LIFE+ Environment Policy and Governance

TECHNICAL APPLICATION FORMS

Part A – administrative information

LIFE+ 2013

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LIFE13 ENV/IT/000560

LIFE+ Environment Policy and Governance project application

Language of the proposal:

English (en)

Project title:

Wood and forest management to mitigate climate change

Project acronym:

WoodForClimate and Life

The project will be implemented in the following Member State(s):

Italy	Toscana
Spain	Castilla-León

Expected start date: 01/07/2014 **Expected end date:** 30/06/2018

LIST OF BENEFICIARIES

Name of the **coordinating** beneficiary:	UNCEM TOSCANA- NATIONAL UNION OF MUNICIPALITIES COMMUNITIES AND MOUNTAINS
Name of the associated beneficiary:	Centro de Servicios y Promoción Forestal y de su Industria de Castilla y León
Name of the associated beneficiary:	UNIONE DI COMUNI VALDARNO E VALDISIEVE

LIST OF CO-FINANCIERS

PROJECT BUDGET AND REQUESTED EU FUNDING

Total project budget:	948,352 Euro	
Total eligible project budget:	948,352 Euro	
EU financial contribution requested:	474,175 Euro	(= 50.00% of total eligible budget)

PROJECT POLICY AREA

Climate Change

Coordinating Beneficiary Profile Information

Legal Name	UNCEM TOSCANA- NATIONAL UNION OF MUNICIPALITIES COMMUNITIES AND MOUNTAINS			
Short Name	UNCEM	**Legal Status**		
VAT No	90001910489	**Public body**		
Legal Registration No	90001910489	**Private commercial**		
Registration Date		**Private non- commercial**	X	

Legal address of the Coordinating Beneficiary

Street Name and No	via Cavour, 15		
Post Code	50129	**PO Box**	
Town / City	Florence		
Member State	Italy		

Coordinating Beneficiary contact person information

Title	N/A	**Function**	Consultant
Surname	LAURI		
First Name	Marina		
E-mail address	marinlau@tin.it		
Department / Service	Internationa cooperation		
Street Name and No	via Cavour, 15		
Post Code	50129	**PO Box**	
Town / City	Florence		
Member State	Italy		
Telephone No	39055213151	**Fax No**	3905521769

Website of the Coordinating Beneficiary

Website	http://www.uncemtoscana.it

Brief description of the Coordinating Beneficiary's activities and experience in the area of the proposal

UNCEM Tuscany (National Union of Municipalities, Communities and Authorities Montani) is the representative body of Municipalities, Communities and Authorities mountain and is the regional delegation of the relevant national association founded in November 1952 and consists of members belonging to the Tuscany Region. They have a regional competence compare to UCVV which has more a local action. Uncem Tuscany is 18 unions of municipalities with special status, 126 mountain municipalities or partially mountain and non-mountain towns 4. In addition to participating in the activities of the National UNCEM, plays the role of institutional representation of instances of the mountain contributing to the promotion of the development of mountain areas in terms of social, economic, civil, environmental and employment. It also performs a work of coordination and stimulation of entities associated, has close relations with the other Associations of Local Authorities and other public and private entities interested in the development of mountain issues. In Tuscany, the Mountain is an efficient laboratory of innovation through projects that use technology tools to improve the quality of life of those who decide to live and invest in these territories. The areas of commitment UNCEM Tuscany are those related to mountain policies: soil conservation, environment, innovation, education, social. In particular green economy policies are developed withmany projects with other entities (public and private). Uncem has many agreements with Tuscany Region to improve these fields, such as, for example, wood chain in production, sustainable construction and energy, renewable energy, biomass, carbon credits voluntary market, activities of animation information and dissemination about energy for municipalities.

LIFE13 ENV/ - A3

COORDINATING BENEFICIARY DECLARATION

The undersigned hereby certifies that:

1. The specific actions listed in this proposal do not and will not receive aid from the Structural Funds or other European Union financial instruments. In the event that any such funding will be made available after the submission of the proposal or during the implementation of the project, my organisation will immediately inform the European Commission.

2. My organisation UNCEM TOSCANA- NATIONAL UNION OF MUNICIPALITIES COMMUNITIES AND MOUNTAINS has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 93.1 and 94 of Council Regulation 1605/2002 of 25/06/2002 (OJ L248 of 16/09/2002).

3. My organisation (which is legally registered in the European Union) will contribute 149,440.00€ to the project. My organisation will participate in the implementation of the following actions: A1, B1, B2, B3, C1, C2, C3, D1, E1. The estimated total cost of my organisation's part in the implementation of the project is 298,880.00 €.

4. Should one or more associated beneficiary or co-financier reduce or withdraw its financial contribution, my organisation will ensure that a corresponding additional contribution is made available.

5. My organisation will conclude with the associated beneficiaries and co-financiers any agreements necessary for the completion of the work, provided these do not infringe on their obligations, as stated in the grant agreement with the European Commission. Such agreements will be based on the model proposed by the European Commission. They will describe clearly the tasks to be performed by each associated beneficiary and define the financial arrangements.

6. I am aware that my organisation is solely legally and financially responsible to the Commission for the implementation of the project (Article 4 of the Common Provisions).

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the Common Provisions (attached to the Model Grant Agreement provided with the LIFE+ application files).

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At FLORENCE on 21 June 2013

Signature of the Coordinating Beneficiary:

Name(s) and status of signatory:

ORESTE GIURLANI PRESIDENT

DELEGAZ. REGIONALE TOSCANA U.N.C.E.M.

* When the form is completed, please print, sign, scan and upload it in eProposal

LIFE13 ENV/ - A4

ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned, JOSE Luis Lanas[1], representing, Centro de Servicios y Promoción Forestal y de su Industria de Castilla y León CESEFOR, Private non-commercial, ECD/642, VAT number ES G42164020, Polígono Industrial las Casas Calle C, parcela 4, Soria, 42005, Spain, hereinafter referred to as "the associated beneficiary", for the purposes of the signature and the implementation of the grant agreement Wood and forest management to mitigate climate change with the European Commission (hereinafter referred to as "the grant agreement") hereby:

1. Mandate UNCEM TOSCANA- NATIONAL UNION OF MUNICIPALITIES COMMUNITIES AND MOUNTAINS (UNCEM), Private non-commercial, 90001910489, VAT number 90001910489, via Cavour, 15, Florence, 50129, Italy, represented by ...CARLO GIURLANI..., (hereinafter referred to as "the coordinating beneficiary") to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the European Commission.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

   I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Commission and distribute the amounts corresponding to the associated beneficiary's participation in the action.

   I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

   I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).

2. The associated beneficiary (which is legally registered in the European Union) will contribute 153499€ to the project. My organisation will participate in the implementation of the following actions: A1, B1, B2, B3, C1, C2, C3, D1, E1. The estimated total cost of my organisation's part in the implementation of the project is 306997€.

3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the European Commission. This agreement will be based on the model proposed by the European Commission. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation. I have read in full the Common Provisions (attached to the Model Grant Agreement provided with the LIFE+ application files). I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.
At ...SORIA..... on.....25.06.2013.....
Signature of the Associated Beneficiary:
Name(s) and status/function of signatory: JOSE LUIS LANAS PRESIDENTE

Fundación Centro de Servicios y Promoción Forestal y de su Industria de Castilla y León
G-42164020

1. Forename and surname of the legal representative of the future associated beneficiary signing this mandate.
2. When the form is completed, please print, sign, scan and upload it in eProposal

ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned, CRISTIANO BENUCCI (1), representing, UNIONE DI COMUNI VALDARNO E VALDISIEVE UCVV, Public body, 06096360489, VAT number 06096360489, XXV APRILE, n°10, Rufina, 50068, Italy, hereinafter referred to as "the associated beneficiary", for the purposes of the signature and the implementation of the grant agreement Wood and forest management to mitigate climate change with the European Commission (hereinafter referred to as "the grant agreement") hereby:

1. Mandate UNCEM TOSCANA- NATIONAL UNION OF MUNICIPALITIES COMMUNITIES AND MOUNTAINS (UNCEM), Private non-commercial, 90001910489, VAT number 90001910489, via Cavour, 15, Florence, 50129, Italy, represented by PRESIDENTE ORFEO GIURLANI, (hereinafter referred to as "the coordinating beneficiary") to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the European Commission.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

   I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Commission and distribute the amounts corresponding to the associated beneficiary's participation in the action.

   I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

   I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).

2. The associated beneficiary (which is legally registered in the European Union) will contribute 171238€ to the project. My organisation will participate in the implementation of the following actions: A1, B1, B2, B3, C1, C2, C3, D1, E1. The estimated total cost of my organisation's part in the implementation of the project is 342475€.

3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the European Commission. This agreement will be based on the model proposed by the European Commission. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation. I have read in full the Common Provisions (attached to the Model Grant Agreement provided with the LIFE+ application files). I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Rufina on 24-06-2015

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory: CRISTIANO BENUCCI, PRESIDENTE

UNIONE DI COMUNI VALDARNO E VALDISIEVE

1. Forename and surname of the legal representative of the future associated beneficiary signing this mandate
2. When the form is completed, please print, sign, scan and upload it in eProposal

ASSOCIATED BENEFICIARY PROFILE

Associated Beneficiary profile information					
Legal Name	Centro de Servicios y Promoción Forestal y de su Industria de Castilla y León				
Short Name	CESEFOR	**Legal Status**			
VAT No	ES G42164020		**Public body**		
Legal Registration No	ECD/642		**Private commercial**		
Registration Date	05/11/2002		**Private non- commercial**	**X**	

Legal address of the Coordinating Beneficiary					
Street Name and No	Polígono Industrial las Casas Calle C, parcela 4			**PO Box**	null
Post Code	42005	**Town / City**	Soria		
Member State	Spain				

Legal address of the Associated Beneficiary	
Website	http://www.cesefor.com

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

Cesefor is a non-profit private foundation established since 2003. Its administrative body incluyes the Province of Soria, the University of Valladolid and two private companies (Tableros Losán and 56 Puertas Norma). Its mission is to develop the forestry sector and its industry built upon the exploitation of forestry resources for a sustainable development of their environment. Specifically to: Improve the management and sustainable exploitation of forestry resources. Improve the competitiveness and development of the industrial base. Increase the degree of sustainable industrialization for forestry products.
The International Cooperation Department of Cesefor is hosting the Secretariat of the Mediterranean Model Forest Network since 2008, under a memorandum of understanding signed by all members of the Network (13 between Countries and Regions), the Region Castilla y León and the Canadian Government. Some of the Cesefor's types of action: Technology development related to forestry products;Technical assessment on every action in the forestry sector. CESEFOR is also foundator member of the Urbiòn Model Forest Association (Spain): the first one in Europe: the "Model Forest" is a new tool of governance is one of the answer to put in place a sustainable forest management. About the experience in cooperation, CESEFOR has been partner in two Interreg IVC capitalization projects about Forest Fire prevention (EUFOFINET www.eufofinet.eu and EFFMIS www.effmis.eu) and Lead Partner of an Interreg SUDOE project (SUSTFOREST www.sust-forest.eu). CESEFOR is currently partner of the project ODS3F, funded by the DG Civil Protection of the European Commission, about "Observation and detection Systems For Forest Fire Management", and of the DRYMOS project, funded by the Leonardo Da Vinci Lifelong Learning Program, about the "New Skills for New Jobs in the Forest Sector" and in particular to create a new shared E-learning Platform.

ASSOCIATED BENEFICIARY PROFILE

Associated Beneficiary profile information					
Legal Name	UNIONE DI COMUNI VALDARNO E VALDISIEVE				
Short Name	UCVV		**Legal Status**		
VAT No	06096360489		**Public body**	**X**	
Legal Registration No	06096360489		**Private commercial**		
Registration Date	01/12/2010		**Private non- commercial**		
Legal address of the Coordinating Beneficiary					
Street Name and No	XXV APRILE, nº10		**PO Box**	null	
Post Code	50068	**Town / City**	Rufina		
Member State	Italy				
Legal address of the Associated Beneficiary					
Website	http://www.cm-montagnafiorentina.fi.it				

Brief description of the Associated Beneficiary's activities and experience in the area of the proposal

UCVV (Valdarno and Valdisieve Municipality Union) is a public administration which began its operations in Dicember 2010 following the changement (by regional law) from Montagne Fiorentine Mountain Comunity. The mission statement of UCVV is to support the growth of the forestry and agriculture sectors and, in general, the economic and social development of the rural territories included in seven municipalities: Londa, San Godenzo, Pelago, Rufina, Reggello, Rignano s/Arno e Pontassieve. UCVV manages forestry resources of his territories (private and public) in ways that make a large contribution to sustainable development, through their projects and services.
UCVV developed several enviromental project which is aimed at reducing fire risk, climate change mitigation, green energy production and the creation of local green jobs in the region.
UCVV:
a) aims to promote, encourage and coordinate all initiatives of economic, social, environmental and tourist promotion in the mountain areas, taking care of the local population’s interests in order to cancel economic, social and civil unbalances existing between mountain areas and the other territory;
b) in the context of the actual legislation, it works for soil defence and environmental protection;
c) protects and promotes culture and local traditions, the historical and religious patrimony, encouraging the collaboration among associations, institutions and, in particularly, schools;
d) realises actions and projects about technical education for living and working on mountain areas;
e) encourages economic, social and cultural initiatives with the aim of strengthening the relationship and the integration between the local dimension and the principles and values of the European Union.

