



APPENDIX. DECREE DATED NOVEMBER 20TH 2009, BY THE REGIONAL MINISTRY OF AGRICULTURE AND WATER, AUTHORISING THE DEVELOPMENT OF THE INITIATIVE “MURCIA AGRICULTURE AS A CO₂ SINK” AND ESTABLISHING THE CREATION AND USE OF THE LOGO-STAMP “LESSCO2” TO IDENTIFY THE COMMITMENTS SET OUT BY THE INITIATIVE

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The concept of the carbon footprint starts out from an analysis of the cycle of life. It is one of the mostly widely accepted indicators for identifying, synthesizing and communicating in a readily understandable way the possible environmental impacts of a process or activity. In this way, the aim is to quantify the greenhouse gas emissions that are released into the atmosphere as a result of the production and marketing of a product from the acquisition of primary materials to its handling as waste, enabling consumers to decide which foods to buy according to the emissions produced.

For companies, the calculating of the carbon footprint brings with it, among many advantages, the possibility of acquiring certification for their voluntary efforts in terms of environmental responsibility, as well as fomenting eco-efficiency benchmarking in business.

The increasing popularity of the carbon footprint concept has led a number of companies in northern and central European countries to employ this instrument in order to address this new social demand by providing information regarding the greenhouse gas emissions associated with their products.

The spread of this concept to the field of agriculture should be undertaken bearing in mind that the agricultural sector, forestry and part of the marine ecosystem are the only activities capable of absorbing or removing CO₂ from the atmosphere, leading us to speak of “carbon balance” instead of “carbon footprint”, given that in the case of many agricultural crops, depending on the production techniques employed, a positive balance will be obtained as they act as net CO₂ sinks.

Within the agricultural sector, regional agriculture through its technological development, and in general terms Mediterranean agriculture as a whole, as a result of a climate that allows for reduced energy consumption, has the characteristic of being a powerful CO₂ sink, producing in this way -as well as food, rural employment and development- a significant environmental benefit.

In order to take advantage of this characteristic to make a contribution to the fight against climate change, it will be necessary to create an initiative to channel the sum total of the greatest possible number of individual efforts. To be effective, such efforts must be voluntary and tailored to the characteristics, scope and timing of each operation. These efforts, however small, must have social recognition through mechanisms such as website advertising and institutional support.

If, in an objective and transparent manner, this environmental benefit produced by agriculture in terms of the absorption of greenhouse gases were to be communicated to the interested parties, particularly consumers, then agricultural companies would be able to obtain competitive advantages that would stimulate them to improve their CO₂ sink capacity. To this end, the opportunity should be provided for those companies able to achieve greater and verifiable commitments to obtain an identifying stamp.

Law 4/2009, dated May 14th, for the Integrated Environmental Protection of the Region of Murcia, establishes in Item VI mandates for fomenting a low carbon economy and the generating of market instruments at the service of the environment. To this end, Article 121 states that:



“The Regional Administration will encourage private sector participation in increasing the carbon sequestration capacity of sinks, developing market instruments capable of producing competitive advantages through the environmental benefits that contribute to the uptake of CO₂”.

The Environmental Administration of the Autonomous Community, in compliance with the requirements of Law 4/2009, and to enable export companies in Murcia, particularly in the food industry, to prepare for future market demands, is developing initiatives that will make it possible to visualize the environmental efforts they develop on a voluntary basis.

The “Murcia Agriculture as a CO₂ Sink” initiative aims to promote this absorption capacity of agriculture, making it possible for those agricultural companies which commit themselves to reflecting concrete and verifiable commitments and demonstrate to interested parties the increase in the sink capacity of their crops, to obtain the identifying stamp of the initiative, identified by the slogan “LessCO₂: Agriculture in the Region of Murcia”. In this way, the consumer will be able to visualize the commitment of companies to the reduction of their emissions of greenhouse gases during food production, and will be able to consult the official website for specific information about CO₂ absorbed or removed from the atmosphere associated with the amount of product they have just acquired.

Consequently, it is necessary to establish the use of this “LessCO₂” stamp, so that it can be used by the largest possible number of companies in the region, while at the same time, given that these products are mainly intended for export to foreign markets, these regulations must be adapted to internationally recognised methodologies and ways of thinking, such as those set out under the international standards ISO 14064:2006 1, 2, 3 and 4 and ISO 14065, and which can be verified by internationally recognised environmental verifiers.

