

# CARBON CREDITS MARKET PROTOCOL

WP 4 Pilot project implementation

Activity 4.2 Pilot project preliminary actions



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## **GECO2** – Green Economy and CO2

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Editor:	Antonio Cinti		
Contributors:	Leonardo Marotta		



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#### Introduction

This project document explains the generation/transaction proposed principles and procedures for the development of the CO2e voluntary credits market, operational core of the GECO2 project.

As emphasized in other project documents (WP 3.1 international survey and WP 3.3 Guidelines for project development) there are both compliance markets and markets operating on a voluntary basis. The Kyoto protocol credits market and the European Union Greenhouse Gas Emission Trading Scheme are some of the main examples of a trading emission allowances compliance market.

Carbon markets are a system in which parties exchange interests in carbon for voluntary or compliance purposes. Interests in carbon generally consist of either emission permits (or allowances) or carbon credits. Emission permits are used in regulatory schemes that limit greenhouse gas emissions from defined facilities or sources. Under these regulatory schemes, the release of greenhouse gasses from prescribed sources is prohibited without a permit. The credit is a permit that entitles the holder to offset a prescribed amount of greenhouse gasses emissions (GHG).

Carbon stocks in a farm is the amount of carbon captured in a farm filed during the project.

Carbon credits represent a reduction in emissions, or increase in sequestration, relative to a baseline or reference case, which can be used to compensate for, or meet liabilities related to, emissions from another source. Carbon offsets are a particular type of credit that stem from a project



that reduces emissions or increases sequestration that compensates (offsets) for emissions from another source. To be an offset, the project must reduce greenhouse gas emissions relative to what would have otherwise occurred and there must be equivalence between what is gained (the offset) and lost (the emission that is being offset)<sup>1</sup>.

Per each buyer the carbon footprint is defined through a standard. This standard includes protocols/methodologies and guidance documents. These standards provide guidance and/or specifications on GHG (greenhouse gasses) quantification, monitoring, and reporting. Stand-alone standards typically do not have an associated regulatory body that registers projects and also do not typically have registration and enforcement systems to track and ensure legal ownership of offset credits (e.g., ISO 14064-2).

The GECO2 project market is in the framework of the main international adopted standards (in particular ISO 14064 and 14067), but, being experimental, it follows its specific development lines with reference to the following topics:

- Regional local market
- Wide and open participation of a large number of farmers and firms,

(including the SMEs), PA and public and private organizations, associations and private citizens.

• A market governmental system simple and of easy access. For example the adoption of presumptive informatic tools.

<sup>&</sup>lt;sup>1</sup> Source: https://www.agrifutures.com.au/wp-content/uploads/2019/07/19-026-Digital-1.pdf



The adoption of the above mentioned criteria and their easy friendly use and implementation, will allow a proactive role of local PAs, and a broad participation of the whole civil society.

The GECO2 credits market is fully voluntary and dedicated only to credits produced by the agricultural sector.

The GECO2 market consists of a platform where carbon credits, mainly calculated on the basis of the project tools (GECO2 credits calculators for sellers and buyers) are traded.

Within the platform, public and private actors (farmers, small and mediumsized companies, private and public organizations, service and multi-utility companies,) can interact.

On one hand, farmers offer to sell carbon credits (generated by agricultural practices) and on the other hand buyers can purchase them in order to offset their emissions or for other pursuits.

The interactions between supply and demand is supported and managed, in this experimental phase, by the project.

GECO2 will define price ranges and rules and provide information about the commitments that each party must underwrite and on how the purchase and sale of credits is organized.

The project will also carry out a series of support activities for market development, earmarked to both sellers and buyers.



All the information related to the parties and their transactions, will be collected and included in a specific public database (MArket Platform - MAP) published on the web and that will support both matchmaking and CO2 credits registration.

This platform could be also a basis for the development of a regional observatory for both of the CO2e regional credits market and of the local CO2e emissions/sequestrations.

This protocol includes, as annexes, the contracts schemes (farmer agreement and farm plan for credits producers and buyer contract and plan for credits purchasers).

Market protocol is part of GeCO2 general scheme of project protocols, as follows:

- a. Farm cultivation protocol;
- b. Calculation system protocol;
- c. Market.

The choice of approaching the market using a simple methodology (that takes into account the balance of emissions/absorptions produced by the farmer) and the use of the calculator software, with the aim of easily calculate them, allows the project to estimate and control all the activities that contribute, directly and indirectly, to generate gas emissions able of altering climate equilibrium.

Calculation system will be fully explained and it will be transparent. It will be possible to know which cultivation practice applied is concerned in the calculation process and its relative weight.



#### 2 **Objectives**

The main objective of the GECO2 project is to develop, through a harmonized, science-based approach, a reliable, simple and fair market of voluntary CO2 credits.

The creation of a voluntary co2 credits market, linked to the agricultural sector, will enable to pursue the following general objectives:

- To foster Co2e sinks, adopting farming models based on increasing biomass/biodiversity and soil regeneration;
- To promote Co2e mitigation in project sellers and buyers;
- Increasing awareness and consensus on climate change topics, among the actors: farmers, emitting firms, consumers, public administration;
- Favoring the implementation of measures to reduce and mitigate emissions both in agricultural and industrial sectors at local and international scale;

• Proposing and developing an idea of green circular economy that could help actors to contribute to implement effective environmental improving actions on an economic and ecological sustainability logic.

#### 3 Market Principles

The GECO2 project took into account international standards as regards the carbon footprint.

Project carbon footprint concept is based on ISO 14064.

Carbon balance includes

direct emissions;



indirect emissions;

biogenic emissions and removals.

In this frame the proposed market intends to be fair, transparent, reliable, efficient and innovative.

**Fair**, because the project is open to all the actors having the requested characteristics, establishes clear criteria for credit calculation and eligibility and provides procedural guarantee that the credit couldn't be sold twice.

**Transparent**, because information diffusion is foreseen in each project phase and all the actors and their transactions will be published on line and verified by the project. All the project protocols, defining the cultivation and calculation will be available to anyone. The carbon calculator will not be protected through a patent.

**Reliable** because the calculation procedures chosen by the project are based on established scientific evidences and adopt very conservative calculation estimates.

Furthermore, the system is based on defining a baseline, applying additionality, fixing credit permanence, performing counting and monitoring actions through the use of informatic tools, tests and controlling visits.

The project calculation tool includes "buffer "in order to prevent overestimations.

Baseline state refers to the Business as usual (Farm BAU) absorption and production of greenhouse gasses. It is analyzed as having occurred in the past and which are being produced prior to the introduction of any strategies to reduce emissions (farm project). The baseline measurement is



determined over a set period of time, typically one year.<sup>2</sup> This historical measurement acts as a benchmark to evaluate the success of subsequent efforts to reduce emissions and increasing carbon capture (increasing soil and biomass stocks, increasing C fluxes into soil/biomass reservoirs).

Additionality is operationalized as the difference between actual project activities and activities identified in a farm BAU baseline.

Permanence/risk mechanisms: Any carbon sequestered in the soil and woody biomass can be released with a change in land management practices or through severe weather events. Much of the carbon sequestered from notill aggregates near the soil surface, where it's vulnerable to rapid oxidation after even a single tillage pass. Even long-term contracts that bind land managers to use certain practices do not ensure permanence since the carbon stored can be released back into the atmosphere as soon as the contract is up if the land manager returns to less climate-friendly practices<sup>3</sup>.

**Efficient,** because the technological component of the project tools, developed by GECO2, makes easier to use the credit market system. Very simple operating tools like the calculators and an open registering and matchmaking platform, assure large accessibility, speed and participation.

**Innovative:** a CO2e credits market earmarked to the agriculture sector is experimented for the first time in an organized framework system.