OTHER PROPOSALS SUBMITTED FOR EUROPEAN UNION FUNDING

Please answer each of the following questions:

- Have you or any of your associated beneficiaries already benefited from previous LIFE cofinancing? (please cite LIFE project reference number, title, year, amount of the co-financing, duration, name(s) of coordinating beneficiary and/or partners involved):

None of the two Italian partners (UNCEM and UCVV) were involved in a LIFE project from previous LIFE call. CESEFOR is currently principal beneficiary of one project Life+ called DESMANIA - Call 2011 - Duration from 01/06/2012 to 30/11/2016 - Cofinancig: 617 137 euros.

- Have you or any of the associated beneficiaries submitted any actions related directly or indirectly to this project to other European Union financial instruments? To whom? When and with what results?

In Italy...
One of the structure to be monitored in the action B1 of the project will be realized with the co-financing of tuscan's rural development plan. The structure is one of the action planned in the project DEMOSCOPE, it's named "show-wood" and is the promoting location for the wood products of the Montagne Fiorentine Forest Model.
The co-financing for DemoScope was awarded to Unione dei Comuni Valdarno e Valdisieve in June of 2013. "Show-wood" will be realized before june 2014, which is the dead line of the project.

- For those actions which fall within the eligibility criteria for financing through other European Union financial instruments, **please explain in full detail** why you consider that those actions nevertheless do not fall within the main scope of the instrument(s) in question and are therefore included in the current project.

The actions described were chosen because the ultimate goal, as well as main theme of project is the assessment of climate change in relation to such actions.
For each action is therefore not expected a co-financing because for their realization have already been identified financial resources.

Co-financing is required for monitoring and calculating the effect of co2 emission mitigation.

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TECHNICAL APPLICATION FORMS

Part B - technical summary and overall context of the project

SUMMARY DESCRIPTION OF THE PROJECT (Max. 3 pages; to be completed in English)

Project title:

Wood and forest management to mitigate climate change

Project objectives:

The overall objective of the project is to contribute to the mitigation of climate change using local wood, both increasing carbon storage or avoiding or reducing the emission of greenhouse gases (GHG).

The project is intended to help implement strategies for the replacement of energy-intensive raw materials and fossil fuels with wood from sustainable forest management. These strategies will promote interaction with the voluntary market for carbon credits and enable local and Mediterranean scale.

Wood is one of the best-known raw materials to mankind, which employs it from its very beginning to warm, cook food and build artifacts and homes. In the course of industrial development, however, wood has been replaced by other raw materials, often non-renewable, highly energy-intensive and, for this reason, responsible for the emission of large amounts of GHG. Wood also has been replaced by fossil fuels for the production of thermal energy.

GHG are considered the main anthropogenic cause of climate change. Using the latest technology, the reverse process to that triggered by industrialization can be activated: replacing energy-intensive materials and fossil fuels with wood.

In particular, the aim is to allocate, to the industries most effective in the mitigation of climate change, the wood produced in forests of the Mediterranean area which belong to a network characterized by sustainable forest management and participative governance: the Model Forest Network.

The overall objective will be pursued through:

• replacement of cement and metal with timber products (eg shelters for the equipment of farmers and hobbyists, shelters for pets, poles for agricultural use, urban furniture);
• replacement of fossil fuels with wood fuels from forests management;
• replacement of inefficient energy conversion systems (eg open fireplaces, stoves, low efficiency) with high efficiency boilers;
• adoption of silvicultural protocols for the production of timber suitable for the realization of artifacts in which carbon storage will take place for longer periods of time.

The benefits in terms of reduction of GHG in the atmosphere will be calculated as carbon credits.

For each objective and each territory will be defined carbon credits potentially produced by the adoption of the solutions demonstrating through this project on a large scale. The dissemination of the results will be developed, as well as a Mediterranean/EU scale, on a global scale through the International Model Forest Network.

Actions and means involved:

A - PREPARATORY ACTIONS (number of days/people: 125)

A1: Creation of the Project Management team

A2: State of the art

A3: Identification of demonstrative areas

A4: Creation of indicators check-list

A5: Communication and Dissemination plan

A6: Preparation of the kickoff

B – IMPLEMENTATION ACTIONS (number of days/people: 2148)

B1: Development of strategic actions to mitigate climate change - Reduce the footprint of buildings using wood

B2: Development of strategic actions to mitigate climate change - Energy-high efficient by wood

B3: Silvicultural interventions climate change mitigation

C: MONITORING OF THE IMPACT OF THE PROJECT ACTIONS(number of days/people:245)

C1: Assessment of GHG reduction (impact of the B1 action)

C2: Verification of the amount of new avoided CO2 emission with biomass heating (impact of B2 action)

C3: Assessment of costs and benefits deriving from the ad (impact of B3 action)

D: COMMUNICATION AND DISSEMINATION(number of days/people:380)

D1: Annual communication report

D2: Communication materials

D3: Media

D4: Networking

D5: Layman report

D6: Publications

E: MANAGEMENT AND MONITORING(number of days/people:538)

E1: Project Management

E2: Monitoring of the project

E3: Steering Committee

E4: Audit

E5: Networking with other projects

E6: After LIFE communication plan

The main mean will be the expertise of the own staff from each partner (72% of the total budget):

Number of internal staff people: 14 people involved in the project - UNCEM (2 especially hired for the project), CESEFOR (2), UCVV (7)

The external assistance (26% of the budget) will be used for communication activities (DVD creation, notice board, website, translation, logo research...) and for:

UNCEM will open a public tender for selecting an external assistance on developing project management tools for Actions A et E (accounting tool, audit, internal procedures, preparation of the conference call and Steering Committee), and as indicated above will hire especially for the project two senior experts for the implementation and monitoring action, they will act as project manager and project manager team leader (see the structure chart in E1):

UCVV will use the external assistance from the University of Firenze

CESEFOR will use the external assistance from the University of Valladolid and has forecasted a specific budget for the networking activities (Meditererranean Model Forests network, experts from Life+ projects).

Expected results (outputs and quantified achievements):

The project aims to achieve (n°) of concrete results

1. Realization of a set of demonstration areas distributed in all Model Forests partner of WoodForClimate, in which is possible to verify the possibility of replacing with wood raw materials with high emission of greenhouse gases.

1. Realization of 2 heating systems for each Model Forest, visited during dissemination activities beyond the end of the LIFE + WoodForClimate, including:

a. one that replaces a system powered by fossil fuels;

b. one that replaces a low-efficiency system powered wood connuno at lata efficiency

3. Generation of carbon credits, such as additional and future financial resources through shared activities in the territories of the various partners in order to facilitate the replacement, in combustion processes and products with high greenhouse gas emissions, with the wood from management sustainable forest implemented in the network of Model Forests in the Mediterranean.

1. Drafting guidelines for

a. Making wooden artefacts for the storage of long-term Carbon;

b. Assessing the economic and environmental replacement of boilers fired with fossil fuels or wood, but with low efficiency;

c. Make silvicultural operations aimed at the production of timber from where it currently produces only woody biomass for energy purposes.

5. Technical/ practical training for operators to:

1. Promote and create articles of wood;
2. Evaluate the cost-effectiveness and environmental adoption of high efficiency systems powered by wood;
3. Make silvicultural operations aimed at the production of work timber.

Can the project be considered to be a climate change adaptation project? Yes [X] No [ ]

This project is aimed at climate change mitigation through the implementation of demonstration. The dissemination of the results and the awareness of the stakeholders and the main target audience will aim to demonstrate the ability to use wood products on a local scale to mitigate climate change and improve the well-being of communities by enabling or improving the management of territories.

ENVIRONMENTAL PROBLEM TARGETED

The greenhouse gases are considered among the main causes of climate change in progress.

The use of high energy-intensive raw material for construction and fossil fuels for heating, make gradually increase the amount of these gases in the atmosphere.

Reducing the amount of greenhouse gases in the atmosphere is the primary objective of the European strategy for climate change (European Climate Change Programme ECCP).

Forests and forestry supply chain can therefore contribute to the realization of the commitments made by the EU in relation to climate change.

The materials from forests can help this process, the European Economic and Social Committee (EESC) believes that forestry should play a leading role for the sustainable future of Europe.

Our goal is to implement these best practices around the Mediterranean Basin encouraging the rural development in developing countries explaining why some of them members of the Mediterranean Model Forest will follow the works of the project, we want in particular to provide the necessary energy supply using indigenous resources on a sustainable development. As it is mentionned in the Strategic Framework of the Mediterranean Forest (SFMF), "Forests and other wooded lands are highly integrated into Mediterranean landscapes. An improved regional cooperation around the Basin, North-North, North-South and South-South is key to cope with these challenges exacerbated by the socio-economic crisis and the climate change".

Important disparities exist between the North and the South of the Mediterranean Basin: land abandonment and lack of management on the North and human presures on forest resources cause by dense and poor rural population. We think that working on finding new resources coming from the forest within the framework of the Model Forest Network where the risk of social conflict (between private and public owners or public and citizens or citizens and timbers) are minimized because they work on the same way: the sustainable developpement of THEIR forest could allow to reach our target to use local wood as one of the element of construction reducing the GHG emission, using the indigenous resources and vitalizing the rural area.

STATE OF THE ART AND INNOVATIVE ASPECTS OF THE PROJECT

Until now, many projects on forests role in climate change mitigation have been conducted both at European and national level.

Many of these projects are designed, however, to define mechanisms of accounting and sale of carbon credits resulting from forest management.

Wood for climate Life + project will be directly connected with two other projects: CarbonMark Life + and Operation CO2 Life +.

Comparing projects its easy to understand that there is a different prospective in each one, but also that wood for climate LIFE+ is the only one who focuses the attention to wood products.

In Operation CO2 the main objective is to demonstrate the viability of forestry and agroforestry projects on carbon sequestration in Europe and consequently release to the voluntary market carbon offsets,and in CarbonMark the overall objective is to promote a local Voluntary Carbon Market to trade carbon credits.

Both of them are not oriented to improve forest products but only to find or experiment method to increase carbon sequestration in forest.

"Wood for climate" project aims to study the effects and the potentiality that an increase of the use of wood in construction and in the heating system could have on climate change by establishing a close connection with a local supply chain and improving forest management.

In particular, the aim is to allocate to the most effective technologies in climate change mitigation in the Mediterranean area the wood products obtained from a network characterized by sustainable forest management and governance by the widespread participation in what is the Model Forest Network.

The aim of the project is to develop strategic action to mitigate the climate change increasing the use of wood from well managed forests and to link Forest management to climate benefits.

