



Assessment of forest-carbon sinks and promotion of compensation systems as tools for climate change mitigation

# 1. INTRODUCTION, JUSTIFICATION AND OBJECTIVES

The LIFE FOREST CO2 project-Quantification of forest carbon sinks and promotion of compensation systems as tools for mitigating climate change-, is a demonstration project, of a transnational nature, carried out between Spain and France. Belonging to the 2014 call of the LIFE Program, as part of the Climate Action subprogram, its main objective is the promotion of forest systems and sustainable forest management as a tool for mitigating climate change through the application of the European regulation on the accounting of emissions and removals in the sector of land use, land use change and forestry (LULUCF), improving the knowledge base at the local level and realizing an integrated practical application covering all sectors involved of interest, including those responsible for offsetting emissions, in their enhancement.

The main lines of work to achieve the objectives of the project have been:

- Modeling of carbon sequestration as a consequence of Sustainable Forest Management actions (pruning, clearing, thinning, etc.) in Spanish and French Pinus halepensis and Pinus pinaster masses in their various deposits: biomass (aerial and underground) through tools LIDAR, soil organic matter and dead organic matter, through internationally recognized calculations (IPCC), but specified locally.
- In addition, the implementation of an integrated work of promotion and advice for the development of sustainable forest management projects with public and private forest owners, as well as a work to disseminate and promote the compensation of the carbon footprint and CO2 emissions through of forestry projects between public and private entities of the non-regulated or diffuse sectors (Sector NO EU-ETS).
- Finally, there is an impact on the implementation of replication work of the project's methodologies, as well as dissemination work to publicize the project among the main social agents of interest.

In accordance with the general approach proposed for the project, the specific objectives that have been addressed in the general framework outlined above have been:

- Know precisely the net absorption of CO2 resulting from carrying out sustainable forest management work in Pinus hapensis and Pinus pinaster forest stands in the geographical scope of the project (Spain and France).
- Model and synthesize the knowledge acquired, so that it can be transmitted among the agents of interest, and can be considered in the accounting of the sinks of the LULUCF sector.
- Encourage forest owners to develop projects on carbon sequestration and sustainable forest management, so that they become allies in the conservation of the ecosystem benefits of forests and the development of local economies.
- Encourage among non-regulated or diffuse sectors the importance of the forest sector as a tool for mitigating climate change through the calculation, reduction and voluntary compensation of the carbon footprint using sustainable forest management projects as a basis for compensation.

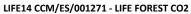






Imagen 1. Scheme of general objectives to be achieved with the LIFE FOREST CO2 methodology



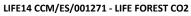


# 2. SUMMARY OF RESULTS OBTAINED

After the end of the project, after the initial four years for which it was planned, to which are added an initial extension period of one year and another extension of 6 months due to the exceptionality caused by the COVID-19 pandemic, the main results obtained through the implementation of the same are:

Tabla 1. Results obtained through the actions of the LIFE project

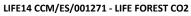
Acco					
ACTION	Provided in proposal	mplish ed	Evaluation		
A1	Objectives: improving knowledge about voluntary carbon markets and offset initiatives  Expected results: study on compensation initiatives (40 global)	Yes	Evaluation: action carried out as planned and the expected results were achieved.  Lessons: MVC and GFS are climate change mitigation measures recognized by the Paris Agreement. The GFS accounts for a small proportion of the MVCs, with prices lower than those associated with reforestation projects.		
A2	Objectives: better knowledge about the involvement of organizations in the diffuse sector. Potential partners for action C5.  Expected results: Market study and database with 500 potential organizations.	Yes	Evaluation: action carried out as planned and expected results exceeded (more than 700 potential organizations identified).  Lessons: there is a significant lack of knowledge in fuzzy sectors on key issues such as carbon sinks or carbon footprint offsetting. On the other hand, there is great motivation to improve environmental issues. This has been key to planning approach and communication strategies.		
C1	Objectives: estimation of the carbon stock in biomass and roots (BR) of P. halepensis and P. pinaster  Expected results: tool to estimate the stock in BR through LIDAR, reduction of error rates with LIDAR, reduction of 1/3 of the quantification time of carbon stocks.	Yes	Evaluation: the methodological development took longer than initially estimated, but the results have been satisfactorily achieved.  Lessons: The station quality maps and the application of carbon models for BR, for each station quality and forestry itinerary, will allow us to estimate carbon stocks faster and on a larger territorial scale. This facilitates the integration of the models and the calculation of carbon stocks by forest owners in the projected areas.		
C2	Objectives: Estimation of the Organic Carbon in the soil (SOC) of P. halepensis and P. pinaster as a consequence of the GFS.  Expected results: quantification of the SOC, initially estimated in 85% of the target ecosystems, reduction of error rates with FieldMap, net anthropogenic SOC due to GFS.	Yes	Evaluation: action carried out as planned and results achieved. SOC data, both in unmanaged and managed stands, allow modeling the SOC and the effects of forest management. Action D2 and C4 modeling are necessary to quantify the net anthropogenic SOC and the percentage of SOC in the target ecosystems. The SOC estimate represents between 10-15% of the total C stored in the target ecosystems studied. This is below the expected projections (85%), but could depend on the characteristics of the area and the forest studied.		
C3	Objectives: quantification of the carbon stock of dead wood on the soil of P. halepensis as a consequence of the FSM in Murcia	Yes	Evaluation: the debris and dead wood results were grouped and considered as a single carbon store: DWL. The results were expanded, since initially they only covered the Region of Murcia and finally data		







ACTION	Provided in proposal	Acco mplish ed	Evaluation
	Expected results: Estimation of the carbon stock of dead wood depending on the intensity of management and the destination of the waste.		were collected for each study area of the Project (Andalusia, Castilla y León and Occitania). The data from the DWL warehouse for both types of masses, unmanaged and managed, will allow the modeling of the carbon stock in the DWL warehouse and the effects of the management in that warehouse in action D3.
C4	Objectives: modeling of carbon sequestration as a result of SFM in Mediterranean forests of Pinus halepensis and Pinus pinaster in the various stores.  Expected results: Technical guide for the quantification and accounting of carbon sequestration from GFS treatments in P. halepensis and P. pinaster. Distribution to 4.500 people.	Yes	Evaluation: The treatment, modeling and presentation of data was successfully achieved, being integrated into the Technical Guide for the quantification and accounting of carbon sequestration from GFS techniques in P. halepensis and P. pinaster, available in physical and digital format. 500 printed copies have been distributed and 1,300 users have downloaded the digital version.
C5	Objectives: to promote forestry projects as a tool for mitigating climate change in the diffuse sector, with special emphasis on offsetting emissions based on SFM.  Expected results: Reduction and compensation of the carbon footprint in 200 organizations of the diffuse sector, reducing, at least, 7,000 tons of CO2	Yes	Evaluation: 121 organizations of the diffuse sector have joined the Project for the calculation, reduction and compensation of the carbon footprint (60% of the expected objective). The emission of at least 12,376 tons of CO2 has been reduced by member organizations (75% of the original objective). 21,052.22 tons (798 through GFS projects) have been offset.
C6	Objectives: improve the involvement of the social actors involved in the forestry sector, SFM and carbon sequestration and encourage them to become allies for the promotion and dissemination of the benefits of the conservation of forest ecosystems, as well as the development of local economies.  Expected results: Development of 125 GFS projects, sequestering CO2 from the atmosphere in the long term, achieving a total CO2 sequestration estimated at 3,375 tons during the life of the LIFE Project, and more than 50,000 tons in the long term.	Yes	Evaluation: 185 absorption projects with forest owners have been achieved (148% of the planned objective). The long-term net absorption of CO2 amounts to 116,206.61 t in executed projects (132% over the planned objective). It has been estimated that, during the duration of the Project, 1,364.61 t have been sequestered through forest management (43% of the planned target), but it is expected to grow exponentially, surpassing the original target very soon.
C7	Objectives: transfer the Project methodology and replicate its actions in other geographic areas.  Expected results: creation of 1 carbon sequestration simulator (app). At least 14 agreements for the transfer and replication of the Project's techniques with the interested parties. Publication of 2 articles on	Yes	Evaluation: the web application for the simulation has been created and is fully operational. Eleven agreements (78%) have been reached and one more is pending signature. 2 articles have been published (100%) and the Project has been replicated in at least 7 new areas (140% of the planned objective).