The market will be characterized by a "locally based" platform to trade credits and it will be totally voluntary guaranteeing mitigation effects and

<sup>&</sup>lt;sup>2</sup> See ISO 14064 all. G

<sup>&</sup>lt;sup>3</sup> IATP, 2020. Why Carbon Markets Won't Work for Agriculture https://www.iatp.org/documents/why-carbon-markets-wontwork-agriculture



faster flexibility of sector evolution towards more environmentally sensitive objectives and practices. On the other hand while compliance markets bind "big emitters' ' only, voluntary markets can also involve in the process small and medium enterprises, locally based, increasing additional CO2 emissions savings. Local communities and emitters, which invest in this market, can appreciate the geographical proximity of both sink and emission sites, giving an added value to the communication strategy of the buyers.

The GECO2 project's main objective is to test an experimental local carbon market agriculture-based. Therefore, the platform is local, as the project wants mainly to be a regional oriented project, which links actors belonging to the same region. Acting at a regional level, allows for a less bureaucratic approach, where good practices are directly verifiable by market players. Furthermore, following this approach, it will be possible to overcome some limits defined for the Kyoto market, including the lack of control, and the ability of small and medium-sized enterprises to participate in such a market.

GECO2 project on a regional scale tends to ensure that the buyer increases his carbon stock and therefore increases the value of his ecosystem services; furthermore, the buyer must, even if in a limited way, reduce his carbon footprint.

#### 4 Market scheme

## 4.1 Market estimated dimension and timing



According to projects' objectives and planned activities the following indicative targets have been foreseen:

 selection of a group of 20- 40 farmers, per each partner region, without considering the number of experimental fields;

The selected farms have to respect the minimum participation conditions fixed by the project.

Total number of farmers participants in the project: from 140 to 280.

agriculture surfaces between 30 ha and 200 ha per each partner region;

Total number of agriculture surfaces in the project: between 250 and 1500 ha.

 number of CO2e credits produced between 50 tons and 500 tons per each partner region;

Total number of CO2e credits produced in the project: between 350 and 3500 ton

• Total provisional pilot market turnover in the project:

from 70 000 euro to 700 000 euro.

The credits have a 1-year duration starting from the purchase date.

#### 4.2 **Operational indications for farmers participation**

In general terms farms participation is based on the following actions:



- planning
- Implementation
- reporting.

Farmer's participation is organized in a 6 steps process:

1) Planning a project and be formed /informed (understanding project, crediting, reporting, delivery and permanence periods, choose experimental fields and practices),

- 2) Assessment of the conditions of participation;
- 3) Signing agreement and plan;
- 4) Calculate the exact amount of CO2e credits produced. (trough CAFE);
- 5) Charging credits in the database platform;
- 6) Reporting and auditing.

## 4.3 Operational indications for buyers participation

In particular buyer participation is organized in a 6 steps process:



- 1) To be formed /informed (understanding GECO2 project, CO2e emissions debts, offsetting)
- 2) Assessment of the conditions of participation (see chapter 7.1);
- 3) Signing contract and plan;
- 4) Calculate the exact amount of CO2e credits produced. (trough COFFEE);
- 5) Purchasing credits in the database platform;
- 6) Finalise transactions with payment and reporting.

#### 5 Market actors

The GECO2 market involve in its realization several actors:

- Sellers (regional farmers)
- Buyers (emitting firms or organisations)
- Public administrations interested to develop and rule a CO2e voluntary credits market
- General public and consumers interested to participate in a process that could assure them important results in terms of a safer environment.

Its operational structure is a platform where CO2e credits are traded.



Local carbon credit markets can

be activated by building the supply of credits within the agricultural sector o n the one hand and by building corresponding demand on the other. The aim of the project is set up and experiment voluntary economic transactions between the actors.

Both public and private subjects belonging to the primary sector can sell their credits while other subjects – small and medium enterprises, service companies, utility companies, public administrations, private business or citizens – can buy them to offset their own emissions.

The sellers represent the offer, while the buyers are the demand.

GECO2, provides ad hoc conditions and tools for selecting actors, estimating carbon stock, selling credits in order to participate in the market.

GECO2, in the absence of an organized CO2e credits voluntary market, replaces the functioning mechanisms by giving itself a prominent rol e in the market governance.

Demand and offer are matched by Geco2 market management tool: MAP (MArket Platform).

#### 5.1 Farmers CO2e sinkers (sellers)

GECO2 attempts to preserve and increase the amount of carbon sequestered in soil and trees biomass.



Farmers have to be located in one of the seven GECO2 partners regions eligible for the project and belong to one of the two experimental sectors:

orchards and vineyards.

The objectives of farmers participating in GECO2 project can be summarized as follows:

1. Increasing household farm assets in the form of trees, hedgerows and biodiversity;

2. Increasing soil fertility and additional incomes from agriculture;

3. Improving climate and atmospheric benefits (carbon sequestration).

Through the adoption of CO2e conservative practices, farmers, supported by the project, will be able to calculate if and how much CO2e has been stocked in soil and biomass.

This CO2e sequestration will be transformed into credits and proposed for selling.

The minimum accepted quantity of CO2e credits produced in order to be allowed to participate in the market is 0,5 tons/ha.

#### 5.2 CO2e emitters (buyers)

Credit purchasers can be farmers with transforming activities, small and medium-sized industrial enterprises, multi-utilities and service companies, local and national public bodies, private business.



The buyers, playing the role of "emitters", because of their CO2e emissions, can reduce their environmental impact, by promoting CO2 sink and carbon stocking, thus offsetting their emissions and favoring climate mitigation" actions.

Purchasing organizations deciding on participating in the market on a voluntary basis undertake to assess their emissions and inform the project about their emissions management and reduction.

GECO2 develops a voluntary market, in which buyers seek to offset emissions in order to develop new promotional tools in the frame of "Corporate Social Responsibility" and "Public Relations/Branding".

The project allows the buyers to explore such a kind of strategy and to evaluate potential benefits.

The objectives of buyers participating in GECO2 project can be summarized as follows:

- Contributing to improve climate and atmospheric benefits (carbon sequestration);
- 2. Increasing knowledge and management attention concerning their CO2e emissions;
- 3. Offsetting emissions exploring the chance of environmentally qualify their goods and services introducing a new green marketing levers; offsetting projects increase environmental co-benefits, without negative secondary effects. Companies that voluntarily offset their own emissions tend to be of



relatively low carbon intensity, as they can offset a significant proportion of their emissions at relatively low cost;

4. Exploring the chance of using environmental labels as the geco2 logo. The logo, is an environmental qualification of the product/firm giving commercial and recognizability benefits. The innovative communication contents is a publish message of sensitivity towards the climate change challenges and it is easily visible by potential customers. The GECO2 marketing and communication instruments refer only to the project and can be used just in the frame of the project.

#### 6 Structures and tools of market management

GeCO2 project management will act as auditing market validation and verification body.

The project management structure is organized as follows:

- A central Management Unit with coordination and controlling responsibilities;
- Seven Regional Management Units, in each seven partners regions, charged of developing the project activities; each regional Management unit will be supported by external consultants;
- A Scientific Committee that flanks and supports the Management Units from the technical point of view.



At the present stage, considering the experimental characteristics of the project and the local extent of the proposed market, no provision is made for an independent third party certificating the credits generated and the emission inventories.

Geco2 project management, will have the following functions:

- validate the new market and ensure the matching with project objectives and planned activities;
- organize data collection, with support of external consultants;
- create a project database/market platform and provide coordination among regional databases;
- validate the new market and ensure the matchmaking with the project objectives and requisites;
- approve and supervise use of the project tools (calculators) and protocols in order to assure a proper calculation of credits and the application of sustainable methods of cultivation;
- supervise the functioning of the market according to the project rules:
- control of the respect of the actors 'engagements through direct controlling visits in site in order to verify the correspondence with practices declared and with information provided.
- organize a final check of compliance and allow transaction of credits
- verify the effective payment of credits and start the credit cancellation procedure in MAP



For this task GECO2 project management will carry out market controlling activities with the help of external consultants (agriculture technicians to be hired).

