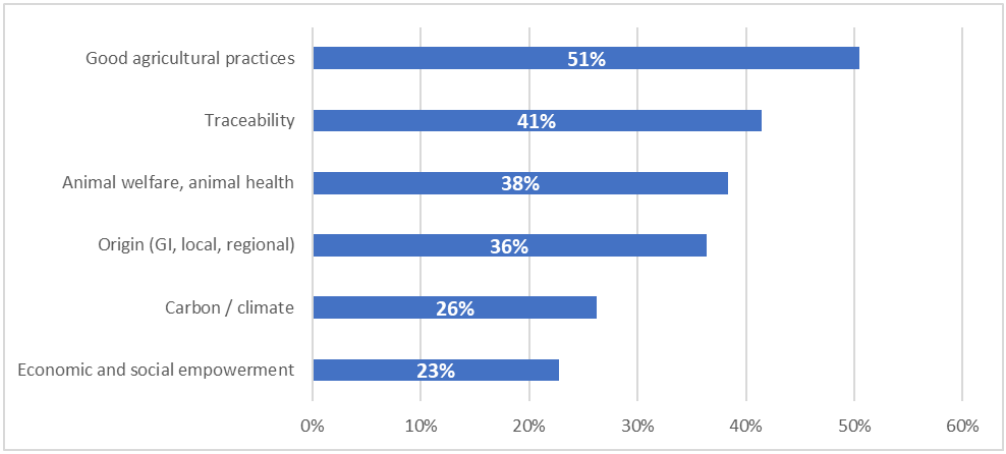
Source: AND International

2.3.6 Thematic objectives of the schemes

When looking at the focus of the schemes, a significant share aims to achieve more than one thematic objective. For instance, the claim for assurance on products' traceability (or food safety and quality management) is almost systematically combined with another commitment. Among the different thematic objectives:

- **Good agricultural practices**, which encompass a diversity of environmental issues (soil fertility, water and air quality, biodiversity conservation, etc.) are the most represented objectives, with nearly half of the schemes including related requirements (51%). This includes organic schemes.
- **Traceability along the supply chain** (with possible focus on food safety) is highlighted by 41% of the schemes.
- **Animal welfare and health** is a theme covered by 38% of the schemes, some of these schemes are specifically dedicated to this topic and in other cases it is one theme among others (for instance with good agricultural practices).
- **Origin of the product (or raw material) and/or the quality of the final product** is covered by 36% of the cases.
- The issues of **carbon/climate** and **economic/social empowerment** are covered by about one-quarter of the schemes each. Some of them specifically cover these topics.

Figure 6: % of scheme covering each theme (each scheme generally focuses on several themes, total > 100%)



Source: AND International

2.4 Proposed typology

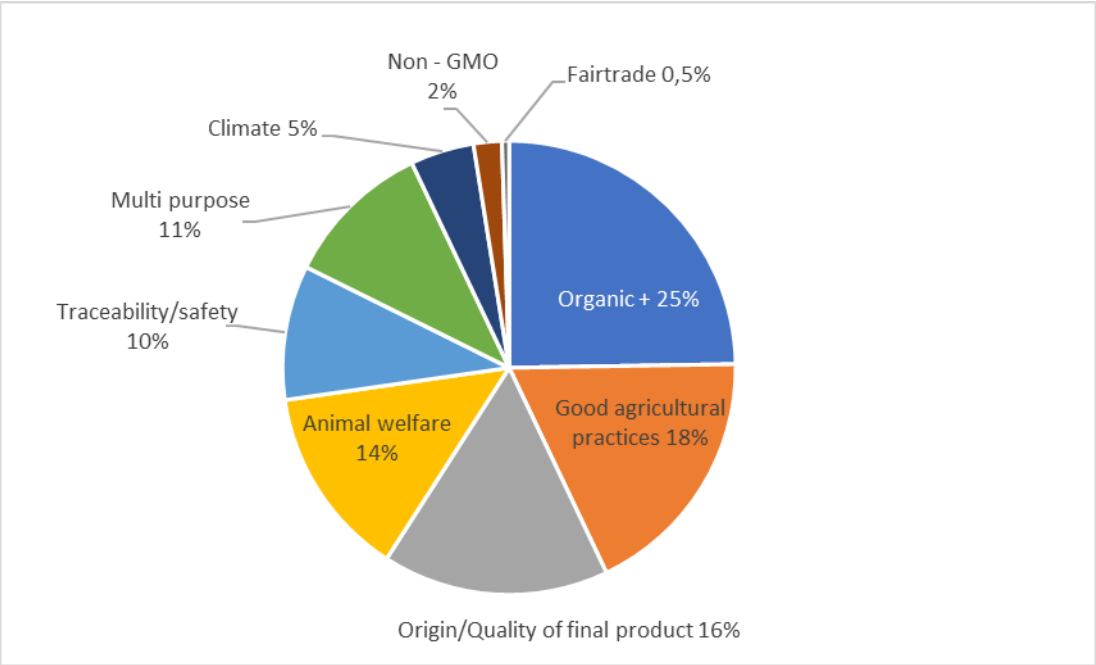
A typology of schemes has been elaborated, based on the main thematic areas covered by each scheme. This typology aims to facilitate the understanding of the large diversity of schemes identified. Each of the schemes has been classified in this typology. In terms of limits, we shall highlight that the boundary between these types may not be strict and the classification of some schemes in one type or another may be suggestive.

These different types are listed below:

- **Good agricultural practices:** schemes focusing on environmentally friendly methods of production,
- **Animal welfare and health:** focus on animal welfare and health,
- **Origin / quality of the final products:** schemes guaranteeing a specific origin and/or attributes on the final product,
- **Organic +:** based on organic standards, with some additional rules,
- **Climate:** specific focus on climate-related issues,
- **Multi-purpose:** focus on a combination of issues, for instance good agricultural practices and quality management,
- **Traceability / safety:** schemes committing to provide high transparency on the origin and quality management of products all along the supply chain,
- **Non-GMO:** main guarantee is the absence of GMO,
- **Fairtrade:** focus on social and ethical trade commitments.

The following figure indicates the percentage of scheme in each group.

Figure 7: Breakdown of schemes per category



Source: AND International

2.4.1 Good agricultural practices (GAP)

Description

The "Good agricultural practices" category entails certification schemes that promote diversity of environmentally friendly agricultural practices tackling issues such as soil fertility, water quality and quantity, air pollution, landscape, and biodiversity conservation. Such practices include for example: the reduction of phytosanitary products, waste management, cover crops. This category groups 18% of the certification schemes analysed in this study. The "GAP" schemes have mostly been defined at national level (56%) and to a lesser extent at sub national and international levels (17% and 28% respectively). Although mostly issued from private operators in specific production sectors (tomatoes, apples & pears, wines etc.), a significant share of these schemes has been developed in the last decade by national governments to offer an official framework for the promotion of integrated production principles. They focus on the farming stage. Considered as a complementary -and more accessible- alternative to organic agriculture, some of these public schemes are mentioned in the national strategic plans for the CAP 2023-2027 as an implementation tool: "Integrowana Produkcja" (Integrated Production) in Poland, "SQNPI: Sistema di Qualità Nazionale di Produzione Integrata per le Produzioni Agricole" (National Quality System of Integrated Production for Agricultural Productions) in Italy, "Haute Valeur Environnementale" (High Environmental Value) in France.

Economic importance

The economic weight of GAP schemes is highly variable depending on their geographical and sectoral scope. A number of schemes are developed at a local scale in association with regional brands and gather a few hundred participants: "Kontrolliert Integrierte Produktion" (Controlled Integrated Production) in Bavaria (around 600 farms), "Producción Integrada" (Integrated Production) in Andalusia (109 processors and 2,064 producers), "Programa de Sustentabilidade dos Vinhos do Alentejo (PSVA)" in Portugal (483 members, 10 834 ha covered and 76 million litres of PDO

and PGI wine). On the other hand, Certified Sustainable Palm Oil (CSPO) counts more than 4 000 members worldwide who are active at all stages of the palm oil supply chain. "Leaf" mark certified businesses produce 45% of the UK fruits and vegetables, and the system has reached an international scope, with 299 185 hectares of crop on LEAF Marque certified businesses worldwide. Interestingly, in France, the "Haute Valeur Environnementale" (High Environmental Value) certification established in 2011 is demonstrating rapid growth in recent years: in 2021, 19 216 farms were certified, which is double from the previous year.

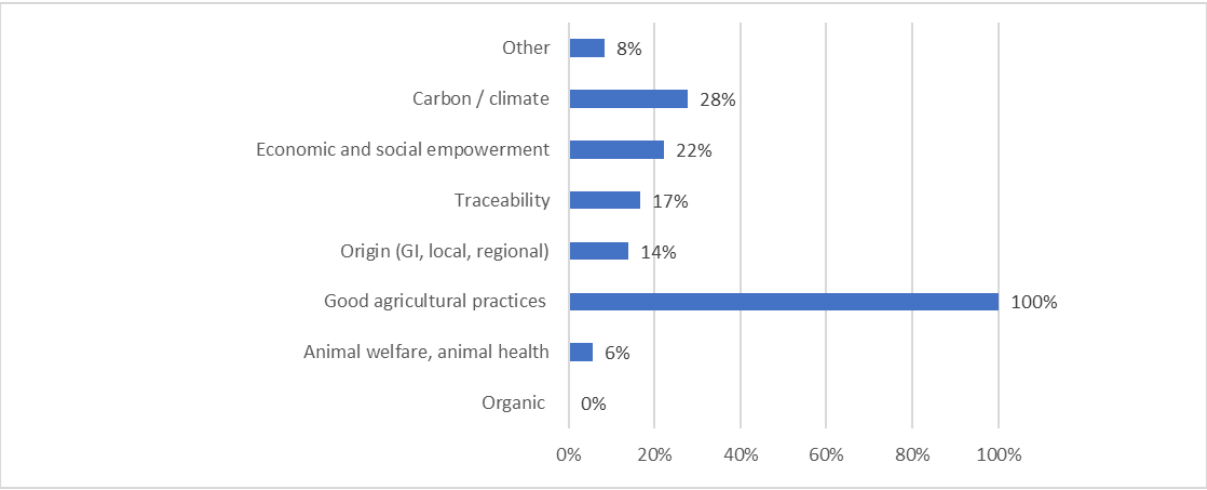
Table 3: Main features of the Good agricultural practices category

Name of the type		**Good agricultural practices**
Number of schemes		36
Geographical coverage	International (incl. EU)	28%
	National	56%
	Sub national	17%
Status of the standard setter	Private	64%
	Public	36%
Target of certification	BtoB	28%
	BtoC	72%

Source: AND-International

As shown in the figure below, more than one quarter of GAP schemes also addresses the objective of tackling climate change, through emissions reduction or carbon storage. A smaller proportion combines GAP with corporate social responsibilities, especially in the wine sector, with the aim of developing employment, ensuring fair revenues to the producers or boosting local economy. Other schemes, in German or Spanish provinces, link GAP requirements with traceability and assurance on the local origin of the product.

Figure 8: Thematic objectives addressed by "good agricultural practices" certification schemes



Source: AND International

2.4.2 Animal Welfare

Description

Animal welfare certification schemes address specific issues in the animal production supply chain. These regimes define standards, requirements and tools regarding part or all of the chain, i.e., birth, breeding, transport and/or killing of animals.

Based on our research, we identified 28 certification schemes addressing animal welfare issues. Most of the schemes have been set up at national levels and defined by private standard setters. The schemes mostly target consumers with dedicated labels placed on the products. Among the CS, 9 schemes are dedicated to one type of animal production. The schemes analysed are mainly European; Germany itself has 8 different animal welfare certification schemes.

Economic importance

The economic importance of animal welfare certification schemes is highly variable between countries where the schemes are implemented depending on existing alternative animal productions that comply with the standards. In some MS, animal welfare schemes are widely implemented. For instance, more than 90% of eggs produced in the Netherlands comply with the IKB EI certification scheme. In Germany, 80% of the poultry and turkey and 34% of pigs are produced according to the Initiative Tierwohl labelling scheme. In France, the recent EBEA scheme (Etiquette Bien-être animal) set up in 2021 has been implemented by the free-range poultry sector and covers already 10% of the national poultry production.

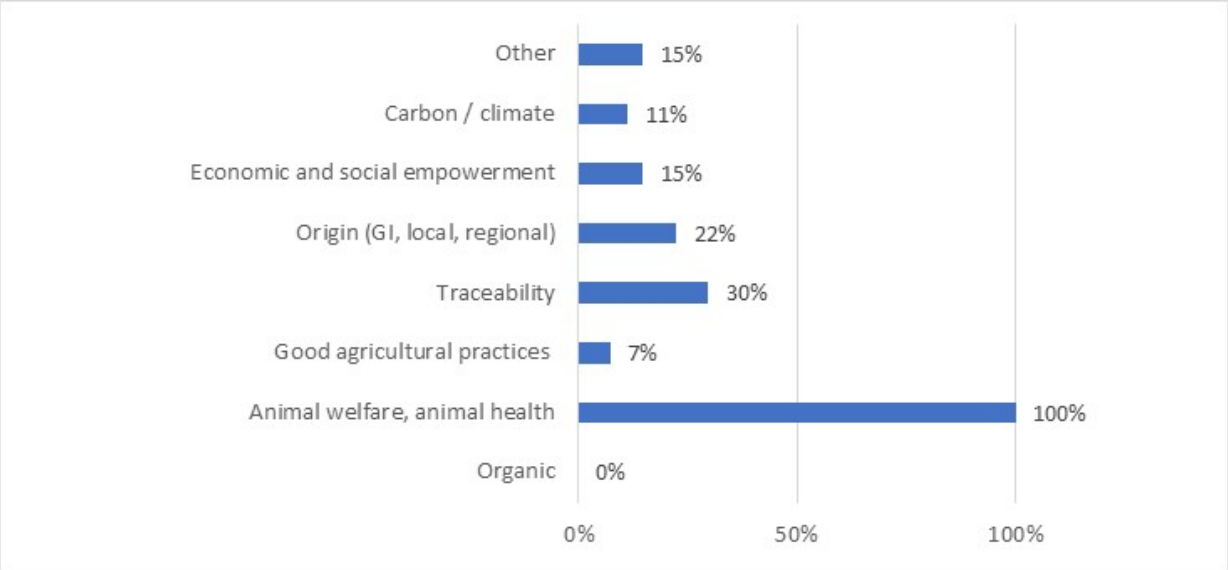
Table 4 : Main features of the animal welfare category

Name of the type		**Animal welfare**
Number of schemes		28
Geographical coverage	International (incl. EU)	11%
	National	74%
	Sub national	15%
Status of the standard setter	Private	93%
	Public	7%
Target of certification	BtoB	4%
	BtoC	96%

Source: AND International

These schemes appear to be mainly focused on animal welfare issues and only a small proportion of them addresses other thematic objectives such as traceability and origin of the animal products.

Figure 9: Other thematic objectives addressed by "animal welfare" certification schemes



Source: AND International

2.4.3 Origin and quality of the final product

Description

This group is composed of BtoC schemes which highlight the specific origin and/or attributes of the products to the final consumer. The group covers schemes:

- Which guarantee a **link to a specific origin:**
    - geographical indications (GIs, PDOs and PGIs), explicitly link the origin to **specific attributes of the final product**, with over 3,000 names registered at EU level,
    - two schemes are related to specific valuable areas: **Natural Parks** in Spain ("Marca Parque Natural" de Andalucía) and **"Valeurs Parc Naturel Régional"** in France.
    - several schemes provide guarantees on the origin (and promote this origin) but this is **not necessarily linked to specific attributes** of the final product. To some extent, these schemes are comparable to schemes in the group "**traceability, safety and quality management**", the difference being that the traceability is related to a specific origin. Examples of such schemes include: "Produits agricoles de France" which covers 13 sub-schemes (meat, eggs, fruit and vegetables, potatoes and flower), "Produckt Polski" in Poland, "CC Calidad controlada" in Spain which covers 15 agri-food products from Cantabria in Spain or "Laid in Britain" (eggs from the UK).
- Which guarantee **specific attributes of the final products**, due to specific methods of production, but not necessarily linked to a specific origin. They include for instance the Polish scheme "Quality Meat Program" (QMP), the French "Label Rouge" and the EU scheme "traditional speciality guaranteed" (TSG).

Most of the schemes are sub-national (18 schemes, 60% of them), and among these sub-national schemes, all are from Germany, Italy and Spain which are MS where the regional level has a great importance at the economic and political levels. About one-third (30%) of the schemes are implemented at national level: five in Poland, three in France and one in the UK. The last three schemes (representing 10% of the total) are implemented at EU level: GIs, TSGs and the Polish scheme "Poznaj Dobrą Żywność" which is open to all EU producers and guarantees "high quality products".

Economic importance

The economic importance of these schemes varies a lot. GIs account for EUR 75 billion at EU level and the largest ones gather thousands of farmers and processors. However, the sales value of half of the EU GIs is low (below EUR 1 million)[7]. "Produits Agricoles de France" is the largest one with a significant share of the French production in the meat sector (covering for instance 99% of the pig production). Several schemes gather a few thousands or hundreds of farms / companies (e.g., 500 users in Qualitätszeichen Baden-Württemberg (DE) and 270 companies involved in "Sapore di Campania" in Italy) while some of them remain quite small (for instance "Von Hier"(DE) with 25 producers involved).

[7] AND-I study for DG AGRI (2020) - https://ec.europa.eu/commission/presscorner/detail/en/IP_20_683

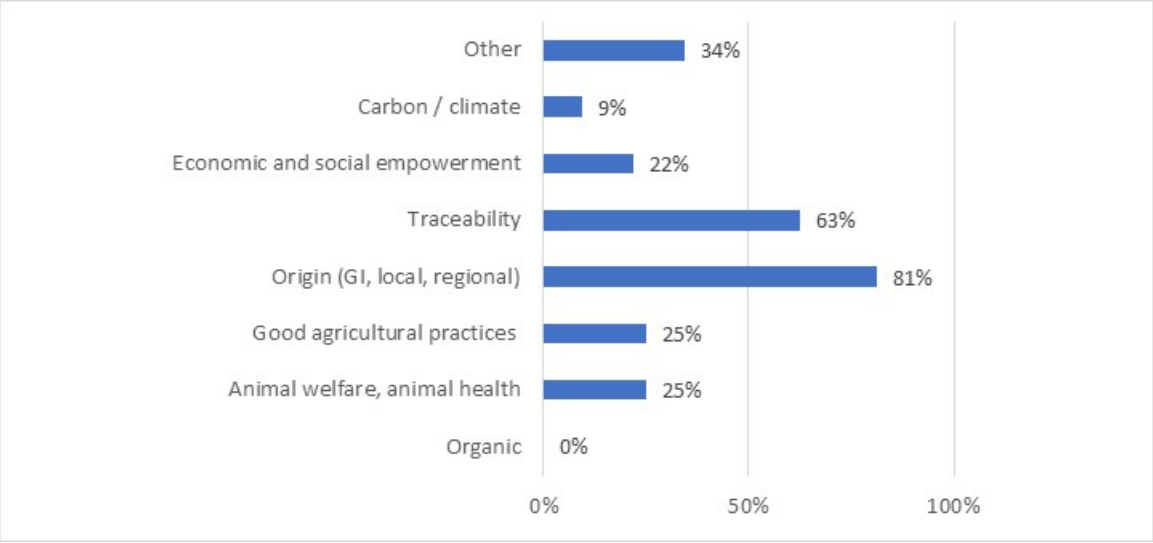
Table 5 : Main features of the "Origin / quality of final product" category

Name of the type		**Origin / quality of final product**
Number of schemes		32
Geographical coverage	International (incl. EU)	9%
	National	34%
	Sub national	57%
Status of the standard setter	Private	34%
	Public	66%
Target of certification	BtoB	0%
	BtoC	100%

Source: AND-International

The main focus of the schemes is related to a specific geographical origin (for 81% for them). Most of them also provide guarantees on traceability (in relation with the specified origin). There are other different focus areas (which are not systematic): good agricultural practices, economic and social, and animal welfare and health.

