

D2.1 – 1,500 Adaptation and Mitigation Plans - AMPs

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List of Abbreviations

CFD	Climate Farm Demo				
NC	National Coordinator				
PDF	Pilot Demo Farm				
WP	Work Package				
AMP	Adaptation and mitigation Plan				
АММ	Adaptation and mitigation measure				
CFA	Climate Farm Advisor				





Table of Contents

Abstract6
AMPs: an overview7
The AMP7
AMP sections7
The process9
AMPs process progress11
AMPs by country and production system12
AMPs next steps15
Preventive actions15
Further actions15





List of Tables and Figures

Table 1. Distribution of AMPs and audits by country	.11
Figure 1 Farm description and farm indexes	8
Figure 2. Carbon audit's results	9
Figure 3. The plan	9
Figure 4. The process	.10





Abstract

Deliverable D2.1 collects the information from the AMPs done by climate farm advisors (CFAs) together with the farmers in the Pilot Demo Farms (PDFs) and uploaded to <u>the Backoffice of CFD website</u> within 30th September 2024. It is a preliminary analysis of AMPs uploaded which will be further completed.

By the deadline, about 32% of the total AMPs were uploaded. The report results from the analysis of the AMPs collected. It describes and clusters AMPs by country and production sector, while a deeper analysis of mitigation and adaptation measures selected and GHG emission and C sequestration baselines will be integrated when all plans will be uploaded.

This report will be updated in September 2025.





Chapter 1 AMPs: an overview

The AMP

A plan is a **set of actions** to be implemented in order to achieve a **specific goal.** Thus, the adaptation and mitigation plan (AMP) could be defined as a set of strategies and actions aimed at *minimizing the impacts of climate change on the farm while reducing greenhouse gas emissions.* The preparation of a written AMP helps to identify and define goals as well as to foresee gaps, weaknesses and obstacles for its implementation.

In CFD, a common template for the AMP was developed to ensure the collection of the same information for all 1,460 farms involved in the project. This information will be used in T2.3 and task 2.4 to understand the performance within the farm and to compare results at national and European level. The plan is mandatory for all PDFs. Each AMP is individual for each farm and outlines the pathways to improve climate-related environmental performance in the farm. In some farms (with 2 or more production centres or with more than one main products), the advisor together with the farmer could decide to prepare more than one plan.

The initial carbon audit (baseline) together with the adaptation audit and the farmer's preferences, possibilities and interests are the base for a successful AMP. Each CFA can tailor the plan together with the farmer to better answer the specific needs and challenges of the PDF. It is worth noticing, that the specific content of each AMP is highly connected on the local context, agricultural practices and products, and regional climate change impacts, even if the general structure is the same for all AMP.

AMP sections

The AMP is divided in 5 sections:

- **Farm description**: this part contains general data from the farm (name, farmer, location, etc.), the production system, main product, etc.
- Farm indexes: this section is dedicated to information about main crops, livestock (for calculation of livestock units you can use sheet 4-LU, which contains the coefficients for each category), products and energy consumption and production. Information required is not detailed but it helps to make a photograph of the farm.
- **Carbon audit results**: this section summarises the results obtained from the C audit for both GHG emissions and C sequestration, expressed by area and by product and the main GHG emission sources.





- **Plan's objectives table:** this section is dedicated to the identification of the objectives of the farm and the measures the farmer would like to apply to reach the objective. It also contains the indicators useful for monitoring the progress of the plan.
- **Farmer's approach:** this part is focused on monitoring the farmer's approach and willingness to apply the measures proposed by CFA.

EGEND : Mandato MP Version Number		markers _	Colculated data that co	annue de modifiéd		
enerality	202401					
		1		1		
ID-FARM Date		Country				1
Date		Region				1
Farm's name			Farmer's name]
Advisor name			Advisor organisation			
Production system			Main product			1
Product certification			Type of production			J
Farm manpower		number of f	uli-time worker equivo	lent (also family)		
arm						
UAA Total		ha		UAA owned		ha
Soil type			Av	erage annual rain		mm
				•		1
hort description f the farm :	Suggestion: include her					
r the farm :	Jormer, Jomily memo	ers and emp	loyees, thought or reco	ignised threads for	m climate ch	ange
arm indexes						
Main crops						
		1				, ,
Grassland (ha)		ha	Maize	and other forage		ha
Of which pastoral land		ha				
r		Yield	Type of	Fertilisation	Area	
	Main crop	(t/ha)	fertilisation	kgN/ha	(ha)	Notes
rop 1						
rop 2						
rop 3						
ivestock						
Livestock system						
		an behad				
nimals	Livestock category	Unit (LU)		Products		
ategory 1				Type of product		
ategory 2			Average	e production/year Choice of unit		{
ategory 3			k	ncentrates in diet		
ategory 4	Total	0	76 CD	incentrates in diet		2 m
	IOLA			Milk only	Quantity	Unity
				Fat	-Construction of the	5/1
				Solids		5/1
				Protein		6/1 E/1
nergy			Description of the second			
nergy consumption Electricity			Renewable energy pr		Quantity	1
Electricity		kWh/year	Energy (Type of energy	Quantity	114/0 / 100
FUEL		kg/year or.	Energy 1			kWh/year kWh/year
Mathana (other mo		m*/year	Energy 2			A MARY AND
Methane/other gas						
If other, indicate which						