The verification of the market is in the hands of the project management.

According to the project financial and timing limits it was the most efficient management option in order to reach experimental GECO2 objectives.

Verification role for GECO2 management is experimental but it is sustained by a public transparent procedure that could be a model of a possible governance of the future regional markets of carbon credits and carbon offsets.

At the end of the project, regional actors (institutions, farmers and private firms) will enjoy the chance to build local markets starting from the results developed during the experimental phase.

A follow up, through a subsequent project, in order to give continuity and development to the project, is expected to be implemented.

The project has been considered of vital importance, in order to assure a successful implementation of the pilot market, to develop some specific tools to be used for a correct calculation of the balance of emissions/absorption made by the farmers and by the buyers.

These instruments will support management structures on:

• easing data collection and elaboration;



- helping the proper functioning of transactions and actor's participation in the market;
- allowing a constant check of data quality and procedures application.

Two informatic tools have been created by GECO2:

• Carbon Fixing Elaborator (CAFÉ)

CAFÉ is focused on the calculation of the carbon balance. In particular the tool allows to evaluate and to assess the current carbon budget of the farms, in the selected fields (farm patches) chosen by farmers wishing to participate to GECO2 who meet the basic conditions required by the project; Furthermore CAFÉ provides a calculation of CO2e credits per farm field, and per hectare. Each credit is calculated in tons of equivalent carbon dioxide sequestered.

• Carbon OFFsetting Emissions Elaborator (COFFEE) is a tool that estimates buyer's carbon footprint.

It registers buyers' data and their carbon footprint (for selected activities and /or production of goods and services)<sup>4</sup>. In case that buyer's carbon footprint was not available this tool allows the definition and the assessment of global energy emissions, and in particular the quantity of GHG emissions that buyer can offset.

<sup>&</sup>lt;sup>4</sup>Per each buyer the carbon footprint is defined through a standard. This standard includes protocols/methodologies and guidance documents. These standards provide guidance and/or specifications on GHG (greenhouse gasses) quantification, monitoring, and reporting. Stand-alone standards typically do not have an associated regulatory body that registers projects and also do not typically have registration and enforcement systems to track and ensure legal ownership of offset credits (e.g., ISO 14064-2).



Furthermore, an ad hoc project web-based database (MAP – Market Platform) will be created and each project partner will be responsible for:

- charging calculated credits in the platform;
- inserting purchase options made by buyers;
- establishing the firms and credit register and its continuous updating;
- monitoring credit transactions;
- canceling credits, after the conclusion of transactions (verified payments).

## 7 Market rules

## 7.1 Seller selection principles

The farm selection has to comply with the following conditions:

• Farm located in one of the seven partners regions eligible for the project;

• Belonging to one of the two experimental sectors -orchards and vineyard

• Adopting at least 3 among 10 of the cultivation practices identified by the project; among these adopted practices at least 1 has to be implemented for the first time;

• At least a CO2e 0,5 ton/ha sequestered according to the result of the project calculator.

• Willingness to sign the agreement and the plan.



The increase in carbon stored in the agriculture ecosystem derives from: increase in organic carbon in the soil; reduction of soil carbon loss due to oxidation and erosion; increase in plant biomass. According to these reasons, farms selected for the experimentation have to own some of the following characteristics: organic cultivation and / or regenerative practices; recycling of biomass within cultivation processes; presence of hedges, rows or trees; applying practices to reduce surface erosion and weathering phenomena. In addition to the above-mentioned criteria, regions involved in the project can orientate their selection activities taking into account the following general indications:

• farms that have a policy aimed at increasing soil organic matter and biomass and biodiversity;

• farms representing various biogeographic, pedological and bioclimatic sub-regions (e.g. mountain area, hilly area, coastal area, alluvial plains, gullies hills, etc.), different cultivations and dimension (small medium and large farms) in order to have a good synthesis of regional agriculture.

## 7.2 Buyers selection principles and measures

The buyer selection has to comply with progressive levels of matchmaking.

Starting from the selected offers, possible buyers will be searched according to the following criteria:

- Buyers belonging to manufacturing or services sector linked to the same production chain of the credits generated;
- Buyers located in the same territory where the credits were produced;



• Buyers known to be environmentally sensitive and to use green marketing levers.

• Buyers available to sign the contract and the plan prepared by the project.

Furthermore, the buyers selection will be carried out taking into account the following progressive priority levels:

- Buyers of the same region where the credits were produced
- Buyers belonging to the other GECO2 regions
- Buyers at national and international level.

## 7.3 Credit generation and validation process

The market considers the credits generated by sustainable agricultural practices adopted by selected farmers participating in GECO2.

A carbon "credit" is a tradable permit that represents one metric tonne of CO2e (either a tonne of CO2 or an equivalent amount of other greenhouse gasses), generated by specific activities that either remove a measurable amount of CO2e from the atmosphere or reduce the amount of CO2e being emitted.

These credits will be calculated using the informatic tools developed by the project (CAFÉ).

This calculator will give as a result the exact estimated quantity of CO2e sequestered and of credits produced by each field chosen by farmers. Eligible activities for the generation of carbon credits are described in Protocol A (Cultivation Protocol) and B (Calculation system Protocol).



It is possible to introduce different activities from those which were originally foreseen and to develop innovative aspects, but always within the areas of intervention originally planned by the project.

All the eligible activities must respect the principles of additionality, permanence and baseline.

It is important to define clearly and unambiguously the baseline or the reference scenario for all eligible activities for the generation of carbon credits. The baseline identified will be verified by the project.

## 7.4 Pricing mechanism

Starting from the consideration that a co2e credits voluntary market in agriculture is not yet developed, the project decided to use a reference price to ease the matchmaking process.

This reference price is based on the following issues:

the economic and social costs deriving from the emission of one ton of carbon (see for definitions: Minh Ha Duong, Gaëll Mainguy, 2009. What is the Price of Carbon? Five definitions", S.A.P.I.EN.S [Online], 2.1 | 2009, Online since 03 June 2009, connection on 18 September 2021. URL: http://journals.openedition.org/sapiens/793; Ricke, K., Drouet, L., Caldeira, K. et al. (2018). Country-level social cost of carbon. Nature Clim Change 8, 895–900 https://doi.org/10.1038/s41558-018-0282-y; Bressler, R.D. (2021)The mortality cost of carbon. Nat Commun 12, 4467. https://doi.org/10.1038/s41467-021-24487-w; Wagner et al., 2021. Eight priorities for calculating the social cost of carbon, https://www.nature.com/articles/d41586-021-00441-0; Expert Consensus on the Economics of Climate Change, 2015.