Figure 10: Other thematic objectives addressed by "Origin and quality of final products" certification schemes



Source: AND-International

2.4.4 Organic +

Description

"Organic +" certification schemes are voluntary schemes which are based on organic standards defined at national, EU or international level but where extra requirements have been added. This category groups a quarter of the certification schemes identified in this study.

The "Organic +" schemes have mostly been defined at national levels (69%) and to a lesser extent at international levels (18% international and EU). In addition, sub national organic certification

schemes have been identified (12%), aiming at promoting regional or local organic farming products.

"Organic +" certification schemes are mainly private initiatives, owned and designed by associations that have defined their own standard that goes beyond the European or national regulation in place. "Organic +" schemes are almost exclusively designed for the purpose of being sold by companies to consumers with dedicated labels placed on the products. Almost all are BtoC, only one scheme is considered as BtoB, this is the IFOAM programme on organic certifications[8].

The additional requirements vary between schemes and can entail a wide scope of provisions regarding farming, processing and the general system:

- Inspection and transparency: prohibition of partial conversion, additional checks,
- Origin: localisation of the farm, origin of the fodder and the feed, origin of the produce and ingredients used for processing,
- Social and economic empowerment: specific rules to protect workers and farmers and to balance the value share throughout the supply chain,
    - Environmental issues to tackle water management; GHG emissions, soil protection, water quality,
    - Quality of the products: prohibition of certain additives and/or processes.

Economic importance

The area grown organically in the European Union increased by 6.3% in 2019, approaching 14.7 million hectares. Surfaces managed under organic farming methods represented about 8.1% of the EU utilised agricultural area (UUA) in 2019 and 343 605 farms (an increase of 5.4% as compared to 2018). EU organic consumption has quadrupled between 2004 and 2019 and was estimated at nearly EUR 45.2 billion for 2019 (+10.3% as compared to 2018). Provisional estimates elaborated by Agence Bio forecast that the EU market will reach EUR 50 billion in 2020 which account for 3,5% of the European food consumption.

« Organic + » certification schemes are widely implemented. In some EU member states, "Organic +" schemes can represent a large share of the organic farms in place, such as Bio Austria which accounts for 23% of the organic farms; KRAV which covers most of the Swedish farms or OKO Estonian scheme which represents 18% of the organic area The German "organic +" schemes are also widely implemented: Naturland cover 100,000 farmers (and 560,000 ha worldwide) while Bioland standards is followed by 8 500 farmers in Germany representing half of the national organic area.

[8] https://www.ifoam.bio/our-work/how/standards-certification

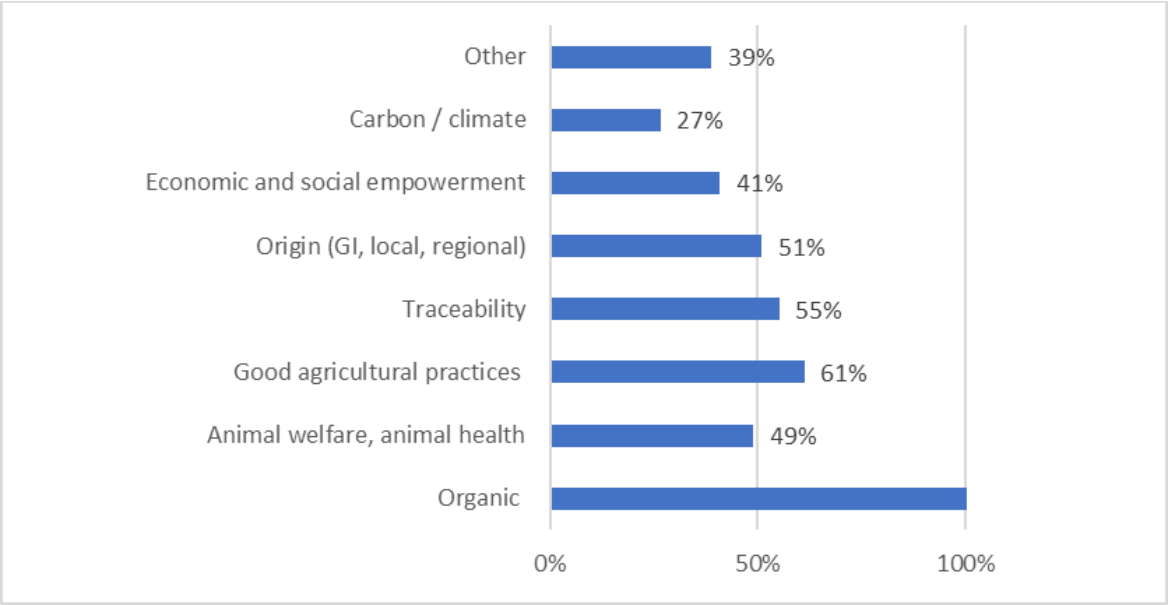
Table 6 : Main features of the Organic + category

Name of the type		**Organic +**
Number of schemes		49
Geographical coverage	International (incl. EU)	18%
	National	69%
	Sub national	12%
Status of the standard setter	Private	71%
	Public	29%
Target of certification	BtoB	2%
	BtoC	98%

Source: AND International

The figure below represents the objectives addressed by "Organic +" certification schemes[9]. These objectives either include specific requirements and standards or entail general commitments. Almost half of the "Organic +" schemes analysed combine objectives of good agricultural practices (61%) and about half of the schemes include objectives in terms of traceability (55%) and animal welfare (49%). Economic and social empowerment as well as origin of the organic products are tackled by more than one third of the schemes (41%). Specific requirement regarding climate (27%) are addressed by a smaller share.

Figure 11: Thematic objectives addressed by "organic +" certification schemes



Note: only the objectives which go further than EU organic scheme are ticked.

Source: AND International

[9] Only the objectives which go further than EU organic scheme are ticked. 100% of organic scheme cover traceability and good agricultural practices, this is identified only of the requirements are higher than the EU ones on these themes.

2.4.5 Climate

Description

Climate certification schemes primarily address climate change related issues, promoting measures for GES emissions reduction or enhanced carbon storage.

Based on our research, we identified 9 Climate schemes, namely: the Australian Carbon Farming Initiative under the Emissions Reduction Fund, REDcert certifications, the SURE system, the Label Bas-Carbone, International Wineries for Climate Action, Peatland Code, the Carbon Footprint labels, the Dairy Sustainable Framework and ISCC - International Sustainability and Carbon Certification. Most of the schemes have a national or international scope, and a smaller proportion is implemented at EU scale. More than half of them are not specific to the agricultural or agri-food sector and intend to offer a reliable framework for market monetization of carbon assets. For instance, REDcert and SURE system certifications aim to demonstrate compliance of biomass, biofuels and bioliquids with the requirements of RED II Renewable energy directive. National schemes, such as the Label Bas-Carbone (France) and Peatland Code (UK) offer independent standards to assess, certify and market the climate benefits of land restoration or GES emissions reduction projects.

A great majority of Climate schemes have a business-to-business target and focus their requirements on production and processing stages. Other carbon footprint labels such as those developed by the Carbon Trust or ISCC encompass the whole lifecycle of products, including all steps from cradle-to-grave: from the extraction of raw materials through to the product's manufacture, distribution, use and eventual disposal. They directly target consumers.

Economic importance

The economic importance of Climate certification schemes varies greatly between the countries where the schemes are implemented depending on the creation date and sectoral scope of the schemes. For instance, REDcert certification, established in 2010 in Germany, now involves more than 1,300 system participants in 25 countries, making it one of the leading global certification systems. At a national scale, the Australian Emissions Reduction Fund, considered as a pioneer system for incentivising businesses to cut greenhouse gases emissions and undertake activities that store carbon, has implemented 1,000 projects since its creation in 2015 (the proportion of farming projects is unknown). On the other hand, the very recent French Label Bas-Carbone (2018) has only 150 projects currently registered in its database.

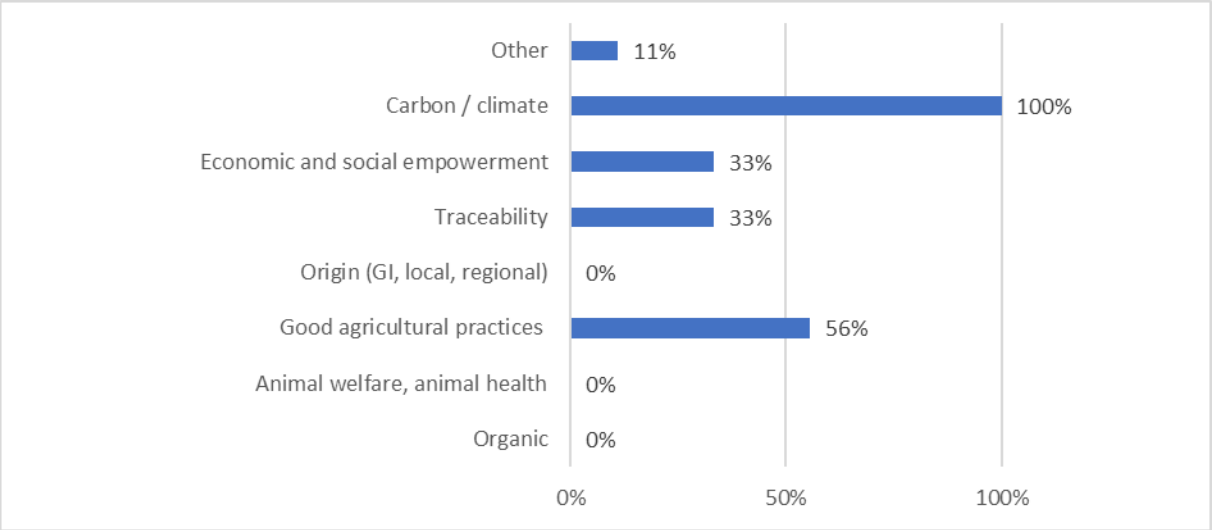
Table 7 : Main features of the carbon / climate category

Name of the type		**Climate**
Number of schemes		9
Geographical coverage	International (incl. EU)	66%
	National	33%
	Sub national	0%
Status of the standard setter	Private	78%
	Public	22%
Target of certification	BtoB	78%
	BtoC	22%

Source: AND International

More than half of the schemes in this group also cover good agricultural practices, one-third also cover economic and social empowerment, as well as traceability.

Figure 12: Other thematic objectives addressed by "Climate" certification schemes



Source: AND International

2.4.6 Multi-purpose

Description

Multi-purpose schemes are characterized by the diversity of the outcomes targeted. As highlighted in the figure below, they cover a broad range of equally important commitments along the supply chain, the processing or farming practices, or the properties of the final product. Sustainability is pursued through a combination of requirements related to animal welfare, good environmental practices, social responsibility within businesses, guarantee of origin of raw materials.

We identified 21 multi-purpose certification schemes. Most of the schemes have been set up at national level, and to a lesser extent at international scale. The schemes have mostly been designed by private operators and target consumers with dedicated labels placed on the products. Among the 21 schemes, about one-quarter is dedicated to only one type of production, mainly in the livestock sector.

Economic importance

The economic importance of multi-purpose certification schemes varies greatly between countries where the schemes are implemented depending on the type of operator who has set up the standard (individual major retailer, professional consortium, farmers' cooperative, public authority…). For instance, Global Gap certification is a leading scheme involving over 200.000 producers in 134 countries. Global Gap encompasses a range of standards "for safe, socially and environmentally responsible farming practices", that can be enhanced with "Add-ons" targeting more specific aspects (animal welfare, integrated production, workers conditions etc.). Most of the schemes cover all stages of the supply chain including requirements or commitments at the production and distribution/retailing levels.

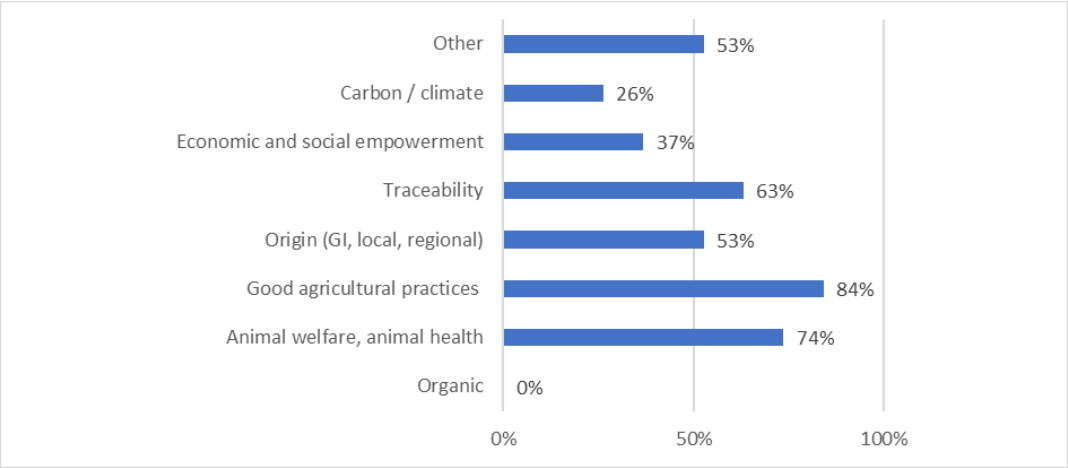
Table 8 : Main features of the multi-purpose category

Name of the type		**Multi-purpose**
Number of schemes		21
Geographical coverage	International (incl. EU)	39%
	National	57%
	Sub national	5%
Status of the standard setter	Private	76%
	Public	24%
Target of certification	BtoB	24%
	BtoC	76%

Source: AND International

These multi-purpose schemes cover a wide range of objectives: they target mainly the good agricultural practices and animal welfare and health, but also cover traceability, origin, social and economic empowerment and carbon / climate issues.

Figure 13: Other thematic objectives addressed by "multi-purpose" certification schemes



Source: AND International

2.4.7 Traceability and safety

Description

Based on our research, we identified 19 schemes focusing their commitment on traceability and safety of the product. Most of these schemes are implemented at a national (63%) level and have been set up by private operators. Under this category, several schemes targeting seeds and crops (Certified Seed potatoes in Belgium, SeedGuard in Germany, Scottish Quality Crops certification and Trade Assurance Scheme for Combinable Crops in the UK, ESTA certification in the EU) are strictly intended to guarantee compliance of certified products with EU or national legislation with regard to management of plant protection products, plant health and food safety.

Economic importance

Some of the "traceability and safety" schemes rank among the most widespread systems, acting in some food sectors as a prerequisite to access national or international markets and supply major retailers. The "Qualität und Sicherheit" (QS) cross-sectoral scheme[10] in Germany involves more than 170,000 participants, certifying 95% of all fresh pork and poultry, 85% of beef and 90% of fruit, vegetables and potatoes produced in Germany. Regarding sectoral schemes, the QMilch label involves 90% of German dairy farms and the British Lion scheme certifies over 90% of UK eggs. At an international scale, IFS standard now mobilises 105 certification bodies and is present in 90 countries.

Table 9 : Main features of the "Traceability and safety" category

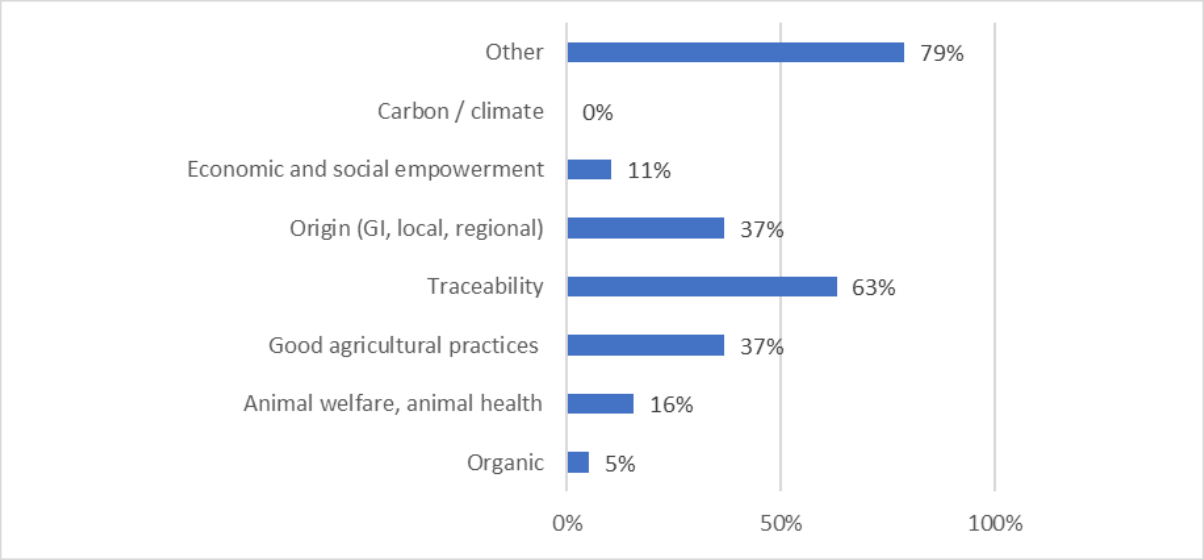
Name of the type		**Traceability and safety**
Number of schemes		19
Geographical coverage	International (incl. EU)	20%
	National	65%
	Sub national	15%
Status of the standard setter	Private	79%
	Public	21%
Target of certification	BtoB	37%
	BtoC	63%

Source: AND International

As shown in the figure below, more than one third of "traceability and safety" schemes also intends to specify the origin of the raw and/or processed final product. A similar share includes commitments regarding environmentally friendly practices (including management of plant protection products, water quality, fertilization…) even if the schemes remain primarily focused on transparency and traceability of products along the supply chain. Examples of such combination are found in QS standards and crops certification schemes (SeedGuard, ESTA, Scottish Quality Crops).

[10] https://www.q-s.de/en/

Figure 14: Other thematic objectives addressed by "traceability, safety and quality management" certification schemes



Source: AND International

2.4.8 Non-GMO

Description

A handful of certification schemes are dedicated to guarantee the absence of GMO ingredients and/or agricultural produce into the labelled products. These schemes are all designed to inform consumers of the absence of GMO in the agri-food products. The implementation of non-GMO schemes requires a dedicated traceability management system, the control of the different stages of the supply chain and product labelling. The geographical coverage of these schemes is international, and they are supported by private and public organisations. It must be pointed out that other certification schemes address the absence of GMO including the whole Organic + category and some local/regional schemes.

Economic importance

The economic importance varies between the schemes. VLOG Certification is one of the most important and covers 14 500 products representing a consumer expenditure at retail stage of EUR 12,6 billion in 2020. Meat and dairy products are the leading VLOG certified products with almost 10 000 products certified. In 2020, the VLOG certification covered 72% of the milk produced in Germany.