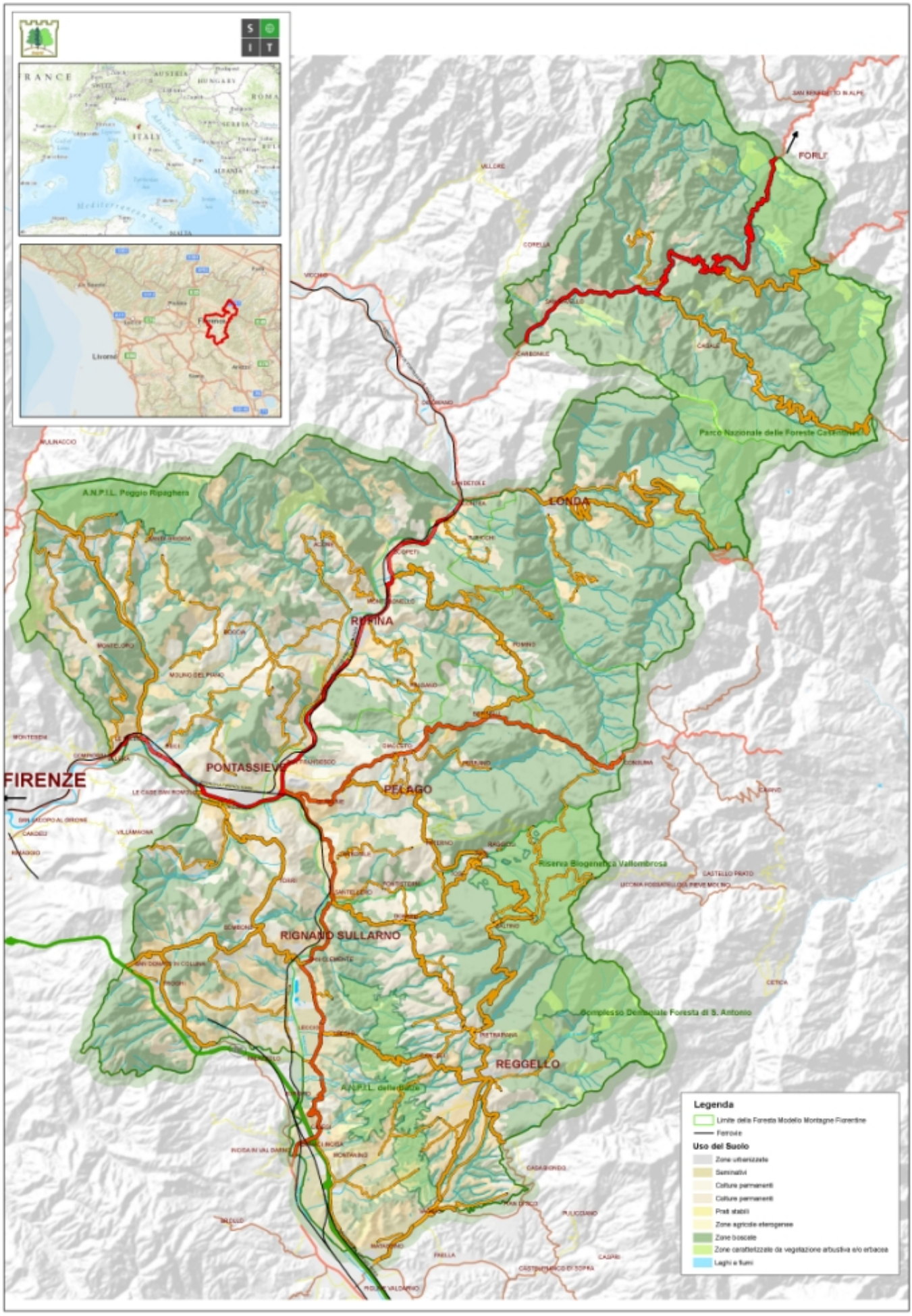
The scope of the project will be achieved through three actions:

• Reduce the footprint of buildings using wood
• Energy high efficient by wood
• silvicultural intervention for the mitigation of climate change

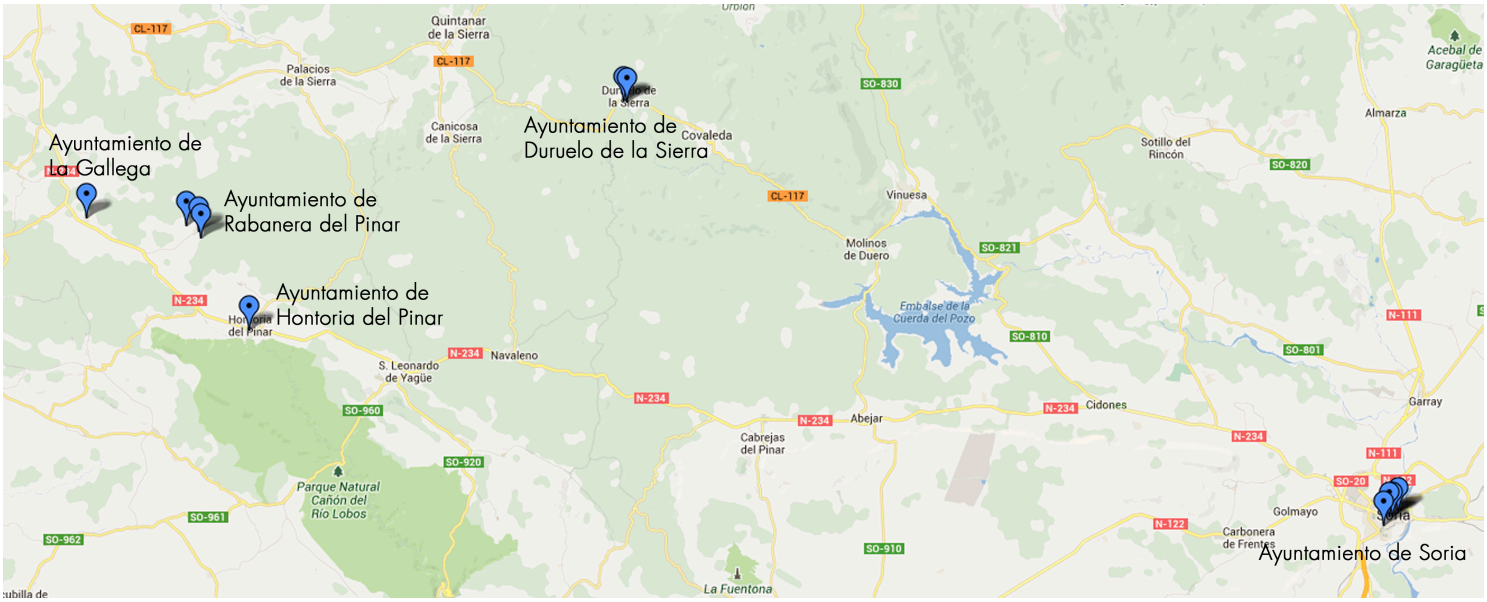
The other innovative aspect of our project compare to the previous or current project is our capacity of disseminating the results of the project thanks to the support of the International Model Forest Network based in Canada (see their letter of support attached) and the Mediterranean Model Forest Network for which CESEFOR, one the beneficiary of our project ensures the Secretariat activities. The Forest Model networks, International and Mediterranean, would be based on the contribution of experience and local expertise in order to build from the bottom (local) to the top (continental) level. Emphasis will be put on experience exchange, results evaluating and sharing, learning together from mistakes and in general, increase the value and impact of good practices. This will help all members to advance in the right direction for protection our forest. Using existing networks provides wide dissemination of good practices that have proved their effectiveness has real use for those who carry out concrete actions in the territories. Extending the application of these experiences will be done through a thorough adaptation to local conditions, which can better be done collaboratively. On the soundness and credibility that the previous steps would confer the Network, it would also develop means for having an impact on the public policy process and in society.

Actually, using two Model Forest territories as demonstrative areas will allow us to be more persuasive when we will disseminate the project results around the Mediterranean Basin. The two Forest Models are: Model Forest of Montagne Fiorentine (Italy) and Model Forest of Urbión (Spain) (see their specifications profile and the map in their location in the attached documents within the section·"Pictures" below). Some of other Model Forests from the South of Mediterranean Basin (see the letter of support of Yalova in Turkey and Ifrane in Marocco) will be involved in our work and they want to implement the best practices in their territory. It is one of our innovative approach to give a possible dissemination not only in the EU territories but also in the South of the Mediterranean Sea.

Name of the picture: Map of the Model Forest of Montagne Fiorentine - Tuscany Region - Italy



Name of the picture: Overview of the interventions (B1 and B2 actions) within the pilot territory: Model Forest of Urbion



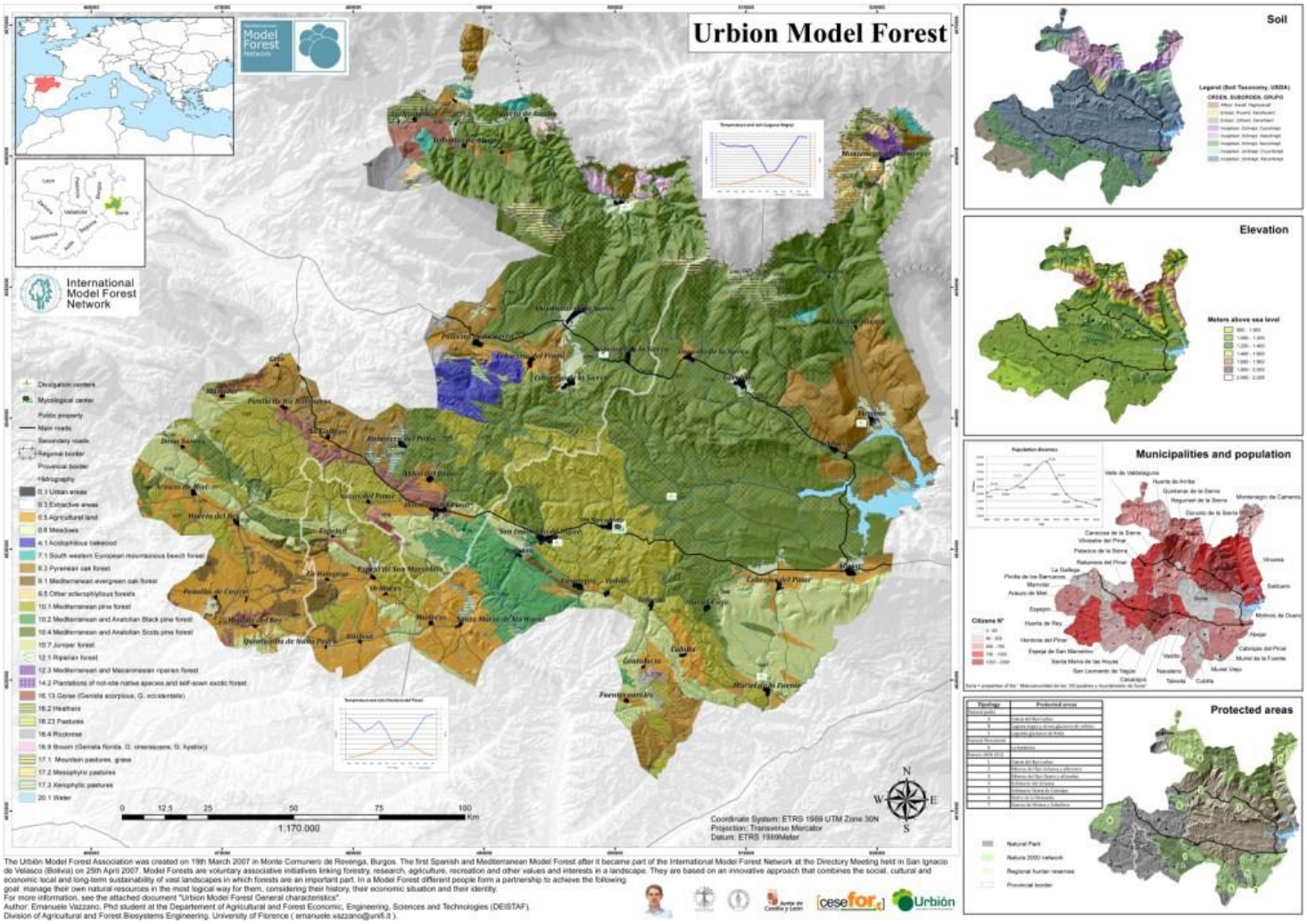
Name of the picture: Profiles of the two pilot territories: Model Forests of Montagne Fioretine (Italy) and Urbión (Spain)

A - WOOD FOR CLIMATE

MODEL FOREST PROFILES

Name of the Model Forest **Province** **Region**	**Forest coverage**
Urbion Model Forest, Soria Province Region of Castilla y Léon spain	In Urbion Model Forest, there are 154.209 ha of forest (forest coverage 87 %), consisting for 77,48 % of conifers and 14,01 % of hardwood (the 8,50% remaining are heathers, riparian forests, gorse, broom, rockrose and pastures). 55.915 ha make part of EU Natura 2000. 35 % of forests are private, 65% is owned by municipalities. The total annual increment of wood in the forests was estimated in 722.815 m^3/year with bark. No data are available concerning the heating plants. An annual forest growth is about 722.815 m^3/year with bark. Only 8% of the harvested wood is used as biofuel.
Montagne Fiorentine Model Forest Firenze Province Region of Tuscany Italy	In Montagne Fiorentine Model Forest, there are 36.000 ha of forest (forest coverage 70%), consisting for 15% of conifers and 85% of hardwood. 8.885 ha makes part of EU Natura 2000 or other protected areas. 85% of the forests are private, 0% is owned by municipalities, 15% by other public bodies. Actually it's taken by the forests just the 40% of the total annual increment of wood. Along last 8 years have been realized 5 district heating plants (different size from 320 kWt to 1 MWt) fueled by wood biomass forestry. Also pellet-based, woodchip-based and modern logwood-based boilers are increased during same period. There are 3 or 4 supply chain implemented at least in the Montagne Fiorentine area.

Name of the picture: Map of the Model Forest of Urbión - Region of Castilla y León - Spain



DEMONSTRATION CHARACTER OF THE PROJECT

The project will demonstrate the effective benefits of using wood in construction and in heating systems, and it will be conduced at pilot scale.