https://www.edf.org/sites/default/files/expertconsensusreport.pdf; Expert Consensus on the Economics of Climate Change, 2021.https://policyintegrity.org/files/publications/Economic\_Consens us\_on\_Climate.pdf; https://nature4climate.org/news/new-studycountry-level-social-cost-of-carbon/);

 the actual value of the transaction in the similar markets, which despite being very volatile can give important indications (see for example: Patrick Bayer, Michaël Aklin, 2020. The European Union Emissions Trading System reduced CO2 emissions despite low prices, Proceedings of the National Academy of Sciences Apr 2020, 117 (16) 8804-8812; DOI: 10.1073/pnas.1918128117; https://qz.com/2028724/to-address-climate-change-fix-the-globalcarbon price/: https://www.oocd.org/tax/tax.policy/offective.carbon

carbon-price/; https://www.oecd.org/tax/tax-policy/effective-carbonrates-2021-0e8e24f5-en.htm). 3

 a reference value that could be be interesting for buyer and seller (see for example: Fuss, S., W. F. Lamb, M. W. Callaghan, J. Hilaire, F. Creutzig, T. Amann, T. Beringer, W. D. Garcia, J. Hartmann, T. Khanna, G. Luderer, G. F. Nemet, J. Rogelj, P. Smith, J. L. V. Vicente, J. Wilcox, M. D. Z. Dominguez, and J. C. Minx. (2018). Negative emissions—Part 2: Costs, potentials and side effects. Environmental Research Letters 13(6). Griscom, B. W., J. Adams, P. W. Ellis, R. A. Houghton, G. Lomax, D. A. Miteva, W. H. Schlesinger, D. Shoch, J. V. Siikamaki, P. Smith, P. Woodbury, C. Zganjar, A. Blackman, J. Campari, R. T. Conant, C. Delgado, P. Elias, T. Gopalakrishna, M. R. Hamsik, M. Herrero, J. Kiesecker, E. Landis, L. Laestadius, S. M. Leavitt, S. Minnemeyer, S. Polasky, P. Potapov, F. E. Putz, J. Sanderman, M. Silvius, E. Wollenberg, and J. Fargione. (2017). Natural climate solutions. PNAS 114(44):11645-11650).



This price of course has been thought of in the frame of the project. Once the market will be more stable the pricing mechanism will be linked to demand offer cross.

The basic project price is estimated at 20 euro per each CO2e ton sequestered by farmers.

This is a reference price. Price increase will be accepted without limits. Price reduction, can be acceptable only in particular cases under the approval of Geco2 Project Management and within a limit of 50%.

The reference price doesn't take into account only the cost of the practices introduced.

GECO2 considered this price, in the frame of the pilot experimental action, as reasonable and acceptable for the actors.

The farmer freely chooses to introduce a practice. The cost of the practice (s) , in any case, has to be assessed in the framework of durability / sustainability; the implemented practices are part of a process that transforms agriculture into sustainable agriculture. In fact, the proposed practices make the agricultural system more resilient and capable of regenerating itself, thus increasing the value of the agroecosystem over time.

Taxes and VAT applicability and treatment will be determined pursuant to the law of the jurisdiction where a transfer subject to VAT is deemed to take place (Italy and Croatia). To the extent permitted by law, the farmer will issue a VAT invoice as required for the purposes of this agreement. Considering the innovative contents of the co2e credits, there are no taxes and VAT specific provisions on this topic.

The Italian and Croatian fiscal authorities'

current line is to not equate carbon credits with the preferential VAT regime for agricultural goods, even if in the future a special treatment is expected.



Current indications are to apply the normal rate of VAT.

## 7.5 Matchmaking functioning mechanism and management

The market will be characterized by a "locally based" platform to trade credits and it will be totally voluntary guaranteeing mitigation effects and faster flexibility of sector evolution towards more environmentally sensitive objectives and practices.

Each partner region will manage its local market identifying sellers and buyers and supporting and controlling all the matchmaking phases. The data collected of farmers selected by the project, its CO2e sequestration capacity and the correspondent calculated credits figures will be charged into the project database.

Each project partner will be responsible, using the project tools:

- to calculate credits produced by its regional farmers;
- to check that the annexed documents (agreement and plan) have been signed
- to charge data in the MAP (Market Platform) database.

After that the same procedure will be followed for buyers.

Each project partner will be responsible, using the project tools:

- to calculate debts produced by buyers;
- to check that the annexed documents (contact and plan) have been signed
- to charge data in the MAP (Market Platform) database.



In addition to its registration functions (see chapter 8.1), the database will be the market platform where the matchmaking, crossing selected offer and demand, will be developed.

The potential buyer will consult the database and he will have the chance to consider the selected offers and choose one or more credits from one or more farmers.

The purchasing choice will be made according to calculated emissions and to buyers' marketing and communication needs.

After the choice a purchase option will be registered in the database. At the end of the pilot phase, after the final check of compliance, the GECO2 project management will allow the economic transactions between the parties and will check the effective payment of the credits.

Once this payment check will be made and proved, the project management will take care to cancel the credits and put them in an ad hoc table of the database.

## 7.6 Sellers commitments

The farmer undertakes to comply with the following commitments:

a. Support the project technicians in data collection for the quantification of Co2e sequestration and emissions produced by project field through the use of the project calculator;

b. Provide truthful information about the farm and crop management, to the consultants of the project;

c. Define the business management plan, being the scheme provided (Farm Plan);



d. Declare to be available for the sale of the calculated credits, according to the results of the project calculator, and following the matchmaking mechanisms set up by the project;

e. Respect and undertake the chosen good cultivation actions foreseen in the project documents (annexed protocols) and tools (calculators);

f. Comply with the general documentation and the rules established by the project (see project documents annexed);

g. Provide access and information for inspection visits conducted by project management and consultants during project life span;

h. Respect the terms and conditions of participation:

• Farm located in one of the seven regions of the project;

• Belonging to one of the two experimental sectors(orchards and vineyard);

• Adopting at least 3 among 10 of the cultivation practices identified by the project; among these adopted practices at least 1 has to be implemented for the first time;

• At least a CO2e 0,5 ton/ha sequestered according to the result of the project calculator.

• Sign the agreement and the plan (annex A and B) that commit to fulfill the obligations described above.

## 7.7 Buyer commitments

The buyer undertakes to comply with the following commitments:

• to follow project rules about companies' participation conditions;



• to carry out a quantification of the GHG emissions for a single product, a production line o the whole company,

This calculation will be made using already existing certified LCA data or if not available using the project calculator (COFFEE).

Company's emission assessment bases on carbon footprint principles, which determines the CO2 quantity emitted for a single product, process or service yearly;

• to activate its own environmental policy that integrates the compensation action, activating a medium-term strategy, aimed at reducing or controlling its emissions (see annex D);

• to transfer the obligations connected to the contract also to the new owner, in the case of transfer of all or part of the company property;

• to facilitate access to the company and the data necessary for checks (information relating to energy consumption in order to estimate the equivalent CO2 emissions);

- to do not resell the credits purchased to other subjects;
- to use the market logo, according to project rules, and make a correct and clear communication of the compensation activity carried out within the project.
- To sign the contract and the plan (annex C and D) that commit to fulfill the obligations described above.
- To proceed, after project controls, to pay the credits to the sellers.

## 7.8 Sellers rights

The project commits itself to give to the farmers the following opportunities:



• Providing free of charge farmers with a document of their carbonic impacts including specification of the carbon uptake in soil and biomass;

• Give support to farmers focused to develop and introduce new carbon conservative and regenerative practices moving towards the objectives of the next European CAP;

• Let farmers have the chance of promoting their activity and products through an ad hoc advertising campaign linked to the participation in the GECO2 project.

• The farmers are free to disclose in their communication activities the environmental qualification deriving from GECO2;

• Guarantee the possibility to farmers to enjoy an additional income deriving from tentative selling of CO2e credits.

## 7.9 Buyer rights

The commitments undertaken by the companies to participate in the market, as well as their willingness to contribute to mitigate the environmental impact of their production processes give to the buyers the following opportunities:

• To communicate in their promotional and marketing activities their contribution to CO2e saving and mitigation process

• To give to emitting companies the opportunity to offset part of its emissions, by buying carbon credits.

• To environmentally qualify their products, lines, firms applying a project "CO2 free" logo. This GECO2 logo can be shown and proved the participation at the project representing a positive environmental and territorial marketing initiative and conveys a message for environmental awareness to the public which can be recognized easily.



The environmental qualification of a product, line or brand is an important added value able to give a more and more remarkable competitive advantage to fully exploit the international market.