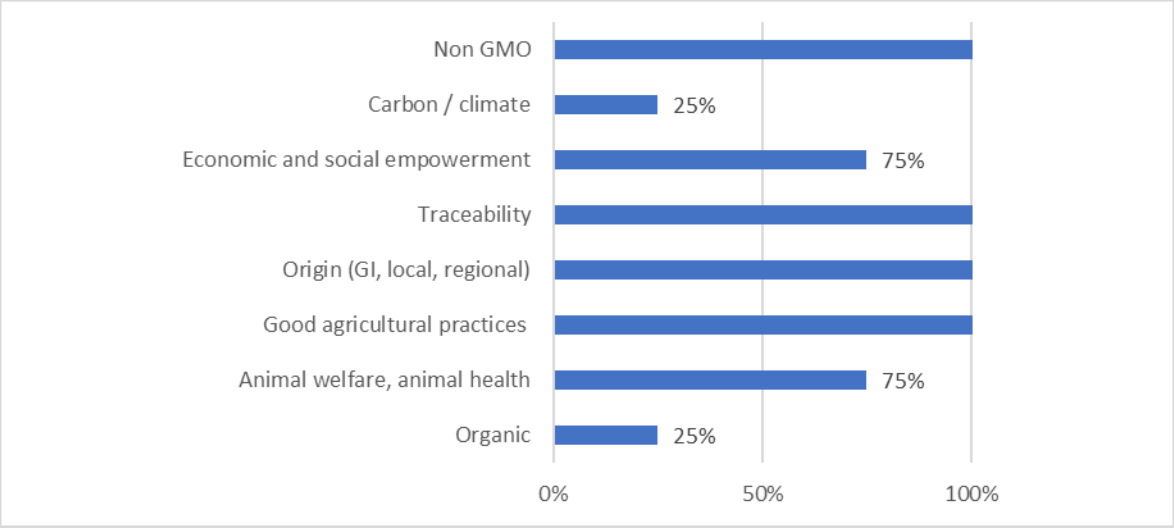
Table 10 : Main features of non-GMO category

Name of the type		**Non - GMO**
Number of schemes		4
Geographical coverage	International (incl. EU)	75%
	National	25%
	Sub national	0%
Status of the standard setter	Private	75%
	Public	25%
Target of certification	BtoB	0%
	BtoC	100%

Source: AND International

The figure below represents the other objectives addressed by "non-GMO certification schemes". All non-GMO schemes combine objectives of traceability. One of them includes additional goals such as climate, economic and social empowerment and good agricultural practices.

Figure 15: Other thematic objectives addressed by "Non-GMO" certification schemes



Source: AND International

2.4.9 Fairtrade

Description

This last group is composed of one scheme: Fairtrade, a well-known international BtoC scheme. The standard setter is located in Germany.

The objective of the scheme is to support farmers and workers, improve their living conditions and be conducive to community building. The key specific objectives of the standards are to:

- ensure that producers receive prices that cover their average costs of sustainable production,

- provide an additional Fairtrade Premium which can be invested in projects that enhance social, economic and environmental development,
- enable pre-financing for producers,
- facilitate long-term trading partnerships,

There is a guarantee of traceability of the product. However, the standard does not include the agricultural methods of production.

Economic importance

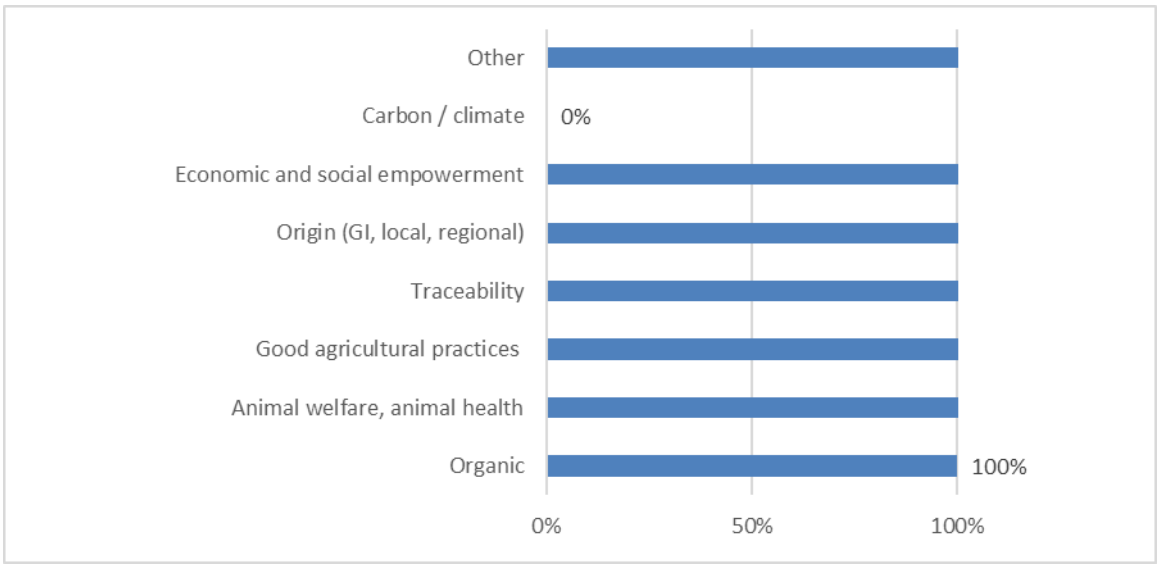
1 880 producer organisations were involved in 2020, and included 1,9 million producers around the world.

Table 11 : Main features of the category "Fairtrade"

Name of the type		**Other**
Number of schemes		1
Geographical coverage	International	100%
	EU	0%
	National	0%
	Sub national	0%
Status of the standard setter	Private	0%
	Public	100%
Target of certification	BtoB	0%
	BtoC	100%

Source: AND International

Figure 16: Other thematic objectives addressed by "Fairtrade" certification schemes



Source: AND International

3. IN DEPTH ANALYSIS OF THE MAIN EXISTING SCHEMES

KEY FINDINGS

- A total of 15 schemes have been selected on the basis of the typology proposed (see previous section), a balanced geographical coverage, the economic importance of the schemes and the inclusion of schemes in the CAP strategic plan.
- The 15 schemes selected are Haute Valeur Environnementale (HVE), Integrowana Produkcja, IP Sigill, Leaf, Sistema di Qualità Nazionale di Produzione Integrata per le Produzioni Agricole (SQNPI), Beter Leven, Initiative Tierwohl, EU geographical indications (GIs): PDOs and PGIs, Naturland, Label Bas-Carbone, Wineries for Climate Protection (WfCP), Bord Bia Quality Mark, Certified Sustainable Beef Framework (CSBF), Equalitas and Global G.A.P. Integrated Farm Assurance (IFA).
- A general overview of each of these schemes includes the implementation context, the focal points of the certification process and the related economic importance.
- For each of these schemes, the contribution to EU sustainability objectives has been analysed (CAP post-2020 specific objectives, Farm to Fork Strategy and the Biodiversity Strategy) and the specific contribution to the following objectives has been assessed: farmers' position in the value chain, climate change, sustainable management of resources, protection of biodiversity, habitats and landscape, ecosystem services, health and animal welfare.
- The limit of such an approach shall be highlighted: the analysis covers a sample of 15 CS (among 198 CS identified) and the assessment of the contribution to EU objective is qualitative and may be subject, in some cases, to different interpretations.
- Among the 15 schemes analysed:
    - Some of the schemes have a broad scope of commitments, likely to provide a direct or high contribution to nearly all EU sustainability objectives: IP Sigill, Leaf (option included), Naturland and Equalitas;
    - Other schemes have been tailored to address one to three EU objectives (mainly management of resources, protection of the environment, health and animal welfare, and less frequently climate change);
    - A few schemes specifically focus on one objective: animal welfare (Beter Leven and Initiative Tierwohl) or climate (Label Bas-Carbone).

3.1 Objectives

The purpose of this section is to assess the link between key certification schemes and the sustainable objectives of the CAP strategy, the Farm to Fork strategy and the Biodiversity strategy.

3.2 Selection of 15 certification schemes

The present section proposes a selection of 15 schemes based on a mapping and a typology. The selection criteria used were based on:

- **The typology** and the **coverage of the agricultural stage of the value chain:** this resulted in the selection of the most relevant schemes in the following categories: "good agricultural practices", "climate", "organic+", "animal welfare", "multi-purpose", "origin / quality of the final product" (other categories appeared to be less relevant for the purpose of the study, namely "traceability / safety" and "non-GMO").
- A balance on the **geographical coverage**:
    - we propose 13 schemes from the EU and two from third countries (the UK and Canada)
    - among the EU schemes:
        - some are national and the Member States (MS) covered (i.e., where the standard setter is located) are France, Germany, Ireland, Italy, the Netherlands, Spain, Sweden, Poland.
        - several ones have an international scope, such as GLOBAL G.A.P. (standard setter in DE) and GIs (EU scheme) and therefore cover all MS.
- The **economic importance** and an **assessment of the availability of data**.
- The inclusion in the **CAP Strategic Plan**: four schemes among the 15 shall be supported through National Strategic Plans (in France, Spain, Ireland and Poland).

The table below provides the list of selected schemes. Details on each of these schemes are provided in annex 5.

Table 12: Proposed list of schemes

	Web link	Typology	Country of the standard setter	Public / Private	BtoB / BtoC	Sectors covered Economic importance	Rationale
Haute Valeur Environnementale (HVE)	Link	Good agricultural practices	FR	Public	BtoC	About 19.000 farms involved. Many agricultural sectors plan to develop	Supported by the **French Strategic Plan** Rapid growth in the number of participants in the recent years 4 key areas covered: biodiversity conservation, plant protection strategy, management of fertiliser use and management of water.
Integrowana Produkcja	Link		PL	Public	BtoC	Covers fruit, vegetables and crops No data available on the number of producers involved	Certification of integrated production. The scheme is supported by the **Polish Strategic Plan**
IP Sigill-certifierad and Svenskt Sigill-märke	Link		SE	Private	BtoC	About 4.000 companies in Sweden, Norway, Denmark and Finland are certified. Several sectors have been developed: crops, livestock, flowers, honey, fish	There are three levels of certification, it covers environment, animal welfare and food safety with an additional module regarding climate. The company may also be certified on social aspects.
Leaf marque	Link		UK	Private	BtoC	45% of UK fruits and vegetables grown by LEAF	Scheme on sustainable production with high number of stakeholders involved.
Sistema di Qualità Nazionale di Produzione Integrata per le Produzioni Agricole (SQNPI)	Link		IT	Public	BtoC	About 1.460 certified farms	Integrated farming, national and regional specifications. The scheme is supported by the Italian Strategic Plan
Beter Leven	Link	Animal welfare	NL	Private	BtoC	About 2.000 farms and 600 processors involved. About 90% of market share in the pig	Widely used scheme in NL with progressive scoring: from one to three stars depending on the level of animal welfare

						sector and 80% for eggs (retail stage)	
Initiative Tierwohl "Haltungsform labelling scheme"	Link		DE	Private	BtoC	10.200 farms involved. 80% of chickens and turkeys and 34% of pigs produced in DE	High economic importance. Score from 1 to 4.
EU geographical indications (GIs): PDO/PGI	Link	Origin/Quality of final product	EU	Public	BtoC	More than 3.000 GIs registered with total sales value at EUR 75 billion at EU level	High diversity of specifications (one specification for each name registered). Some of them may cover environment sustainability.
Naturland	Link	Organic +	DE	Private	BtoC	More than 100.000 farmers (560 000 ha)	Scheme based on the EU organic regulation and providing additional requirements. Wide use in Germany.
Label Bas-Carbone	Link	Climate	FR	Public	BtoB	152 projects implemented	Recent scheme developed by the French government for dairy and beef production. Scheme based on the carbon market.
Wineries for Climate Protection (WfCP)	Link		ES	Private	BtoC	14 wineries certified in Spain.	Supported by the **Spanish Strategic Plan**. Focus on reduction of GHG, water management, waste reduction, energy efficiency and renewable energy.
Bord Bia Quality Mark Beef and lamb scheme + Grass fed beef standard	Link	Multi-purpose	IE	Public	BtoC	It covers livestock, dairy products, eggs and horticulture products (8 schemes). 56.000 farmers and 150 processors involved. Main scheme is on beef and lamb.	Supported by the **Irish Strategic Plan**. Widely used in Ireland with specifications on sustainability and guarantee of the national origin.
Certified Sustainable Beef Framework	Link		CA	Private	BtoC	Large-scale companies use this scheme in Canada. 1 300 farms involved, 1,6 cattle	Covers different aspects of the sustainability: environment, economic and social
Equalitas	Link		IT	Private	BtoC	Covers the wine sector	The scheme covers three industry levels: the producer (Organisation standard), the finished product (Product standard) and the Terroir

						The scheme is used in several Italian regions as well as one winery in Spain.	(Terroir standard). It covers environment, quality management and social aspects
Global G.A.P.	Link		DE	Private	BtoB	Covers fruit and vegetables, livestock, crops and aquaculture. 117.000 farms certified at EU level, 200.000 at world level.	Scheme widely used at EU and world level Strong focus on agricultural practices and traceability. Wide use of the scheme and demand from large-scale retailers.

3.3 Identify the sustainability objectives of the different EU strategies and the contribution of the 15 schemes

Three sets of EU policies have been included in the analysis:

- **CAP (post 2020) specific objectives:** while nine specific objectives have been defined for the post 2020 CAP, the focus will be on the objectives related to sustainability (climate change and environment, biodiversity, resource-efficiency, health and food quality, animal welfare, rebalancing power in the food chain)[11];
- **Farm to Fork Strategy**, which forms part of the EU Green Deal strategy for agriculture, aquaculture and food sectors[12];
- **EU Biodiversity strategy for 2030**[13], which is also a component of the Green Deal for which key commitments and objectives have been defined for 2030.

We suggest summarising the different objectives from these three strategies in a set of common, overarching objectives. The following table provides an overview of the contribution of each policy and strategy to each of these objectives.

Table 13: Main objectives themes of the different EU policies and strategies

		CAP (post 2020)	Fam to Fork Strategy	Biodiversity strategy
Improve the farmers' position in the value chain		x	x	x
Climate change	Climate change mitigation	x	x	x
	Climate change adaptation	x		
	Production of sustainable energy	x	x	
Sustainable management of resources		x	x	x
Protection of biodiversity, habitats and landscape, ecosystem services (incl. limitation of pesticides and fertilizers)		x	x	x
Health and animal welfare	Animal welfare	x	x	x
	Antimicrobial resistance	x	x	x
	Plant health		x	
	Human health	x	x	x

A more detailed analysis is proposed in the matrix in annex 6, which details each specific objective of each strategy. This matrix has been used for the analysis of the potential contribution of the certification schemes to each EU strategy.

[11] https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/new-cap-2023-27/key-policy-objectives-new-cap_en

[12] https://ec.europa.eu/food/system/files/2020-05/f2f_action-plan_2020_strategy-info_en.pdf

[13] COM(2020) 380 final : communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0380&from=FR

3.4 Overview of the contribution to EU policies and objectives

3.4.1 General overview

The following matrix provides an overview of the contribution of each of the 15 selected schemes to EU policy objectives for each EU objective (climate change, sustainable management of resources…).

The following section provides an overview and a detailed assessment is provided in annex 7 for each scheme.

Table 14: Overview of the contribution of the 15 selected schemes to EU policies

		Good agricultural practices					Animal welfare		Origin & quality	Organic +	Climate		Multi-purpose			
		HVE	Integrowana Produkcja	IP SigilII	Leaf	SQNPI	Beter Leven	Initi. Tierwohl	PDO/PGI	Naturland	Label Bas-Carbone	WfCP	Bord Bia quality Mark	CSBF	Equalitas	Global G.A.P.
Farmers' position value chain		+	+	+	+	+	+	+	++	++	+	+	+	+	+	+
Climate change	Climate change mitigation	/	+	/ or ++	++	+	+	/	+	++	++	++	/	+	++	+
	Climate change adaptation	+	+	/	/	+	+	+	+	/	/	+	/	/	+	+
	Prod. sustainable energy	/	/	/ ++	++	+	+	/	/	+	/	++	/	/	+	+
Sustainable management of resources		++	++	++	++	++	+	/	+	++	/	++	+	++	++	++
Protection of biodiversity, habitats and landscape, ecosystem services		++	++	++	++	++	+	/	+	++	/	+	+	++	++	+
Health and animal welfare	Animal welfare	/	/	++	++	/	++	++	+	++	/	/	++	++	/	/
	Antimicrobial resistance	/	+	+	++	/	++	+	+	++	/	/	+	+	/	/
	Plant health	++	++	+	++	++	/	/	+	++	/	/	+	/	++	+
	Human health	+	+	+	++	+	++	++	++	++	/	/	+	+	+	++

Legend

++	High or direct contribution
+	Limited or indirect contribution
	Out of scope

3.4.2 Improve the farmers' position in the value chain

Only a few schemes contribute to improving the farmers' position in the value chain: geographical indications PDO/PGI and Naturland. These are the schemes with identified objectives to provide a fair return from the market to the farmers.

Other schemes have a potential impact (assessed here as a "limited impact") on farmers' position in the value chain: those which provide an access to a market (based on a specific demand from their client, for instance some large-retail companies). For instance, GLOBAL G.A.P. (widely used by retailers in the EU), Bord Bia Quality Scheme (highly used on the Irish sector), Equalitas (demand from the market in Scandinavian countries), Better Leven. Depending on the market, these schemes may provide a competitive advantage or become a necessary condition to access the market (possible negative effect with additional requirements for producer without incentive on the market, in terms of volume or price).

There are some specific examples where the involvement in the scheme may lead to additional payment for farmers at first sale (including as a potential bonus in the quality payment for farmers), for instance "Initiative Tierwohl "Haltungsform labelling scheme"" or "Bord Bia Quality Scheme".

For "Label Bas-Carbone", the position of farmer in the value chain is out of scope.

3.4.3 Climate change

Climate change mitigation

Several schemes directly contribute to climate change mitigation: Leaf, Naturland, IP Sigill (optional requirement), Label Bas-Carbone, WfCP and Equalitas. For instance, they foresee:

- an increased energy efficiency (Leaf, WfCP, Label Bas Carbone),
- the implementation of carbon and/or energy footprints (Equalitas, WfCP, Label Bas Carbone), with an improvement of the score over the time (WfCP),
- practices with mitigating impact on the environment: Naturland (organic production) and the climate option of IP Sigill and Label Bas Carbone.

Several other schemes have an indirect impact on climate change mitigation through specific requirements:

- Beter Leven (focusing on animal welfare) has growing impact on climate with requirements on animal feed,
- Integrowana Produkcja includes some requirements which are likely to enhance carbon storage and reduction of GHG emissions, such as practices promoting soil fertility and preventing soil depletion, rational use of fertilizers and phytosanitary products and tree plantation for hosting natural enemies of pests.
- SQNPI: The scheme promotes practices likely to contribute to increased carbon storage (work for soil structure, reduction of soil compaction, grassing in the inter-row area, restoration and realization of hedges etc.) and reduction of GHG emissions (management of phytosanitary products and fertilizers, reduction of soil tillage).

Climate change adaptation

None of the quality scheme directly focuses on climate change adaptation. However, some of the requirements may indirectly contribute to this objective.

Production of sustainable energy

A few schemes contain specific requirements on the production of sustainable energy:

- Leaf: the standard requires an annual energy audit, the monitoring of energy consumption and CO2 emission and an energy action plan aiming at reducing dependency on non-renewable energy sources
- WfCP: the production of renewable energy provides a bonus in the scoring for the certification
- IP Sigill: IP Sigill climate option sets several requirements including the monitoring of energy consumption, the definition of a plan aiming to improve energy efficiency and/or the target to source 100% of electricity from renewable sources by 2028.

There is an indirect or limited contribution of several other schemes for the production of sustainable energy: SQNPI (optional requirement), Beter Leven (requirement on energy for the highest level of the scheme), Naturland (preference on the use of renewable energy), Equalitas (calculation of a carbon footprint but no direct requirement on energy consumption) and Global G.AP (use of renewable energy is encouraged, but not compulsory).

3.4.4 Sustainable management of resources

There is a high contribution to the sustainable management of resources for all schemes from the group "good agricultural practices": HVE, Integrowana Produkcja, IP Sigill, Leaf, SQNPI, as well as organic + scheme, WfCP and two multipurpose schemes: CSBF and Equalitas.

For instance:

- HVE scheme provides specifications on:
    - management of irrigation,
    - phytosanitary strategy, including measures to avoid pesticides release in the environment (recycling and treatment of irrigation water, inter-row grassing),
    - management of fertilisation and soil quality.
- Leaf provides voluntary best practices regarding:
    - water management,
    - rational use of phytosanitary products and fertilizers (positive impact on air, water and soil quality),
    - energy efficiency,
    - soil management fertility.
- WfCP: the scheme fosters the sustainable management of water and energy, including a plan to reduce water consumption.
- CSBF: the standard includes requirements for the management and improvement of natural resources. It covers:
    - the preservation of riparian areas, wetlands, and surface/ground waters,
    - the enhancement of soil quality (limitation of erosion, compaction, and degradation),

- grasslands management (and implementation of a grazing management plan), protection of native ecosystems, biodiversity and air quality.