In each territory involved will be realized the monitoring plan for the actions described above.

In particular we will use innovative methodologies to:

• Calculating the storage of CO2 in wood products and the CO2 saved by the replacement of high intensive-energy raw material with wood in building; the aim is to use the prEN16449 "Wood and wood-based products - Calculation of sequestration of atmospheric carbon dioxide and the Life Cicle Analisys (LCA) methodologies (which is largely applied to a lot of products but there are not so many experiences in wood construction sector); for this methodology a specific protocol will be stated between partners involved.
• Calculating the amount of avoided CO2 emission with biomass heating and with replacement with high/low system by comparing their emission in the entire cicle of energy productions (determined from the integrated analysis of data provided by the different pilot areas and based on a specific protocol of monitoring for all partners involved).
• Calculating the benefits for the forests through a shared protocol between the partners of the project which, complying with the results obtained by the action B1 ("Reduce the footprint of buildings using wood") provide the data for the quantification of carbon credits that may be generated by the specific silvicultural action planned.

EU ADDED VALUE OF THE PROJECT AND ITS ACTIONS

Our project results will have positive impact on different European policies included in the 2020 strategy: there is a clear connection with other policies: forest fires prevention, rural development, agricultural and social cohesion.

The importance of implementing the project using a transnational partnership, member of the same network of territories that apply the principles of sustainable forest management and participatory governance, which is the Mediterranean Model Forest Network (MMFN) and on a global scale the International Model Forest Network (IMFN), lies in the opportunity to share demonstrative actions in parallel forest ecosystems and local communities which share not only a common Mediterranean climate and vegetation but also the managerial approach of the territory. Implement the actions on different territories will reinforce the future success of the results dissemination. In addition to the intrinsic characteristics of the Model Forest, these may serve as nuclei for dissemination in their respective regional and national circumstances. Finally, the interest of the participation in the project expressed by the third countries of the southern Mediterranean (members of the MMFN, even as observers, gives to the project a large extension of the project actions to other areas where the impact in reducing the emission of greenhouse gases will be crucial for the geographical area as the Mediterranean Basin.

SOCIO-ECONOMIC EFFECTS OF THE PROJECT

We can see three positive socio-economic effects of our project:

1-To help the partner territory to reach the EU efficiency target by energy savings in their local consumption clearing public resources for other purposes.

It is therefore expected that the demonstrative actions will stimulate other parties in the area to make the switch, once the positive effects will be demonstrated. One of our expectations is to encourage Mediterranean local authorities to involve their citizens and SMEs in the development and implementation of the renewable energy as wood. The public sector has to be exemplary when innovative measures have to be implemented and constitutes an important driver to stimulate market transformation towards more efficient products, buildings and services, as well as to trigger behavioral changes in energy consumption for citizens and SMEs.

2-To disseminate the best and innovative practices in the Mediterranean Model Forests Network, sharing their experiences between local authorities developing local markets of bioenergy. Actually, wider market penetration should be stimulated in Mediterranean countries, where the use

of wood boilers is still in early stages according to estimates of the Italian Association of Wood Energy (AIEL, 2010) explaining why we have invited South Mediterranean Model Forest members as observers (Moreover, pellet stoves also offer fairly low investment costs while producing significant amounts of renewable heat and they could be acquired by households with lower incomes). One of the strategic objectives is to disseminate and extend WOOD FOR CLIMATE results to the Mediterranean Model Forest network thanks to the networks effect and presenting the annual results of the project during the annual Assembly of the Mediterranean Model Forest network. In the Mediterranean Network, there are actually five official Model Forest: Urbion (Spain), Ifrane (Morocco), Yalova (Turkey), Montagne Fiorentine (Italy) and PACA (France). We can add two in current process to become Model Forest before the end of the project: the Regional Unity of Grevena (Western Macedonia-Greece) and in Mirna River Basin (Istria-Croatia). For 2020, it is planned to add ten new Model Forests: two in Turkey, an new one in Greece, a new one in Tunisia, one in Algeria, a new one in Spain, a new one in Italia, the first one in Lebanon, a new one in Croatia and the first one in Portugal.

3-To have a positive impact on the social cohesion and the environment in rural territories. On the supply aspect and as a consequence of the two previous objectives, an enhancement of demand for wood fuels will stimulate and expand local supply markets; this will create new financial resources and opportunities for local suppliers. At the same time, energy from wood fuels contributes to rural development by providing additional job opportunities and increased income. Bearing in mind that an important issue for the whole of the partnership is to balance wood energy extraction with preserving biodiversity in forest. An important concern that needs further integration is the skill to analyse environmental aspects of wood energy.

One of the socio-demographic factors related to unmanaged forest is the abandonment of rural lands and rural activities. In Europe, this factor is also relevant in biodiversity terms, since a relevant portion of the

European biodiversity occurs in non-pristine ecosystems where human intervention is one more ecological factor which has shaped the ecosystem for millennia. **A comprehensive and coherent forest management concept will have very positive effects: new incentives social and economic will appear for population setting in rural landscapes**, as reducing their heating and cooling cost so the generation of a sustainable land management will provide economic advantages: new job opportunities in excluded and abandoned areas, with a relevant socioeconomic impact besides the ecologic one.

EFFORTS FOR REDUCING THE PROJECT'S "CARBON FOOTPRINT"

Most of the activities will be managed in the two Forest Models (Montagne Fiorentine and Urbión) with limited travelling needs for the whole of the project team, except the forest experts coming from Algeria, Morocco, Tunisia and Turkey invited by the partnership (CESEFOR actually - see D and E actions) once a year within the framework of the networking activities (with other Life+ projects) for disseminating working methodology and projec results.The partners decided to limit the travel around 15 (5 from Spain to Italy, 3 from Italy to Spain and 7 for the networking activities and participation to external events). These travels include the project technical workshops and the participation to dissemination events within th EU territory. We have planned to set up the technicals workshops (B1, B2, B3) combined with the Steering Committees and management/communication meetings. In fact, there will be only one roundtrip travel for three meetings. The team members will mainly work from their own locations levaraging communication tools (emails, telephone, quarterl conference calls using Skype tools). Use of paper will be minimised as well by privileging electronic documentation: for example, the newsletters drafted and sent every two months will be diffused through electronic email on pdf version. Also for this purpose, the realization of the web tool able to support project communications will be anticipated on the early stages of the project, during the preparatory action actually.
When possible, electronic format will be proposed (dowloaded from the project website) as alternative to paper for minimising the using of consumables.

STAKEHOLDERS INVOLVED AND TARGET AUDIENCES OF THE PROJECT OTHER THAN PROJECT PARTICIPANTS

The proposal intends to involve as many stakeholders as this is also inherent in the spirit of the forest model network.

The transversality of the actions that we want going to implement will facilitate a large participation and interest and also a great number of people /categories that could have an interest in what is made.

It is auspicated the participation of people / association who are involved in tenable architecture (anab...), wood construction (lignus; federlegno; ...), biomass heating systems (aiel; fiper;) forestry and agroforestry companies (Marchese de Frescobaldi), sawmills, association of lumberjacks (SOFEA), agronomist, forest engineer association, uniiversity, because they can give positive approach to the project and suggest innovative technology to implement actions. besides it will be possible to involve, in italy, also a national park (foreste casentinesi) as member of Model Forest of Montagne Fiorentine. Public stakeholder consultation will be conducted in each territory involved also through the thematic committees already present within the forest model network. Our stakeholders which gave to us their support will have an active involvement in pour project as described within the content of their support providing their feedback and information following the requests of the project partnership, taking part to the experience exchanges and contributing to the dissemination of the results.

The other target audience are the local public authorities who are involved in the pilots for which they have given us their agreement to be a case study for the project. One effect of using wood is the energy savings. Local public authorities can reach the 2020 target. The saved public resources could be available and used for other purposes in environmental issues and to promote rural activities in the partner territory. In a second time during the project time life and thanks to dissemination activities we want to reach all the local public authorities which are members of the Mediterranean Model Forest Network implementing the best practices around the Mediterranean Basin. We will use the power of the International Model Forest Network for disseminating and sharing our experiences, updating our actions. Thanks to the support of the Regional Authorities (Tuscany, Castile y León and Western Machedonia), we will have another powerful network for results dissemination.

Letters of support (more than 21 letter of support have been uploaded into the eproposal application):

Regional Authorities: Regione Tuscany (Italia), Region of Western Machedonia (Greece);

Municipalities: Londa (Italy) – Pelago (Italy) – San Godenzo (Italy) – Rufina (Italy) – Duruelo de la Sierra (Spain)- Soria (Spain) - Rabanera del Pinar (Spain) - La Gallega (Spain) - La Hontoria del Pinar (Spain);

Model Forest network: International Model Forest Network (Canada) - Model Forest of Montagne Fiorentine (Italy) - Model Forest of Urbión (Spain) - Model Forest of Ifrane (Morocco) - Model Forest of Yalova (Turkey);

Wood and woodfuel industry/Institute: Confindustria Toscana **–** Corpo Forestale dello Stato - Territorial Office for Biodiversity of Vallombrosa (Italy);

Energy: Federazione Italiana Produttori di Energia da Fonti Rinnovabili FIPER (Italy);

Research and Energy Institutes: University of Florence-GESAAF (Italy) - Consiglio Nazionale della Ricerche-Trees and Timber Institute (Italy) – Universidad de Valladolid-Instituto Universitario de Investigación en Gestión Forestal Sostenible.

To communicate and inform our stakeholders, we will use newsletters (six numerous per year), website, direct communication during the dissemination events or the annual Expoenergia in Valladolid or the MedForum for the Mediterranean Model Forest...

The involvement of stakeholders at the various phases of project implementation will improve the monitoring of the project outcomes, as the Regional or Local Authorities has the task to set forest and

environmental protection objectives and priorities

The involvement of stakeholders will be guaranteed by:

• their invitations/participation to the kickoff meeting during the Preparatory Phase of the project on December 2014 in Florence and to the three annual open seminars in Florence on December (2015-2016-2016) for the presentation of the project progress and for the final seminar on June 2018. More than 400 participants are expected);

• the sending of the project newsletter (21 numeros sent to a contact list of 7 500 names regurarly);

• summary of annual communication reports in user-friendly format;
• specific sessions during the annual open seminar for end-users and stakeholders for updating the project progress.

EXPECTED CONSTRAINTS AND RISKS RELATED TO THE PROJECT IMPLEMENTATION AND HOW THEY WILL BE DEALT WITH (CONTINGENCY PLANNING)

The qualitative and quantitative definition of the real effects in term of CO2 reduction emissions will follow a unique procedure for each types of buildings identified by all the partners of the project.

Particular attention should be paid to the methods of calculation of the amount of CO2 stored in wood products and the amount of CO2 saved by replacing high energy-intensive raw materials with wood.

The definition of the real effects of CO2 emissions reduction will have to be unique for the types of substitutions identified for all project partners.

The changes of heating system must be made through the use of high throughput technologies but at the same time readily available in the different countries of the partners.

The replacement of low-efficiency plants fueled by biomass should cover plants with an efficiency of no more than 60% while for the replacement of existing fossil fuel power plants will be of interest primarily manufactured outside the distribution network of natural gas (therefore fueled by gas or liquid Propane).

The operations in forest must be differentiated according to the type of forest ecosystem in which we will work.

It will be important to pay attention to the ease of access to the areas where the forest operations will be carried out in order to increase the demonstrative effectiveness.

Organizational problems. Lack of communication may cause problems at any step of the project implementation. However, there is experiences on the Mediterranean Model Forest Network among the UNCEM as principal beneficiary and UCVV and CESEFOR as associated Beneficiaries that suggest this risk to be minimum.

Monitoring of the technical implementation of the project will allow the identification of problems and most favorable solution to be found before problems get serious.

Administrative risks and financial risks. This may be caused by improper project management and administration. Care will be devoted to the monitoring of project financial and administrative status. The risk is very limited thanks to the experience required in the tender for the external assistance.

CONTINUATION / VALORISATION OF THE PROJECT RESULTS AFTER THE END OF THE PROJECT

Which actions will have to be carried out or continued after the end of the project?

In after life project it's possible and auspicated to continue with the dissemination of the result and the sensibilization about the importance of using wood for climate mitigation.

Each action proposed could be carried out or continued after the end of the project.

Indeed the dissemination of good practices even after the end of the project would undoubtedly benefits to the territories involved.

The measurement of the amount of CO2 saved / stored in the actions planned B1 and B2 could be developed on a regional scale even after the end of the project with at least annual frequencies to check the real benefits obtained.

The calculation of the real benefits in terms of quantity of CO2 generated through forest management resulting from the adoption of the widespread measures provided would be a good indicator if measured at least once in the year.