By virtue thereof, and through the powers vested in me by Articles 16 and 24.4 of Law 7/2004, dated December

28th, by the Organisation and Legal System of the Public Administration of the Autonomous Community of the Region of Murcia,

I HEREBY DECREE THAT:

Article 1: Purpose and Scope

The purpose of this Decree is to establish the framework of the initiative “Murcia Agriculture as a CO₂ Sink”, the mechanism for adherence and the formulation of voluntary environmental commitments, as well as the conditions for use of the initiative’s logo-stamp, known by the slogan “LessCO₂: Agriculture in the Region of Murcia” (known hereafter as the LessCO₂ Initiative and Stamp).

The LessCO₂ stamp is the exclusive property of the Regional Ministry of Agriculture and Water of the Region of Murcia, by virtue of its registration in the Register of the Spanish Patent and Trademark Office.

Article 2: Scope and Purpose of the Initiative

“Murcia Agriculture as a CO₂ Sink” is an initiative that reflects the commitment of agricultural companies in the region, under the criterion of continuous improvement, to contribute to the reduction of greenhouse gases in the atmosphere and an increase in the sink capacity of the regional territory, in order to produce food in a more eco-efficient and environmentally responsible way.

Specifically, the initiative establishes an operating framework to:

- Encourage agricultural firms in the region to contribute to sustainable development by formulating practices and adopting specific commitments to environmental responsibility that make it possible to minimise green-



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house gas emissions and enhance the capacity for absorption, or the net removal, of CO₂ by agricultural crops.

- Make it possible for the environmental efforts formulated to obtain proper social recognition.
- Enable, in those cases in which commitments are verifiable and validated, the use of an identifying stamp that will allow them to gain a competitive advantage.

In addition, through use of the LessCO₂ stamp, the aim is to reflect the voluntary, validated and verified commitment of the producer to the year on year improvement of the carbon sink capacity associated with a particular agricultural product.

The logotype and the other characteristics of the LessCO₂ stamp are established in the Graphic Identity Manual included in Appendix F.

Article 3: Commitments Assumed by the Regional Administration

The Regional Administration, within the framework of this initiative, undertakes to:

- Contribute to overcoming lack of knowledge regarding eco-efficiency and agricultural best practices that minimise greenhouse gas emissions and enhance the CO₂ removal capacity of crops, encouraging the analysis of new developments, success stories, initiatives and demonstration projects.
- Publish and broadcast via the media and/or publicity campaigns, the list of companies that have adopted the initiative and develop within its framework voluntary

environmental commitments, the companies and products which can use the LessCO₂ stamp and the environmental benefits that entails.

- Contribute to increased social recognition for the agricultural sector in terms of the environmental benefits it generates.
- Make available to the public through the website www.lessco2.es, information regarding the environmental efforts assumed voluntarily by those who adopt the initiative, differentiating them from those who are validated and verified by third parties, and who will be permitted to use the LessCO₂ stamp.

Article 4: Adherence to the Initiative and Commitments Adopted by the Adherent Companies

Agricultural companies from the region of Murcia, groups of such companies, under the coordination of one of their number, or those companies involved in production activities in the region, will be eligible to participate in the initiative "Murcia Agriculture as a CO₂ Sink" and, where appropriate, to use the LessCO₂ stamp.

Those interested in joining the initiative "Murcia Agriculture as a CO₂ Sink" should complete the membership form contained in Appendix A, and within a period not greater than six months submit a sworn statement in which they undertake to adopt annual voluntary commitments, in accordance with the model in Appendix B, attaching:

- **A company declaration of the balance of emissions and removal of greenhouse gases associated with the crop, in accordance with the specifications given in Appendix C, and signed by the company's legal representative.** This declaration must include the CO₂ equivalent net



balance associated with each product (B), calculated according to the following equation:

$$B = R - E$$

(R): Removal of CO₂ from the atmosphere by the crop. The removal or sink capacity associated with each crop will be made public by the Regional Ministry of Agriculture and Water of the Region of Murcia. Those interested will be able to access this information via the official website www.lessco2.es.

(E): The greenhouse gas emissions associated with the crop.

The CO₂ equivalent net balance is calculated by commercialisation units, so that the initiative's official website can be consulted to see how much CO₂ is temporarily removed from the atmosphere associated with the aforementioned commercialisation units.

- **Company declaration of voluntary environmental commitment** assumed by the company, in accordance with the specifications given in Appendix D.