## 7.10 Payment scheme

The participating farmer is supported by the project on defining the credit, according to the selected practices;

The exact amount of credits produced will be determined by project calculator;

This credit selling option will be uploaded on a web-based database; The buyer issues the purchase option;

Once the project checks on seller and buyers participating conditions, the farmer issues an invoice for the value for the sale of the credit;

The buyer will pay the invoice within 30 days and send receipt to the regional project manager;

The regional project manager checked the payment documentation and send to Project Management Central Unit;

The sold credit will be canceled and placed in an ad hoc register.

#### 8 Other market functioning mechanisms

#### 8.1 Registration



The registration process will be based on the project database. The GECO2 database will integrate data from the seven partner regions; each partner will have access to its own data. At the end of the project, data will be replicated in seven regional databases for further developments. The web based market platform will record the demand and supply of carbon credits in the project selected sectors, ensuring the transparency of transactions and withdrawal of credits from the market once they have been sold. Databases may also have the task of monitoring the credits for the whole period of their duration (1 year) and to verify the existence of the conditions signed at the time of joining the market. Therefore, the database will have the main function to act as a public register, recording market transactions, in order to create market constant traceability and assure transparency to the management model. The database could also play a possible pilot role in building an observatory measuring regional CO2 emissions and absorptions and supervising a local based CO2e voluntary market.

#### 8.2 Quality assurance procedures

Quality assurance is assured by the following procedures:

• Direct visits (2/3) in the farms willing to participate in the project, carried out by agriculture experts in order to verify the veracity of the collection of the data introduced and their permanency at the end of the project.



- GECO2 operational tools that have some controlling mechanisms that reduce the risk of unfaithful information and increase reliability on database and calculators' outputs. Both at calculator level during the data inputs and then at the central management unit, the system includes controlling mechanisms in order to avoid errors and wrong estimation of data.
- Project Partners staff and external technicians have been trained by the project with the aim to correctly use the project tools (calculators and platform) and to properly communicate the working mechanism of the calculators and platform both to farmers and buyers.
- Each regional project manager will carry out monitoring and quality control permanent procedures related to external consultants' activities during the pilot phase applying continuous improvement practices.
- Double control levels of actions: locally by the partners and at a general level by ARPAE Emilia Romagna (LP).
- In case of failures, mistakes or delays, fast contact procedures will be established involving the Central Management Unit in order to give quick and valuable solutions to the arising problems.

#### 8.3 Defaults and remedies


When, during auditing project actions, a non-compliance is detected in which the actors fail to comply with their commitments, Geco2 Project management can initiate the procedure for resolving them and, in any event, report it in project progress report. This procedure will be focused, if it is the case, on

identify and implement effective and appropriate corrective actions. The verification of the conditions of participation will be managed by GECO2 project management, which it considers invaluable. Anyhow, the verified default may result in suspension of actors' participation in the project and in more serious cases to the exclusion from the market.

GECO2 project Management will have the right to refuse and exclude credits or actors that materially fail to meet verified participating conditions and quality specifications fixed by the project.

# 8.4 Management of Complaints

In the event a dispute arises during the lifespan of the project each actor involved in the pilot phase shall first attempt to resolve the dispute by discussion and negotiation. Farmers and buyers may always present to GECO2 project partners its complaints.

Geco2 Central Unit Project Management, together with partners' PM of the interested region, will take a final unappealable decision on solving the dispute.



# 8.5 Confidentiality

Each actor accepts that information (including images and videos) collected during the project can be freely diffused, for not commercial scopes. The agreement is an exception to the EU Data Protection Laws", EU Directive 95/46/EC, including GDPR and laws implementing or supplementing the GDPR.

Each actor is free to use and diffuse Information received provided that project objectives are met.



# List of annexes

- A GECO2 Farmer agreement
- **B** Farm Plan
- C Buyer contract
- D Buyer Plan
- E Bibliography



# All. A GECO2 Seller Agreement

# **GECO2 Seller Agreement**

This AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_\_, 2021 (commencement date)

Between and by,

hereinafter referred to as ("FARMER"),

and

hereinafter referred to as "GECO2".

This AGREEMENT is made with reference to the following facts:

WHEREAS, the environmental crisis and climate change fast development is a challenge that can be faced by more responsible behaviors addressed to reduce CO2e emissions and increase CO2e conservative practises,

WHEREAS, the **FARMER** is interested on knowing and improving the positive environmental impacts of his cultivation practices (with special reference to



ecosystem services and CO2e sink) and to explore opportunities about CO2e credits business;

and

WHEREAS, **GECO2** is a European funded project (financed in the frame of Italy Croatia Interreg Programme), interested to develop new climate mitigation practices and to implement and verify the

operating conditions of a voluntary credits market applied to the agriculture sector in Italy and Croatia.

NOW, THEREFORE, the parties hereto agree as follows:

### <u>Object</u>

The object of the present Agreement is to establish commitments, rights and conditions for the participation of regional farmers to GECO2.

The project is focused on setting up a pilot market on CO2e credits applied to the agriculture sector.

### **Definitions**

- A "CO2e credit" or "carbon credit" is a project certification, based on international standards, that proves that 1 ton of CO2e (carbon dioxide equivalent) has been sequestered by the participating farmer, and can be used to offset emissions from another source.
- "Seller" is a farmer participating in the GECO2 project who:

Sequesters carbon by applying GECO2 farming practices,

Generates carbon credits through the use of the project calculator, and subsequently offers those credits for sale to GECO2 buyers.



• "Buyer" is any legal entity (company or organization) participating in the GECO2 project which has proceeded to estimate its carbon footprint and wishes to neutralize a part or its entire carbon footprint by purchasing some or all of the carbon credits offered by farmers.

#### <u>Terms</u>

This Agreement shall commence on the Commencement Date and terminate at the end of the project. (Termination Date).

### **Obligations of the farmer**

The farmer undertakes to comply with the following commitments:

- Provide access for visits conducted by project management and consultants including the provision of information necessary for an optimal project development
- Support the project technicians in data collection for the quantification of CO2E sequestration and emissions produced by project field (use of calculator).
- Provide truthful information about the farm, on crop management, to the consultants of the project.
- Define the business management plan, being the scheme provided (Farm plan).
- Availability for the sale of the calculated credits, according to the results of the project calculator, and following the matchmaking mechanisms set up by the project
- Respect and undertake the chosen good cultivation actions foreseen in the project documents and tools.



- Compliance with the general documentation and the rules established by the project
- Provide access and information for inspection visits conducted by project management and consultants during project life span
- Respect the conditions of participation:
  - 1. Farm located in one of the seven regions of the project;
  - 2. belonging to the two experimental sectors -orchards and vineyard-;
  - 3. at least 3 among 10 of the cultivation practices identified by the project, adopted; among these 3 at least 1 has to be innovative;
  - 4. at least a CO2e 0,5 ton/ha sequestered according to the result of the project calculator.
- Sign the project documents.

#### Farmer's rights

The project commits itself to give to the farmers the following opportunities:

- Provide free of charge farmers with a document of their carbon impacts including specification of the carbon uptake in soil and biomass.
- Give support to farmers focused to develop and introduce new carbon conservative and regenerative practices moving towards the objectives of the next European CAP (Common Agricultural Policy).
- Let farmers the chance of promoting company and products through an ad hoc communication linked to the participation in the GECO2 project.

The farmers are free to disclose in their communication activities the environmental qualification deriving from GECO2.



• Guarantee to farmers the possibility to enjoy an additional income deriving from the tentative sale of CO2e credits.

### **Governing Law**

This AGREEMENT will be governed by and construed in accordance with the laws of Italy and Croatia.