The aim of the project is to set up a series concrete actions (B1 for the construction of new buildings and B2 for the replacement of the boilers by high efficiency boilers). Theses concrete results will have an effect on the forest management where the impact will be evaluated for their outcomes with particular emphasis on indicators of carbon cycle and biodiversity.

In general, forest management has a long-term perspective, results of the project will be disseminated among the Model Forest network, hence for many of the actions follow-up are planned. In those areas, more detailed indicators will be monitored also after the end of the project even in a less frequent timeframe.

The website of the project (action D1) will be maintained at least for 5 years after the end and integrated under the website of the Mediterranean Model Forest Network.

Dissemination material will be printed in excess of copies (DVD in 500 copies and the two downloaded publications in pdf format), allowing their distribution or their downloading to the public and citizens.

How will this be achieved, what resources will be necessary to carry out these actions?

Continuing the monitoring undertaken it might be possible by enabling ad hoc financial measures (eg specific funding lines in the rural development plan) or finding a way to sell the carbon credit generated by the validated CO2 emission reduction.

Internal resources of the beneficiaries, local and regional authorities will be necessary for maintaining the website, the dissemination of the CO2 impact using wood in the building construction.

To what extent will the results and lessons of the project be actively disseminated after the end of the project to those persons and/or organisations that could best make use of them (please identify these persons/organisations)?

Local and Regional Authorities, International and Mediterranean Model Forest Networks, Forest and Environmental management Institutions acting at local, regional and national level.

Active dissemination will be performed in the demonstration areas encouraging the other local authorities to implement the best practices and during the conferences/workshop and Expoenergia event after the end of the project. As we have described within the E1 action, The "After-Life communication plan" will describe how the partners plan to continue and develop the actions that will have been initiated through this project, after the end of the project. It will give details on the actions that will be carried out in the future and it will form a separate chapter of the final report (planned for June 2018).

This action aims to ensure the sustainability of the project actions: all the project results will be maintained after the end of the project, the indicators will be regularly presented during the annual MedForum and Expoenergia event and the DVD showing the experience will be diffused among the Model Forest Network.

LIFE13 ENV/IT/000560

TECHNICAL APPLICATION FORMS

Part C – detailed technical description of the proposed actions

LIST OF ALL PROPOSED ACTIONS

A. Preparatory actions (if needed)

A1 PREPARATORY ACTIONS

B. Implementation actions

B1 Development of strategic actions to mitigate climate change - Reduce the footprint of buildings using wood

B2 Development of strategic actions to mitigate climate change - Energy-high efficient by wood

B3 Silvicultural interventions climate change mitigation

C. Monitoring of the impact of the project actions (obligatory)

C1 Assessment of reduction of GHG and the amount of CO2 stored

C2 Verification of the amount of avoided CO2 emission with biomass heating and with replacement with high/low system(impact of B2 action)

C3 Assessment of costs and benefits deriving from the adoption of forest management

D. Communication and dissemination actions (obligatory)

D1 COMMUNICATION AND DISSEMINATION ACTIONS

E. Project management and monitoring of the project progress (obligatory)

E1 MANAGEMENT, COORDINATION AND MONITORING

DETAILS OF PROPOSED ACTIONS

A. Preparatory actions

ACTION A.1: PREPARATORY ACTIONS

Description and methods employed (what, how, where and when):

When: from July to December 2014

How: Preparation of all documents/tools necessary for a very smooth implementation

A1 Creating a team for the coordination of the project (partner responsible: UNCEM)

UNCEM, the principal beneficiary has experience on management and coordination of regional and national projects but not in transnational project. For this purpose, they will select following the national public procurement an external assistance. Their tasks will be the creation of tools and templates (accounting tool on a excel format for those partner who do not have a specific accounting for their project management, time-sheets with allocation by action, the Steering Committee rules, conference call and meeting timetable, preparation of the kick-off meeting) before to start the implementation actions. A temporary coordinating team will be constituted by one representative of the principal beneficiary, the external assistance and one representative of each partner. They will validate the tools and templates. This team will become the Project Coordination Team when we will start the implementation action after the kick-off.

A2 State of the art: environmental, regulatory framework, landscape, energy supply and demand, best practices, previous experiences (all partners)

• Analysis of the main artifacts achievable in wood and currently made with raw materials with a negative balance in the overall release of greenhouse gases;
• Analysis of thermal energy demand for space heating or farms in each Model Forest and the effects of the conversion to the high-efficiency systems powered by wood;
• Evaluation of forest areas where it is potentially possible to produce timber and not just biomass for energy purposes.
• Analysis of supply chains using wood from work in the territory of each Model Forest and their possible activations
• Inventory at partner's level of the experiences already realized (studies and / or achievements of buildings / structures in wood)
• Current stock of carbon in each selected territory
• Existing high efficiency system within the partner territory

A3 Identification of demonstrative areas for interventions and strategies to make the awareness raising of results most effective and disseminated – Drafting a public tender for B1 and B2 actions (all partners)

For each Model Forest territory involved as partner (Montagne Fiorentine-Tuscany-Italy) and Urbion (Castilla y Leon-Spain), it has been identified pilot municipalities within the entire area in which the actions planned will be realized (construction of woody building for B1 and boilers replacement for B2). You can find the profile of the two Model Forests and an attached maps under the "Pictures" section.

The partner will draft a public tender with common specifications for searching subcontractor that will be able to take in charge the replacement of the heating system in the private buildings (action B1)

A4 Putting in place relevant indicators (partner responsible: UCVV)

During the preparatory phase of the project, permanent monitoring checks will be put in place on the indicators relating to the different implementations actions

This monitoring process will allow the initial situation under the lines to be explored and will allow the progress made during and after the LIFE project to be recorded. It will provide a means for checking the impact on the carbon sequestration to the methods of management used and therefore for evaluating how suitable they are.

The different monitoring tools will be put in place and validated or adapted so that they are optimal during the project implementation (Action E2 more precisely). There will be bi-annual checks during the project (presenting officially and approved during the Steering Committee before their dissemination and uploading into the project website) and we will work to maintain monitoring in the post-LIFE situation, transferring the check-list to new initiatives and updating it or refining it in accordance with the results obtained for each activity and new territory.

A5 Project Communication and Dissemination Plan (partner: CESEFOR)

Communication and dissemination represent key parts within any project activity. A sound communication and dissemination strategy needs to be planned well in advance in order to maximize its benefits. The communication and dissemination plan will set out the internal procedures to be followed by the LIFE+ WOOD FOR CLIMATE partners to ensure the consistency and coordination of external communication generated throughout all project activities.

The partner in charge of the Dissemination and Communication will draft a plan which will be presented and validated during the first Steering Committee (December 2014).

Target audience The Communication & Dissemination plan is aimed to the following audience and respectively at the fulfillment of the following objectives:

• European Commission: to communicate the project strategy and planned activities;
• International and Mediterranean Model Forest network: idem
• Consortium partners: to coordinate and harmonize their individual dissemination activities and align these with the project ones;
• The project management entities: to provide an overview of activities, tools and procedures for dissemination to agree on;

A6 Kick-off (partner responsible: UNCEM)

This action could be considered as the final preparatory action and the official launch of the implementation activities but before some methodology of work have to be validated among the consortium. The kick-off organized in Firenze on December 2014 will be set by

• A presentation to the whole of the partnership of informations collected during the Regional kickoff meeting with EC representatives in Brussels,
• A financial meeting: eligibility rules reminder, financial tools and templates built on A1 will be presented;
• An administrative meeting: workplan update, conference calls and workshop timetables will be validated;
• The first Steering Committee where some important decisions will be taken as presentation and approval of the Steering Committee internal rules, B1 public tender, communication and dissemination plan…;
• A networking meeting with the representatives of the four similar Life+ project (by chronological order: BIOSIT, CARBOMARK, P.Pro.SPO.T., LAIKA, Soria CO2Cero and OPERATION CO2) led by Italian and Spanish as principal beneficiaries (respectively University of Florence, Union of Communes of Montana Colline Metallifere, Region of Veneto, City of Milano, City of Soria and University of Valladolid) and with which the WOOD FOR CLIMATE ´s consortium has close relationship. The goal of these preparatory experts workshop will be for finding common points in our approach and methodology and project results and deliverables that we can use;
• A presentation of the project objectives to the partner stakeholders invited by each partner.

Constraints and assumptions:

The constraints which can have a negative impact on the launching of the project are:

• Delay of the selection of the project management team
• Unavailability of the other selected Life+ projects: BIOSIT, PPROSPOT, CARBOMARK, LAIKA, OPERATION CO2 and Soria CO2Cero
• A significant deterioration in the financial situation of the beneficiaries and their co-financing
• A significant deterioration of the social conditions in the selected areas
• Non-availability of pilot sites for reasons of natural disasters (pest, forest fires ...)
• Team restrictions

Common business constraints include budget and time restrictions, resource limitations, and resource skill limitations.

The assumptions which we have made for launching this project are a full involvement of the consortium partners and the stakeholders designated by each beneficiary. A smooth implementation, none conflict between partners and a common way to reach the target, working with all resources required by each partner

Beneficiary responsible for implementation:

UNCEM

Responsibilities in case several beneficiaries are implicated:

A1/A6: UNCEM
A2/A3: All partners
A4: UCVV
A5: CESEFOR

Expected results (quantitative information when possible):

Selecting a project management team well experimented

Accounting toolkit (timesheet, reporting form, accounting tool used only for the project expenditures...)

Steering Committee internal rules drafted and approved

1 communication and dissemination plan drafted and approved

Preparation and identification of all necessary datas

Preparation of the kick-off on time

1 indicator checklist

2 draft of public tender (B1 and B2 action)

1 Steering Committee meeting

2 Conference calls

Indicators of progress:

ACTION Indicators of progress Target

A1 – Project management Deliverables on time 100%

Number of participants in the Conference call 1 participant per partner (minimum)

Average of conference call per quarter 1

Number of project team 1 team per partner

A2 State of the art per territory 1

A3 Number of pilot municipality per partner territory 1 at least

A4 Number of project monitoring indicators 10 at least

A5 Number of communication plan copies 100

A6 – Project Kick-off Number of participants 100

Number of participants in the first Steering Committee meeting (minimum)	1 participant per partner

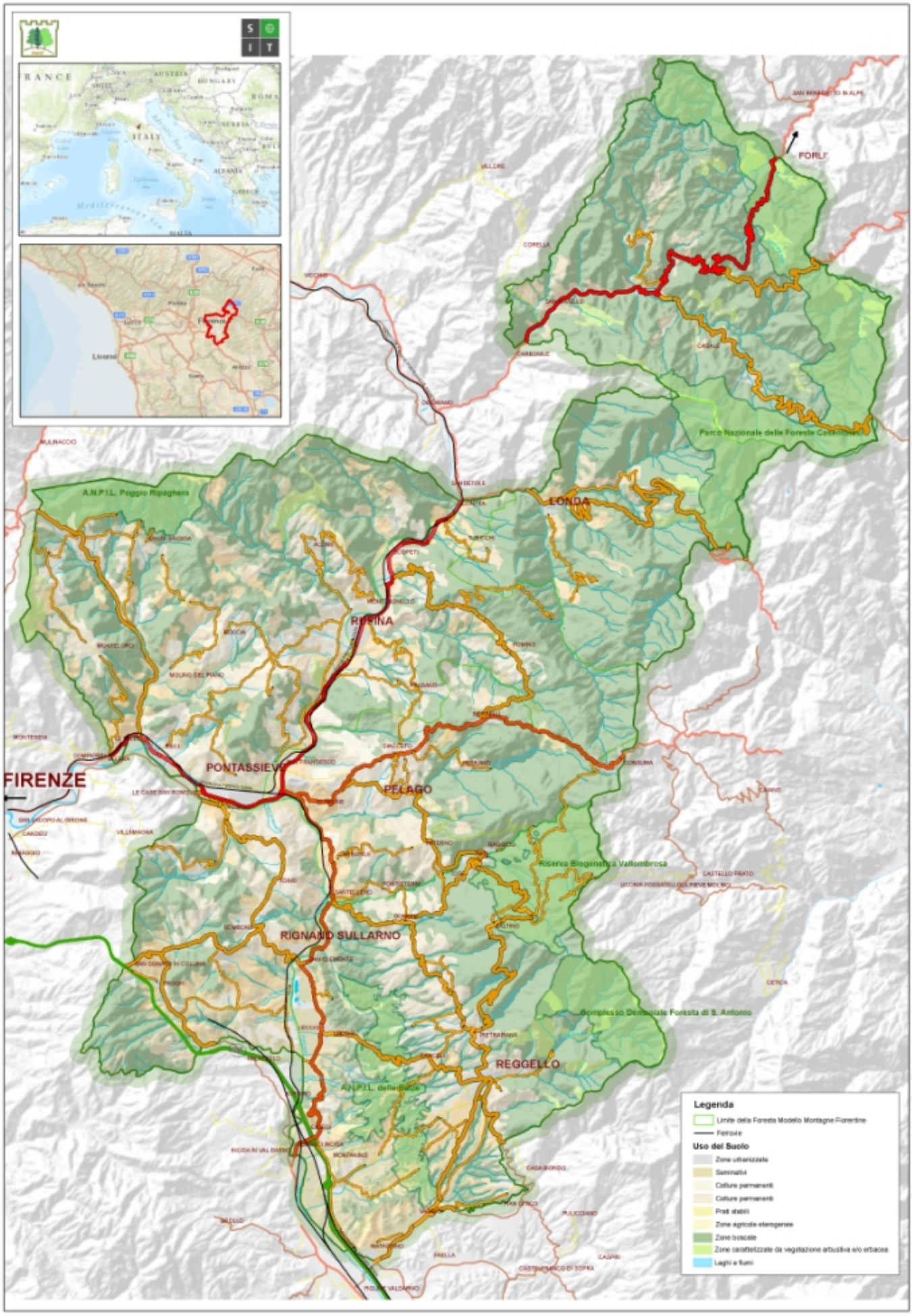
Name of the picture: Profiles of the two selected Model Forest: Montagne Fiorentine (ITA) and Urbion (ES)