There is a limited or indirect contribution from all other schemes: Beter leven, PDOs/PGIs Bord Bia Quality Mark and Global G.A.P.

3.4.5 Protection of biodiversity, habitats and landscape, ecosystem services (incl. limitation of pesticides and fertilizers)

The contribution of the certification schemes to this objective is comparable to the previous theme (management of resources), with the exception of WfCP which highly contributes to sustainable management of resources but does not focus on biodiversity and ecosystems.

For instance:

- Equalitas: in vineyards over 15 ha, at least 5% of the area should be managed as semi natural areas. Potential improvements for their functions, including interconnection, shall be formalised.
- Naturland: in addition to the positive impact of organic farming on the protection of biodiversity, Naturland has set up a partnership with LBV (Bavarian Bird Protection Society) in order to improve Naturland farming provisions regarding biodiversity, conservation and protection. The use of peat is limited as well as the use of copper and fertilisation rules are stricter than EU regulation.
- HVE assesses practices related to:
  - phytosanitary strategy (untreated areas, frequency of phytosanitary treatment, use of alternative methods to chemical control, percentage of the UAA committed to a AECM aimed at reducing the consumption of plant protection products, level of consumption of phytosanitary products, inter-row grassing...),
  - management of fertilization and soil quality,
  - biodiversity friendly practices (share of UAA with agro-ecological infrastructure, share of UAA cultivated with the main crop, number of plant species cultivated, number of animal species raised, beehives, endangered variety, breed or species).
- Geographical indications (GIs, including PDOs and PGIs): environment, climate and animal welfare are not primary objectives of GIs. However, these are growing concerns from producers, consumers and public bodies and we observe some changes. For instance:
  - Evolution of the specifications of some GIs to add environmental requirements,
  - Public initiative to integrate pre-defined agro-environmental requirements (for instance in the wine sector in France).

  Most of the producer groups surveyed in the context of the EU Evaluation of GIs and TSGs (477 GIs/TSGs covered) declared that their product specifications take into consideration environmental aspects (64%).

  Main environmental aspects are related to landscape, used of old breeds and plant varieties (biodiversity), mitigation of the impact on water quality, limitation of the use of water, fostering extensive practices, mitigation of the impact on biodiversity, fostering organic production. A few producer groups also indicated requirements with an impact on energy

and greenhouse gas emissions. The considerations for environment and climate are a long process. This is on-going as several initiatives are in progress.

3.4.6 Health and animal welfare

Animal welfare

Two schemes specifically focus on this theme: Beter Leven and Initiative Tierwohl "Haltungsform labelling scheme". However, other schemes also cover this issue directly: IP Sigill, Leaf (in good agricultural practice group of schemes), Naturland and two "multi-purpose" scheme focusing on cattle: Bord Bia Quality Mark and CSBF.

The level of requirements may highly differ among these schemes and even within the different levels of a single scheme (three levels in Beter Leven).

In Beter Leven, the level of requirement depends on the level of the standard (1 star, 2 stars, 3 stars). Requirements are defined for:

- minimum space allowance per individual,
- type of entertainment material provided,
- prohibition of docking of tails (levels 2 and 3),
- outdoor access (levels 2 and 3) etc.

Initiative Tierwohl includes criteria to cover the stage of fattening (space allowance, shed climate, access to drinking water, minimum amount of exposure to daylight...) and the handling of livestock when loading.

In Bord Bia Quality Mark, several requirements have to be respected:

- a contingency plan must be in place to safeguard the health and welfare of the animals in case of specific event,
- animals must be treated and handled in a manner that minimises stress, without excessive physical force and without the use of electric goads,
- minimum space allowance for animals (in line with EU laws).

These requirements are in line with regulatory requirements. The Grass Fed Beef Standard (Bord Bia) implemented by about 70% of the beef producers requires that "animals must have been at pasture for a minimum of the national average of 220 days per year during their lifetime".

For PDOs and PGIs, 61% of the producer groups managing GIs/TSGs in the animal sector declare that they include specific requirements on animal welfare (based on the EU evaluation of GIs/TSGs). This covers, for instance, animal feeding practices and grazing possibilities.

Antimicrobial resistance

Three schemes contribute directly to antimicrobial resistance: Beter Leven, Leaf and Naturland.

For Beter Leven, the level of antibiotics used must be under the relevant action zone set by the Dutch Veterinary Medicines Institute.

For Leaf, a Livestock Health Plan must be elaborated, which includes targets to prevent resistance build-up to veterinary medicines.

For Naturland, the requirements are aligned with the EU regulation on organic farming. The use of antibiotics is restricted to one treatment per year for animals living more than one year and one treatment maximum per animal if they live less than one year.

A few other schemes contribute indirectly or to a limited extent to this theme. For instance, an Animal Health Plan (APH) must be drafted on each farm with Bord Bia Quality Mark, but there are no specific requirements on antibiotics.

Plant Health

The schemes on the group "good agricultural practices" have a significant contribution to plant health.

For instance:

- in IP Sigill, the standard includes measures aiming at:
    - preventing attacks from Fusarium fungus that can form mycotoxin,
    - definition of a crop and fertilisation plan,
    - Integrated pest management shall be applied in respect to crop rotations.
- in SQNPI, the "propagation material must be healthy and genetically guaranteed and must be able to offer phytosanitary and agronomic quality guarantees".

Another "multi-purpose" scheme (Equalitas) focuses on plant production (vine) and plant health and includes a requirement to set up monitoring systems or predictive models for controlling diseases and parasites.

Naturland also contributes to plant health through organic production rules. Indeed, organic standards ban synthetic pesticides and fertilizers and promote long crop rotations including leguminous crops which contribute to improved plant health.

Human health

Human health in EU policies covers limited antibiotic use in agriculture, the sustainable use of pesticides and the response to consumer demand for quality food.

Thus, a high contribution is assessed for certification schemes for EU quality products, i.e.: PDOs/PGIs and Naturland (based on EU regulation on organic farming) contribute significantly to this exercise.

There is a similar high contribution to the objective for schemes contributing to limitation of antibiotics (see paragraph above on antimicrobial resistance).

4. CERTIFICATION SCHEMES AND THE UPCOMING CAP PROGRAMMING PERIOD

KEY FINDINGS

- Some national strategic plans (NSPs) already use some of the 15 CS to implement the CAP: Bord Bia Quality Mark in Ireland, Integrowana Produkcja in Poland, HVE in France and SQNPI in Italy.
- A large share of the 15 certification schemes (CS) included in the analysis covers some good agricultural and environmental conditions (GAECs) and statutory management requirements (SMRs) and some go beyond them:
    - CS from the "good agricultural practices" show the higher level of coverage: HVE, IP Sigill, Leaf as well as "Organic+" (Naturland),
    - The coverage of GAECs/SMRs by other categories of schemes is variable. We can mention Beter Leven (level 3), Bord Bia Quality Mark, CSBF and Global G.A.P. which cover a significant number of GAECs and SMRs,
    - A few CS are not tailored to pre-defined practices (i.e., the practices implemented are defined on a case-by-case basis by stakeholders) and thus do not cover any GAECs and SMRs (Label Bas-Carbone, WfCP and PDOs/PGIs).
- Among these CS, a few of them provide guarantees that go beyond a significant number of GAECs/SMRs: Beter Leven (level 3), HVE (including options) and to a lesser extent IP Sigill (including options), Leaf and Naturland.
- A wider use of CS schemes could be envisaged to lead to the adoption or maintenance of eco-schemes practices (compared to 22 practices suggested for eco-schemes by DG AGRI in 2021):
    - most of the CS analysed cover some of the farming practices (generally less than a quarter of the 22 practices suggested) and,
    - a few schemes even cover more than one third of the 22 practices suggested: Naturland (68%), IP Sigill (option included, 50%) and Beter Leven (level 3, 41%) and HVE (including option, 36%).
- With regard to the possible use of CS to fulfill the result indicators of the CAP, analyses show that it does not sound relevant as CS do not generally foresee a comprehensive and centralised monitoring system.
- Risk of greenwashing and competition risks:
    - The level of guarantees provided by the different CS, on each environmental and climate area differs greatly. The assessment of the risk of greenwashing must be conducted for each CS.
    - A limited risk of competition distortion has been identified as the CS are generally open to all producers and each CS is not compulsory to access a specific market.

4.1 Objectives

The objective is to assess to what extent the main certification schemes analysed could be used into the national strategic plans prepared under the CAP for 2023-2027. More specifically the objective here is to analyse:

- To what extent the certification schemes would fulfil the statutory management requirements (SMR) and the standards for Good Agricultural and Environmental Conditions (GAEC).
- To what extent the certification schemes could be used as a reference or control criterion in the different environmental measures defined under Pilar 1 and 2 of the CAP. These schemes can potentially be eligible to be included:
    - in the list of potential agricultural practices that eco-schemes could support under Pillar 1 of the CAP.
    - in the agri-environment-climate measures (AECM) of Pillar 2.
    - in the list of result indicators annexed to the Commission's draft regulation on national strategic plans. The study will also examine how the implementation of certification schemes could feed data into the relevant sustainability results indicators.
- To what extent the implementation of various certification schemes could raise risks in terms of:
    - "greenwashing": schemes that pursue the same sustainability objectives, but which imbed different level of practices and ambition, and which may have inadequate environmental added value.
    - "distortion of competition": the various nature of practices and requirements can lead to unfair competition between European farmers.

4.2 Mapping of certification schemes with new conditionality standards (SMRs and GAECs)

The following tables provide information:

- on the statutory management requirements (SMRs) and good agricultural and environmental conditions (GAECs) foreseen by the new CAP legislation (table 15).
- on how they fit with the requirements for each of the selected 15 schemes (Table 16, followed by a detailed analysis)

Table 15 : List of rules on conditionality pursuant to article 12 of Regulation (EU) 2021/2115

Main issue	Requirements and standards	
Climate change (mitigation of and adaptation to)	GAEC 1	Maintenance of permanent grassland based on a ratio of permanent grassland in relation to agricultural area at national, regional, subregional, group-of-holdings or holding level in comparison to the reference year 2018 Maximum decrease of 5 % compared to the reference year
	GAEC 2	Protection of wetland and peatland
	GAEC 3	Ban on burning arable stubble, except for plant health reasons
Water	SMR 1	Directive 2000/60/EC of 23 October 2000 of the European Parliament and of the Council establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1): Article 11(3), point (e), and point (h), as regards mandatory requirements to control diffuse sources of pollution by phosphates
	SMR 2	Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources (OJ L 375, 31.12.1991, p. 1): Articles 4 and 5
	GAEC 4	Establishment of buffer strips along water courses (minimum width of 3 meters without using pesticides and fertilisers)
Soil (protection and quality)	GAEC 5	Tillage management, reducing the risk of soil degradation and erosion, including consideration of the slope gradient
	GAEC 6	Minimum soil cover to avoid bare soil in periods that are most sensitive
	GAEC 7	Crop rotation in arable land, except for crops growing under water
Biodiversity and landscape (protection and quality)	SMR 3	Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20, 26.1.2010, p. 7): Article 3(1), Article 3(2), point (b), Article 4(1), (2) and (4)
	SMR 4	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna (OJ L 206, 22.7.1992, p. 7): Article 6(1) and (2)
	GAEC 8	Minimum share of agricultural area devoted to non-productive areas or features - Minimum share of at least 4 % of arable land at farm level devoted to non-productive areas and features, including land lying fallow. - Where a farmer commits to devote at least 7 % of his/her arable land to non-productive areas or features, including land lying fallow, under an enhanced eco-scheme in accordance with Article 31(6), the share to be attributed to compliance with this GAEC standard shall be limited to 3 %. - Minimum share of at least 7 % of arable land at farm level if this includes also catch crops or nitrogen fixing crops, cultivated without the use of plant protection products, of which 3 % shall be land lying fallow or non-productive features. Member States should use the weighting factor of 0,3 for catch crops.
		Retention of landscape features
		Ban on cutting hedges and trees during the bird breeding and rearing season
		As an option, measures for avoiding invasive plant species

	GAEC 9	Ban on converting or ploughing permanent grassland designated as environmentally sensitive permanent grasslands in Natura 2000 sites
Food safety	SMR 5	Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (OJ L 31, 1.2.2002, p. 1): Articles 14 and 15, Article 17(1)1 and Articles 18, 19 and 20
	SMR 6	Council Directive 96/22/EC of 29 April 1996 concerning the prohibition on the use in stock farming of certain substances having a hormonal or thyrostatic action and beta-agonists, and repealing Directives 81/602/EEC, 88/146/EEC and 88/299/EEC (OJ L 125, 23.5.1996, p. 3): Article 3, points (a), (b), (d) and (e), and Articles 4, 5 and 7
Plant protection products	SMR 7	Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC (OJ L 309, 24.11.2009, p. 1): Article 55, first and second sentence
	SMR 8	Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides (OJ L 309, 24.11.2009, p. 71): Article 5(2) and Article 8(1) to (5) Article 12 with regard to restrictions on the use of pesticides in protected areas defined on the basis of Directive 2000/60/EC and Natura 2000 legislation Article 13(1) and (3) on handling and storage of pesticides and disposal of remnants
Animal welfare	SMR 9	Council Directive 2008/119/EC of 18 December 2008 laying down minimum standards for the protection of calves (OJ L 10, 15.1.2009, p. 7): Articles 3 and 4
	SMR 10	Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs (OJ L 47, 18.2.2009, p. 5): Articles 3 and 4
	SMR 11	Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes (OJ L 221, 8.8.1998, p. 23): Article 4

For methodological reasons, we have not referred to EU geographical indications in the following assessment of conformity with SMRs/GAECs, as the specific content of each PDO/PGI scheme in relation to sustainable requirements could not be determined.

It also must be noted that HVE certification has a pre-requisite of compliance with all CAP conditionality rules (« level 1 of environmental certification »). The HVE label is therefore not systematically mentioned as one of the schemes matching conditionality standards under the following sustainability themes, as the conformity is implicit.

4.2.1 General overview

The following table provides a general overview of the level of compliance of each of the 15 selected schemes to SMRs and GAECs. The detailed matrix for each certification scheme is provided in annex 8. A score is calculated on the compliance of the various schemes with those rules on cross compliance stipulated for direct support under the CAP (see following tables).

A major share of the CS covered by the analysis cover some GAECs and SMRs:

- 4 CS cover more than 50% of the SMRs and GAECs: HVEIP Sigill, Beter Leven (level 3) and Naturland.
- 5 CS cover 25% to 50% of the SMR and GAECs: Leaf, SQNPI, Global G.A.P., CSBF and Integrowana Produkcja.
- 3 CS cover 1% to 24% of the SMRs and GAECs: Bord Bia Quality Mark, Initiative Tierwohl and Equalitas.

- 2 CS don't cover any SMR/GAEC: Label Bas-Carbone and WfCP, which have not been elaborated to comply with pre-defined and detailed requirements, there are adapted to each context in order to address climate issues.

In addition, a few schemes include requirements which go beyond these SMRs/GAECs: HVE (including options) and Beter Leven (level 3) go beyond 50% of the SMRs/GAECs and a few other CS go beyond 25% of these SMRs/GAECS: IP Sigill, Leaf and Naturland.

Table 16 : Matrix analysing the conformity of certification schemes with requirements and standards of CAP conditionality

		Good agricultural practices					Animal welfare		Origin & quality	Organic +	Climate		Multi-purpose			
		HVE	Integrowana Produk	IP Sigill	Leaf	SQNPI	Beter Leven	Initi. Tierwohl	PDO/PGI	Naturland	Label Bas-Carbon	WfCP	Bord Bia quality Mark	CSBF	Equalitas	Global G.A.P. I.F.A.
Climate change	GAEC 1	= or + (option)	/	/ or +*	/	/	/ or +	/	nd	/	-	/	/	-	/	/
	GAEC 2	= or + (option)	/	+	-	/	/ or +	/	nd	=	/	/	/	+	/ or =	- (option)
	GAEC 3	=	/	/	/	=	/	/	nd	=	/	/	/	/	/	/
Water	SMR 1	= or +	-	+	+	+	/ or +	/	nd	+	/	/	-	/	+	=
	SMR 2	= or +	=	+	+	=	/ or +	/	nd	+	/	/	-	nd	nd	= (option)
	GAEC 4	= or + (option)	=	+	-	/	/ or -	/	nd	-	/	/	/	nd	=	/
Soil	GAEC 5	=	+	-	nd	+	/	/	nd	-	/	/	/	+	-	= (option)
	GAEC 6	= or + (option)	-	-	nd	+	/	/	nd	+	/	/	/	/	-	- (option)
	GAEC 7	= or + (option)	+	-	-	nd	/	/	nd	=	/	/	/	/	/	= (option)
Biodiversity and landscape (protection and quality)	SMR 3	= or + (option)	nd	=	+	/	/ or +	/	nd	/	/	/	/	+	-	=- (option)
	SMR 4	= or + (option)	nd	=	+	/	/	/	nd	/	/	/	/	+	-	= (option)-
	GAEC 8	= or + (option)	-	/	+	-	/ or +	/	nd	-	/	/	/	/	/	- (option)
		= or + (option)	nd	=	=	=	/ or =	/	nd	=	/	/	/	=	nd	- (option)
		=	-	=	+	nd	/ or +	/	nd	/	/	/	/	nd	nd	- (option)
		= or + (option)	/	/	/	/	/ or =	/	nd	/	/	/	/	=	/	/
	GAEC 9	=	/	=	nd	/	+	/	nd	/	/	/	/	nd	/	- (option)
Food safety	SMR 5	=	+	=	/	=	= or +	+	nd	/	/	/	=	+	-	=
	SMR 6	=	/	=	/	/	+	=	nd	=	/	/	/	-	/	/
Plant protection products	SMR 7	= or + (option)	+	=	+	+	/ or +	/	nd	+	/	/	=	= or +	-	=
	SMR 8	= or + (option)	+	+	+	=	/ or +	/	nd	+	/	/	/	-	-	=
Animal welfare	SMR 9	=	/	+	nd	/	+	/	nd	+	/	/	=	nd	/	/
	SMR 10	=	/	+	nd	/	+	+	nd	+	/	/	=	/	/	/
	SMR 11	=	/	+	nd	/	+	+	nd	+	/	/	=	=	/	/

*(+ for the option Natural Pasture Beef)

Legend		
	+	Requirements higher than CAP conditionality
	=	Requirements equivalent to CAP conditionality
	-	Requirements below CAP conditionality
	nd	Not determined

Table 17: Calculation of score on the compliance of scheme requirements with requirements and standards of CAP conditionality

Conformity with CAP conditionality requirements	Good agricultural practices					Animal welfare		Origin & quality	Organic +	Climate		Multi-purposes			
	HVE	Integrowana Prod.	IP Sigill	Leaf	SQNPI	Beter Leven	Initi. Tierwohl	PDO/PGI	Naturland	Label Bas-Carbone	WfCP	Bord Bia quality Mark	CSBF	Equalitas	Global G.A.P.
+ and + (option)	61%	17%	39%	35%	17%	65%	13%	0%	35%	0%	0%	0%	26%	4%	0%
=	39%	9%	35%	4%	22%	9%	4%	0%	22%	0%	0%	22%	13%	9%	39%
- and – (option)	0%	17%	13%	13%	4%	4%	0%	0%	13%	4%	0%	9%	13%	30%	26%
nd	0%	13%	0%	26%	9%	0%	0%	100%	0%	0%	0%	0%	22%	13%	0%
/	0%	39%	13%	22%	48%	22%	83%	0%	30%	96%	100%	70%	26%	43%	35%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

4.2.2 Climate change

Beyond conditionality standards

Only a few schemes may go beyond the conditionality requirements addressing the issue of climate change, namely HVE, IP Sigill, Beter Leven and CSBF. Depending on their implementation (choice of indicators in HVE, option "Natural Pasture Beef" in IP Sigill, "3-stars" level for dairy cattle in Beter Leven), certified farmers may commit to maintain a minimum share of their agricultural area in carbon-rich soils (permanent grassland, wetlands and peatlands) and manage these valuable elements.