#### Credit development scheme

- The participating farmer is supported by the project on defining the credit, according to the selected practices.
- The exact amount of credits produced is determined by the project calculator and it will last 1 year from that moment .
- The minimum accepted quantity of CO2e credits produced is 0,5 tons/ha.
- This credit selling option is charged on a web-based database.
- The buyer issues the purchase option;
- After the project checks on seller and buyer participating conditions, at the end of the verification process the farmer issues an invoice for the value for the sale of the credit;
- The CO2e credit price to be paid by the buyers, considering limits and goals of the project and with reference to similar market parameters, is fixed at 20 euros per each CO2e sequestered ton. This is a reference price. Price increase will be accepted without limits. Price reduction, can be acceptable only in particular cases under the approval of GECO2 Project Management and within a limit of 50%. Taxes and VAT applicability and treatment will be determined pursuant to the law of the jurisdiction where a transfer subject to VAT is deemed to take place (Italy and Croatia).



- The buyer pays the invoice within 30 days and sends the receipt to the regional project manager.
- The regional project management checks the payment documentation and uploads the related documentation in the project web based portal.
- The credit is canceled and placed in an ad hoc register.

#### Force Majeure

Reasonable steps have to be taken under the circumstances to minimize delay or damages caused by foreseeable events; Neither party will be liable for any loss or damage suffered or incurred by the other party due to its failure to perform due to war, riot, insurrection, civil unrest, martial law, national general strike, wildfire, insect infestation, outbreak of plant disease, flood, earthquake, storm, accumulation of snow and ice, epidemic, quarantine, radiation or radioactive contamination, or any other circumstance beyond the control of parties (including a change of law) (each a "Force Majeure Event") provided that the non performing party shows that: all non-excused obligations were substantially fulfilled; the other party was timely notified of the actual occurrence of the Force Majeure Event.

#### **Dispute Resolution**

In the event a dispute arises under, out of, or relating to the interpretation, application, or performance of this agreement, the parties shall first attempt to resolve the dispute by discussion and negotiation.

Farmers can always present to GECO2 project partners its complaints during the lifespan of the project.



GECO2 Project Management will take a final unappealable decision on solving the dispute.

#### **Termination**

The agreement will be considered to be terminated if the farmer fails

to comply with his commitments. The verification of participation conditions will be managed by GECO2 project management,

which it considers incontestable.

#### **Confidentiality**

Signing the agreement, each party accepts that information (including images and videos) collected during the project can be freely diffused, for not commercial scopes. Each Party is free to use and diffuse Information received from the other Party provided that project objectives are met. The agreement is an exception to the EU Data Protection Laws", EU Directive 95/46/EC, including GDPR and laws implementing or supplementing the GDPR.

#### Entire Agreement

This Agreement will be signed by the parties together with the Farm plan (annex A). The annex constitutes the entire agreement and supersedes any previous agreements and extinguishes any representations between the Parties relating to the subject matter of the Agreement.

#### **Interpretation**

Ambiguities, inconsistencies or conflicts arising from this Agreement will

be interpreted and resolved by applying the most reasonable interpretation under the circumstances, giving full consideration to the following project documents:

- Carbon calculation system
- Farm cultivation protocol
- Carbon credits market protocol



Place and	date
i luce allu	

Farmer's signature

GECO



# All. B Farm Plan

Name and address of the farm:.....

# Farm Plan and Project

# <u>Scope</u>

The GECO2 farm plan resumes requirements for farmers in order to participate in the project, and collect information regarding new improving practices planned by the farmers for the next years.

Selected agricultural practices, on which conditions of participation to GECO2 project are based, valorize and increase the value of ecosystem services, namely carbon sinks. The GECO2 project seeks to improve and stimulate changes in farming management,

increasing agricultural ecosystem services and introducing carbon conservative practices. Practices such as organic fertilization, split fertilization, reduced tillage, biological pest control and soil cover have already medium or high integration in today's agriculture and a good potential to be more and more broadly adopted.

The implementation of these management options will create an increase of carbon stored in soil and biomass. This carbon sequestration capacity will generate CO2e credits that, through the voluntary credits market, will give to the farmer an additional income.

Documentation required from the farmers which demonstrates compliance with the project requirements must be made available for review during the project auditing process.



# Protocol and compliance system: farm plan and project

### Table A Practices already in use or selected for the GeCO2 project:

	Practices	Threshold in order to define a new practice	Already in use (specify if the practice has been already financed by CAP and the number of years from the start)	New practice for GeCO2 project	Area of applicatio n (ha)
1	Organic farm management	No threshold.			
2	Application of a conservative soil tillage (no tillage or minimum tillage)	To be considered a new practices conservative soil tillage as to at list cover the 40% of farm experimental GeCO2 cultivated field and increase of at least 50% respect to the pre- project status (before the GeCo2 project).			
3	Use of cover crops and/ or permanent grass / meadow	No threshold.			



4	Farm management with hedge, rows and forest patch integrated within field crops	In order to be considered innovative practice these practices must be cover at least the 5% of experimental field and have to increase at least of 50% into respect the pre-project situation (before the GeCo2 project).		
5	Reuse of wood residues in order to improve soil organic matter	No threshold.		
6	Reuse of green residues (e.g. green mulch) in order to improve soil organic matter	No threshold.		



7	Use of organic amendments (which therefore store carbon in the soil) and use soil improvers (e.g. biochar, earthworm compost, bio- stimulating products)	No threshold. Practice considers the use of the following organic amendments (soil improvers) list: i. Compost_zero_emissio ns_1N; ii. Compost_nonfully_aer ated_production_1N; iii. Biochar iv. Volcanic_rock_dust; v. Wood_chips; vi. Straw		
8	No application of synthesis fertilizers	No threshold. Practice considers no application of synthesis fertilizers.		



application       application lower than 1         (application       kg/ha         rate lower than       kg/ha         1 kg/ha of       pesticides,         'pesticide'       prevents,         destroys, or       controls a         harmful       organism         ('pest') or       disease.         Pesticides       include Plant         Protection       Protection         Products       (PPPs) and         biocides)       logical	<ul> <li>Reduction in pesticides application (application rate lower than 1 kg/ha of pesticides, 'pesticide' prevents, destroys, or controls a harmful organism ('pest') or disease.</li> <li>Pesticides include Plant Protection Products (PPPs) and biocides)</li> </ul>
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10	Optimal management of farm residues (emission lower than 20 kg CO2Eq / ha).	No threshold. The practice considers the application of following farm residues (with total emission lower than 20 kg CO2Eq / ha): Compost_fully_aerated _production_1N ii. Cattle_Farmyard_manure _0_6N iii. Pig_Farmyard_manure _0_7N iv. Sheep_Farmyard_man ure_0_7N v. Horse_Farmyard_Man ure_0_7N v. Horse_Farmyard_Man ure_0_7N vi. Poultry_layer_manure_ 1_9N vii. Broiler_Turkey_litter_3 _N viii.		
		viii. Cattle_Slurry_0_26N ix. Pig_slurry_0_36N Separated_Pig_slurry_li quid_part_0_36N →		



	x. Separated_Pig_slurry_ solid_part_0_5N		
	Digestate_6percent_dr ymatter		



# Table B Future improvement plans

GeCO2 Practice	Future development (Time application scenario ): 3 years	Future development (Time application scenario ): 5 years	Future development (Time application scenario ): 10 years
	Specify the area of application	Specify the area of application	Specify the area of application
Organic farm management			
Application of a conservative soil tillage (no tillage or minimum tillage)			
Use of cover crops and/ or permanent grass / meadow			
Farm management with hedge, rows and forest patch integrated within field crops			



Reuse of wood residues in order to improve soil organic matter		
Reuse of green residues (e.g. green mulch) in order to improve soil organic matter		
Use of organic amendments (which therefore store carbon in the soil) and use soil improvers (e.g. biochar, earthworm compost, bio- stimulating products)		
No application of synthesis fertilizers		



Reduction in pesticides application (application rate lower than 1 kg/ha of pesticides, 'pesticide' prevents, destroys, or controls a harmful organism ('pest') or disease. Pesticides include Plant Protection Products (PPPs) and biocides)		
Optimal management of farm residues (emission lower than 20 kg CO2Eq / ha).		