ACTION	Provided in proposal	Acco mplish ed	Evaluation
	replicability. Replication of the Project methodology in 5 new areas.	cu	
D1	Objectives: modeling of carbon stocks in BR (biomass + Roots) of P. halepensis and P. pinaster as a consequence of GFS.  Expected results: Photogrammetry monitoring models. Efficient methodology for detecting changes in land use through a combination of remote sensing techniques. Growth models adjusted to photogrammetry data.	Yes	Evaluation: the development took longer than initially estimated, but the results have been achieved satisfactorily.  The biomass maps allow the quantification of the carbon stock that makes up the baseline through GIS and Remote Sensing. Through station quality-based carbon models, it will be possible to more quickly quantify the effects of SFM, reducing time and effort for forest owners / managers.
	Objectives: Cos modeling in P. halepensis a and P. pinaster as a consequence of GFS.		Evaluation: the results obtained have made it possible to monitor the total C stored in the ecosystem until the end of the shift, evaluating the changes generated in the soil and biomass through various simulation scenarios.
D2	Expected results: Publication of an initial	Yes	These results can help in the design of management plans focused on C forestry, since they provide basic information for the quantification of the total C stored
	and a final report, including the modeling of the COS.		in the stands. When quantified, an economic estimate can be made by adding an extra value to protective reforestations that have deficiencies in silvicultural treatments.
D3	Objectives: Modeling of the carbon stock in the DWL store for P. halepensis as a consequence of the GFS.  Expected results: Publication of an initial and a final report, including the carbon model for the DWL warehouse.	Yes	Evaluation: The carbon stock in the DWL warehouse in producing and non-producing masses is underestimated, especially in those scenarios where the remains of the forestry are left on the ground due to the non-viability of their removal or use. This carbon store should henceforth be considered in the development of the models.
D4	Objectives: To know the progress regarding the development of GFS projects and the adhesions of the entities of the diffuse sector.  Expected results: Publication of an intermediate and a final report.	Yes	Evaluation: Both reports reflect that the climate change objectives (reduction and absorption by forests) have been achieved. Stakeholder involvement has been good; Most of the companies and organizations contacted have changed their perception regarding the urgency of climate change and the need to reduce and offset emissions.
D5	Objectives: to know the impact of the Project in terms of ecosystem services.  Expected results: Publication of a final report.	Yes	Evaluation: the final report shows an increase in the GFS area of 3,397.97 ha with a net CO2 absorption of 116,206.76 t in the long term. 631.47 ha belonging to RED NATURA 2000 have been benefited through the GFS.
D6	Objectives: to know the socioeconomic impact of the Project.  Expected results: publication of an intermediate and a final report.	Yes	Evaluation: the final report shows that the impact on the forestry sector reaches € 4,332,511.25. The profits generated from the sale of wood and biomass reached € 1,515,409,639 (VAT included). Both consultants and forestry companies have benefited from the development of projects and reduction measures in diffuse sectors, generating, through the drafting of projects, execution and supervision, a total







LIFE14 CCM/ES/001271 - LIFE FOREST CO2 Assessment of forest-carbon sinks and promotion of compensation systems as tools for climate change mitigation