In addition, the companies joining the initiative “Murcia Agriculture as a CO₂ Sink” undertake to:

- Make available to the public the environmental commitments they have assumed voluntarily.
- Contribute to an increase in social recognition for the agricultural sector in terms of the environmental benefits it produces.
- Promote agriculture based on low greenhouse gas emissions and, specifically, to develop production activity characterised, among other things, by:

- A reduction in the use of fossil fuels and their gradual replacement by renewable energy.
- A minimising of the consumption of inorganic nitrogenous fertilizers.
- The use of agricultural practices that favour the net absorption or removal of CO₂ by both the crop and the soil and therefore increase their capacity as sinks.

Article 5: Use of the LessCO₂ Stamp

Those companies which adopt the initiative and are interested in using the LessCO₂ stamp for one or more of their products, should submit, together with their sworn statement (Appendix B), a certified copy of the certificate issued by one of the institutions identified in Article 7, issued for each product for which use of the LessCO₂ stamp is being requested. The certification will be granted in accordance with the standard model included here as Appendix E.

Use of the LessCO₂ stamp may only be requested for those products or crops for which the Administration has made public the quantifying of their respective net absorption or removal (R) of CO₂. For other agricultural products, participating companies may request that the Administration determine their respective removal (R).

If after three months since the submission of all the documentation requested, the Administration has not acted, then the applicant may make use of the stamp, without prejudice to the powers of verification of the Regional Ministry.

Any inaccuracy or misrepresentation in any information, statement or document of an essential nature which accompanies or forms part of the sworn statement, will invalidate the application, therefore preventing, from that moment, any use of the LessCO₂ stamp.



Article 6: Period of Participation in the Initiative and Continued Use of the LessCO2 Stamp

To maintain their participation in the initiative, the designated legal representative of the company must certify and present each year their written undertaking to voluntarily assume annual commitments within the framework of the initiative, according to the model in Appendix B, attaching:

- The company declaration of the balance of greenhouse gas emissions and removal associated with the crop.
- The company declaration of voluntary environmental commitment.
- The company declaration of the degree of compliance with the voluntary environmental commitment assumed during the previous year.

Requests for the renewal of authorisation to use the LessCO2 stamp must be sent to the Regional Ministry of Agriculture and Water, together with the declaration of annual commitment assumed under the framework of the initiative referred to in the previous paragraph, and a certified copy of the Certificate issued by environmental verification and validation institutions referred to in Article 7.

Article 7: Environmental Verification and Validation Institutions

Those institutions accredited with ISO 14064:2006 standards by any internationally recognised accreditation body may act as environmental verification and validation bodies, as well as verifiers of greenhouse gases, EMAS accredited environmental verifiers, certifiers of products in accordance

with ISO and UNE standards, designated operational agencies for Clean Development Mechanisms and Joint Implementation of the Kyoto Protocol, PAS 2050 and GHG Protocol certifiers, environmental control agencies and associates of the Administration in environmental issues.

In the process of validation of environmental commitments and verification of the CO₂ emissions and removal balance, the authorised agencies will deal with, in addition to the terms of this decree, the criteria for the UNE-ISO 14064 standard, paragraph 3 (14064-3, "Specification with guidance for the validation of assertions regarding greenhouse gases").

Article 8: Conditions for Use of the LessCO2 Stamp

Use of the LessCO2 stamp shall be subject to the following conditions:

- The LessCO2 stamp may only be reproduced while fully respecting the logotype, minimum size, colors and fonts specified in the LessCO2 Graphic Identity Manual (Appendix F).
- The LessCO2 stamp must be used in association with the product and the company for which its use has been granted, with the aim of enabling the consumer to consult via the website, featured in the label, the environmental efforts being made by the company in question.
- Before making use of the LessCO2 stamp, the Regional Ministry of Agriculture and Water must be informed of all the places and documents in which it will be used.

The LessCO2 stamp should be placed on the labels of the units of the product being marketed and it should be featured in the company's website, in which, in order to



provide the consumer with more information, there should be links to the initiative’s official website www.lessco2.es

The owner of the right to use the LessCO₂ stamp for a product is required to:

- Communicate in writing to the Regional Ministry of Agriculture and Water:
- Any temporary or permanent cessation to the production of the product. The natural lull between campaigns will not be considered a temporary cessation.
- Any changes in the legal form or name of the company.
- Any substantial modification in productive activity that might affect the CO₂ equivalent net balance associated with the crop.

Article 9: Registration and Publicity

The Regional Ministry of Agriculture and Water will maintain a registry of the companies participating in the initiative, as well as a list of the products of those companies for which they are permitted to use the LessCO₂ stamp.