#### Table COther practices

In addition to the previous GeCo2 selected practices please specify if you use or have planned to apply other conservative practices.

Practices	Management (description and application modalities of practices already in use)	Future application Specify the practice duration in years (FromTo)

In order to define new practices or possible improvements, it is suggested to use the Carbon Calculator Tool in order to understand the carbon sequestration potential for each practice.

The seller agrees that the information collected may be used only in the context of the impleme ntation of the project in derogation from EU Directive 95/46/EC.

Place and date.....

Farmer signature

**GECO2** signature



#### <u>Annex</u>

#### Key Terms and Practices improving biodiversity, soil and biomass carbon stocks:

- Agroforestry: The practice of incorporating cultivation and conservation of trees as a part of agricultural operations.
- Biodiversity: Biodiversity, or biological diversity, is the diversity of life existing at three levels: genetic, species, and ecosystem. Biodiversity includes variety in all forms of life, from bacteria and fungi to grasses, ferns, trees, insects, and mammals. It encompasses the diversity found at all levels of organization, from genetic differences between individuals and populations (groups of related individuals) to the types of natural communities (groups of interacting species) found in a particular area. Biodiversity also includes the full range of natural processes upon which life depends, such as nutrient cycling, carbon and nitrogen fixation, predation, symbiosis and natural succession.
- Carbon Sequestration: The process by which atmospheric carbon dioxide is taken up by trees, grasses, and other plants through photosynthesis and stored as carbon in biomass (trunks, branches, foliage, and roots) and soils. For agricultural operations, increased carbon sequestration may be achieved through, for example, no-till or low-till practices, agroforestry, reforestation, or the use of biomass-containing amendments.
- Compost: Compost, when properly managed, is a high-quality soil amendment. Compost may increase the water holding capacity of the soil, helping farmers to produce a good yield even in drought years. Compost improves soil structure and stability, recycles nutrients, stabilizes volatile nitrogen, converts wastes into resources and suppresses soil-borne diseases. The composting process destroys weed seeds and pathogenic microorganisms, while beneficial microorganisms grow and multiply in great numbers. Synthetic amendments can provide soluble nutrients for plant growth, but do not build the soil's long-term biological reserves as well as compost does.
- Cover Cropping: A cover crop is a crop planted primarily to reduce soil erosion and prevent desiccation of soil microbial communities, resulting from soil left exposed. Cover crops may suppress weeds, recycle nutrients back to the soil, increase soil organic matter, sequester carbon in the soil, and reduce erosion.



- Crop Rotation: Crop rotation is a systematic approach where producers rotate crop varieties and locations from one year to the next. The goals of crop rotation are to help manage organic soil fertility and to help avoid or reduce problems with soil-borne diseases and some soil-dwelling insects, such as corn rootworms.
- Pasture: Pasture is a land use type having vegetation cover composed primarily of native or introduced forage species that is used for livestock grazing.
- Perennial Crops: Crops which are present year-round and are harvested multiple times before dying. Apples and alfalfa are examples of perennials that are already commercially grown and harvested. Perennial plants develop much greater root mass than annual crops and protect the soil year-round, leaving fields less vulnerable to wind, water, and soil erosion.
- Riparian Areas: Plant communities contiguous to and affected by surface and subsurface hydrologic features of perennial or intermittent moving and standing water bodies (e.g. rivers, streams, lakes, or drainage ways). Riparian areas have one or both of the following characteristics:

1) distinctly different vegetative species than adjacent areas;

2) species similar to adjacent areas but exhibiting more vigorous or robust growth patterns. Riparian areas are usually transitional between wetland and upland.

- Rotational Grazing: Rotational grazing is a livestock production system where livestock graze in only one portion (a paddock) of a pasture that has been divided into several paddocks. Livestock are systematically moved from paddock to paddock based on the stage of growth of the forages and on the objectives of the grazing system. While one paddock is being grazed, the rest of the pasture rests. This rest and recovery time maintains forage plants and builds soil organic matter.
- Silvo-pasture: The practice of combining forestry and grazing of animals in a mutually beneficial way. A properly managed silvo-pasture operation enhances soil protection and increases long-term incomes due to the simultaneous production of trees and grazing animals.
- Soil Health: Improving soil health is one of the key targets of regenerative organic agriculture. Soil health is measured by various factors, such as the amount of nutrients in the soil (i.e. nitrogen), soil organic matter, humic acid (the component of soil sequestering carbon in a long-term perspective), and biological life



- Tillage: Preparation of soil by mechanical agitation of various types, such as digging, stirring, and overturning. Regenerative Organic practices aim to minimize tilling. Biological principles and cover crops may reduce or eliminate the need for tilling.



# All. C Buyer contract

### CARBON DIOXIDE CREDITS PURCHASE CONTRACT

This Carbon Dioxide credits Purchase contract is made and entered into as of ..... (the "<u>Commencement Date</u>"),

by and between,

Seller name	Address and Email

hereinafter referred to as "SELLER",

and

Buyer name	Address and Email

hereinafter referred to as "BUYER".

This contract is made with reference to the following facts:



WHEREAS, the environmental crisis and climate change fast development is a challenge that can be faced by more responsible behaviors addressed to reduce co2e emissions and increase co2e conservative practises,

WHEREAS, GECO2 is a European funded project (financed in the frame of Italy Croatia Interreg Programme), interested to develop new climate mitigation practices and to implement and verify the operating conditions of a voluntary credits market applied to the agriculture sector in Italy and Croatia

WHEREAS, the **SELLER** is a farmer that has calculated in the frame of the project the co2e credits produced by its activity, and that is interested to sell these co2e credits and to improve the environmental impacts of his cultivation practices (with special reference to co2e sink);

WHEREAS, **BUYER** is an organization interested to contribute to solving and/or attenuating the climate crisis and/or develop new green marketing actions in order to provide an environmental qualification of its group/products in the frame of a carbon credits market

WHEREAS a "**CO2e credit**" or "carbon credit" is a project certification, based on international standards, that proves that 1 ton of CO2e (carbon dioxide equivalent) has been sequestered by the participating farmer, and can be used to offset emissions from another source.

NOW, THEREFORE, the parties hereto agree as follows:

#### <u>1 Terms</u>



This contract shall commence on the Commencement Date and terminate at the end of the project (31th May 2022) (Termination Date).

### 2 Obligations of the seller

The farmer has declared to comply with the following commitments:

- Availability for the sale of the calculated credits, according to the results of the project calculator, and following the matchmaking mechanisms set up by the project
- Compliance with the general documentation and the rules established by the project
- Agree that buyer shall have the right to use the credits sold for communication and marketing purposes
- Sign the contract that commits to fulfill the obligations described above.

### **3** Obligations of the buyer

BUYER's commitments are the following:

- to agree to purchase carbon credits.
- to comply with project rules including participation conditions,
  - GECO2 credits calculation methodology and registration, time limits;
- to carry out a quantification of the GHG emissions for a single product, a production line of the whole company. This



calculation will be made using already existing certified LCA data or if not available using the project calculator (COFFEE). Company's emission assessment is funded on carbon footprint principles, which determines the CO2e quantity emitted for a single product, process or service, on a yearly basis.

- to show its own environmental policy that integrates the compensation action, defining a medium/long-term strategy, aimed at reducing or controlling its emissions (see buyer plan);
- to transfer the obligations connected to the contract also to the new owner, in the case of transfer of all or part of the company property;
- to not resell the credits purchased to other subjects;
- to sign the contract and the plan.