Figure 1 Farm description and farm indexes





Summary of audit res	sults				
Audit tool	5		1		
AMMs already present in			J		
Aiviivis aiready present in	Code measure	1	Description		Notes
AMMs No1	Code measure		Description		Notes
AMMs No1					
Alviivis 1402					
GHG emissions					
Denominator type	Measurement unit	Farm result			
Area	kg CO2 eq/ha				
Product unity	kg CO2 eq/kg product unity				
Denominator type	Main sources for GHGs	Result	Reference available ?	Value	Notes
	CH4 kg CO2 eq/ha				
Area	N2O kg CO2 eq/ha				
	CO2 kg CO2 eq/ha				
	CH4 kg CO2 eq/kg				
Product unity	N2O kg CO2 eq/kg				
	CO2 kg CO2 eq/kg				
Carbon Stock					
Denominator type	Measurement unit	Farm result	Note	5	
Area	kg CO2 eq/ha				
Product unity	kg CO2 eq/kg product unity				

Figure 2. Carbon audit's results

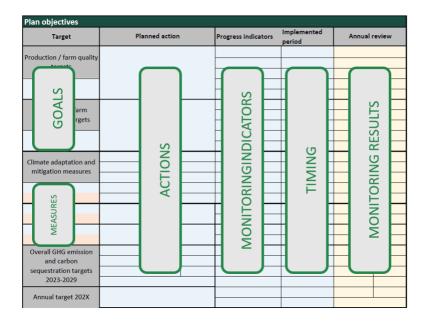


Figure 3. The plan

The process

An AMP is an instrument for the farmer and the advisor useful to achieve the environmental objectives set for the PDF. The <u>AMP Template</u> was specially designed by CFD WP2 and contains a part which describes the farm and the current situation regarding GHG emissions and sequestration, this section





allows the farmer and the advisor to define clear and realistic objectives and to identify the measures that can be applied to improve environmental conditions of the farm. The AMPs can change over the time according to results, the context and the needs of the farm and farmer, for that reason each plan will be monitored and revised every year until 2027.

To complete the AMP template a farm audit is the first step. An audit is a methodical examination and review of something. In CFD, the purpose of the audit is to collect information about the farm to determine the GHG emission and C sequestration baseline (Carbon audit) and to get valuable information regarding the climatic risks of the farm (Adaptation audit) to complete the descriptive part of the <u>AMP Template</u>. This part is the framework of the plan and it is necessary to better tailor the goals and measures for the farm.

Goals, actions and measures (<u>from the CFD AMM library</u>) to be applied in the farm, are accorded with the farmer. In the AMP, how the progress will be measured, should be also defined.

After completion of the document, it must be signed by the farmer and advisors.

Once completed the AMP a pdf copy should be uploaded to the <u>back office</u>, the excel file should be uploaded to the folder <u>AMP_Completed</u> in CFD SharePoint.

The template contains also a sheet called 3-BDD which summarises the information in the Adaptation audit and in the AMP. Each advisor should copy and paste this line in one excel file and send it to the NC. Each NC will merge all the records in a file (CFD_AMP_BDD_resume_COUNTRY) and upload this file in the folder <u>AMPs summary</u>.

After setting up the plan the implementation and monitoring phase starts. The progress of the plan will be monitored yearly until 2028 and the AMP template will be updated with monitoring information.

In 2028 the evaluation phase starts: a second complete audit will be conducted to verify the degree of success of the plan. Results will be compared within each farm, at national and European level.

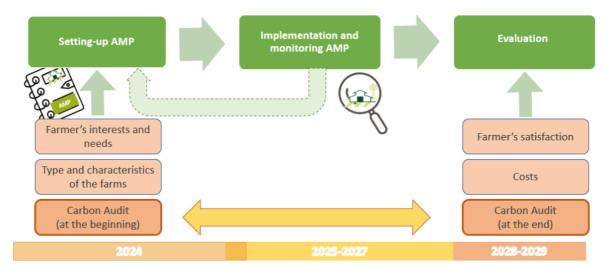


Figure 4. The process





Chapter 2

AMPs process progress

488 farms had uploaded at least one AMP to the CFD <u>back office</u> by the 30th of September 2024, the deadline for submission (Table 1). This represents about 33,5% of the total number of AMPs expected. The relative low number of AMPs uploaded is explained because the whole process started with delay as a consequence of difficulties in farm's recruitment (which ended in March 2024), in the delivery of the CFD approved carbon audit tool's list (October - December 2023) to perform audits which determined a delay in tool's selection by National coordinators (January 2024) and training of the selected tools (from February 2024). At the end of March 2024, only 58 audits were uploaded to CFD project website. The first AMPs uploaded to the website were in June 2024.