Periodically, a list will be published on the website of the organisations that continue to participate in the initiative, as well as a list of the products and the companies which may use the LessCO₂ stamp. Publicity will also be included for each company and product regarding their balance of greenhouse gas emissions and removal, the voluntary environmental commitments assumed by the companies and the level of compliance with environmental commitments made in previous years, among other information.

Article 10: Confidentiality

The Regional Ministry of Agriculture and Water will treat as confidential all information requested regarding those companies participating in the initiative and those which use the LessCO₂ stamp, together with all data and documents presented by those companies, and will only use such information, data or documents for the purposes of participation in the initiative and, where appropriate, the granting of permission to use the LessCO₂ stamp. To this end, in the documentation presented by the company any data which the company considers confidential should be specified as thus.

FINAL PROVISION

Coming into effect:

This Decree will come into effect the day after its publication in the Official Newsletter of the Region of Murcia.

Murcia, November 20th 2009

The Regional Minister of Agriculture and Water,
Antonio Cerdá Cerdá



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APPENDIX A



**INITIATIVE PARTICIPATION FORM
"MURCIA AGRICULTURE AS A CO₂ SINK"**

Honorable Regional Minister of Agriculture and Water:

Mr./Ms., as the legal representative of, hereby agrees to join the initiative: "Murcia Agriculture as a CO₂ Sink".

The undersigned hereby assumes the obligations associated with the initiative "Murcia Agriculture as a CO₂ Sink", the aim of which is to advance the contribution of agriculture in the fight against climate change.

I, the undersigned, have read and agree to the terms of the initiative.

Signed in Murciaof.....20...

APPENDIX B



SWORN STATEMENT AGREEING TO PRESENT ANNUAL COMMITMENTS WITHIN THE FRAMEWORK OF THE INITIATIVE "MURCIA AGRICULTURE AS A CO₂ SINK"

Mr./Ms., identified with DNI, in the name of..... with place of business at.....,

States under oath:

That they comply with the requirements established by the initiative "Murcia Agriculture as a CO₂ Sink", and that they submit the following documentation accrediting their application (mark with an X):

- Company declaration of the balance of greenhouse gas emissions and removal associated with the crop, in accordance with the specifications given in Appendix C of the Decree dated November 20 2009.
- Company declaration of the voluntary environmental commitment assumed, in accordance with the specifications given in Appendix D of the Decree dated November 20 2009.
- Company declaration of the degree of compliance with the voluntary environmental commitment assumed the previous year.¹
- Certified copy of the Certificate emitted by one of the institutions specified in Article 7 of the Decree, issued for the product for which use of the LessCO2 stamp² is being requested.

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SIGNATURE AND SEAL

1. To be presented in order to remain part of the initiative and, where appropriate, to retain use of the stamp.
2. To be presented for use and maintenance of the LessCO2 Label.



CONTACT INFORMATION

Company Name:
Company Address:
N.I.F (Tax ID):
Telephone:
Fax:
E-mail:

Contact name:

Position:
Telephone:
Fax:
E-mail:

Other contact details or relevant information (company logo, etc.):



APPENDIX C

SPECIFICATIONS REGARDING THE CONTENT AND CHARACTERISTICS WITH WHICH THE BALANCE OF GREENHOUSE GAS EMISSIONS AND REMOVAL OF THE PRODUCT SHOULD BE EXPRESSED, METHOD OF CALCULATION AND COMPANY DECLARATION

Agricultural activities may release into the atmosphere, among other greenhouse gases, CO₂ produced by the use of fossil fuels and nitrous oxide (N₂O), derived from fertiliser (principally inorganic). Nitrous oxide has a global warming potential much higher than that of CO₂; according to the latest report from the Intergovernmental Panel on Climate Change (IPCC) it is 310, meaning that small emissions of this gas can lead to a significant impact on the carbon balance of the agricultural industry and, therefore, on the carbon balance associated with each crop. For this reason, emissions of greenhouse gases should be expressed as carbon dioxide equivalent.

The agricultural sector, on the other hand, is characterised by the fact that it can remove CO₂ from the atmosphere by storing it temporarily in plants (stems, roots, branches, leaves and fruits) and the soil (particularly important and long term) and therefore act as a CO₂ sink. In order to understand the removal capacity of each crop, a prior research process is required. For this reason, the Regional Administration will make public the removal factors applicable to each crop.