### 4 Buyer's rights

The commitments undertaken by the companies to participate in the market, as well as their willingness to contribute to mitigate the environmental impact of their production processes give to the buyers the following opportunities:

- To communicate in their promotional and marketing activities their contribution to CO2e saving and mitigation process
- To give to emitting organizations the opportunity to offset the whole or a part of its emissions, by buying carbon credits.



- To environmentally qualify their products, lines, firms applying the project "CO2 free" logo. This GECO2 logo can be shown and proved the participation at the project representing a positive environmental and territorial marketing initiative and conveys a message for environmental awareness to the public which can be easily recognized.
- To increase products added value "selling" the special environmental care of the purchasing organization.

#### 5 Governing Law

This contract is governed by and constructed in accordance with the laws of Italy or Croatia.

#### 6 Payment scheme

- The participating farmer is supported by the project on defining the credit, according to the selected practices.
- The exact amount of credits produced is determined by the project calculator and it will last 1 year from that moment .
- The minimum accepted quantity of CO2e credits produced is 0,5 tons/ha.
- This credit selling offer is charged on the MArket Platform (MAP), a webbased database.
- The buyer issues the purchase option on the MAP;



- After the project checks on seller and buyer participating conditions, at the end of the verification process the farmer issues an invoice for the value for the sale of the credit;
- The buyer pays the invoice within 30 days and sends the receipt to the regional project manager.
- The regional project management checks the payment documentation and uploads the related documentation in the project web based portal (MAP).
- The credit is canceled and placed in an ad hoc register.

### 7 Taxes and VAT application

Taxes and VAT applicability and treatment will be determined pursuant to the law of the jurisdiction where a transfer subject to VAT is deemed to take place (Italy and Croatia).

#### <u>8 Price</u>

The CO2e credit price is free. Considering limits and goals of the project and with reference to similar market parameters, a minimum reference price is fixed in 20 euros per each CO2e sequestered ton.

#### 9 Dispute Resolution



In the event a dispute arises under, out of, or relating to the interpretation, application, or performance of this agreement, the parties shall first attempt to resolve the dispute by discussion and negotiation.

The parts can always present to GECO2 project management its complaints during the lifespan of the project.

### 10 Termination

The contract will be considered terminated if the parts fail to comply with their commitments.

The verification of the conditions of participation will be managed by GECO 2 project management, which it considers incontestable.

#### 11 Confidentiality

Signing the contract each party accept that information collected during the project can be freely diffused, for not commercial scopes.

Each Party is free to use and diffuse Information received from the other Party provided that project objectives are met.

The agreement is an exception to the EU Data Protection Laws", EU Directive 95/46/EC, including GDPR and laws implementing or supplementing the GDPR.

#### 12 Entire Agreement

This contract will be signed by the buyer together with the buyer carbon plan (annex A). The annex constitutes part of the entire agreement.



# 13 Contract interpretation

Ambiguities, inconsistencies or conflicts arising from this contract will be interpreted and resolved by applying the most reasonable interpretation under the circumstances, giving full consideration to the following project documents:

Calculation system protocol

Farm Cultivation protocol

Market protocol.

### Credits sold:

Seller name	N° of credits sold	Price/co2e ton (euro and/or krunes)	Total amount paid (please specify euro and/or krunes)
	CO2e tons		

Place and date.....

Buyer signature.....



# All. D Buyer plan

# GECO2 PROJECT Buyer's carbon plan

### **Project details**

Organization:	
Production (goods and/or services):	
Carbon Footprint Accounting Report (if existing)	YEAR
The report draws on information provided by	
NAME OF Director / CEO;	
NAME OF Sustainability Manager (if it is the case)	

This plan is organized into two sections.

The first is addressed to provide information about buyers' organization operations related to  $CO_{2e}$  emissions in the frame of GECO2.

The second focused on giving an overview of future goals of organization's development.



# Section A Information about CO2e offset

The report contains the yearly carbon footprint for the following alternative options:

	Selection	Code	if 2, 3,4 is selected specify production line or product
Whole organization		1	
Production line		2	
Product		3	
Others		4	

Please select only one code.

	Selection	Code	NOTES
LCA/carbon footprint		A	
GECO2 calculator		В	

Please select only one code.



Specify the chosen option carbon footprint (from LCA) or energy consumption data used for the calculator (COFFEE).

In the next table please insert, if available, data related to greenhouse gas emissions, calculated as LCA matching the main international standards or by means of COFFEE GECO2 calculator, according to the following topics :

	Select one or more	Quantity	Unit (specify)
Fossil fuels for energy consumption heating			
Purchased electricity			
Business travels flight trips			
Business travels (train)			
Business travels (car)			
Logistic (fuel- liters/km)			
Raw materials			


	Select one or more	Quantity	Unit (specify)
Waste production			
Others			

Please select one or more codes.

All greenhouse gas emissions are converted into CO<sub>2</sub> equivalents.

The report attests the organization's commitment to responsible operations in line with GECO2 environmental objectives.

Declaration of offset in the frame of GECO2:
The total compensation calculated is based on the CO2e emissions of the organization related to:
(pls. specify if for COMPANY / PRODUCTION LINE / PRODUCT, OTHERS) And amounts to (ton/CO2eq/year) (e.g. "We have offset all of our emissions in travel and fleet for 23597 tCO2eq").

Section B Development goals

## Definition of climate goals:

Please specify your climate goals with reference to GHG emissions, definition of carbon footprint targets, sustainability policies, offsetting strategies.



(e.g.: Reduction of direct GHG emissions of 20% 2026 vs.2021; offsetting targets + 20% 2026 vs. 2021)

Please specify which of the following objectives that your organization identifies as important will be attempted to implement in the following 5 years:

Objectives	selection (yes/not)
Create a culture of sustainability by incorporating sustainability principles into general management	Yes□
	Not□
Use the Company Environmental Management System (EMS) as a guide for continual improvement and compliance with regulations in order to meet sustainability goals following the EU target to reduce emissions by at least 40% by 2030 – in the frame of the Paris Agreement and of the EU's 2030 climate and energy strategies.	Yes□ Not□
Continuous Improvement Actions	Yes□
	Not□



Objectives	selection (yes/not)
Follow the EMAS* / Ecolabel** guidelines in order to reduce emissions of greenhouse gasses;	Yes□
Continually improve environmental stewardship with respect to materials, water and energy use;	Not□
Demonstrate transparency through publication of its data	Yes□
	Not□
Develop 5-year sustainability goals that will be reviewed and reported annually. Goals will be published on the company page.	Yes□
	Not□
Others	Yes□
In case Yes please, specify what:	Not□

## <sup>5</sup>NOTES

<sup>(\*)</sup> The EU Eco-Management and Audit Scheme (EMAS) is a premium management instrument developed by the European Commission for companies and other organisations to evaluate, report, and improve their environmental performance. EU EMAS page is: https://ec.europa.eu/environment/emas/index\_en.htm



Place and date.....

Buyer signature.....

<sup>(\*\*)</sup> EU Ecolabel is a label of environmental excellence that is awarded to products and services meeting high environmental standards throughout their life-cycle: from raw material extraction, to production, distribution and disposal. The EU Ecolabel promotes the circular economy by encouraging producers to generate less waste and CO2 during the manufacturing process. The EU Ecolabel criteria also encourages compa nies to develop products that are durable, easy to repair and recycle.

The EU Ecolabel criteria provide exigent guidelines for companies looking to lower their environmental impact and guarantee the efficiency of their environmental actions through third party controls. Furthermore, many companies turn to the EU Ecolabel criteria for guidance on eco-friendly best practices when developing their product lines. EU Ecolabel page is: https://ec.europa.eu/environment/ecolabel/



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