A - WOOD FOR CLIMATE

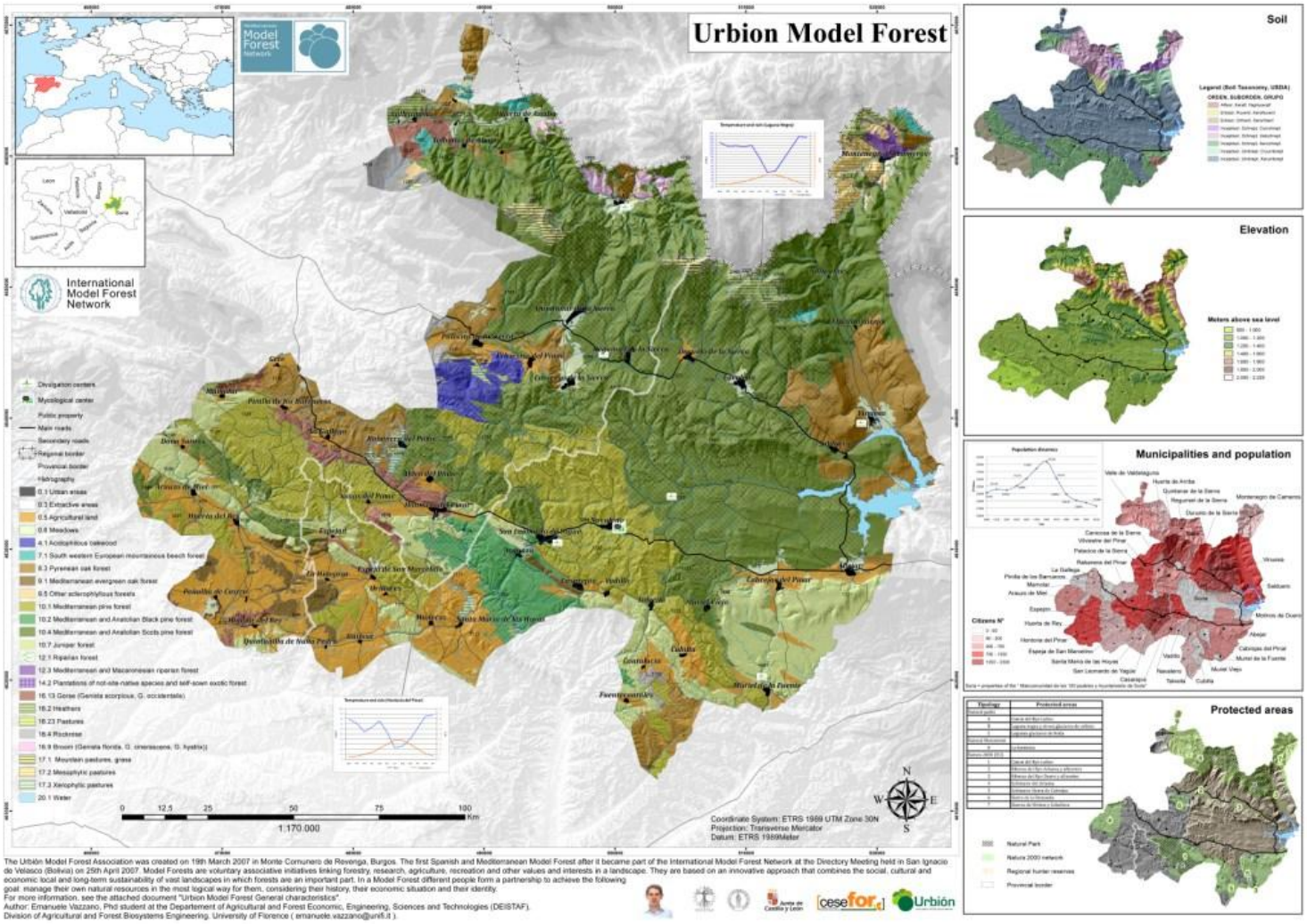
MODEL FOREST PROFILES

Name of the Model Forest **Province** **Region**	**Forest coverage**
Urbion Model Forest, Soria Province Region of Castilla y Léon spain	In Urbion Model Forest, there are 154.209 ha of forest (forest coverage 87 %), consisting for 77,48 % of conifers and 14,01 % of hardwood (the 8,50% remaining are heathers, riparian forests, gorse, broom, rockrose and pastures). 55.915 ha make part of EU Natura 2000. 35 % of forests are private, 65% is owned by municipalities. The total annual increment of wood in the forests was estimated in 722.815 m^3/year with bark. No data are available concerning the heating plants. An annual forest growth is about 722.815 m^3/year with bark. Only 8% of the harvested wood is used as biofuel.
Montagne Fiorentine Model Forest Firenze Province Region of Tuscany Italy	In Montagne Fiorentine Model Forest, there are 36.000 ha of forest (forest coverage 70%), consisting for 15% of conifers and 85% of hardwood. 8.885 ha makes part of EU Natura 2000 or other protected areas. 85% of the forests are private, 0% is owned by municipalities, 15% by other public bodies. Actually it's taken by the forests just the 40% of the total annual increment of wood. Along last 8 years have been realized 5 district heating plants (different size from 320 kWt to 1 MWt) fueled by wood biomass forestry. Also pellet-based, woodchip-based and modern logwood-based boilers are increased during same period. There are 3 or 4 supply chain implemented at least in the Montagne Fiorentine area.

Name of the picture: Map of the Model Forest of Montagne Fiorentine - Italy



Name of the picture: Map of the Model Forest of Urbión - Spain



B. Implementation actions

ACTION B.1: Development of strategic actions to mitigate climate change - Reduce the footprint of buildings using wood

Description and methods employed (what, how, where and when):

what

The implementation of the strategic action for climate change mitigation will be realized through the realization of wooden construction instead of using high energy raw materials; for the scope of the project we have identified three public structures, and some others private structures for each country partner (Italy and Spain).

These constructions should be used to define the real effects of CO2 reduction derived from the use of wood as a building material

In Italy (Tuscany Region) will be built using wood the following public buildings:

1. New gym to build in the municipality of Rufina and owned by the city administration. (financed by Tuscany Regional funds). See the map in the section "Pictures" below and the letter of support in the corresponding section.

2. Building for the storage of wood chips in the forest complex of Rincine (Municipality of Londa) owned by the Tuscan Region and managed by the Union of Municipalities and Valdisieve Valdarno. (financed by Tuscany regional funds). See the map in the section "Pictures" below and the letter of support in the corresponding section.

3. Commercial building called "show wood" - promoting location for wood products of the territory of the Montagne Fiorentine Model Forest, to be implemented under the project DemoScope (funded by the Tuscany rural development plan - measure 124)

In Spain, (Region of Castilla y León) the following public buildings will be built using wood:

1. The Municipality of La Gallega (Province of Burgos – Region of Castilla y León) is going to install a biomass boiler for the City Hall - The map of the intervention has been uploaded into the section "Pictures" below;

2. The Municipality of Rabanera del Pinar (Province of Burgos) is going to restructurate a roman bridge using wood and it is expected to repair a historical hut (using wood for the roof) and a second historical breeding hut called “El Aleman”. You can find the map of the intervention in the section “Pictures” below.

3. The Municipality of Duruelo de la Sierra (Province of Soria) is going to build a wooden footbridge to cross the river “Triguera” and a wooden dresser for the soccer stadium (funded by the own Municipality budget). You can find their letter of support in the corresponding section and the map of the intervention in the section “Pictures” below.

In each country partner the realization of private structure will be incentivated trough public tender for co-financing. This public tender for the B1 action will be prepared during the preparatory phase and validated by the First Steering Committee in Firenze on December 2014, published afterwards.

Construction will be carried out using a protocol shared by partner involved which sets limits in relation to:

• Destination of use and volumetries of the buildings (residential, commercial and agricultural);

• Forest species used in the construction of structures and their own origin;

• Project choices, construction techniques and energy requirements expected;

• A management protocol that defines the commitments of the owner of the building both during the period of implementation of the project Life + and after in a period "after LIFE" estimated to be equal to the duration of the of the building itself (maintenance ...);

Verification and validation of the qualitative and quantitative amount of the real effects of CO2 emissions reduction will be entrusted to the CNR I.VA.LSA, scientific research institute, in relation to sub-contractor (see their letter of support in the relevant section)

How

The definition of the qualitative and quantitative amount of the real effects in term of co2 emissions reduction deriving by increasing the use of wood in construction will be through:

• analysis of the already realized experience (studies and / or achievements of buildings / structures in wood) in the different partner countries, either in terms of verifiable results achieved through ex ante and ex post analysis or as an object of other programs and projects financed by European, national or regional founds;
• Implementing the analysis mentioned above through the development of a methodology for analyzing at a territorially scale for each partner, through an inventory, the types of artifacts more wide spread that may be wooden constructed and which are currently produced with highly energy-consuming / or high CO2's emitting raw materials;
• shared formulation of proposals for legislative changes aimed at encouraging the use of wood in construction and the construction of wooden structures trough a recognition of regulatory instruments in force (municipal urbanistic rules) in the different territory involved;
• The construction of three public buildings and at least as many private structures in wood and calculating the amount of CO2 reductions.
• The accounting of the amount of CO2 stored in the buildings through the application of the draft standard prEN16449 "Wood and wood-based products - Calculation of sequestration of atmospheric carbon dioxide."
• comparison between the carbon footprint generated throughout the entire life of wooden structures and emissions that would have be realized if the same structure with energy-intensive raw materials (using LCA methodology).

Public structures have already been identified and for their realization have been provided the following financial resources:

1. New gym to build in the municipality of Rufina (see the attached letter of support) - Tuscany - Italia (800.000,00 € financed by Tuscany Regional funds)

2. Building for the storage of wood chips in the forest complex of Rincine (City of Londa-Tuscany-Italia see the attached letter of support) owned by the Tuscany Region and managed by the Union of Municipalities and Valdisieve Valdarno (financed by Tuscany regional funds decree N° 5167 - 08 November 2012 € 115.243,00)

3. Commercial building called "show wood" - promoting location for wood products of the territory of the Montagne Fiorentine Model Forest located in Tuscany-Italia, to be implemented under the project DemoScope (funded by the Tuscany rural development plan - measure 124 - 95.000 €)

4. Municipality of La Gallega – installation of a biomass boiler for the City Hall: €1000 (funded by the own Municipality budget);

5. Municipality of Rabanera del Pinar restructuration of a roman bridges using wood: 33.000€; Reparation of an historical hut (using wood for the roof): 1.550€; Reparation of a second historical breeding hut called “El Aleman”: 1.500€ (funded by the own Municipality budget).

6. Municipality of Duruelo de la Sierra – Erection of a wooden footbridge on the river “Triguera”: € 19.079,28. Construction of a wooden dresser for the soccer stadium: € 29.369,34.

for the structures listed above will proceed to:

• Identification of architectonic choices that, in accordance with the protocol identified, maximize the use of local wood;
• Application of the draft standard prEN16449 "Wood and wood-based products - Calculation of sequestration of atmospheric carbon dioxide" to calculate the amount of CO2 stored in the timber used for constructions

Regarding to private structures will incentive the replacement of high intensive energy raw material through a public tender.

Will be paid an incentive payment to the cost of projecting structures that:

• are representative for the territory Involved (priority will be chosen the most representative structures for each territories involved);
• are usually built with high energy-intensive raw materials.