ACTION	Provided in proposal	Acco mplish ed	Evaluation
		eu	of 48 wages. Through the activities of the Project, to date, the sale of carbon credits has amounted to a total of € 415,738.
E4	Objectives: disseminate the Project to the target audiences.  Expected results: direct knowledge of 12,000 people about LIFE FOREST CO2 (3,500 scientists and university students and 4,000 forestry and environmental professionals). Impacted on 2,000,000 people through the media.	Yes	4,680 participants (1,238 high school and vocational students, 16 members of professional associations, 1,819 forest and environmental consultants and administrators, 128 forest-related companies, 272 forest researchers, 738 university students and 597 in society). The newsletters are distributed monthly to more than 4,000 subscribers. Press releases were distributed to 270,000 subscribers of newspapers and magazines in which they were published. The participation in the activities, despite being lower than initially expected, is also good, since the project's beneficiaries have reached 40% of the expected participation.  The reception from the target audience was good in the case of the activities, receiving positive comments during and after the development. The dissemination material has been well received by the public, with approximately 13,500 downloads of all materials recorded on the project website. In addition to mass dissemination, newsletters have been downloaded 2,000 times through the project website. For the media, the project was well received, as 250 related news items have appeared in national, regional and local media.
		2	883 people participated in the technical conferences, mostly professionals and technicians from the forestry sector.  Participation in the activities is lower than initially expected, possibly due to an expectination of
E5	Objectives: Disseminate the Project to technical audiences  Expected results: 4,900 stakeholders discover LIFE FOREST CO2 directly (4,800 nationally and 100 European experts)	Yes	expected, possibly due to an overestimation of potential participants (almost 5,000 at the national level), since the topics are complex and the technical knowledge required limits participation.  The reception of experts from the forestry sector was good at the national level. The promotion of the projects developed in Action C5, at the initiative of the technicians attending these technical conferences, shows a useful transfer of methodologies. At an international level, since the intervention in the European Parliament, the project coordinator has been invited to participate in various events organized by the main European Forest Associations, thus creating synergies with the European forest network. The participants in the international technical conferences were representatives of the European Parliament, as well as European forestry associations and technicians.



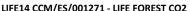
ACTION	Provided in proposal	Acco mplish ed	Evaluation			
E6	Objectives: Create Networking with other projects and institutions  Expected results: Collaboration with 20 experts through meetings. Attendance at 6 conferences. 50 attendees to the final Symposium		Evaluation: The networking involved 1,674 participants (1,020 in Congresses, 568 in networking activities and 86 in the final Symposium).  The impact has successfully exceeded expectations both in congresses (300 were expected) and in networking (40 were expected). The reception of the project sessions was well received by the target audience, especially with regard to the carbon quantification methodologies for COS and DWL. In addition, it was a positive experience for the project members, who integrated the lessons of other projects into the core actions of the LIFE FOREST CO2 project. Additionally, the contacts made during these conferences have been useful to reach European and national contacts for the transfer of results as representatives of MITECO or the Regional Administration.			
E7	Objectives: Disseminate the Project through publications  Expected results: 4 book-type publications and 16 articles. The publications reach 45,000 experts and the articles 35,000.	Yes	4 Book-type publications. 21 articles published The impact of the publications is good, as the articles accumulate more than 17,000 downloads through the project website alone. Articles in French have been distributed to more than 18,000 recipients. The manuals have been downloaded more than 3,000 times in 5 months, which is likely to increase in the post-LIFE period. 2,100 copies of manuals and guides have been distributed.			
E8	Objectives: publish the Layman Report Expected results: Publication of the Layman's Report in Spanish, English and French.	Yes	The Layman Report has been published and disseminated through a European Diffusion website, achieving a much greater diffusion than originally expected.			

<sup>\*</sup> Objectives achieved. Most of the expected results have been exceeded, with some exceptions regarding the number of conferences or meetings held.

Based on the results presented, it can be established that the main objective of the project: the promotion of forest systems and sustainable forest management as a tool for the mitigation of climate change through the application of European regulations on accounting of emissions and removals in the land use, land use change and forestry (LULUCF) sector, improving the knowledge base at the local level and realizing an integrated practical application that covers all the sectors involved of interest, including those responsible for the compensation of emissions, in the enhancement of the same, as well as the operational or secondary objectives for this, have been successfully achieved (see Table 2).

Tabla 2. Compliance with operational or specific objectives of the LIFE project

rabia 2. Complaine with operational of Specific Objectives of the En 2 project				
OBJETIVO	CUMPLIMIENTO			
Know precisely the net absorption of CO2 resulting from carrying out sustainable forest management (SFM) work in Pinus halepensis and Pinus pinaster forest stands in the geographical scope of the project (Spain and France).				