Matches conditionality standards

HVE, SQNPI and Naturland all ensure strict compliance with GAEC 3 by explicitly prohibiting the burning of arable stubble. Protection of wetland and peatland (GAEC 2) is also guaranteed by Naturland and Equalitas (for vineyards larger than 15ha).

Below conditionality standards

The Label Bas-Carbone, Leaf, CSBF and Global G.A.P Integrated Farm Assurance for fruits and vegetables are all likely to promote the protection of wetlands and permanent grassland covered by GAEC 1 and 2, as their standards recommend taking into account and monitor the areas of interest for biodiversity and carbon storage. But these issues are not associated with strict requirements.

Out of scope

For most of the analysed schemes, GAECs 1, 2 and 3 are out of their scope.

4.2.3 Water

Beyond conditionality standards

Nearly half of the selected schemes provide specifications for water quality and quantity management that go beyond CAP conditionality rules: HVE, IP Sigill, Leaf, SQNPI, Beter Leven (only the new "3-stars" dairy cattle standard), Naturland, Equalitas and CSBF. Based on the principles of organic or integrated production for the sustainable use of resources, and to avoid water pollution by nitrates or phosphates, they often require farmers to monitor their inputs and to design a fertilisation plan in adequation with the calculation of the farm nutrient balance. Schemes covering livestock production can expect a grazing management plan and a manure management plan, some even set a maximum stocking density (Naturland) or maximum annual amount of organic manure per hectare ("3-stars" Beter Leven standard for dairy cattle). While SMR 1 requires the recording and legal authorization of water catchments, HVE, Equalitas and SQNPI standards promote the reduction of irrigation volumes. For example, SQNPI national guidelines require farmers to set "an irrigation plan, based on the crop's water balance and the use of efficient irrigation distribution techniques compatible with the characteristics and distribution methods of the collective irrigation systems present on the territory. In general, the use of overhead irrigation is prohibited. The use of flood irrigation is forbidden for new tree crops, except for those supplied by drainage consortia that do not guarantee continuity of supply. In existing tree plantations and herbaceous crops, drip irrigation is only permitted if the necessary precautions are taken to minimise waste."

Matches conditionality standards

Few schemes ensure strict compliance with water conditionality standards. SQNPI and Integrowana Produkcja explicitly recall the legal requirements of Council Directive 91/176/EEC underlying SMR 2,

specifically on the maximum annual quantities of nitrogen and phosphate to respect in the nitrate vulnerable zones. Global G.A.P. Farm Insurance Scheme for fruits and vegetables includes requirements that seem to ensure compliance with the law, such as the presence of "valid permit/licenses available issued by the competent authority for all farm water extraction, all on-farm water usage including irrigation, and where legally required, for water discharge into river courses or other environmentally sensitive areas".

Below conditionality standards

Bord Bia standard for beef and lamb includes recommendations on a balanced nutrient plan but this is not considered in the scoring for the certification. The implementation of buffer strips (GAEC 4) is suggested by Leaf scheme and required by Naturland, but in the last case the standard does not set a minimum buffer strip width.

Out of scope

Some schemes do not appear to address any of the water conditionality requirements: Initiative Tierwohl, Label Bas-Carbone, WfCP. Equalitas does not address nutrient nor irrigation management required by SMR 1 and 2. Although 3-stars Beter Leven standard for dairy cattle provides high level of requirements on fertilisation management, it is not the case of the other Beter Leven standards, including for pig and poultry sectors, despite significant challenges associated with manure management in these industries.

4.2.4 Soil (protection and quality)

Beyond conditionality standards

A small share of schemes provides specifications with higher ambition than GAEC 5, 6 and 7 for the protection of soil quality. Most are based on integrated or organic production principles (HVE, SQNPI, Integrowana Produkcja, Naturland).

Matches conditionality standards

Naturland certification guarantees compliance with GAEC 7, by requiring crop rotation for combinable crops. Global G.A.P IFA shall ensure conformity with GAEC 5 and 7 through requirements on the use of techniques to reduce the possibility of soil erosion and crop rotation but the compliance is not 100% guaranteed, as farmers are allowed to be certified despite some unconformities (up to 5% of the "minor requirements").

Below conditionality standards

Integrowana Produkcja, IP Sigill, Leaf, Naturland and Equalitas entail some provisions for the protection of soils, that do not exactly match the same expectations than GAEC 5 to 7. For example, compared to CAP requirement for crop rotation (GAEC 7), Leaf requires a long-term cropping plan over at least 3 years but does not provide obligation to implement crop rotation in arable land. Compared to GAEC 5, Equalitas sets requirements related to the depth of ploughing and tilling but does not consider the slope gradient.

Out of scope

Many schemes do not address soil quality management: Initiative Tierwohl, Beter Leven, Label Bas-Carbone, WfCP, Bord Bia Quality Mark.

4.2.5 Biodiversity and landscape (protection and quality)

Beyond conditionality standards

Only 4 schemes provide specifications with higher level than at least one of the conditionality rules targeting biodiversity: HVE, Leaf, CSBF and Beter Leven. For instance:

- Compared to SMR 3 and GAEC 8, Leaf standards provide that "Nesting birds and wildlife are protected when cutting forage" and "Field boundary management plans observe nesting periods and consider other flora and fauna including pollinating insects".
- Compared to GAEC 8, HVE entails a scoring criterion on the share of unproductive area in total agricultural area and grants points for a share > 5%. However, farmers have multiple options to get the sufficient score for certification, hence the added value of HVE on one specific conditionality requirement is not guaranteed.
- Beter Leven level 3-standard for dairy cattle is the only scheme with high added-value on GAEC 9, as it does not only forbid ploughing, harrowing and reseeding of herb-rich grassland but also sets a minimum share of 25% of the farmland for permanent grassland.

Matches conditionality standards

Some schemes, although not focused on biodiversity protection, entail specifications that match with related conditionality. GAEC 8 ("Retention of landscape features ») is the most frequently included. For instance, SQNPI supports the implementation of techniques and interventions to enhance the development of beneficial organisms (predators, parasites) as part of their biological control strategy. Provided measures include « restoration and creation of hedges, artificial nests, water reservoirs, dry stone walls, polyphyte grassing, alternating mowing of rows, etc." or "trees and bushes on the field edge".

Naturland directly requires to "conserve and, if required, to recreate structural elements of the landscape, such as hedges, borders, humid areas, oligotrophic grassland and other elements".

Below conditionality standards

Current version of Global G.A.P IFA for fruits and vegetables and Equalitas standard entail non-mandatory guidance for practices that could contribute to compliance with SMR 1 and 2 and GAEC 8 and 9, such as:

- The establishment of an action plan to enhance habitats or maintain biodiversity on farm, paying special attention to areas of environmental interest being protected and making reference to the legislation where applicable (Global G.A.P. IFA);
- Conversion of unproductive sites and identified areas that give priority to ecology into conservation areas (Global G.AP. IFA);
- An updated list of threatened and protected plant or animal species present in the area where the property and the land under direct management are located (Equalitas);
- Participation or support in flora and fauna preservation programmes (Equalitas).

It has to be noted that, according to Global G.A.P managing organization (FoodPLUS), next version (v6) of IFA (to be published in 2022) will include new and updated criteria on biodiversity with a view to be aligned with EU objectives.

Out of scope

Biodiversity requirements are out of the scope of Initiative Tierwohl, Bord Bia Quality Mark, Label Bas-Carbone and WfCP. For Beter Leven, it must be noted that biodiversity is only addressed by the latest 3-stars dairy cattle standard, which is a pilot system for a future more integrated sustainability label.

4.2.6 Food safety

Beyond conditionality standards

In addition to Integrowana Produckja, only 3 livestock-targeted schemes go beyond food safety conditionality standards (SMR 5 and 6): Beter Leven, Tierwohl Initiative and CSBF. They include requirements for farm agreement with specialised veterinarians to supervise the use of medicinal products, the establishment of a farm-specific animal treatment plan, the implementation of on-farm food security training etc. To ensure adequate hygiene and animal health, participation of livestock owners in the Initiative Tierwohl is even conditioned to QS certification. As a quality assurance system, the QS scheme defines strict manufacturing and marketing criteria along the entire value chain for fresh food, including meat.

Matches conditionality standards

Nearly half of the analysed schemes ensure compliance with SMR 5 and/or 6. Most of them provide rules regarding traceability, hygiene and food sanitary quality. Some (Naturland, IP Siggill) explicitly prohibit the use of substances such as antibiotics and hormones in animal feed. Many plant production schemes require residual analysis of the products.

Below conditionality standards

Equalitas standard entails requirements on traceability, but none on food safety. CSBF standard refers to some food safety obligations (e.g., the obligation for a drug withdrawal period prior to slaughter) but does not provide any additional guarantee.

Out of scope

Leaf, Label Bas-Carbone and WfCP do not include provisions on food safety.

4.2.7 Plant protection products

Beyond conditionality standards

Half of the schemes go beyond the minimum rules for placing plant protection products on the market (list of authorized products, adequate use of products following packaging instructions) and the sustainable use of pesticides (mandatory training certificates, inspection of PPP spraying materials, storage and disposal), as framed by SMRs 7 and 8.

- Naturland standards prohibit the use of chemical plant protection products and provide additional restriction regarding copper use.
- All the schemes based on a model of integrated-farm-management (HVE, IP Sigil, SQNPI, Integrowana Produkcja, Leaf) are more restrictive than law, as the core of their system is the optimization of phytosanitary defense strategies. Their main added value lies in their requirements for application of plant protection products: number of applications, sprayed area, list of authorized products...

Matches conditionality standards

Global G.A.P IFA for fruits and vegetables and Bord Bia Quality mark defined requirements on the right pesticide to use on farm, that should be in compliance with the law. For instance, IFA certification requires a certificate of training for workers handling PPP and biocides, and "compliance of PPP storage with local regulations".

Below conditionality standards

CSBF guarantee of compliance with SMR 8 is unclear, as no explicit reference to issues raised by Directive 2009/128/EC of the European Parliament can be found. However, the standards refer to worker training in using pesticides under the measure "Crop input products are safely and responsibly used, stored and disposed".

Out of scope

Initiative Tierwohl, Label Bas-Carbone and WfCP do not appear to address the use of PPP.

4.2.8 Animal welfare

Beyond conditionality standards

4 schemes go beyond CAP requirements for animal welfare improvement as set by SMR 9, 10 and 11, at least for one of the SMRs. 2 of these schemes are specific to the livestock sector, and target animal welfare improvement (Initiative Tierwohl and Beter Leven). The others are IP Sigill and Naturland.

Initiative Tierwohl provides pigs and broilers with slightly higher space allowance than requested by law (10% more for piglets, maximum density of 35 kg/m^2 for broilers versus 42 kg/m^2 by derogation under the EU legislation). The standard also entails minimum animal access to natural light, which is not provided by the legislation.

Beter Leven is organised in 3 levels of growing ambition, with requirements focusing on space allowance, enrichment materials, ban of castration and tail-docking, access to outdoor areas. Each of the 3 levels provides improvement to a different extent. For example, while the law requests a minimum individual space of 0,8 m^2 per fattening pig, level-1 of BL guarantees 1 m^2, level-2 1,1m^2 and level-3 1,3 m^2.

Matches conditionality standards

HVE and Bord Bia Quality Mark ensure compliance with the conditionality standards on animal welfare. CSBF standards match SMR 11, as their requirements follow the Canadian codes of practices for the care and handling of livestock, as set by the National Farm Animal Care Council.

Out of scope

Animal welfare is out of the scope of plant production schemes, and Label Bas-Carbone

4.3 Assessment of the use of certification schemes as eligibility or control criterion for eco-schemes, agri-environment-climate measures and for monitoring results

The use of certification schemes as eligibility or control criterion has been analysed through their capacity to comply with the regulatory requirements defined in the Regulation (EU) 2021/2115 of the European Parliament and of the Council of 2 December 2021 establishing rules on support for strategic plans to be drawn up by Member States and in particular its articles 31 (schemes for the climate and the environment) and 70 (agri-environmental and climatic measures).

The use of certification schemes as reference or control criterion must respect the following conditions:

- **Scope:** the certification scheme must address one or more of the specific environmental- and climate-related objectives laid down in the regulation proposal, as analysed in Chapter 3.
- **Environment and climate added value:** the certification schemes should go beyond the minimum requirements defined through the relevant statutory management requirements (SMR) and standards of good agricultural and environmental conditions (GAEC), as examined in Chapter 4.2.
- **Technical suitability of the certification schemes with AECMs and eco-schemes provisions:**
    - The certification schemes should comply with the common and specific conditions defined for eco-schemes and AECMs. The suitability of the following provision with the functioning of the schemes is analysed:
        - maintenance of agricultural area (AECM and eco-scheme),
        - period of commitment of 5 or 7 years (AECM),
        - suitability of the scheme to receive area-based payment (AECM and eco-scheme) or livestock-based payment (eco-scheme),
        - information and training to assist farmers committed to enforce the practice (AECM),
        - capacity of the scheme to be revised to follow the evolution of legal framework (AECM).
    - Regarding the potential use of certification scheme through the article 31 (eco-scheme), the analysis relies on the capacity of the selected certification schemes to lead to the adoption or maintenance of practices defined in the list of potential agricultural practices drafted by the European Commission (see table 18).
- **Monitoring**: The capacity of certification schemes to be integrated or to feed sustainable result indicator will be assessed based on the annex I of the EU regulation. The capacity of each scheme to feed data has been systematically assessed with the corresponding result indicators defined for EU specific objectives related to environment and climate and welfare (see table 19).

Some NSPs already use some of the 15 CS to implement the CAP: Bord Bia Quality Mark in Ireland (AECM), Integrowana Produkcja in Poland (eco-scheme), HVE in France (eco-scheme), SQNPI in Italy (AECM and eco-scheme) and Naturland in Germany (organic support).

4.3.1 Overview of the environmental and climate friendly practices under the eco-schemes that could be implemented through the certification schemes

The following table provides a list of 22 agricultural practices proposed by the EU Commission to help MS to define eco-schemes that would improve the environmental and climatic impact of agriculture (see table below). This list, drafted by the EU Commission is non limitative and other practices could be associated to environmental and climatic friendly measures (crop fertilisation management; crop irrigation; crop choice, spatial distribution and temporal succession; weed, pest and disease management…).

Table 18: Draft list of potential practices to be supported by eco-scheme

Type of practices	Practices
Organic farming practices	Conversion to organic farming
	Maintenance of organic farming
Integrated Pest Management practices	Buffer strips with management practices and without pesticide
	Mechanical weed control
	Increased use of resilient, pest-resistant crop varieties and species
	Land lying fallow with species composition for biodiversity purpose
Agro-ecology	Crop rotation with leguminous crops
	Mixed cropping - multi cropping
	Cover crop between tree rows on permanent crops - orchards, vineyards, olive trees - above conditionality
	Winter soil cover and catch crops above conditionality
	Low intensity grass-based livestock system
	Use of crops/plant varieties more resilient to climate change
	Mixed species/diverse sward of permanent grassland for biodiversity purpose
	Improved rice cultivation to decrease methane emissions
	Practices and standards as set under organic farming rules
Husbandry and animal welfare plans	Feeding plans: suitability of and access to feed and water, feed and water quality analyses optimised feed strategies
	Friendly housing conditions: increased space allowances per animal, improved flooring, free farrowing, provision of enriched environment, shading/sprinklers/ventilation to cope with heat stress, access to roughage, provision of additional enrichment material.
	Practices and standards as set under organic farming rules
	Practices increasing animal robustness, fertility, longevity and adaptability; breeding lower emission animals, promoting genetic diversity and resilience
	Animal health prevention and control plans: overall plan for reducing the risk of infections that require antimicrobials and covering all relevant husbandry practices
	Providing access to pastures and increasing grazing period for grazing animals
	Provide and manage regular access to open air areas

Source: DG AGRI (2021)[14]

[14] List of potential agricultural practices that eco-schemes could support DG AGRI, 2021 https://ec.europa.eu/info/news/commission-publishes-list-potential-eco-schemes-2021-jan-14_en

This list has been compared with the requirements of the selected certification schemes. The comparison has led to the following qualitative assessment:

- "+": The agricultural practice must be implemented to respect the standards of the certification scheme.
- "+ (option)": The agricultural practice which has to be implemented to respect one or several option in addition to the standard of the certification scheme.
- "nd": The implementation of the practice is not determined: it can be recommended by the certification scheme and potentially implemented but it is guaranteed.
- "-": The practice is not recommended by the certification scheme while the theme of the agricultural practice remains into the scope of the standards.
- "/": The practice is out of scope of the scheme.

The following table (Table 19) provides a general overview of the comparison of the scheme requirements and the potential practices supported by eco-schemes. The detailed matrix for each certification scheme is in annex 9.

A score is calculated for the compliance with the practices supported by the eco-schemes (see following tables). The calculation of this score shows the following results:

- Most of the CS cover a limited scope of the practices suggested as they have been tailored to address specific themes: the 15 CS generally cover less than a quarter of the practices suggested.
- One scheme leads with certainty the implementation of a majority (>50%) of the environmental and climatic friendly practices mentioned: Naturland which covers 68% of the 22 practices considered.
- Three schemes entail the implementation of more than one-third of the practices: IP Sigill (option included) with 50% and Beter Leven with 41% and HVE with 36%.
- Geographical indications (PDO/PGIs) are the certification scheme that have the potential for the largest number of environmental and climatic friendly practices to be implemented. However, each of the PDO/PGI has established specific requirements (environment and climate are not the focus of PDOs and PGIs even if these considerations are growing) and no centralised information is available. No guarantee of the effective implementation of such environmentally friendly practices could be provided.
- WfCP and Global Gap and Geographical indications do not guarantee the effective implementation of any of the environmental and climatic friendly practices mentioned in the list.