In order to determine the CO₂ equivalent net balance of a crop and, as a result, the net capacity as a CO₂ sink associated with each commercialised unit of each product, it is necessary to subtract the CO₂ equivalent emissions which have been necessary for its production from the removal calculated from the data made public by the Regional Administration for each type of crop. Finally, this balance will be applied to each commercialised unit.

To determine emissions, firstly it is necessary to identify the sources of greenhouse gas emissions and determine the different greenhouse gases emitted by the facility and calculate the annual emissions of the different gases, and



secondly, multiply each type of emission by the corresponding emission factors in order to calculate the total CO₂ equivalent emissions associated with the product.

METHOD FOR CALCULATING THE GREENHOUSE GAS EMISSIONS AND REMOVAL BALANCE OF THE PRODUCT (REMOVAL MINUS EMISSIONS)³

In accordance with the provisions of ISO 14064 and the GHG Protocol, the carbon balance calculation for each product should be based on the following principles, which are essential in ensuring that the information relating to the GHG is accurate and fair:

- **Relevance:** The sources, sinks, GHG reservoirs, data and methodologies appropriate to the needs of the prospective user should be selected.
- **Full coverage:** All relevant emissions and removal of GHG should be included.
- **Consistency:** Enabling meaningful comparisons of information associated with GHG.
- **Accuracy:** Bias and uncertainty will be reduced as far as is possible.
- **Transparency:** Sufficient and appropriate information related to greenhouse gases will be disclosed, to enable prospective users to make decisions with reasonable confidence.

1. Establishment of Operational Limits

The effective and novel management of GHG, and the establishment of comprehensive operational limits with regard to direct and indirect emissions, will help the company to better manage the full spectrum of risks and opportunities throughout their value chain (GHG Protocol).

3. In ISO terminology, "Establishment of operating limits".

The emissions taken into account in the carbon balance must necessarily include:

- Direct GHG emissions
- Indirect GHG emissions from energy

In addition, other indirect GHG emissions will not be included in the carbon balance, but they may be calculated if they are of interest to the organisation applying to use the LessCO₂ stamp. This information, which complements the carbon balance, will be posted on the official website. Examples of other indirect GHG emissions are:

- Transportation of products to markets, both national and European, handled by another organisation.
- Daily movements of employees and business trips.
- Outsourced activities, manufacturing contracts and franchises.
- GHG emissions from waste generated by the organisation, but handled by another.
- GHG emissions from use and end of lifecycle stages of the organisation's products and services.
- GHG emissions originating from the production and distribution of energy other than electricity, steam or heat, consumed by the organisation.
- GHG emissions from the production of primary materials or purchased primary materials.

The removal of CO₂ from the atmosphere associated with each type of crop for a temporary period or during the production cycle, will be provided by the Murcia Regional Ministry of Agriculture and Water, and will be posted on the website www.lessco2.es.

This removal data is supported by the research work based on climatic conditions and the variety of crops grown in the region being conducted by the University of Murcia (UMU),



the Polytechnic University of Cartagena (UPCT), the Centre for Edaphology and Applied Biology of the National Scientific Research Council (CEBAS-CSIC) and the Murcia Institute for Agricultural and Food Research and Development (IMIDA).

2. Quantification of GHG Emissions and Removal

Within the limits of their installation, the company must measure and document the GHG emissions and removal associated with every one of the crops or agricultural products for which they are requesting the LessCO₂ stamp.

The CO₂ equivalent net balance will be calculated according to the equation described in Paragraph 4.2 of Article 4 of this document.

The following should be documented separately: Direct GHG emissions; GHG removal; indirect GHG emissions from energy; other indirect GHG emissions and direct emissions of CO₂ from the combustion of biomass.

Both emissions and removal of GHG will refer to the previous calendar year and will be calculated both by installation and commercialised unit. The method of calculation is based on the ISO 14064 standard and the recommended conversion factors will be updated periodically on the website www.lessco2.es.

Those GHG emissions or removals that are not significant may be excluded from the measurement, together with those the measurement of which is not technically viable or cost effective.

For the balance of emissions of the installation, the unit employed is the *tonne*, while for the balance relating to each commercialised unit, *grams* will be used. The balance will be expressed in terms of CO₂ equivalent.

In addition, the balance may be completed with an evaluation of uncertainty for GHG emissions and removal. Procedures should be established and maintained for the storing of documents and record keeping.

In general, in order to determine the CO₂ removal of a crop, given that it is dependent on the working practices implemented on each farm, it is necessary to consider two contributions: a basic one which is common to the type of crop; and another (additional) factor which will be added or subtracted depending on the practices applied in the installation, so that:

$$\text{CO}_2 \text{ Removal} = \text{Basic Removal} \pm \text{Additional Removal}$$

Where:

Basic Removal: That associated with the plant and soil, depending on cultivation techniques.