LIFE14 CCM/ES/001271 - LIFE FOREST CO2
Assessment of forest-carbon sinks and promotion of compensation systems as tools for climate change mitigation

Model and synthesize the acquired knowledge, so that it can be transmitted between the agents of interest, and can be considered in the accounting of the sinks of the LULUCF sector.	<b>~</b>
Encourage forest owners to develop projects on carbon sequestration and sustainable forest management, so that they become allies in the conservation of the ecosystem benefits of forests and the development of local economies.	<b>~</b>
Encourage among non-regulated or diffuse sectors the importance of the forestry sector as a tool for mitigating climate change through the calculation, reduction and voluntary compensation of the carbon footprint using as a basis the compensation of sustainable forest management projects (SFM)	<b>~</b>
Disseminate the project at the regional level, with special attention to the sectors involved.	<b>√</b>
Disseminate the objectives and results among expert personnel and share experiences.	<b>√</b>
Guarantee in the long term the integration of forest management as a tool for mitigating climate change at the regional and state level (through the Spanish Office for Climate Change) once the project is completed. Take into account, in this framework, the methodology developed by LIFE FOREST CO2, at least as a starting point for the inclusion of SFM as a mitigation tool.	Objetivo de este plan
Maintenance of the LIFE FOREST CO2 platform that will deal with the procedures related to MVCs: application of the entire methodological standard for carrying out the accounting, monitoring, validation and certification of the carbon credits generated through the LIFE FOREST CO2 methodology.	Objetivo de este plan







Imagen 2. VCM scheme according to the methodological standard derived from the LIFE FOREST CO2 methodology

systems as tools for climate change mitigation





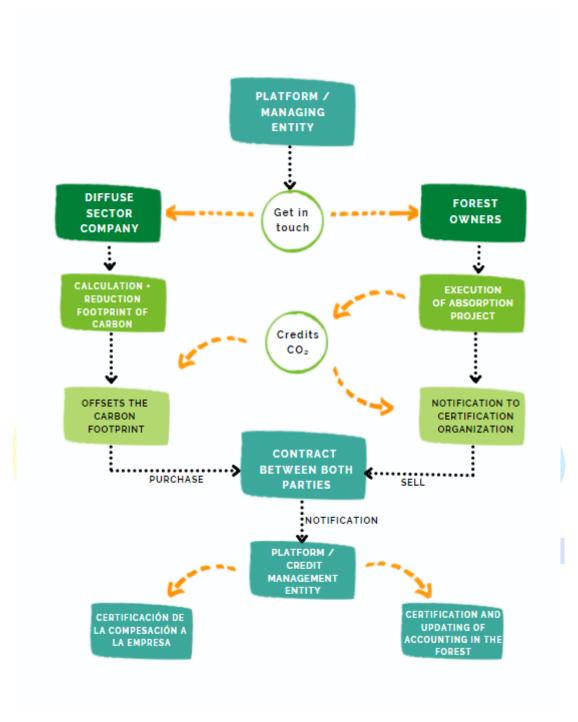


Imagen 3. Operational diagram of the transfer and accounting platform managed by the LIFE FOREST CO2 platform.



### 3. ANÁLISIS DE LA SITUACIÓN ACTUAL

The current situation, once the project is finished, can be summarized in analysis of Weaknesses, Threats, Forces and Opportunities (SWOT). This analysis is detailed in Table 3.

#### Tabla 3. Análisis DAFO

#### Debilidades

- The integration of the methodology in the National Carbon Footprint Registry of the Ministry of Ecological Transition and Demographic Challenge has not been achieved.
- Technical difficulties (intrinsic to the administrative models of each Autonomous Community) to export an administrative model of accounting for carbon credits from GFS
- The credits generated by this methodology, as of today, do not have a solid regulation that supports them in the voluntary carbon markets, as would be the case of Decree 163/2014, of March 14, which creates the Carbon Footprint Registry.

#### ∆menazac

- Complexity of aspects related to greenhouse gas emissions and removals accounting.
- MCVs are relatively new, rapidly evolving and abstract, which often makes it difficult to effectively integrate them into existing administrative processes.
- Complex administrative procedures

#### Fuerzas

### SFM as a mitigation tool provides a broad catalog of ecosystem and socioeconomic benefits that, by themselves, would already be sufficient to justify investment in SFM, which gives tremendous potential to the methodology developed.