Table 19: Matrix of CS requirements and potential practices that eco-schemes could support

Type of practices	Potential practices that eco-schemes could support	Good agricultural practices					Animal welfare		Origin & quality	Organic +	Climate		Multi-purposes			
		HVE	Integrowana	IP Siggill	Leaf	SQNPI	Beter Leven	Initi. Tierwohl	PDO/PGI	Naturland	Label Bas-Carbone	WfCP	Bord Bia quality Mark	CSBF	Equalitas	Global G.A.P.
Organic farming	Conversion	/	/	/	/	/	/	/	/	+	/	/	/	/	/	/
	Maintenance	/	/	/	/	/	/	/	/	+	/	/	/	/	/	/
Integrated Pest Management	Buffer strips	+ (option)	nd	+	+	/	/	/	nd	+	/	/	/	nd	+	-
	Mech. weed control	+ (option)	-	-	nd	nd	+ (dairy cattle)	/	nd	+	/	nd	/	/	+	-
	Resilient, pest-resistant crops	/	-	+	nd	+	/	/	nd	/	/	/	/	/	-	-
	Land lying fallow for biodiversity	+ (option)	+	-	+	+	/	/	nd	/	/	/	/	/	/	-
Agro-ecology	Crop rotation with leguminous	+ (option)	+	+ (option)	/	+	/	/	nd	+	+	/	/	/	/	/
	Mixed cropping - multi cropping	+ (option)	-	+ (option)	+	+	/	/	nd	/	+	/	/	/	/	-
	Cover crop between tree rows	+ (option)	nd	-	/	+	/	/	nd	+	/	nd	/	/	nd	nd
	Winter soil cover and catch crops	nd	nd	-	/	nd	/	/	nd	+	/	/	/	/	/	-
	Low intensity grass-based livestock system	/	/	+ (option)	nd	/	+ (dairy cattle)	/	nd	+	nd	/	nd	+	/	/
	Crops/plant resilient to climate change	+ (option)	-	-	-	PI	/	/	nd	/	/	/	/	/	-	-

	Mixed species/diverse sward of permanent grassland	+ (option)	nd	+ (option)	-	/	+ (dairy cattle)	/	nd	nd	/	/	-	/	/	PI
	Improved rice cultivation	/	/	/	/	+	/	/	nd	/	/	/	/	/	/	/
	Practices / standards – organic	-	/	/	/	/	+ (dairy cattle)	/	nd	+	/	/	/	/	/	/
Husbandry and animal welfare plans	Feeding plans	/	/	+	+	/	+	+	nd	+	+	/	+	+	/	/
	Friendly housing conditions	/	/	nd	-	/	+	+	nd	+	+	/	nd	+	/	/
	Practices and standards - organic	/	/	nd	/	/	+ (dairy cattle)	/	nd	+	/	/	/	/	/	/
	Robustness, fertility, lower emission…	/	/	+ (option)	/	/	/	/	nd	/	nd	/	nd	-	/	/
	Animal health	/	/	+	+	/	+	+	nd	+	/	/	nd	+	/	/
	Pastures / grazing	/	/	+	-	/	+	/	nd	+	/	/	+	nd	/	/
	Regular access open air	/	/	+	-	/	nd	/	nd	+	/	/	+	nd	/	/

Legend

+	Agricultural practice must be implemented to respect the standards of the certification scheme
+ (option)	Agricultural practice which must be implemented to respect one or several option in addition to the standard of the certification scheme
nd	Not determined: agricultural practice recommended by the certification scheme but whose implementation cannot be guaranteed
-	Agricultural practice which is not recommended by the certification scheme while the theme of the agricultural practice remain into the scope of the standards
/	"/": agricultural practice which is out of scope

Table 20: Calculation of score on the compliance of scheme requirements and the potential practices that eco-schemes could support

Type of practices	Potential practices that eco-schemes could support	Good agricultural practices					Animal welfare		Origin & quality	Organic +	Climate		Multi-purposes			
		HVE	Integrowa. Produk.	IP Sigill	Leaf	SQNPI	Beter Leven	Initi. Tierwohl	PDO/PGI	Naturland	Label Bas-Carbone	WfCP	Bord Bia quality Mark	CSBF	Equalitas	Global G.A.P.
Score	+ and + (option)	36%	9%	50%	23%	27%	41%	14%	0%	68%	18%	0%	14%	18%	9%	0%
	nd	5%	18%	9%	9%	14%	5%	0%	91%	5%	9%	9%	18%	14%	5%	9%
	-	55%	55%	18%	45%	59%	55%	86%	9%	27%	73%	91%	64%	64%	77%	59%
	/	5%	18%	23%	23%	0%	0%	0%	0%	0%	0%	0%	5%	5%	9%	32%
	Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

4.3.1.1 Organic farming practices

According to European Commission, "*organic farming is an agricultural method that aims to produce food using natural substances and processes*". Organic farming has limited environmental and climate impact as it encourages a responsible use of natural resources; the protection of biodiversity; the enhancement of soil fertility; the preservation of water quality and promote high animal welfare standards.

Organic farming practices which must be implemented through the general standards: "+" and "+ (option)

Naturland is the only certification scheme of the list that mandates the conversion and maintenance to organic farming. Conversely to EU regulation, Naturland farms must engage the whole agricultural area into organic farming.

Organic farming practices which are out of scope: "/"

The other 14 certification schemes do not imply the conversion or maintenance of the agricultural land into organic farming. Some of them like IP Sigill, Leaf and HVE were created to offer a more accessible alternative method to organic farming.

4.3.1.2 Integrated Pest Management practices

According to EFSA, Integrated pest management (IPM) requires an *"integrated approach to the prevention and/or suppression of organisms harmful to plants through the use of all available information, tools and methods". IPM aims at using "pesticides and other forms of intervention only to levels that are economically and ecologically justified, and which reduce or minimise risk to human health and the environment".*

IPM practices which must be implemented through the general standards or an option "+" and "+ (option)

Logically, the certification schemes leading to the implementation of IPM practices are the ones that have set the Integrated Farm Management principles at their core: Integrowana Produkcja, IP Siggil, Leaf, Equalitas. Other certification schemes can lead to the implementation of IPM practices even if it is not their main objective: it includes Beter Leven and Naturland. Indeed, Beter Leven requires to mechanically manage weed in dairy plots while no herbicides are authorized in organic farming. Mechanical weed control is also recommended by HVE- path A according to the options selected.

"Land lying fallow for biodiversity" is the IPM practice implemented the most by four of the certification schemes studied.

IPM practices potentially implemented "PI"

Other certification schemes can potentially lead to the implementation of some IPM practices without absolute certainty. It includes PDO/PGIs (IPM practices can be implemented according to the standards of each GIs), Winery for Climate Protection (mechanical weed control) and Certified Sustainable Beef (establishment of buffer strip).

Mechanical weed control is the practice which is potentially implemented the most by four of the certification schemes analysed.

IPM practices not recommended while they fall into the scope "-" and "- (option)

Board Bia Quality Mark and Global Gap are the only certifications scheme that do not recommend neither oblige any of the IPM practice offered.

While Mechanical weed control falls into IPM panel of practices, many certification schemes do not recommend neither mandate their beneficiaries to implement such practice. Indeed, this the case for IP Sigill and Integrowana Produkcja. Use of resilient, pest-resistant crops is one of the IPM practices which is the least recommended while falling into the scope of the certification schemes.

IPM practices out of scope: "/"

Beter Leven, Initiative Tierwohl, Label Bas Carbone and Certified Sustainable Beef Framework are the schemes that cover the fewer IPM practices. These four schemes have been defined to address animal husbandry issues.
Use of resilient, pest-resistant crops is the practice the least covered by the certification schemes studied.

4.3.1.3 Agro-ecology practices

Agroecology can accept several definitions. According to INRAe, agroecology is *"an innovative framework for developing solutions to the major global challenges"*[15] including food security, climate change, the loss of biodiversity, and the depletion of natural resources. The framework is not limited and entails many agroecological techniques for ensuring good production levels while also reducing the use of inputs and preserving both soils and water resources.

Agro-ecology practices which must be implemented through the general standards or an option "+" and "+ (option)

Naturland, SQNPI and to a lesser extent Label Bas Carbone and Leaf require the implementation of agroecological practices. Naturland is the certification scheme that has led to the implementation of the greatest number of agroecological measures, which is logical given the proximity between organic farming and agroecology. The optional modules of HVE and IP Sigill (Nature Pasture Beef) also include agroecological measures.

Crop rotation with leguminous crops and mixed cropping - multi cropping are the two agroecological practices the most implemented among the certification schemes analysed.

Agro-ecology practices potentially implemented "PI"

PDO/PGIs, Integrowana Produkcja and SQNPI schemes can potentially lead to the implementation of several agroecological practices. PDO/PGIs are the certification scheme that can lead to the largest number of agroecological practices to possibly be implemented. Their effective establishment varies between each GIs' standard: in some cases, the specific features of the GI's are related to the maintenance of traditional and agroecological practices (permanent grazing, low intensity grass-based livestock system, mixed species/diverse sward of permanent grassland…).

The implementation of cover crop between tree rows on permanent crops can potentially be implemented through some certification schemes such as Winery for Climate Protection, Equalitas and Global Gap. Three other practices which may be recommended by a significant number of

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certification schemes are the establishment of mixed species/diverse sward of permanent grassland and winter soil cover and catch crops.

Agro-ecology practices not recommended while they fall into the scope of the standards "-" and – (option)

Board Bia Quality Mark is the only certification scheme that does not recommend neither request any of the agroecological practices suggested.

While the use of crops/plant varieties resilient to climate change is a major tool to face climate change consequences, it is neither recommended nor promoted although it falls into the scope of some certification schemes (Integrowana Produkcja, IP Sigill, Leaf, Board Milk Quality Mark and Global G.A.P.).

Agro-ecology practices out of scope: "/"

Beter Leven, Initiative Tierwohl, Winery for Climate Protection and Certified Sustainable Beef Framework are the schemes that cover the fewer agroecological practices suggested.

The practices which are the least covered by the certification schemes are:

- Improved rice cultivation to reduce methane emission (only SQNPI for this practice),
- Practices and standards as set under organic farming (only Naturland is concerned),
- Use of crops/plant varieties resilient to climate change (only HVE option and possibly SQNPI consider this measure),
- Low intensity grass-based livestock system (is considered by the options of IP Sigill, Beter Leven and CSBF).

4.3.1.4 Husbandry and animal welfare

Husbandry and animal welfare practices which must be implemented through the general standards or an option "+" and "+ (option)

Naturland is the certification scheme that leads to the widest range of agroecological practices regarding husbandry and animal welfare. It is followed by Beter Leven, IP Sigill, Initiative Tierwohl and to a lesser extent CSBF.

Feeding plans and animal health and welfare plans are the two practices implemented the most by the concerned certification scheme. Access to pasture and increasing pasture period as well as friendly housing conditions are two other practices widely recommended.

Husbandry and animal welfare practices potentially implemented "PI"

PDO/PGIs and Board Bia Quality Mark are the two certification schemes that can potentially lead to the implementation of several husbandry and animal welfare measures.

Practices increasing robustness, fertility, longevity and adaptability; lower emission, genetic diversity and resilience are measure potentially implemented the most by four of the certification schemes analysed.

Husbandry and animal welfare practices not recommended while they fall into the scope of the standards "-" and – (option)

Leaf is the only certification scheme that does not recommend neither mandate husbandry and animal welfare measures to be implemented.

Husbandry and animal welfare practices out of scope: "/"

The certification schemes that mostly address vegetal production are the least concerned by this category of environmental and climate friendly measures. It includes most schemes: HVE, Integrowana Produkcja, SQNPI, Wineries for Climate Protection, Equalitas and Global G.AP. (the standard on fruits and vegetables has been assessed for Global G.A.P.).

4.3.2 Overview of the eligibility of certification schemes to be used as AECMs or eco-scheme

The analysis of the eligibility of certification schemes has been based on provisions laid down in the articles 31 and 70 of the Regulation (EU) 2021/2115.

AECMs provide support for farms that are committed to developing or maintaining practices that provide environmental added value. Their remuneration is based on the additional costs and loss of earnings incurred. The design of AECMs by national authorities and subsequently the eligibility of certification must respect certain conditions.

Eco-schemes account for 25% of the first pillar budget. They correspond to aid that will reward the voluntary commitment of farmers to additional efforts (beyond conditionality) with regard to the agroecological transition.

The following table (Table 21) presents the conditions of eligibility certification schemes must fulfil based on the provisions defined in the articles 31 and 70 of the Regulation EU 2021/2115.

Table 21: Conditions of eligibility

AECMs and Eco schemes conditions	Provisions based on articles 31 and 70 of EU regulation 2021/2115		Criterion analysis
Common conditions for AECMs and eco-schemes	Voluntary based commitment	AECMs and eco-schemes must be voluntarily contracted	Is the certification scheme based on a voluntary commitment?
	Environmental added value regarding SMR / GAEC and other minimum legal requirements	AECMs and eco-schemes must go beyond the relevant SMR and GAEC standards established and relevant minimum requirements for the use of fertiliser and plant protection products or for animal welfare, as well as other relevant mandatory requirements established by national and Union law	Does the certification scheme provide environmental added value? – see section 4.2
	Maintenance of agricultural area	AECMS and eco-schemes must go beyond the conditions established for the maintenance of the agricultural area. which makes it suitable for grazing or cultivation, without preparatory action going beyond the use of usual agricultural methods and machinery.	Does the certification scheme allow maintaining of agricultural area?
	Consistency between AECMs and eco-schemes	AECMs are consistent with commitments with respect to which payments are granted through eco-schemes.	Question cannot be answered at this stage.
Specific AECMs conditions	Collective scheme and result-based payment should be encouraged and promoted.	Collective scheme and result-based payment should be encouraged and promoted.	Does the certification scheme adopt a collective approach and is it result based?
	5- or 7-years commitment	Commitments shall be undertaken for a period of five to seven years.	Is the certification scheme suitable with a 5 or 7 year commitment?
	Payment granted per ha	Payment shall be established per hectare.	Is the certification scheme suitable for an area-based payment system?
	Capacity of the scheme to be revised	Revision clause should be introduced for operations implemented to ensure their adjustment in consequence of amendments to the relevant SMR, GAEC, national laws.	Can the standards of the certification scheme be revised?
	Information and training to assist farmers	Persons carrying out operations under this type of intervention have access to the relevant knowledge and information to assist farmers.	Does the certification scheme promote the training and the correct information of advisers and farmers to ensure the implementation of practices?
Specific eco-scheme conditions	Scope: at least two areas of actions	Eco-schemes must address at least two areas of action for climate, environment, animal welfare and combatting antimicrobial resistance.	Does the certification scheme address more than two of area of action laid down in article 30?
	Payment granted per ha or per livestock units		Is the certification scheme suitable for an area based and livestock unit-based payment system?

Source: AND-International based on EU regulation 2021/2115

The following table (Table 22) provides a general overview of the eligibility of the selected certification scheme with such requirements or recommendations.

+	The functioning of the certification scheme is suitable with the provision.
nd	The suitability of the provision with the functioning of the certification scheme could not be determined
-	The functioning of the certification scheme is not suitable with the provision
/	"/": the provision is out of scope of the certification scheme

The typology does not present significative differences between the categories of certification schemes.

Based on table 22, the certification schemes are generally suitable to be turned into national strategic plans and fulfil most of the common and specific provisions for both AECMs and eco-schemes:

- Certification schemes are all voluntary based,
- The selected certification schemes provide at least one environmental added value in comparison with minimum legal requirements,
- They are suitable to be implemented on 5 to 7 years period (AECM),
- They are theoretically suitable to receive area-based payment or livestock unit payments,
- Standards are regularly revised,
- Many schemes require or recommend training and information transfer to assist farmers,
- Schemes generally address more than one area of environmental focus.

However, the fulfilment of some provisions remains variable or could not be determined for some criteria:

- The maintenance of agricultural land suitable for grazing or cultivation without preparatory action going beyond the use of usual agricultural methods and machinery cannot be determined, although it is very unlikely that these schemes could incite the destruction of farmland. Only Beter Leven and Global Gap explicitly fulfil this condition.
- the consistency between AECMs and eco-schemes could not be determined for most of the schemes, as it would require a thorough assessment of the consistency of national strategic plans. While HVE and Integrowana Produjka are supported by eco-scheme subsidies into the French and Polish national strategic plans, SNQPI scheme is supported by both AECM 1 "Integrated Production" and eco-schemes 2, 3, 4 and 5 in the Italian plan. It is specified that "SQNPI certified areas are eligible for [ecoschemes] payment, provided there is no overlap of commitment".
- Collective and result based scheme are recommended for the design of AECM. The analysis shows that most schemes are suitable for a collective approach. However only a handful of schemes has developed a result-based approach (HVE, Label Bas Carbone, WfCP, Equalitas).

Table 22: Eligibility of certification schemes to be instrumented through AECMs or eco-schemes

AECMs and Eco schemes conditions	Provisions based on articles 31 and 70 of EU regulation 2021/2115	Good agricultural practices					Animal welfare		Origin & quality	Organic +	Climate		Multi-purposes			
		HVE	Integrowana Produkcja	IP Siggill	Leaf	SQNPI	Beter Leven	Initi. Tierwohl	PDO/PGI	Naturland	Label Bas Carbone	WfCP	Bord Bia quality Mark	CSBF	Equalitas	Global G.A.P.
Common conditions AECMs and eco-schemes	Voluntary based commitments	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Env. added value on SMR / GAEC and other legal requirements	See section 4.2														
	Maintenance of agricultural area	nd	nd	nd	nd	nd	+ (option)	/	nd	nd	nd	nd	nd	nd	nd	nd
	Consistency AECMs & eco-schemes	nd	nd	nd	nd	+	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Specific AECMs conditions	Collective scheme and result-based	+	+ collective - result based	+ collective - result based	+ collective - result based	+ collective - result based	+ collective - result based	-	+ collective - result based	+ collective - result based	+	+	-	+ collective - result based	+	+ collective - result based
	5- or 7-years commitment	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Payment granted per ha	+	+	+	+	+	nd	nd	+	+	+	-	+	nd	+	+
	Capacity of the scheme to be revised	+	nd	+	+	+	nd	nd / -	+	+	+	+	+	nd	+	+
	Information and training to assist farmers	-	+	-	+	+ (optional until 2023)	+	+	+	+	+	nd	+	nd	nd	nd
Specific eco-scheme conditions	Scope: at least two areas of actions climate, env., animal welfare and antimicrobial resistance	+	+	+	+	+	+ (option)	-	nd	+	-	-	+	-	+	+
	Payment granted per ha or per livestock units	+	+	+ (option)	-	+	+	+	+	+	-	-	+	+	+	+

4.3.3 Overview of the capacity of certification schemes to feed environmental and climate result indicators

The capacity of the certification schemes to feed environmental and climate result indicators as defined in the CAP strategic plans is analysed hereafter.

The analysis relies on the comparison of the data available between the organisations in charge of the certification schemes (websites, impact reports, key figures) and the list of result indicators defined for the monitoring of EU environmental and climatic objectives through national strategic plans.

Table 23: Environmental and climate result indicators defined for the monitoring of the CAP strategic plans

THEMES OF DATA	Result indicators
Contribute to climate change mitigation and adaptation, as well as sustainable energy	R.12 Adaptation to climate change: Share of agricultural land under commitments to improve climate adaptation
	R.13 Reducing emissions in the livestock sector: Share of livestock units under support to reduce GHG emissions and/or ammonia, including manure management
	R.14 Carbon storage in soils and biomass: Share of agricultural land under commitments to reducing emissions, maintaining and/or enhancing carbon storage (permanent grassland, agricultural land in peatland, forest, etc.)
	R.15 Green energy from agriculture and forestry: Investments in renewable energy production capacity, including bio-based (MW)
	R.16 Enhance energy efficiency: Energy savings in agriculture
	R 17 Afforested land: Area supported for afforestation and creation of woodland, including agroforestry
Foster sustainable development and efficient management of natural resources such as water, soil and air	R.18 Improving soils: Share of agricultural land under management commitments beneficial for soil management
	R.19 Improving air quality: Share of agricultural land under commitments to reduce ammonia emission
	R.20 Protecting water quality: Share of agricultural land under management commitments for water quality
	R.21 Sustainable nutrient management: Share of agricultural land under commitments related to improved nutrient management
	R.22 Sustainable water use: Share of irrigated land under commitments to improve water balance
	R.23 Environment-/climate-related performance through investment: Share of farmers with support in investments related to care for the environment or climate
	R.24 Environmental/climate performance through knowledge: Share of farmers receiving support for advice/training related to environmental- climate performance
Contribute to the protection of biodiversity, enhance ecosystem services and preserve habitats and landscapes	R.25 Supporting sustainable forest management: Share of forest land under management commitments to support forest protection and management.
	R.26 Protecting Forest ecosystems: Share of forest land under management commitments for supporting landscape, biodiversity and ecosystem services
	R.27 Preserving habitats and species: Share of agricultural land under management commitments supporting biodiversity conservation or restoration
	R.28 Supporting Natura 2000: Area in Natura 2000 sites under commitments for protection, maintenance and restoration
	R.29 Preserving landscape features: Share of agriculture land under commitments for managing landscape features, including hedgerows
Improve the response of EU agriculture to societal demands on food and health, including safe, nutritious and sustainable food, as well as animal welfare	R.36 Limiting antibiotic use: Share of livestock units concerned by supported actions to limit the use of antibiotics (prevention/reduction)
	R.37 Sustainable pesticide use: Share of agricultural land concerned by supported specific actions which lead to a sustainable use of pesticides in order to reduce risks and impacts of pesticides
	R.38 Improving animal welfare: Share of livestock units covered by supported action to improve animal welfare

Climate

The certification schemes Label Bas-Carbone and CSBF are the only ones that provide comprehensive and adapted data to monitor the share of livestock units committed to reducing emissions. Label Bas-Carbone also includes calculating agricultural land surface under commitment to reducing emissions and maintaining and/or enhancing carbon storage and energy savings.