The sum of the removal of: Stem + fruit + root + soil + branches and leaves (pruning).

In order to calculate the basic removal, some of the contributions may be added or subtracted, such as the removal produced by the trimmings from pruning, which:

- Are *added* if the trimmings from pruning are used as mulch, because much of the carbon will be incorporated into the soil.
- Are considered *zero* when the trimmings from pruning are used as biomass or biofuel⁴, in accordance with the instructions deriving from Commission Decision 2007/589/CE⁵.
- Are subtracted if the trimmings from pruning are burned and no energy is recovered.

Additional removal: Not associated with the plant or soil, this comes from best practices, as long as they are controlled by the organisation and occur within its limits.

4. If trimmings are used for animal feed, they will also be considered as biomass given that greenhouse gas emissions resulting from the production of animal feed are avoided.

5. Commission Decision dated July 18th 2007, by which the guidelines were established for monitoring and reporting greenhouse gas emissions in accordance with Directive 2003/87/CE of the European Parliament and Council.



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The quantitative data for basic and additional CO₂ removal are provided by the Regional Ministry of Agriculture and Water of the Region of Murcia and will be updated periodically on the website www.lessco2.es. The methodology for determining the CO₂ removal capacity of crops is public and will appear on the aforementioned website.

COMPANY DECLARATION OF THE GHG EMISSIONS AND REMOVAL BALANCE

In its declaration of GHG emissions and removal, the company should detail, at the very least, all GHG emissions (direct, indirect, through energy and those "other indirect emissions" which are voluntarily determined), the removal of CO₂ by the crop, the balance of CO₂ equivalent emissions and removals associated with both the installation and each commercialised unit of the product.

The balance of emissions and removals should refer to the entire previous year (from January 1st to December 31st).

As an aid to the gathering of data to determine the greenhouse gas emissions of the installation and for the company statement, the following model may be followed:

Company name
Crop type and variety
UTM coordinates of the property and cadastral reference
Municipality to which it belongs in the Region of Murcia

GENERAL INFORMATION

Description of the property (general characteristics)

N° of hectares cultivated

Annual production (t/Ha) and (units/Ha)

Planting density (N° plants/Ha)

Type of irrigation

Crop cycle (years) / Planting and harvesting dates

Average weight of fruit or vegetable unit / interval (g)

Belongs to the Irrigation Community (YES/NO)

OBSERVATIONS

SPECIFIC DATA

Direct emissions:

1. Land Preparation:

Direct emissions are those which are produced by the consumption of fuel used during tilling, sowing, pruning, shredding, clearing, mulching, treating, basal dressing, installation of irrigation, etc.

Type of fuel used by machinery

Fuel litres / year

2. Fertilising:

The principal emissions derived from fertilising are biogenic and basically result from nitrification and denitrification.

Consumption of fertiliser

Total amount of synthetic fertiliser used NFERT (kg N/year)

N content

Litres of fertiliser per hectare



3. Transportation and collection:

Transport from the vehicle to the storage facility is considered.

Fuel type _____
 Fuel litres / year _____

Indirect emissions from energy

1. Drip irrigation:

Those emissions are considered which derive from the consumption of electricity during capture and distribution.

Electricity consumption (kWh) _____
 If fuel is used, specify the type and annual consumption (considered a direct emission). _____

2. Storage facility and other

Electricity consumption (kWh) _____
 If fuel is used, specify the type and annual consumption. _____

Other indirect emissions

1. Fertilising:

a. Inorganic fertilisers:

This includes CO₂ emissions from energy required for its production, formulation, packaging and transportation.

Kg of inorganic fertiliser / hectare year _____
 N° of hectares over which the inorganic fertiliser is applied _____

Inorganic fertiliser formulation	kg activekg applied
Nitrogen	_____
Phosphorus	_____
Potassium	_____
Calcium-Magnesium	_____

b. Organic fertilisers:

Kg. manure/hectare year _____
 N° of hectares to which the organic fertiliser is applied _____
 g N/Kg. manure _____

2. Phytosanitary treatment:

This takes into account the CO₂ emissions deriving from the energy required for its production, formulation, packaging and transportation.

Treatment	kg active ingredient/Ha	N° of hectares
Herbicides	_____	_____
Insecticides	_____	_____
Fungicides	_____	_____

Emissions from Transportation to Market

If the company itself is responsible for transport to market, the resulting emissions are considered direct. If the transport company is outsourced, the emissions produced are classed as “other indirect emissions”.