- There is great interest on the part of forest owners (both public and private) in having forest management validated as a mitigation tool and thus being able to contribute external resources to carry out such management.
- The change in the production paradigm is already evident in many companies and entities in the diffuse sector, so that corporate social responsibility and production processes close to carbon neutrality are becoming very important.

#### Oportunidades

- The obligations derived from the Paris Agreement push the EU Member States (as signatory parties to the Agreement) to legislate and promote policies that lead to this fulfillment of the climate objectives in the 2030 and 2050 horizons. In this sense, they will be necessary the efforts of all possible carbon sinks, so the mitigating potential provided by forest management should be taken into account.
- The severity of the current climate emergency, together with the ambitious objectives set for very close time horizons (2030), will make the evolution of voluntary carbon markets, production models and policies and regulations related to climate change evolve and are implemented faster and more agile than has been customary.
- Value all the very important ecosystem and socioeconomic externalities derived from forest management, which will be enhanced by considering SFM as a mitigation tool.
- Enhancement and recognition of the work of forest owners (public and private) when managing their territory, since they generate an immense amount of benefits of which the entire society is the beneficiary.
- Positive synergies between conservation of the natural environment and economic development
- Coordination of administrations involved



Assessment of forest-carbon sinks and promotion of compensation systems as tools for climate change mitigation

Development of projects and activities for the dissemination and transfer of results.

### 4. PROGRAM OF ACTIONS

### 4.1. Administrative action program

#### Action 1. Inter-administrative coordination:

Steps will be developed to promote inter-administrative coordination with other Autonomous Communities and with the Central Administration for the consideration of forest management as a mitigation tool included in the Carbon Footprint Registry of the Ministry of Ecological Transition and Demographic Challenge.

Regarding the part of the Project that affects French territory, the National Forest Property Center (CNPF) will be in charge of coordinating and contacting the competent administration in France, coordinating with it the necessary steps for validation of the methodology.

#### Action 2. Certification of carbon credits in the Region of Murcia:

For forestry Projects located within the territory of the Region of Murcia, the General Sub-Directorate for Forest Policy, Hunting and River Fishing (regional administration of the Region of Murcia) will validate the issuance of credits from forest management through the application of the standard methodological LIFE FOREST CO2, issuing the corresponding certificates (there is a Resolution that provides regulatory coverage to this issue).

# 4.2. Research program and replicability of results

### Action 3. Continuity of the methodology:

This action is aimed at continuing to expand and replicate the methodology developed in other forest species, for which funding will continue to be sought (LIFE, ERDF, EAFRD, HORIZONTE2020 ...), in order to give continuity to the work started with the LIFE Project FOREST CO2.

#### Action 4. Support for other projects and initiatives:

This action is aimed at providing technical support to other projects or initiatives that wish to integrate the LIFE FOREST CO2 methodology, thus promoting the transfer of results and the replicability of the methodology.

### 4.3. Voluntary Carbon Markets Program.

### Action 5. Management and maintenance of the LIFE FOREST platform



Assessment of forest-carbon sinks and promotion of compensation systems as tools for climate change mitigation

Management and maintenance of the methodological standard integrated into the LIFE FOREST CO2 platform, which will be made up of part of the LIFE FOREST CO2 Project partners: General Directorate of Natural Environment (DGMN), Natural Environment Engineering (IDEN), AGRESTA Cooperative and CESEFOR Foundation.

For the final validation of the entire process and, when issuing credit certificates, there is an agreement developed with the "ZERO FOOTPRINT" initiative (currently there is an agreement signed between LIFE FOREST CO<sub>2</sub> and ZERO FOOTPRINT).

As stated above, for forestry projects located within the Region of Murcia, there will be an extra certificate, in addition to the one issued by HUELLA CERO, which will be issued by the Sub-Directorate General for Forest Policy, Hunting and River Fishing of the Region of Murcia.