Many other schemes cover climate change, but data availability is unclear and would require specific analysis from the organisation in charge of the scheme.

Naturland, Integrowana Produkcja, Initiative Tierwohl,Bord Bia quality Mark and Equalitas are the certification schemes that present the least capacity to provide data on climate change.

Sustainable development and efficient management of natural resources

Except Label Bas-Carbone and Bord Bia Quality Mark, most certification schemes cover some indicators regarding the use of natural resources. However, only a few schemes including HVE, IP Sigill, Leaf, SQNPI and Naturland can provide data to feed some indicators. Data is available concerning the share of agricultural land under commitment related to improved nutrient management, water balance, soil management as well as investment and training advice around environment and climate.

Protection of biodiversity, ecosystem services and habitats and landscapes

To calculate the share of agricultural land under management commitment supporting biodiversity conservation or restoration, data could be provided by three schemes (HVE, Leaf and Naturland) while it could be available under certain conditions for ten others. Label Bas-Carbone, Wineries for Climate Protection and Bord Bia Quality mark do not cover any of the indicators of this section.

Societal demands on food and health and animal welfare

Leaf and Naturland cover the three indicators listed in this category while other could potentially provide the data but without certainty at this stage: Beter Leven and PDO/PGIs. Based on our analysis, the only data that Bord Bia Quality Mark could provide would be the R.38 indicator of this section: "Share of livestock units covered by supported action to improve animal welfare ".

Regarding the score calculated for each of the schemes, it appears that:

- Naturland, Leaf and HVE are the certification schemes that can provide the data for the largest number of indicators, albeit remaining limited and comprised between 24% and 33% of the 21 indicators defined.
- Most of the schemes analysed cannot inform the indicators: eight of them can feed 0 or 1 indicator with certainty.
- Many schemes cover the theme of the result indicator, but data availability could not be determined.

The following table provides an overview of the possible use of the schemes to inform result indicators of the CAP. Details are provided in annex 9.

The legend of the table is as follows:

+	The data exists and is available
nd	The data is not available, but the scheme covers the indicator
/	The data is out of the scope of the scheme

Table 24: Matrix on the assessment of the capacity of the certification schemes to feed environmental and climate result indicators

		Good agri practices					Animal welfare		Origin & quality	Organic +	Climate		Multi-purposes			
Themes of data	Result indicators that could be fed by CS	HVE	Integrow. Prod.	IP Siggill	Leaf	SQNPI	Beter Leven	Initi. Tierwohl	PDO/PGI	ndturland	Label Bas-Carbone	WfCP	Bord Bia quality Mark	CSBF	Equalitas	Global G.A.P.
Climate mitigation and adaptation and sustainable energy	R.12 Share of agricultural land under commitments to improve climate adaptation	nd	/	nd	/	nd	nd	nd	/	/	/	nd	/	/	/	/
	R.13: Share of livestock units under support to reduce GHG and/or ammonia	/	/	/	/	/	/	/	nd	/	+	/	/	/	/	/
	R.14 Share of agricultural land under commitments	nd	/	nd	nd	nd	nd	/	/	/	+	/	/	nd	/	nd
	R.15 Green energy	/	/	nd	/	nd	nd	/	/	/	/	nd	/	/	/	nd
	R.16 Enhance energy efficiency	/	/	nd	nd	nd	nd	/	nd	/	+	nd	/	nd	nd	nd
	R 17 Afforested land	nd	/	/	/	/	/	/	nd	/	nd	/	/	/	/	/
Sustainable development and efficient management of natural resources such as water, soil and air	R.18 Improving soils	nd	nd	+	nd	+	nd	/	nd	+	/	/	/	nd	nd	nd
	R.19 Improving air quality	+	/	/	/	/	nd	/	nd	/	/	/	/	nd	nd	/
	R.20 Protecting water quality	nd	nd	nd	+	nd	nd	/	nd	+	/	/	/	nd	nd	nd
	R.21 Sustainable nutrient management	+	nd	+	nd	+	nd	/	nd	+	/	/	nd	nd	nd	nd
	R.22 Sustainable water use	+	/	+	nd	+	/	/	nd	nd	/	nd	/	/	nd	nd
	R.23 Environment/climate - investment	/	/	/	/	/	/	+	nd	/	/	nd	/	/	/	/
	R.24 Environmental/climate - knowledge	/	nd	nd	/	nd	nd	+	nd	/	/	/	/	/	nd	nd
Protection of biodiversity, enhance ecosystem services and preserve habitats and landscapes	R.25 Supporting sustainable forest management	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	R.26 Protecting Forest ecosystems	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	R.27 Preserving habitats and species:	+	nd	nd	+	nd	nd	/	nd	+	/	/	/	nd	nd	nd
	R.28 Supporting natura 2000	nd	/	/	/	/	/	/	nd	/	/	/	/	nd	/	nd
	R.29 Preserving landscape features	nd	nd	nd	+	nd	nd	/	nd	/	/	/	/	/	nd	nd
Societal demands on food and health, and animal welfare	R.36 Limiting antibiotic use	/	/	/	+	/	nd	+	nd	+	/	/	/	/	/	/
	R.37 Sustainable pesticide use	+	+	+	+	+	nd	/	nd	+	/	/	/	nd	nd	nd
	R.38 Improving animal welfare	/	/	/	+	/	+	+	nd	+	/	/	+	nd	/	/

4.4 Analysis of the potential risks attached to each certification schemes in terms of fair competition, environmental and climatic impacts

Greenwashing risks and distortion of competition are the main risks attached to the possibility of instrumentalising certification schemes.

4.4.1 Greenwashing risk

The risk of greenwashing depends on the claims, requirements of the standard, the effective implementation of these requirements and their effectiveness in responding to environmental and climate issues.

The potential added value (and limited risk of greenwashing and possible impact on fair competition) of certification schemes relies on the combination of several factors:

- the contribution of the certification schemes to EU environmental, climate and animal welfare objectives (see section 3.5),
- the areas of practices covered by each scheme (see section 4.3.1),
- the added value of the requirements defined in the standards compared with the EU minimum legislative requirements (see section 4.2),
- the level of requirement of the certification scheme on additionality or improvement (compared to an initial reference state). As shown by some authors[16], "the distinction between the obligation of means and the obligation of result, or performance obligation, is too manichean. Pure performance requirements in the environmental field never really exist, the practical examples are placed on a continuum of more or less fine estimated results". This study from I4CE suggests that "two factors are crucial [with regard to the effectiveness of the instrument in terms of environmental impact]: the ambition of the scheme and the level of requirement on additionality, for example by making the subsidy conditional on an improvement over an initial state",
- the compulsory requirement of key points (some requirements may be compulsory or optional in the different schemes),
- an effective control system.

The analysis showed that:

- from a general perspective, the selected CS contribute directly to several EU objectives, in particular "good agricultural practices", "organic +" and "multi-purpose" CS. Other schemes more specifically focus on one or two objectives (animal welfare, climate, position of farmers in the value chain).
- The added value of the certification schemes in comparison with EU GAECs and SMRs remains variable. The CS analysed generally provide at least one requirement with an added value. A limited number of schemes overpass EU minimal legislative requirements on different themes (animal welfare, plant health, management of resources). Only a small

[16] « Will the obligation of environmental results green the CAP? », I4CE, 2020

number of schemes cover several themes. The control of the effective implementation of practices is generally controlled by third party organisations on an annual basis.

- The assessment of the effectiveness of the certification schemes is not uniformly substantiated: only two climate standards (Label Bas-Carbone and WfCP) require demonstration of additional carbon storage or climate-friendly practices. Some schemes provide specific impact reports to assess the impact of their practices. The monitoring of the results or impact of the certification regimes remain variable and incomplete. For most of the schemes and result indicators defined, the data required is either out of scope or its availability is not determined.

Some specific features for each profile of CS may be highlighted:

- Schemes on good agricultural practices:
    - Several EU objectives are addressed but matching with GAEC, SMR and eco-schemes practices is not homogeneous: higher for HVE, IP Sigill and Leaf than for Integrowana Produkcja and SQNPI;
    - The key points are compulsory for most of the CS, except in HVE where the farmer may select requirements from a list,
    - There is no requirement of additionality or improvement in those CS, however some of them demonstrate a high level of ambition (IP Sigill, HVE to some extent),
    - For each CS, a control system is implemented and relies on independent organisations.
- Animal welfare schemes:
    - The CS only focus on one EU objective (health and animal welfare), with the exception of Beter Leven's recently published integrated dairy cattle standard,
    - We observe strong differences between the two CS in terms of requirements in line with GAEC, SMR and eco-schemes (higher number and level of requirements for Beter Leven than for Initiative Tierwohl),
    - However, there are different levels of implementation in Beter Leven scheme, and all requirements are not compulsory in the first level.
    - Each of the CS implements specific control system.
- Origin and quality:
    - The requirements provided by the GI scheme depend on each single PDO or PGI. Analyses tend to show that GIs provide better position in the supply chain for farmers but environmental and climatic commitments are highly variable. Each of the PDO/PGI implements a control system.
- Organic +:
    - The scheme analysed covers all the EU objectives considered, with a high coverage of SMR, GAEC and eco-schemes. A specific control system is implemented.
- Climate:
    - The two CS considered cover the climate objectives of the EU, WfCP also covers the sustainable management of resources. The requirements of these CS do not

specifically cover the GAEC, SMR and eco-schemes as they are based on specific measures implemented by the certified companies (no pre-defined requirements at farm stage). Specific control systems are implemented.

- Multi-purpose:
    - The contribution to EU objectives varies greatly between the schemes, from the high contribution to one objective (Bord Bia quality mark) to high contribution to 4 EU objectives (Equalitas).
    - For some of these schemes, some key points are not compulsory and for most of them, the CS is based on obligation of means (mixed obligations for CSBF).
    - Specific controls are implemented for each scheme.

Each scheme may be instrumental in one or several themes in order to fulfill EU objectives. **However, there is a risk or greenwashing in considering that all schemes are at the same level with regards to addressing all EU objectives**. The present analysis provides an overview of the possible contribution of a selection of schemes to the different EU objectives and highlights that no generic conclusion can be drafted. Thus, to avoid greenwashing risk, a detailed assessment of the added value of **each scheme** on **each EU objective** shall be conducted, based on the detailed requirements and implementation of the scheme.

Table 25: Analysis for Greenwashing

Indicators		Good agri practices					Animal welfare		Origin & quality	Organic +	Climate		Multi-purposes			
		HVE	Integrow. Prod.	IP Siggill with options	Leaf	SQNPI	Beter Leven with [illegible]	Initi. Tierwohl	PDO/PGI	Naturland	Label Bas-Carbone	WfCP	Bord Bia quality Mark	CSBF	Equalitas	Global G.A.P.
EU objectives (high or direct contribution) (section 3.5)	Farmer position	+	+	+	+	+	+	+	++	++	+	+	+	+	+	+
	Climate change	+	+	++	++	+	+	+	+	++	++	++	/	+	++	+
	management resources	++	++	++	++	++	+	/	+	++	/	++	+	++	++	++
	Protection env	++	++	++	++	++	+	/	+	++	/	+	+	++	++	+
	Health and animal welfare	++	++	++	++	++	++	++	++	++	/	/	++	++	++	++
% criterion for which CS go beyond GAEC/SMR (section 4.2)		61%	17%	39%	35%	17%	65%	13%	0%	35%	0%	0%	0%	26%	4%	0%
% practices covered (eco-scheme) (section 4.3.1)		36%	9%	50%	23%	27%	41%	14%	0%	68%	18%	0%	14%	18%	9%	0%
Key point compulsory (++) or optional (+)		+	++	++	++	++	++	++	++	++	/	+	+	/	++	+
Additionality of requirement / improvement		/	/	/	/	/	/	/	/	/	++	+	/	/	/	/
Control of effective implementation		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

4.4.2 Competition distortion risk

Two questions are considered to assess that there is no risk of competition distortion on the EU market:

- Is the scheme opened to all operators?
- Is the scheme compulsory to access some markets?

If the answer is "no" to the first question and "yes" to the second one, we may consider there is a risk of market distortion.

Is the scheme opened to all operators? *Generally, "yes", with a few exceptions.*

We observe that a few schemes are nationally rooted (for instance Bord Bia Quality Mark, HVE or CSBF) and some others may have regional implementation (for instance SQNP with a national base and regional implementation), however the access may be possible for producers from other MS (for instance HVE).

The case of PDO/PGI is specific: the scheme is accessible to all producers (at EU or third country levels) but a specific geographical area is defined for each PDO or PGI.

Some other schemes are internationally used, such as Global G.A.P. or the growing scheme Equalitas (Italian scheme, requested on the Scandinavian market, with certified companies in Italy and Spain).

Is the scheme compulsory to access to some markets? *Generally, "no", with a few exceptions*

In most cases, there is no pre-requisite related to a CS to access a specific market. However, a few situations should be highlighted:

- Some retailers may ask for sustainability schemes, in most cases several schemes are possible, and we should highlight the following cases:
    - The large use of GLOBAL G.A.P. scheme by EU retailers,
    - Tesco (UK) has announced the implementation of the LEAF Marque environmental assurance scheme across its entire global produce supply chain 17. The retailer will ensure all UK growers are certified by the end of 2022 and will begin the process of certifying the rest of its global grower base from 2023, with the aim of completing the transformation by 2025.
    - Starting from 2023, all Dutch supermarkets will require broiler meat to be at least one-star certified Beter Leven.
- Loi Egalim in France states that public catering shall be supplied with 50% of quality product, among which HVE product since January 2020. Other schemes are eligible: organic, PDO, PGI, Label Rouge.

[17] https://leaf.eco/news-and-media/news/tesco-transforms-environmental-standards-for-growers-with-adoption-of-global-leaf-marque-standard

Conclusion on market distortion

No major risk of market distortion is identified. The schemes are generally opened to all producers (with some exceptions) but the main point is that in most cases, the scheme has not been identified as a pre-requisite to access a specific market.

5. POLICY RECOMMENDATIONS

Recommendation 1: Encourage the use of the relevant certifications' schemes within the CAP National Strategic Plans to achieve the EU sustainability objectives.

Rationale: Several schemes contribute to different EU objectives.

Good practices identified: Several schemes are promoted in the NSPs: Bord Bia Quality Mark, SQNPI, HVE, Integrowana Produkcja WfCP…

Recommendation 2: Use certification schemes to implement the CAP and achieve CAP objectives; this is particularly relevant for SMRs, GAECs, eco-schemes and AECMs. Practically, this could be supported by the development of tools such as:

- an equivalence programme of the certification schemes with CAP instruments (SMRs, GAECs, ecoschemes and AECMs).
- a guideline for the assessment of equivalence of schemes with CAP instruments (SMRs, GAECs, ecoschemes and AECMs). These guidelines shall consider:
    - the contribution to at least one environment or climatic objective of the CAP,
    - clear environmental or climatic added value (measurable achievements),
    - requirements with "clear added value" that are compulsory (not optional requirements neither recommendations),
    - third-party control,
    - implementation of a monitoring system which can feed the EU monitoring system.

Rationale: A wide range of schemes are presently implemented at EU level. They differ in terms of scope, type of requirements, level of requirements and practices. Some of them may be instrumental for the CAP. This is a case-by-case approach.

A guide to scheme setters may be relevant to develop the certifications.

For several schemes, the assessment of the contribution to environment and climate is not easily measurable (for instance, requirement to elaborate a management plan, but no quantitative target).

Good practices identifed:

- SQNPI certification is used for the implementation of AECM and ecoschemes in Italy.
- Bord Bia Quality Mark is used for the implementation of AECM in Ireland.
- HVE certification is eligible for Ecoscheme subsidies in France.
- There is a possible exemption of crop rotation requirement under GAEC 7 for organic farms in France.

Recommendation 3: Use some certification schemes in the risk analysis for CAP controls. The possible use of each scheme must be assessed on a case-by-case basis.

Rationale: The monitoring systems of most schemes have not been elaborated to provide centralised and harmonised data. For some of them, determining what type of data is recorded is unclear. Thus, these certification schemes are not fit for purpose to collect data at a farm level (on the compliance with specific requirement for instance). However, the fact that a farm is certified may be an indicator of the level of commitment towards specific objectives (environment, climate, water management…). Thus, the involvement in some of these certification schemes may be used in the risk analysis for CAP controls.

Good practices identified: IP Sigill certification can allow to lower the GAEC and SMR controls conducted by the Swedish authority considering that the farms certified are already controlled for higher standards by an external body.

6. ANNEXES

ANNEX 1 - LIST OF SOURCES

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ANNEX 2 - LIST OF INTERVIEWS CONDUCTED

SCHEME	INTERVIEWS / WRITTEN COMMUNICATION
Haute Valeur Environnementale (HVE) - voie A	• HVE association
Integrowana Produkcja	• State Inspection for Plant and Seed Protection of Poland (PIORIN)
IP Sigill-certifierad and Svenskt Sigill-märke	• Sigill Kvalitetssystem
Leaf marque	• Leaf
SQNPI	• Italian Ministry of Agricultural Food and Forestry Policies
Beter Leven	• Dutch Society for the Protection of Animals (De Dierenbescherming)
Initiative Tierwohl "Haltungsform labelling scheme"	• German Society for the Promotion of Animal Welfare in Farm Animal Husbandry Ltd. (Initiative Tierwohl)
EU geographical indications (GIs): PDO/PGI	/
Naturland	/
Label Bas-Carbone	/
Wineries for Climate Protection (WfCP)	• Federacion Espanola del Vino (FEV)
Bord Bia Quality Mark	• Bord Bia
Certified Sustainable Beef Framework	/
Equalitas	• Equalitas
Global G.A.P. IFA	• FoodPLUS GmbH • French Interprofessional Technical Centre for Fruit and Vegetables • Terres du Sud (French agricultural cooperative)

ANNEX 3 - STRUCTURE OF THE DATABASE

The mapping of the farm certification schemes was realised based on research studies, reports, websites of the schemes, ministry of agriculture and personal bodies. The mapping of certification schemes covered the following items:

Item	Ways to fill in the table	Comment
Name of the standard	/	/
Typology	- Animal welfare - Climate - Good agricultural practices - Local/Regional - Multi-purpose - Non-GMO - Organic + - Other - Traceability/Safety/Management	Each label has one of these typologies, which makes it possible to classify them later, depending on their focus.
Name of the standard setter	/	/
Country of the standard	/	/
Year of establishment	Year of establishment or "under development"	/
Type of standard setter	- Public - Private	/
Target of the certification	- Business to business (BtoB) - Business to consumer (BtoC)	/
Geographical coverage	- Sub-national - National - EU - International	The "geographical coverage" is the area where producers are involved in the scheme. As the distinction between "local" and "regional" could be unclear, both levels were grouped in "sub national".
Mono/Multi production	- Mono-production - Multi-production	This field indicates whether the label covers a single production or multiple productions.
Sectoral coverage	- Livestock - Fruits & vegetables	This field indicates which sectors the label does cover.