Own company:

Type of fuel used by machinery _____
 Fuel litres / year _____



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Subcontractor

Name (s) of transport company/companies _____

Type of fuel used by the machinery _____

Fuel litres / year _____

Observations

CO₂ Removal

Data provided by the Regional Ministry of Agriculture and Water

OTHER RELEVANT DATA

Management of trimmings from pruning and non-commercialised products

(Indicate type of biomass, kg and use / treatment or final destination)

Best practices employed _____

Identification of opportunities for cost effective greenhouse gas emission reductions/GEI⁶ _____

Contact, logo and web link to the company _____

6. Useful for transparency of the LessCO₂ Label and for the start-up of business environmental accounting, which allows the holder to implement intercomparisons, planning, benchmarking, etc.

APPENDIX D

SPECIFICATIONS REGARDING THE CHARACTERISTICS THAT SHOULD BE INCLUDED IN THE VOLUNTARY ENVIRONMENTAL COMMITMENTS FORMULATED, AND REGARDING THE COMPANY DECLARATION THROUGH WHICH THOSE VOLUNTARY ENVIRONMENTAL COMMITMENTS ARE EXPRESSED

The establishment of the voluntary environmental commitment by the company should be based -in addition to the principles of relevancy, full coverage, consistency, accuracy and transparency which characterise the greenhouse gas emissions and removal balance- upon the principle of conservative attitude. In other words, conservative assumptions, values and procedures should be employed to ensure that the reduction of emissions or increase in removal of greenhouse gases is not overestimated. It is essential to ensure that there exists an impartial representation and a credible and balanced account of the greenhouse gas emission reductions and removal increases.

Procedures should be established and maintained for the storing of documentation and the keeping of records.

COMPANY DECLARATION OF VOLUNTARY ENVIRONMENTAL COMMITMENT

The proponent of the project must submit a document describing the Voluntary Environmental Commitment, which must include, at least, the following sections:

- Type of commitment to improvement.
- Description of commitment to improve and the associated best practices.
- Benefits contributed to the net emissions balance.
- Methodology employed to calculate the emissions balance.
- Calculation of CO₂ equivalent emission reductions or increase in CO₂ removal through the following of best practices.



- Balance of CO₂ equivalent emissions.
- Control and monitoring plan.
- Attached documents justifying the formulas and factors employed.

For the implementation of the project, two phases should be established: a planning phase and an implementation phase.



APPENDIX E

CERTIFICATE FROM THE ENVIRONMENTAL VERIFICATION AND VALIDATION BODY

1. IDENTIFICATION OF THE LEGAL REPRESENTATIVE OF THE COMPANY

Name and surname: Tax ID:

2. INFORMATION REGARDING THE COMPANY AND INSTALLATION

Company name: Tax Code/Tax ID:
 Name of facility:
 Address:
 Postcode: Municipality: Province:

3. VERIFICATION PROCESS DATA

Name and accreditation number of the verifying institution:
 Name of Chief Verifier: Tax ID:
 Name of Checker / Technician: Tax ID:
 Date(s) of in situ visit(s) to installation:

4. VERIFICATION OF GREENHOUSE GAS EMISSIONS AND REMOVAL BALANCE

In compliance with the Decree for regulating the LessCO₂ stamp, the verifier certifies that the carbon balance is:

- Verified without deviations. The data and calculations contained in the report are assumed to be accurate, and it is asserted that it is possible to guarantee the reliability of the CO₂ emission results obtained.
- Verified with deviations. The data and calculations contained in the report are assumed to be accurate, and it is asserted that it is possible to guarantee the reliability of the CO₂ emission results obtained. However, deviations have been detected which do not affect the reliability of the CO₂ emissions results obtained. The deviations detected are detailed in the relevant section.
- Unverified. The report submitted by the holder does not guarantee the reliability of the results obtained for CO₂ emissions. The deviations detected which motivate this opinion are detailed in the relevant section.