#### Action 6. Promotion among forest owners.

Forest management will continue to be promoted among the group of forest owners and their associations, working together with them to arrive at solutions and initiatives that strengthen the active management of our forest territory. In this sense, the necessary meetings will be coordinated and technical advice will be provided for the application of the LIFE FOREST CO2 methodology in the drafting and execution of forestry projects. In this action, it is expected to have the support of the Confederation of Organizations of Foresters of Spain (COSE) and the Association of Forest Owners of the Region of Murcia (PROFOMUR).

### Action 7. Promotion among entities of the diffuse sector.

The involvement of companies and entities in the diffuse sector in production and operating schemes aimed at calculating, reducing and offsetting emissions will continue to be promoted. In this sense, the necessary meetings will be coordinated to add companies and entities to the LIFE FOREST CO2 work methodology, applying the methodological standard defined and integrated into the LIFE FOREST CO2 PLATFORM.

### 4.5. Outreach, Training and Networking Program

#### Action 8. Website maintenance

The project website (http://lifeforestco2.eu/) will be kept open for at least 5 years after the project, including relevant information generated through the implementation of this plan.

Within the web, the application developed with the Project will continue to be hosted as a project search engine and simulator for the generation of carbon credits from forestry management: https://murciaforestales/lifeforestco2/visor/

### Action 9. Maintenance of the social media



Assessment of forest-carbon sinks and promotion of compensation systems as tools for climate change mitigation

The management of the social networks associated with the Project will continue for at least 5 years, covering all relevant agreements and events that are carried out within the framework of POST LIFE.

#### Action 10. Papers in popular and scientific magazines.

Opportunities will continue to be sought to publish the results of the Project in technical and scientific dissemination magazines, as well as to try to give the widest possible dissemination in the media and social networks of all the initiatives and agreements that are carried out within the framework of the POST LIFE.

#### Action 11. Attendance and participation in events.

As far as possible, there will be conferences, congresses and other events of interest where we are invited to share the results of the Project.

### Action 12. Distribution and dissemination of publications.

If it is considered necessary, material published as a result of the Project (guides, manuals, etc.) will be printed, taking advantage of the attendance at congresses, conferences, meetings with companies and forest owners, etc.

On the other hand, the downloading of publications in digital format, hosted on the website, will be encouraged.

### 5. ACTORS AND SOURCES OF FUNDING

### 5.1. Project Partners

 General Directorate of the Natural Environment (DGMN). Autonomous Community of the Region of Murcia.

Project Coordinator, who will also assume the coordination of this POST LIFE plan.

You will participate in the LIFE FOREST CO2 PLATFORM, in charge of managing and maintaining the methodological standard developed for the registration and accounting of carbon credits in the voluntary carbon market.

### University of Córdoba (UCO).

University of Cordoba will carry out support work for dissemination actions and technical advice to other projects or initiatives.

### Xunta de Galicia.

Xunta de Galicia will carry out support work for dissemination actions and technical advice to other projects or initiatives.

systems as tools for climate change mitigation



#### French National Forest Property Center (CNPF)

#### Tasks:

- Support work for outreach and advisory actions
- Coordination and contact with the competent administration in France, coordinating with it the necessary steps for the validation of the methodology.

#### Ingeniería del Entorno Natural (IDEN).

#### Tasks:

- Work to support dissemination actions and technical advice to other projects or initiatives.
- Will actively participate in actions related to the maintenance of the website and social networks.
- LIFE FOREST CO2 PLATFORM, in charge of managing and maintaining the methodological standard developed for the registration and accounting of carbon credits in the voluntary carbon market
- Fundación CESEFOR.

#### Tasks:

- Work to support dissemination actions and technical advice to other projects or initiatives.
- LIFE FOREST CO2 PLATFORM, in charge of managing and maintaining the methodological standard developed for the registration and accounting of carbon credits in the voluntary carbon market.

### Cooperativa AGRESTA.

- Work to support dissemination actions and technical advice to other projects or initiatives.
- LIFE FOREST CO2 PLATFORM, in charge of managing and maintaining the methodological standard developed for the registration and accounting of carbon credits in the voluntary carbon market

### 5.2. Social agents of interest

Forest owners associations.