The distribution of AMPs by country foreseen and done is shown in table 1. Finland and Luxemburg ended the AMP setting-up process and are ready to start the implementation phase.

COUNTRY NAME	TOTAL FARMS	N. of farms with AMPs uploaded	N. of farms without AMPs	Total AUDITS uploaded
Austria	27	14	13	14
Belgium	61	1	60	14
Bulgaria	25	4	21	5
Croatia	25	13	12	25
Denmark	33	26	7	27
Estonia	25	0	25	0
Finland	26	25	1	20
France	121	65	56	86
Germany	131	94	37	95
Greece	60	35	25	36
Hungary	25	9	16	16
Ireland	61	6	55	46
Italy	130	47	83	4
Latvia	25	0	25	15
Lithuania	25	0	25	22
Luxembourg	25	25	0	25
Netherlands	60	45	15	47
Poland	131	0	131	0
Portugal	34	13	22	0
Romania	63	1	62	0
Slovakia	31	0	31	20
Slovenia	25	22	3	20
Spain	124	9	115	10
Sweden	25	8	17	8
Switzerland	24	14	10	19
United Kingdom	121	14	108	24
TOTAL	1,463	488	975	574

Table 1. Distribution of AMPs and audits by country





AMPs by country and production system

Austria

14 Carbon audits were concluded (52% of the total audits expected). **15** AMPs for **14 farms** were uploaded to the Backoffice (52% of the total AMPs expected), some information is missing so they will have to be integrated. In 1 case, the farm prepared 2 different plans as they have at least 2 main different main products. The AMPs uploaded regard the following production systems: arable crops, dairy and beef cattle and poultry. About half of the plans are from organic farms.

Belgium

Belgium has uploaded **15 audits** out of a planned total of 61 farms (23%). There is currently only **1 AMP** on the site (2%).

Bulgaria

5 Audits were concluded (20% of the total audits) and **4** AMPs (16% of the total AMPs) were drawn up in Bulgaria. AMPs regard mainly arable crops – cereals production systems, 1 of the AMPs belong to an organic farm, the rest are from conventional farms.

Croatia

25 audits were completed in Croatia (100%) and **13 AMPs** (52% of the total AMPs) were uploaded to the Backoffice.

AMPs covered 7 different production systems, however, most of them are from dairy cattle production systems. Among AMPs, 2 are from organic farms.

Denmark

Denmark submitted **27 audits** out of 33 audits expected (82% of the total n. of audits) and **26 AMPs** were uploaded (79% of the total AMPs).

The most representative production system in the AMP uploaded are pigs and arable crops (cereals and rapeseed). 50% of the AMPs come from organic farms

Estonia

At this moment, there are **no audits or plans** updated from Estonia.

Finland

20 audits (80% of total audits) are completed and were uploaded to the Backoffice as well as all **AMPs (100% of total AMPs)**. Some of the plans require revision as in some cases C audit results are missing. The missing audits will be uploaded soon. The advisor needs to complete some missing information. The main production systems represented by the AMPs are arable crops and dairy cattle.

France

86 audits out of 121 farms were uploaded (71% of total audits) while **65 AMPs** (54% of total plans) are on the website. All production systems are well represented among the AMPs uploaded, most of the AMPs belong to the dairy cattle and poultry production system. About 30% come from organic farms.

Germany

95 audits (73% of total audits) were completed, and **94 AMPs** (74% of total plans) were uploaded to the project BackOffice. The production system mostly represented in the AMPs delivered is the dairy cattle one. 34% of the AMPs come from organic farms.

Greece

36 audits (60% of total audits) out of a planned total of 60 farms were completed and uploaded to CFD BackOffice. **35 AMPs** (58% of total plans) were uploaded. The most representative production system is arboriculture for fruits, mainly to produce olives for olive oil (44% of AMPs uploaded). Among livestock systems dairy cattle as well as sheep milk represent together 47% of the AMPs uploaded





Hungary

16 audits were completed in Hungary (64% of the total audits to be done). **9 AMPs** were uploaded correctly (35% of total AMPs).

Most of the plans are from arable crops farms, mainly conventional.

Ireland

Ireland uploaded **46 audits (75% of total audits)**, out of a planned total of 61 farms, a second audit was uploaded for 2 farms. In addition, there are **currently 6 plans (about 10% of total plans)**, but not in the correct format. The partner will be asked to upload it in the correct format.