Deviations detected (motivating the declaration in assumption 2 or 3):

Suggestions for improvement:

Additional observations:

5. VALIDATION OF NEW ENVIRONMENTAL COMMITMENT

The validating institution, taking into account the project's compliance with the applicable validation criteria, its establishment, justification and documentation, and planned controls, states that the environmental commitment assumed by the company is:

- Validated
- Not validated



APPENDIX. DECREE DATED NOVEMBER 20TH 2009, BY THE REGIONAL MINISTRY OF AGRICULTURE AND WATER, AUTHORISING THE DEVELOPMENT OF THE INITIATIVE "MURCIA AGRICULTURE AS A CO2 SINK" AND ESTABLISHING THE CREATION AND USE OF THE LOGO-STAMP "LESSCO2" TO IDENTIFY THE COMMITMENTS SET OUT BY THE INITIATIVE

6. COMPLIANCE WITH ENVIRONMENTAL COMMITMENT ASSUMED THE PREVIOUS YEAR

Regarding its environmental commitment assumed the previous year, the company is deemed to have:

- Complied
- Complied with deviations
- Not complied

Deviations detected (motivating the declaration in assumption 2 or 3):

Suggestions for improvement:

Additional observations:

Date and signature

Murcia.....of.....of 20.....

Signed by (representative of the environmental verification and validation institution or body):

(Institution's stamp)



APPENDIX F

LessCO2 GRAPHIC IDENTITY MANUAL

1. LOGO OF LessCO2 STAMP



7. The logo must always be linked to the website www.lessco2.es.



2. LOGO OF LessCO2 SEAL FOR MARKETING LABELS

These labels refer to the verifier which carried out the verification and validation process.



Verified and
validated by:

APPENDIX G

TERMS AND DEFINITIONS

Greenhouse gases, GHG: Gaseous component of the atmosphere, both natural and anthropogenic, which absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, atmosphere and clouds.

Some GHG: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulfur hexafluoride (SF₆).

Source of greenhouse gases:

A physical unit or process that releases a GHG into the atmosphere.

Global warming potential (GWP):

A factor that describes the impact of the radiative forcing of a unit based on the mass of a given GHG, in relation to the equivalent unit of carbon dioxide over a given period.

Carbon dioxide equivalent:

(CDE): A unit for comparing the radiative forcing of a GHG with that of carbon dioxide.

Greenhouse gas sink:

Physical unit or process that removes GHG from the atmosphere.

Greenhouse gas reservoir: Physical unit or component of the biosphere, geosphere or hydrosphere with the capacity to store or accumulate a GHG removed from the atmosphere by a GHG sink, or a GHG sequestered from a GHG source.

Emission of greenhouse gases: Total mass of a GHG freed into the atmosphere during a given period.

Direct emission of greenhouse gases: Emission of GHG from sources of GHG that belong to or are controlled by the owner of the installation.

Indirect emission of greenhouse gases through energy:

Emissions of GHG which come from the generation of electricity, heat or steam of an external origin consumed by the installation.



Other indirect emissions of greenhouse gases: Emission of GHG distinct from the indirect emission of GHG through energy, which is a consequence of the activities of the installation, but originates with sources of GHG which belong to or are controlled by other installations.

Removal of greenhouse gases: Total mass of a GHG removed from the atmosphere during a given period; absorption or sequestering of GHG from the atmosphere (definition according to the GHG Protocol).

Reduction of emissions of greenhouse gases: Calculated reduction of emissions of GHG, taking as a base year the year in which the commitment to reduce emissions of GHG is assumed.

Increase in removal of greenhouse gases: Calculated increase in removals of GHG, taking as a base year the year in which the commitment to increase removal of GHG is assumed.

Emission or removal factor of greenhouse gases: Factor that relates the activity data with the emissions or removal of GHG.

Baseline scenario: Hypothetical reference case that best represents the conditions most likely to occur in the absence of a proposed GHG environmental commitment. For the purposes of this Decree, the base year will be taken as the year in which the commitment to improve the balance of GHG emissions is assumed.

Monitoring: Periodic or continuous evaluation of the emissions or removal of GHG or of other data associated with GHG.

Validation: Systematic, independent and documented process for the evaluation of the company declaration of voluntary environmental commitment described in this Decree.

Verification: Systematic, independent and documented process for the evaluation of the company declaration of emissions and removal of GHG described in this Decree.

Environmental verification and validation body: Competent and independent natural person or legal entity responsible for carrying out the validation of the voluntary environmental commitment and verification of the company declaration of GHG emissions and removals and reporting the results.



The Decree dated November 20th 2009 by the Regional Ministry of Agriculture and Water, through which the initiative “Murcia Agriculture as a CO₂ Sink” is developed and the obtaining and use of the logo-stamp LESSCO₂ is established, as an indicator of the commitments assumed within the framework of the initiative (BORM N° 273, dated November 25th 2009), can be consulted via the website www.lessco2.es