Assessment of forest-carbon sinks and promotion of compensation systems as tools for climate change mitigation

As already mentioned, the collaboration of the Confederation of Organizations of Foresters of Spain (COSE) and the Association of Forest Owners of the Region of Murcia (PROFOMUR) will be a key piece in the development of this plan, as well like any other association of forest owners in other autonomous communities.

#### Business associations.

The participation and involvement of business associations is also of vital importance. In this sense, during the Project we have been collaborating with the Confederation of Entrepreneurs of the Region of Murcia (CROEM) and with the Cartagena Chamber of Commerce, so that during the development of this plan, we will continue to maintain contact with these entities and with any other business association that shows interest in establishing collaboration channels

#### Municipalities

Work with the municipalities will be promoted, since they are owners of extensive forest masses in our country, in addition to being part of the so-called diffuse sector, so their integration could be twofold.

 Autonomous administrations with powers in the field of forestry and forest management..

It is also crucial to maintain contact with other autonomous administrations with competences in forestry and forest management, so as to promote administrative coordination and work on the most agreed solutions.

### Spanish Office for Climate Change

The main objective of this POST LIFE plan is to arrive at solutions oriented and agreed with the Office of Climate Change of the Ministry, since it would give it a common framework for the entire national territory, in addition to its Carbon Footprint Registry (Decree 163 / 2014, of March 14, which creates the Carbon Footprint Registry) is the logical normative to accommodate issues such as accounting for emissions and removals in the LULUCF sector, taking into account in this case, the potential of forest masses and the relevant role that forest management can play as a tool for mitigating climate change.

### 5.3. Sources of funding

Among the main sources of financing (see Table 4) are the items destined to the maintenance of the natural environment, the functions of the partners' staff, the European Social Fund (ESF), the European Regional Development Fund (ERDF), the European Agricultural Fund for Rural Development (EAFRD). Other aid programs through which the proposed measures could be financed include aid from the Biodiversity Foundation, as well as funds from the Obra Social and Foundations of the banking entities.

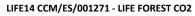
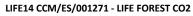




Tabla 4. Responsible actors and financing channels for the proposed actions

ACTION	ACTORS INVOLVED	FINANCING		
1	DGMN	NO COSTS		
2	DGMN	NO COSTS		
3	DGMN, IDEN, AGRESTA, CESEFOR, UCO, CNPF	Agreements with research centers, calls for European Funds (LIFE, HORIZONTE 2020, SUODE)		
4	DGMN, IDEN, AGRESTA, CESEFOR, UCO, XUNTA DE GALICIA, CNPF	OWN FUNDS		
5	DGMN, IDEN, AGRESTA, CESEFOR	OWN FUNDS		
6	DGMN, IDEN, AGRESTA, CESEFOR, CNPF	OWN FUNDS		
7	DGMN, IDEN, AGRESTA, CESEFOR, CNPF	OWN FUNDS		
8	DGMN, IDEN	OWN FUNDS		
9	DGMN, IDEN	OWN FUNDS		
10	DGMN, IDEN, AGRESTA, CESEFOR, UCO, XUNTA DE GALICIA, CNPF	OWN FUNDS		
11	DGMN, IDEN, AGRESTA, CESEFOR, UCO, XUNTA DE GALICIA, CNPF	OWN FUNDS		
12	DGMN	NO COSTS		





# 6. SCHEDULE

Tabla 5. Schedule foreseen for the actions of the POST-LIFE of the LIFE14 / CCM / ES / 001271 project

PROGRAMACIÓN TEMPORAL						
ACCIÓN	2021	2022	2023	2024	2025	2026
1	X	Χ	Χ	X	Χ	X
2	Χ	X	X	X	Χ	X
3	Χ	X	X	X	Χ	X
4	Χ	Χ	Χ	X	Χ	X
5	Χ	X	X	X	Χ	X
6	Χ	X	X	X	Χ	X
7	Χ	Χ	Χ	X	Χ	X
8	Χ	X	X	X	Χ	X
9	Χ	Χ	Χ	X	Χ	X
10	Χ	Χ	Χ	X	Χ	X
11	X	Χ	Χ	X	Х	X
12	Χ	Χ				