	- Crops - Seafood - Wine - Others	
Sectoral coverage (detailed)	/	Detailed information on the sectors covered
Only compliance with regulatory requirements	/	This item specifies whether the specifications of the labels correspond only to regulations or not.
Focus of the certification	- Requirements regarding the quality system - Requirements regarding the quality processing - Requirements regarding the quality of the final product	Some certifications may cover different focus. For instance, organic farming and geographical indications cover both the method of production and the final product.
Farming stage involved	/	The field specifies whether the label covers the farming stage.
Main themes claimed	- Organic - Animal welfare and health - Good agricultural practices - Traceability - Origin (GI, local, regional) - Economic and social empowerment - Climate - Other	This section is based on desk research on certification scheme website. A single label may correspond to more than one of the above categories.
Economic importance	/	Various useful information that can give an order of magnitude on the economic importance of the label.
Type of control	/	This field specifies the types of controls to which the labels are subject.
Public support (policy, fund)	/	This item indicates whether there are some policies or fund which can help promote the label.
Comment	/	/
EU/non-EU	- EU - Non-EU	/
ISO country code	/	/

ANNEX 4 - LIST OF SCHEMES IDENTIFIED

Below is an overview of the database created and used for the analysis, with the following items: name of the scheme, typology, MS, type of the standard setter, target of the certification, geographical coverage.

	Name of the standard	Typology	Country	Geographical coverage	Public / private	BtoB / BtoC
1	"Biozebra" logo (Czech mandatory national organic logo)	Organic +	CZ	National	Public	BtoC
2	Agricultura ecologica	Organic +	RO	National	Public	BtoC
3	Bio aus Hessen	Organic +	DE	Sub national	Public	BtoC
4	Bio Austria	Organic +	AT	National	Private	BtoC
5	Bio Garancia Kft standard for organic quails	Organic +	HU	National	Private	BtoC
6	Bio LËTZEBUERG	Organic +	LU	National	Private	BtoC
7	Biogarantie and Biogarantie Belgium	Organic +	BE	National	Private	BtoC
8	BIOHellas	Organic +	EL	National	Private	BtoC
9	Biokreis	Organic +	DE	National	Private	BtoC
10	Biokreis regional & fair	Organic +	DE	National	Private	BtoC
11	Bioland	Organic +	DE	International	Private	BtoC
12	Biomaufel	Organic +	LU	National	Private	BtoC
13	Bio-ovo	Organic +	LU	National	Private	BtoC
14	Biopark	Organic +	DE	National	Private	BtoC
15	Bio-Qualität Bayern	Organic +	DE	Sub national	Public	BtoC
16	Bio-Siegel	Organic +	DE	National	Public	BtoC
17	Bio-Zeichen Baden-Württemberg	Organic +	DE	Sub national	Public	BtoC
18	CAAE Insumos UNE	Organic +	ES	National	Private	BtoC
19	Cactus Rëndfleesch vum Lëtzebuerger Bauer	Organic +	LU	National	Private	BtoC
20	CARTA QUALITA' DEL PARCO DELLE DOLOMITI BELLUNESI	Organic +	IT	Sub national	Private	BtoC
21	CERTIFIED BULGARIAN Organic production	Organic +	BG	National	public	BtoC
22	Coprosain	Organic +	BE	Sub national	Private	BtoC
23	Demeter	Organic +	DE	International	Private	BtoC
24	Dio	Organic +	EL	National	Private	BtoC
25	Eko Keurmerk	Organic +	NL	National	Public	BtoC
26	Ekoland	Organic +	PL	National	Private	BtoC

27	Gäa	Organic +	DE	National	Private	BtoC
28	Garanzia AIAB	Organic +	IT	National	Private	BtoC
29	IBD Certified organic	Organic +	BR	International	Private	BtoC
30	ICEA voluntary standards	Organic +	IT	National	Private	BtoC
31	IFOAM	Organic +	DE	International	Private	BtoB
32	Krav standards	Organic +	SE	International	Private	BtoC
33	Latvijas Ekoprodukts	Organic +	LV	National	Private	BtoC
34	Le Bourgeon Bio Suisse, le Bourgeon Bio, le Bourgeon de Reconversion et le Bourgeon Gourmet	Organic +	CH	International	Private	BtoC
35	Lebensbaum "natur und mensch" mark	Organic +	DE	National	Private	BtoC
36	Nature&Progrès Belgique	Organic +	BE	National	Private	BtoC
37	Naturland	Organic +	DE	International	Private	BtoC
38	Oko Estonian Organic Farming	Organic +	EE	National	Public	BtoC
39	Økologisk Landsforening (Danish organic logo)	Organic +	DK	National	Private	BtoC
40	Orbi	Organic +	AT	National	Private	BtoC
41	Organic Farming	Organic +	EU	International	Public	BtoC
42	Organic standards Soil Association	Organic +	UK	National	Private	BtoC
43	PRO-BIO	Organic +	CZ	National	Private	BtoC
44	Produccion ecológica	Organic +	ES	National	Public	BtoC
45	Slovenia Organic Farming certification	Organic +	SI	National	Public	BtoC
46	Thönes Organic Meat	Organic +	DE	Sub national	Private	BtoC
47	USDA organic	Organic +	US	International	Public	BtoC
48	We care	Organic +	DE	National	Private	BtoC
49	ZNAK CERTYFIKOWANEGO ROLNICTWA EKOLOGICZNEGO (Polish organic)	Organic +	PL	National	Public	BtoC
50	AENOR Certificación de Producción de Cultivo Sostenible	Good agricultural practices	ES	National	Private	BtoC
51	Agriqualità	Good agricultural practices	IT	Sub national	Private	BtoC
52	ALBERT HEIJN "Beter voor" programs	Good agricultural practices	NL	National	Private	BtoC
53	AREA	Good agricultural practices	FR	Sub national	Public	BtoB
54	Australian Farm Biodiversity Certification Scheme	Good agricultural practices	AU	National	Public	BtoB

55	AWS International Water Stewardship Standard (AWS Standard)	Good agricultural practices	UK	International	Private	BtoB
56	Bee Friendly	Good agricultural practices	FR	National	Private	BtoC
57	Biodiversity Friend	Good agricultural practices	IT	International	Private	BtoC
58	Calidad Certificada (Certificated Quality)	Good agricultural practices	ES	Sub national	Private	BtoC
59	Certification environnementale de niveau 2	Good agricultural practices	FR	National	Public	BtoB
60	Certified Sustainable Palm Oil (CSPO)	Good agricultural practices	Non EU	International	Private	BtoB
61	Certified Wildlife friendly, Wildlife Friendly, Predator Friendly, Gorilla Friendly, Jaguar Friendly, Sea Turtle Friendly, and Elephant Friendly certifications.	Good agricultural practices	US	International	Private	BtoC
62	Fair'n green	Good agricultural practices	DE	International	Private	BtoC
63	FSC	Good agricultural practices	CA	International	Private	BtoC
64	Gutfried brand	Good agricultural practices	DE	National	Private	BtoC
65	Haute Valeur Environnementale (HVE)	Good agricultural practices	FR	National	Public	BtoC
66	INTEGROWANA PRODUKCJA (Integrated Production label)	Good agricultural practices	PL	National	Public	BtoC
67	KIP (kontrolliert integrierte Produktion); KVA (Neutral kontrollierter Vertragsanbau)	Good agricultural practices	DE	Sub national	Public	BtoB
68	Leaf marque	Good agricultural practices	UK	International	Private	BtoC
69	Origin green	Good agricultural practices	IE	National	Private	BtoC
70	Pour une agriculture du vivant	Good agricultural practices	FR	National	Private	BtoB
71	Producción Integrada (Integrated Production)	Good agricultural practices	ES	Sub national	Public	BtoC
72	Programa de Sustentabilidade dos Vinhos do Alentejo (PSVA	Good agricultural practices	PT	Sub national	Private	BtoC
73	Protecção e Produção Integrada	Good agricultural practices	PT	National	Public	BtoC
74	Rainforest Alliance	Good agricultural practices	US	International	Private	BtoC
75	Round table of responsible Soy (RTRS)	Good agricultural practices	Non EU	International	Private	BtoB
76	Slovenia Integrated production certification	Good agricultural practices	SI	National	Public	BtoC

77	SQNPI: Sistema di Qualità Nazionale di Produzione Integrata per le Produzioni Agricole	Good agricultural practices	IT	National	Public	BtoC
78	Terra Vitis	Good agricultural practices	FR	National	Private	BtoC
79	UNE 155000:2016	Good agricultural practices	ES	National	Public	BtoB
80	Vergers écoresponsables	Good agricultural practices	FR	National	Private	BtoC
81	Vigneron engagés en développement durable	Good agricultural practices	FR	National	Private	BtoC
82	VIVA	Good agricultural practices	IT	National	Public	BtoC
83	Weidemelk/Weidemilch/Lait de Paturage/Meadow Milk	Good agricultural practices	NL	EU	Private	BtoC
84	Wspólny znak towarowy gwarancyjny B PCBC	Good agricultural practices	PL	National	Public	BtoB
85	ZÉRO RÉSIDUS DE PESTICIDES	Good agricultural practices	FR	National	Private	BtoC
86	Bord Bia Quality Mark	Origin/Quality of final product	IE	National	Public	BtoC
87	BQM-Landwirtschaft (Basis-Qualitats-Managementprogramm)	Origin/Quality of final product	DE	Sub national	Private	BtoC
88	CC Calidad Controlada (CC Controlled Quality)	Origin/Quality of final product	ES	Sub national	Public	BtoC
89	Certyfikat PCBC Q	Origin/Quality of final product	PL	National	Public	BtoC
90	EU geographical indications: PDO/PGI	Origin/Quality of final product	EU	International	Public	BtoC
91	EU TSGs: traditional speciality guaranteed	Origin/Quality of final product	EU	EU	Public	BtoC
92	Geprüfte Qualität Hessen	Origin/Quality of final product	DE	Sub national	Public	BtoC
93	Geprüfte Qualität Schleswig-Holstein	Origin/Quality of final product	DE	Sub national	Public	BtoC
94	Geprüfte Qualität Thüringen	Origin/Quality of final product	DE	Sub national	Public	BtoC
95	GWARANTOWANA JAKOŚĆ (QAFP)	Origin/Quality of final product	PL	National	Public	BtoC
96	Jakość Tradycja (Quality Tradition)	Origin/Quality of final product	PL	National	Public	BtoC
97	Label Rouge	Origin/Quality of final product	FR	National	Public	BtoC
98	Laid in Britain	Origin/Quality of final product	UK	National	Private	BtoC
99	Marca de Calidad CV (CV Quality Brand)	Origin/Quality of final product	ES	Sub national	Private	BtoC

100	Marca de qualitat agroalimentària (Marca Q)	Origin/Quality of final product	ES	Sub national	Public	BtoC
101	Marca Parque Natural de Andalucía	Origin/Quality of final product	ES	Sub national	Public	BtoC
102	Marchio di Qualità Ambientale DEL PARCO NAZIONALE DEL POLLINO	Origin/Quality of final product	IT	Sub national	Public	BtoC
103	Marchio Qualità controllata	Origin/Quality of final product	IT	Sub national	Public	BtoC
104	Pork Quality System (PQS) (System Jakości Wieprzowiny)	Origin/Quality of final product	PL	National	Private	BtoC
105	Poznaj Dobrą Żywność (PDZ label)	Origin/Quality of final product	PL	EU	Public	BtoC
106	Pro Agro labels: Qualitätsprogramm "Obst & Gemüse", Marke "VON HIER"	Origin/Quality of final product	DE	Sub national	Private	BtoC
107	Produits agricoles de France	Origin/Quality of final product	FR	National	Private	BtoC
108	Produkt polski	Origin/Quality of final product	PL	National	Public	BtoC
109	QUALITA' GARANTITA DALLE MARCHE	Origin/Quality of final product	IT	Sub national	Private	BtoC
110	Qualitätszeichen Baden-Württemberg	Origin/Quality of final product	DE	Sub national	Public	BtoC
111	Quality Meat Programme (QMP)	Origin/Quality of final product	PL	National	Private	BtoC
112	Regionalfenster	Origin/Quality of final product	DE	Sub national	Private	BtoC
113	Sapore di Campania	Origin/Quality of final product	IT	Sub national	Public	BtoC
114	Thönes Natural Meat	Origin/Quality of final product	DE	Sub national	Private	BtoC
115	Tuschia Viterbese	Origin/Quality of final product	IT	Sub national	Public	BtoC
116	UNSER LAND marks	Origin/Quality of final product	DE	Sub national	Private	BtoC
117	Valeurs Parc Naturel Régional	Origin/Quality of final product	FR	National	Public	BtoC
118	"Steinemann Eichenhof Rind HF3" (bovine) and "Steinemann Eichenhof Schwein" (pork)	Animal welfare	DE	Sub national	Private	BtoC
119	American Grassfed	Animal welfare	US	National	Private	BtoC
120	Anbefalet af Dyrenes Beskyttelse	Animal welfare	DK	National	Private	BtoC
121	Bedre dyrevelfærd	Animal welfare	DK	National	Public	BtoC
122	Bem-Estar Animal	Animal welfare	PT	National	Private	BtoC
123	Beter Leven	Animal welfare	NL	National	Private	BtoC

124	BIENESTAR AVALADO POR ANDA	Animal welfare	ES	National	Private	BtoC
125	Compromiso Bienestar Animal Ovinos PAWS (ovino, cabras)	Animal welfare	ES	National	Private	BtoC
126	Compromiso Bienestar Animal Porc PAWS (pork) - IAWS	Animal welfare	ES	National	Private	BtoC
127	Compromiso Bienestar Animal Vacuno PAWS (beef)	Animal welfare	ES	National	Private	BtoC
128	Danish crown code of conduct	Animal welfare	DK	National	Private	BtoB
129	Dawn meats	Animal welfare	IE	National	Private	BtoC
130	EBEA - L'ÉTIQUETTE BIEN-ÊTRE ANIMAL	Animal welfare	FR	National	Private	BtoC
131	FAWL - Farm Assured Welsh Livestock Beef and Lamb Scheme	Animal welfare	UK	Sub national	Private	BtoC
132	HK Ruokatalo Quality Assurance Programme	Animal welfare	FI	National	Private	BtoC
133	IKB Ei	Animal welfare	NL	National	Private	BtoC
134	Initiative Tierwohl "Haltungsform labelling scheme"	Animal welfare	DE	National	Private	BtoC
135	KAT	Animal welfare	DE	EU	Private	BtoC
136	National AW label (Germany)	Animal welfare	DE	National	Public	BtoC
137	Neuland Fleisch	Animal welfare	DE	National	Private	BtoC
138	NIBL FQAS - Northern Irish Beef and Lamb Farm Quality Assurance Scheme	Animal welfare	IE	Sub national	Private	BtoC
139	QM+ additional module	Animal welfare	DE	National	Private	BtoC
140	QMS Cattle & Sheep Assurance Scheme	Animal welfare	UK	Sub national	Private	BtoC
141	RSPCA Assured standards (ex Freedom food)	Animal welfare	UK	National	Private	BtoC
142	TIERSCHUTZ-KONTROLLIERT	Animal welfare	DE	EU	Private	BtoC
143	Tierschutzlabel "Für Mehr Tierschutz"	Animal welfare	DE	National	Private	BtoC
144	Welfair	Animal welfare	ES	International	Private	BtoC
145	AMA siegel / AMA quality seals (AgrarMarkt)	Traceability/safety	AT	National	Public	BtoC
146	British lion scheme	Traceability/safety	UK	National	Private	BtoC
147	C'alial	Traceability/safety	ES	Sub national	Public	BtoC
148	Cahier des charges produits Cora	Traceability/safety	FR	National	Private	BtoC
149	Certified Seed potatoes	Traceability/safety	BE	Sub national	Public	BtoB

150	Culture Raisonnée Controlée - CRC -relatedo to certification environnementale	Traceability/safety	FR	National	Private	BtoC
151	Disciplinare di etichettatura volontaria delle carni di pollame	Traceability/safety	IT	National	Private	BtoC
152	ESTA Certification System	Traceability/safety	EU	EU	Private	BtoB
153	Food security standards FSSC 22000	Traceability/safety	NL	International	Private	BtoC
154	IFS	Traceability/safety	DE	International	Private	BtoB
155	KIK Kvalitetssikring I Kyllingeproduktionen (Quality Assurance in Chicken Production)	Traceability/safety	DK	National	Private	BtoC
156	LU Harmony	Traceability/safety	LU	National	Private	BtoC
157	ORGAINVENT System for the Indication of Origin of Meat	Traceability/safety	DE	National	Private	BtoC
158	Qmilch label	Traceability/safety	DE	National	Private	BtoB
159	QS system	Traceability/safety	DE	EU	Private	BtoC
160	Scottish Quality Crops certification scheme	Traceability/safety	UK	Sub national	Private	BtoC
161	Seed Certification Scheme	Traceability/safety	IE	National	Public	BtoB
162	SeedGuard certification system	Traceability/safety	DE	National	Private	BtoB
163	TASCC-Trade Assurance Scheme for Combinable Crops	Traceability/safety	UK	National	Private	BtoB
164	Agri Ethique	Multi purpose	FR	National	Private	BtoC
165	Agriconfiance	Multi purpose	FR	National	Private	BtoC
166	Arla Foods/Arlagården® quality programme	Multi purpose	DK	EU	Private	BtoC
167	Canadian Roundtable for Sustainable Beef (CRSB)	Multi purpose	CA	International	Private	BtoC
168	Equalitas	Multi purpose	IT	National	Private	BtoC
169	FARM SUSTAINABILITY ASSESSMENT	Multi purpose	US	International	Private	BtoB
170	Genesis standards	Multi purpose	UK	International	Private	BtoB
171	Global G.A.P.	Multi purpose	DE	International	Private	BtoB
172	Goldschmaus – Die Marke der Bauern	Multi purpose	DE	Sub national	Private	BtoC
173	Green Low Carbon Agri-Environment (GLAS) scheme	Multi purpose	IE	National	Public	BtoB
174	IP Sigill-certifierad and Svenskt Sigill-märke	Multi purpose	SE	International	Private	BtoC
175	Marque nationale de la viande de porc	Multi purpose	LU	National	Public	BtoC
176	Naturschutz Fleesch	Multi purpose	LU	National	Private	BtoC

177	On the way to Planetproof (ex "Milieukeur")	Multi purpose	NL	EU	Private	BtoC
178	Qualité Filière Lait (QFL) programme	Multi purpose	BE	National	Private	BtoC
179	Red Tractor Assurance	Multi purpose	UK	National	Private	BtoC
180	Slovenia Selected Quality (Izbrana kakovost – Slovenija)	Multi purpose	SI	National	Public	BtoC
181	Slovenia Superior Quality	Multi purpose	SI	National	Public	BtoC
182	Sustainably Grown program	Multi purpose	US	International	Private	BtoB
183	Wineries for Climate Protection (WfCP)	Multi purpose	ES	National	Private	BtoC
184	Zásady Značky kvality	Multi purpose	SK	National	Public	BtoC
185	Carbon Footprint Labels	Climate	UK	International	Private	BtoC
186	Dairy sustainable framework	Climate	AU	International	Private	BtoB
187	Emissions Reduction Fund	Climate	AU	National	Public	BtoB
188	International wineries for climate action (IWCA)	Climate	ES	International	Private	BtoB
189	ISCC - International Sustainability and Carbon Certification	Climate	DE	International	Private	BtoC
190	Label Bas-Carbone	Climate	FR	National	Public	BtoB
191	Peatland Code	Climate	UK	National	Private	BtoB
192	REDcert-DE, REDcert-EU and REDcert^2	Climate	DE	EU	Private	BtoB
193	SURE system	Climate	DE	EU	Private	BtoB
194	NON-GMO PROJECT Verified brands	Non - GMO	US	International	Private	BtoC
195	Proterra non GMO standard	Non - GMO	NL	International	Private	BtoC
196	VLOG Certification	Non - GMO	DE	International	Private	BtoC
197	wolne od GMO	Non - GMO	PL	National	Public	BtoC
198	Fairtrade	Fairtrade	DE	International	Private	BtoC

This study presents the concepts and methods of farm certification schemes and provides information on the main existing schemes in the EU and in third countries. It analyses how these schemes can help the EU reach its sustainability objectives in the farming sector and be instrumental in the implementation and monitoring of the related CAP instruments during the upcoming programming period.

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