Italy

Italy uploaded **4 audits (3% of total audits)**, out of 130 farms. Concerning plans, there are currently **47 AMPs (36% of total AMPs)**, of which only 3 are complete. The others do not present audit data. Up to this moment, most of the plans come from the arboriculture for fruits production system which are mainly integrated productions.

Latvia

15 Audits (60% of the total number of audits foreseen) were completed, but at the moment no **AMPs** were uploaded to backoffice,

Lithuania

22 Audits (88% of the total number of audits foreseen) were completed, but at the moment no **AMPs** were uploaded to backoffice,

Luxembourg

All audits (100% of total) and AMPs (100% of total number) were uploaded to the Backoffice and are complete. Most of the plans belong to the dairy cattle production system.

Netherlands

47 audits were completed (about 78% of the audits) and **45 AMPs** (about 75% of the AMPs) were uploaded.

Poland

At this moment, there are **no audits or plans** updated from Poland.

Portugal

At this moment, there are **no audits**. **13** farms (52% of the total farms) had done the **AMPs**. Nevertheless, the documents need to be integrated with the audit results. The mixed production systems as well as arboriculture for fruit are the most represented systems in the uploaded AMPs. Most of productions are integrated.

Romania

No audits were uploaded from Romania, only 1 AMP (2% of total AMPs) which will be integrated with audit results.

Slovakia

20 audits (65% of total audits) were completed and uploaded to the BackOffice, but no **plan** had been uploaded yet. Nevertheless, 22 AMPs (88% of plans were submitted in SharePoint). These plans will be uploaded to BackOffice as soon as possible.

Slovenia

20 audits (80% of total audits) were completed and uploaded to the BackOffice and 1 AMP (4%) was uploaded

Spain

10 audits (8% of total audits) were completed and uploaded to the BackOffice and **9 AMPs (7%)** was uploaded. Most of the plans are related to greenhouse horticulture, both organic and integrated.





Sweden

8 audits (32% of total audits) were completed and uploaded to the BackOffice and **6 AMPs** (24% of total AMPs) were completed. The uploaded plans refer to different production systems: open field horticulture, beef cattle, dairy cattle, etc, both conventional or organic.

Switzerland

19 audits (79% of total audits). There are **14 AMPs** (58% of total AMPs) defined, but they need to be revised and integrated. The production system most represented is the conventional dairy cattle.

United Kingdom

24 audits (20% of total audits), out of a total of 121 farms. **14 AMPs** (12% of total AMPs) are currently uploaded. Only 4 plans are complete, while the others need revision regarding goals and measures chosen. The most represented production systems are mixed systems as well as arable crops. Organic and integrated systems are well represented among the plans.





Chapter 3

AMPs next steps

Preventive actions

Before the deadline for the submission of AMPs, in order to catch up and reduce delays, a series of actions were taken to support advisors in the preparation of AMPs: training and support meetings (online) were organised:

29th February 2024 – First training on AMPs compilation Adaptation and Mitigation plan Elena Bortolazzo, Lorena Giglio CRPA Soc. Cons. p. A.

Maria Suomela – PROAGRIA Lin Bautze – FiBl

4th June 2024 – Mid term Annual Meeting **Practical insight how to implement and apply a mitigation and adaptation plan** Elena Bortolazzo, Lorena Giglio CRPA Soc. Cons. p. A. Annika Harlio – PROAGRIA

26th July 2024, 17th and 24th September 2024 Audits and AMPs Update, procedures, tips, next steps Elena Bortolazzo, Lorena Giglio CRPA Soc. Cons. p. A.

3rd and 4th September 2024 **CFD - CFAs francophones aide à la réalisation des plans** Elena Bortolazzo, Lorena Giglio CRPA Soc. Cons. p. A.

A support Centre folder was organised with material from workshops and meetings, questions and answers, examples, etc.

Support activities will continue until the achievement of the objective.

Further actions

The Coordination Team is committed to catching up with audits and AMPs as quickly as possible. These efforts are in line with the project's main objective regarding ensuring high-quality Demo-events. To this regard, autumn is a favourable time, and farmers are more willing to receive consultants and focus on providing information for carbon audits and AMPs.

The following activities identified will be carried out in the following months to ensure that the target is met:





- Identification of possible solutions for overdue countries, during the AM in Ljubljana, meetings with NC will be organised in order to understand the challenges they are facing and to identify possible solutions.
- **Monitoring** AMP uploading process, to identify critical situations and support NC and advisors when needed.
- Support for AMP compilation.
- Checking and controlling AMP uploaded in pdf format and .xls format, to verify AMPs are complete and no data is missing.
- Analysis of AMPs content (referring to measures, production systems, etc.) to complete the photograph of the AMPs implemented in CFD, to find synergies, and to foster advisor's and farmers capacity building.

An update on this deliverable is foreseen by 30th of September 2025.







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