Task of the action B1:

B 1-1 Eight technical workshops on six-monthly basis (June and December). During the first workshop, the partner will put in place a common working methodology as B1 action;

B 1-2 Construction of 3 public buildings from April 2015 to March 2018;

B 1-3 Launching of the public tender for construction of 3 private structures from January 2015 to March 2018 (the tender will be launched by 31st of January and the selection before the 31st of March 2015);

B 1-4 Calculating the amount of CO2 stored applying prEN 16449 for at least 6 constructions (public+private) from April 2015 to March 2018;

B 1-5 Calculating the LCA for these structures and the amount of CO2 saved by using wood from April 2015 to March 2018;

B 1-6 Defining of the amount of CO2 saved for each replacement / installation of wooden structures identified in the Life + project from october 2017 to June 2018;

B 1-7 Assessment of the potentiality in term of CO2 tonnes saved at territorial scale for each partner from october 2017 to June 2018.

where

The quantitative definition of the real effects of reduction of CO2 emissions resulting from the actions described above, made each Model Forest, will be determined from the analysis of data provided by different areas, will then be made at least a total of 6 structures for each partner country.

when

From December 2014 to June 2018; Public tender will be prepared during the preparatory action by November 2014 (see A3) and approved by the first Steering Committee by December 2014 and launched on January 2015; the construction of the public buildings and the replacement of the heating system(private buildings) will start by the end of March 2015 and will be achieved on December 2017, scientific verification and validation of the effects in term of co2 reduced emission should be completed by March 2018, Last calculation of the CO2 saved on June 2018.

Constraints and assumptions:

Qualitative and quantitative definition of the real effects in term of CO2 reduction emissions will follow a unique procedure for each types of buildings identified by all the partners of the project.

Particular attention should be paid to the methods of calculation of the amount of CO2 stored in wood products and the amount of CO2 saved by replacing high energy-intensive raw materials with wood.

Beneficiary responsible for implementation:

UCVV

Responsibilities in case several beneficiaries are implicated:

UCVV will lead the Italian activities of this action
CESEFOR will lead the Spanish activities

Expected results (quantitative information when possible):

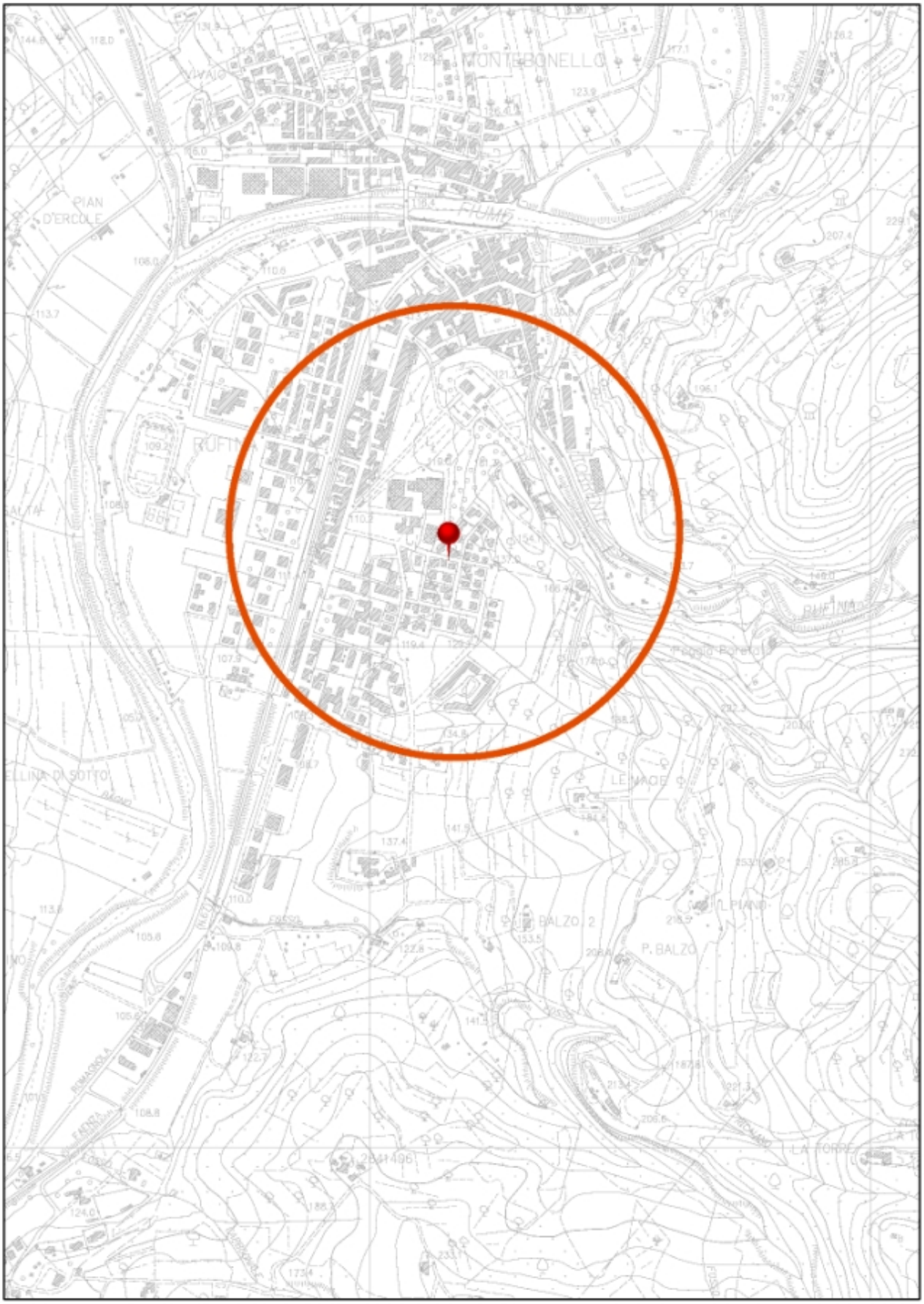
• • Creating a model to quantify the real effects of CO2 reduction through the replacement of high energy-intensive raw materials with wood
• Implementing of regulatory instruments (municipal urbanistic rules) "ad hoc" that allow and encourage the use of wooden artefacts in the territories involved easily applicable to every territory
• Defining of the amount of CO2 saved for each replacement / installation of wooden structures identified in the Life + project.
• Assessment of the potentiality in term of CO2 tonnes saved at territorial scale for each partner

Indicators of progress:

• • one common methodology within Q4/2014
• one public tender for the building of private structures within Q4/2014
• one protocol of common specifications
• one analysis of the already realized experience (studies and / or achievements of buildings / structures in wood) in the different partner countries: by April-2015
• Start of the structures construction before the end of Q1/2015
• Number of new public constructions per country partner: 3

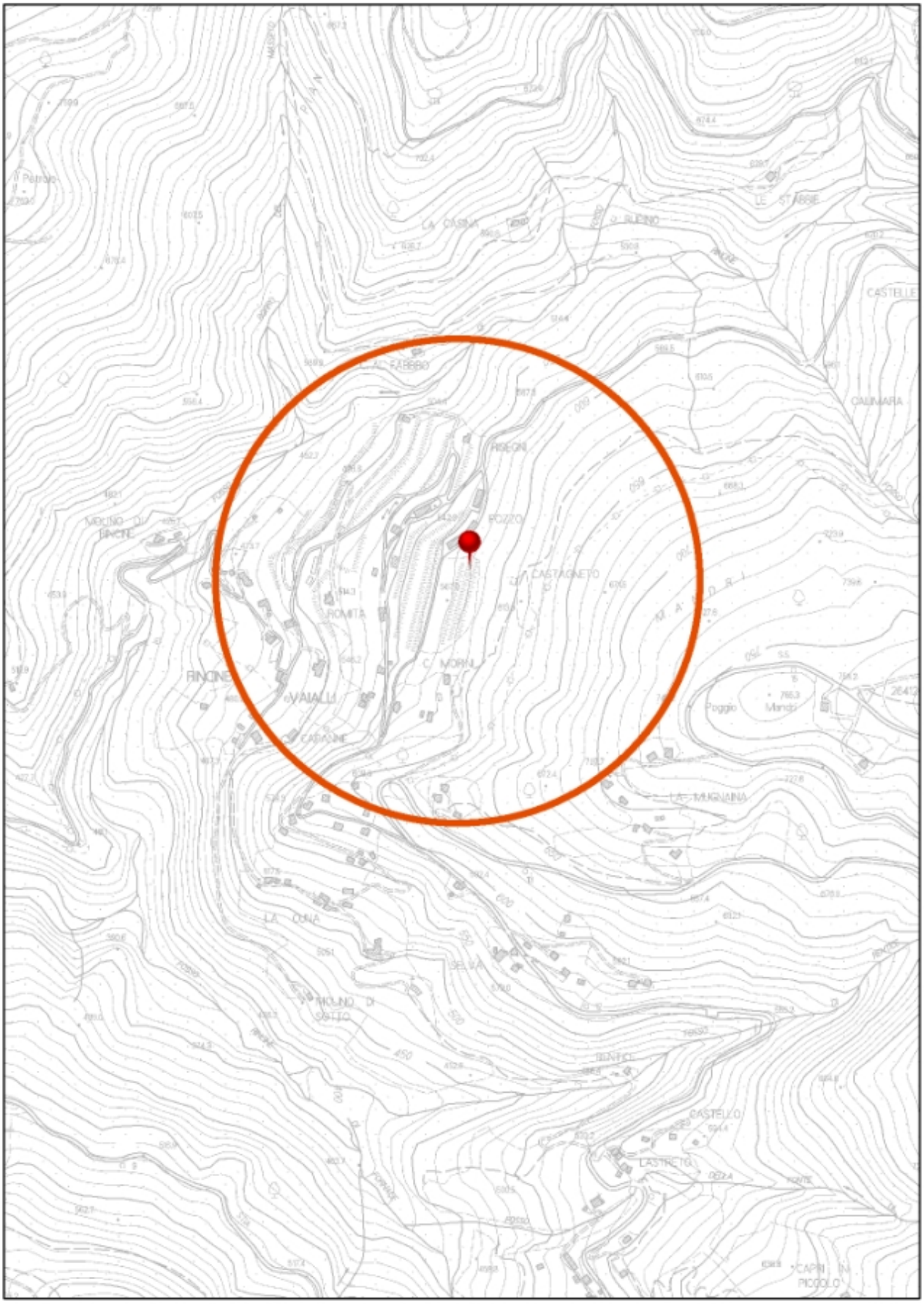
- Number of new heating system replacement in the private buildings per country partner: 3
- Scientific validation of the buildings by Q1/2018
- Average of technical workshops of the B1 action per year: 2

Name of the picture: Map of the Primary school and Sport hall in Comune di Rufina - Regione Toscana - Italy



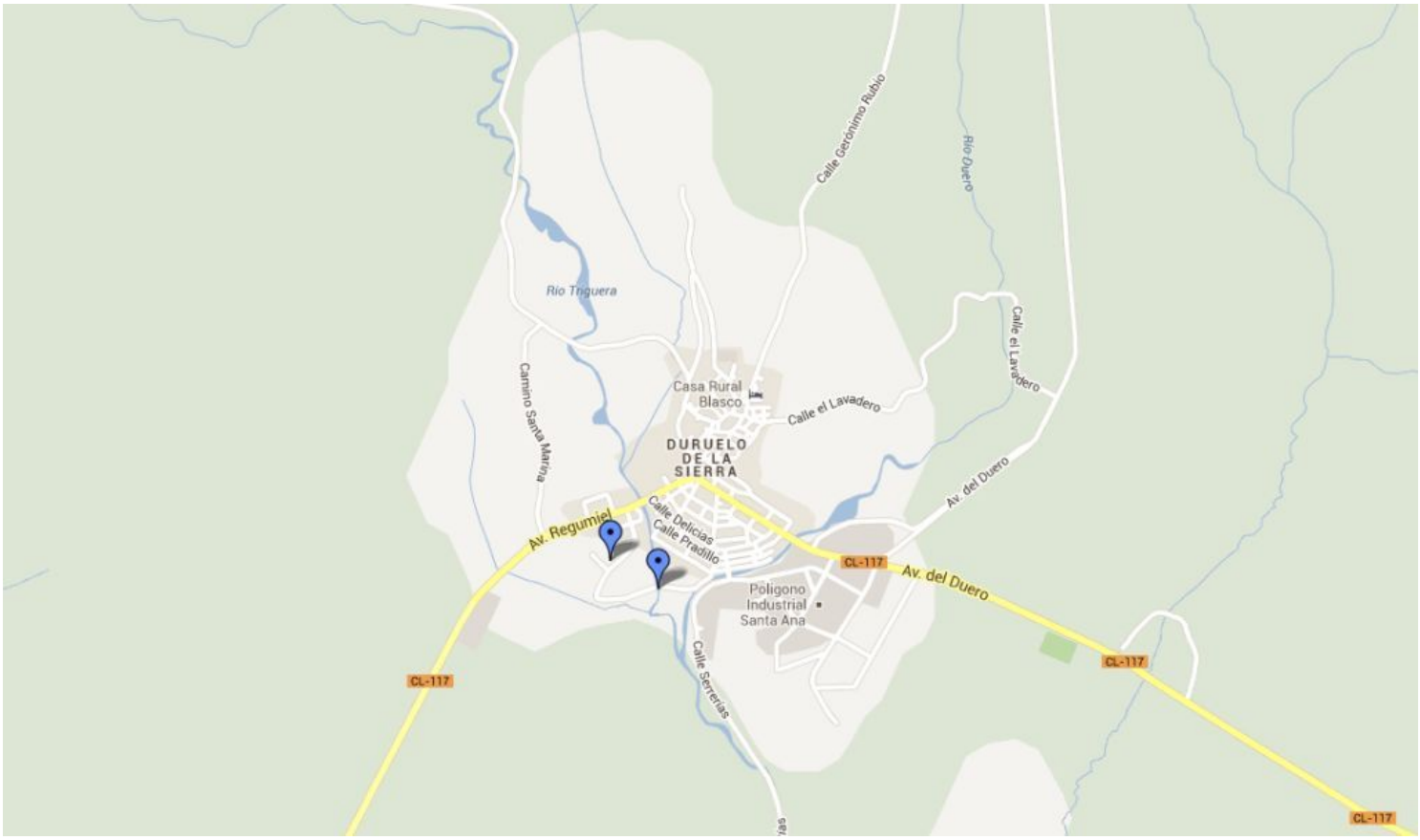
Wood chips biomass heating plant, primary school and gym in Rufina

Name of the picture: Map of the wood chips storag in the Comune di Rincine - Regione Toscana - Italy

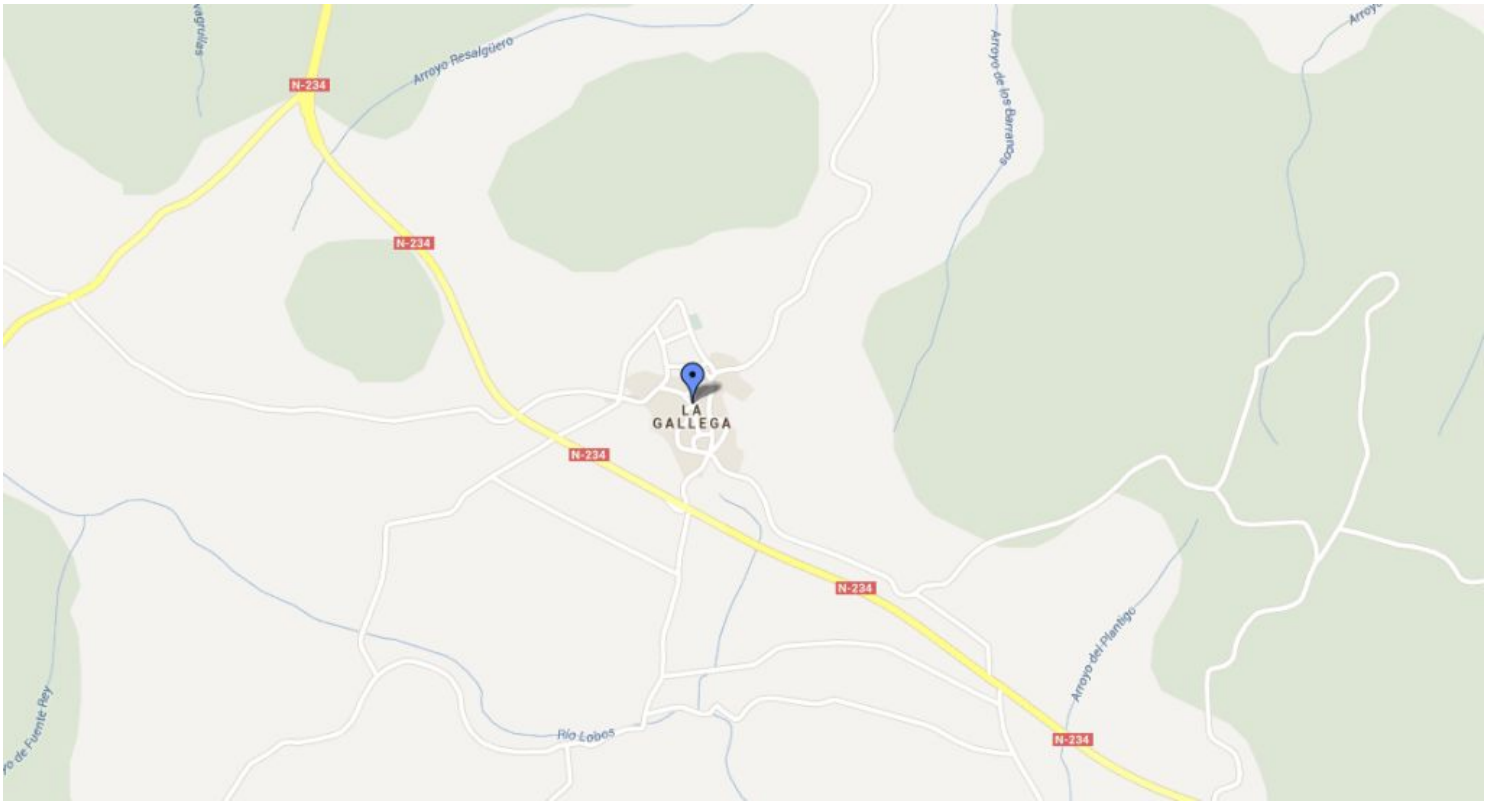


Wood chips storage building in Rincine

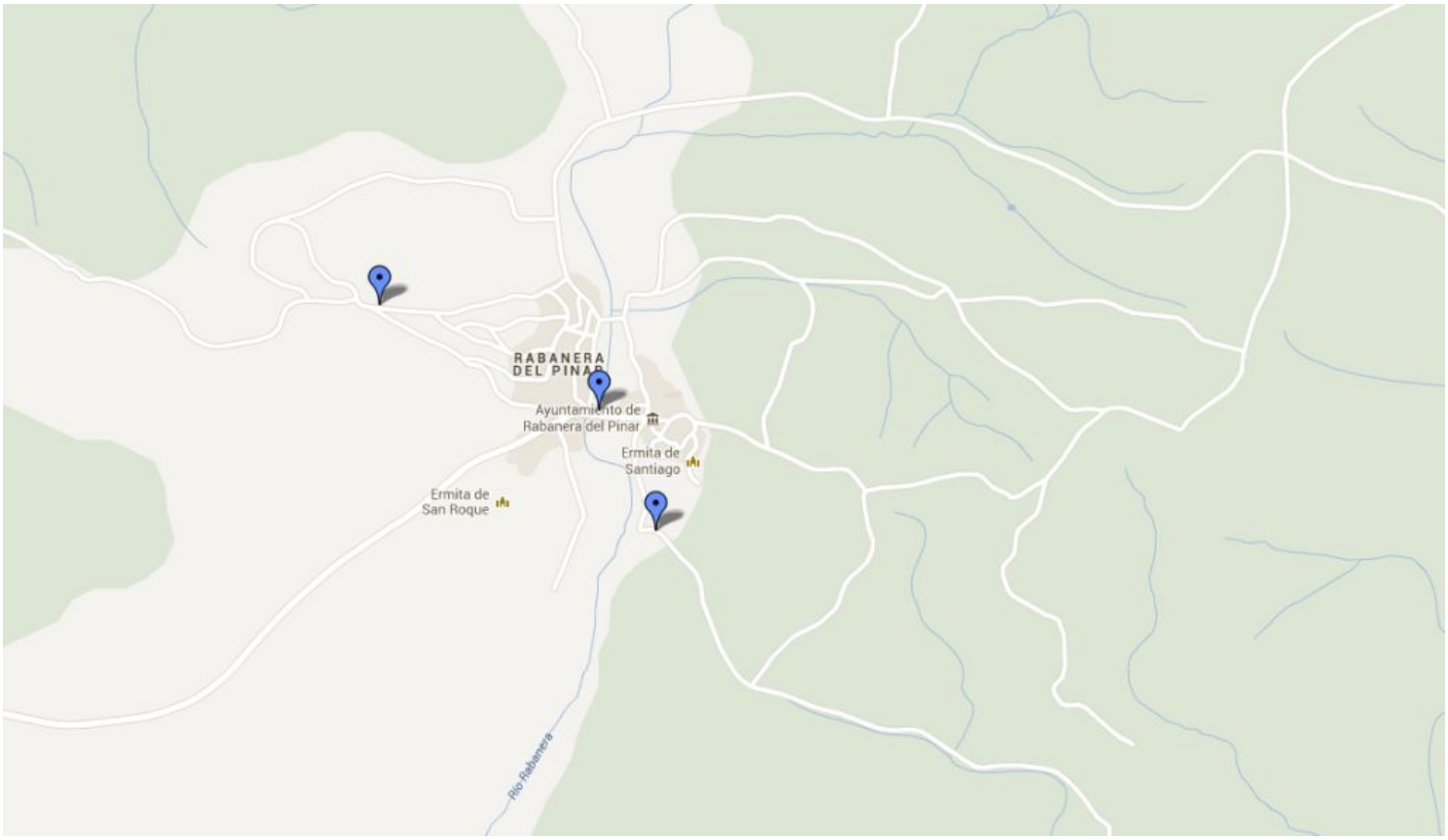
Name of the picture: Map of the Commune of Duruelo de la Sierra - Region of Castilla y León - Spain



Name of the picture: Map of the commune de La Gallega - Region of Castilla y León - Spain



Name of the picture: Mar of the ommune of Rabanera del Pinar - Region of Castilla León - Spain



B. Implementation actions

ACTION B.2: Development of strategic actions to mitigate climate change - Energy-high efficient by wood

Description and methods employed (what, how, where and when):

What

This action will be implemented through the design and installation of four plants for the production of thermal energy by high efficiency biomass-fueled replacing two fossil fueled plants and two biomass power plants with low efficiency (open fireplaces, stoves, boilers of older generation) for each country partner (Spain and Italy). These changes must serve, integrated with the assessment of schemes already implemented in partner countries, to define quantitatively, also in relation with the different sizes of the plants, the real effects of reduction of CO2 emissions resulting from the use of high-performance technologies in terms of return.

In Italy and in Spain, the replacement of fossil fuel power plants will cover the following buildings:

1. Educational complex consists of new sports gym in wood, primary school and center for disability services, located in the village of Rufina (Tuscany region-Italy) and owned by the municipality administration. The replacement will involve a natural gas boiler and diesel as well as to prevent the installation of new natural gas boiler for the new gym. You can see the map of Rufina on B1.

2. Twenty apartments as new connection to Castagno d' Andrea (San Godenzo municipality-Tuscany region - Italy) fueled by biomass heating plant owned by Unione di Comuni Valdarno e Valdisieve-UCVV replacing their fossil fueled boiler. The map of San Godenzo is below and the letter of support in the corresponding section;

3. Following the Life+ "People Soria CO2Cero" project, the municipality of Soria (Province of Soria - Region of Castilla y León) will continue under the energy efficiency philosophy, through the replacement of various public boilers: from the gasoil to the biomass. In the next 4 years, the Municipality of Soria expects to replace 4 new biomass boilers in the following public buildings: in the City Hall (150.000€ budgeted), in the local Police Office (50.000€ budgeted), in the Social Action Center (50.000 € budgeted) and the Civic Center "Becquer" (100.000 € budgeted). Total investment of the Municipality: € 350.000 that will be paid from the energy savings achieved in the next 8-10 years;

4. The municipality of Hontoria del Mar - Province of Burgos - Region of Castilla y León has planned to replace their bioler for another one by biomass heating (investment 6500€). You can see the map of the intervention within the "Pictures" section and their letter of support within the corresponding section.

The actions described above are already equipped with the necessary authorizations and financial coverage.

In each partner country for the replacement of 2 thermal plants fueled by woody biomass with low efficiency (open fireplaces, stoves, boilers of older generation) will be through public tender for co-financing (regional funds) aimed at private facilities, tender prepared and validated during the 1st SC on Dec 2014.

The installation will be realized using a specifications scheme shared between the partners setting limits in relation to:

• Destination and massing of the buildings served by the new facilities (residential and agricultural);

• Technical characteristics of equipment used (output range in kW nominal thermal output, type of fuel used, such as wood in logs, briquettes or wood chips)
• System accounting of thermal kWh actually produced, and the real yield of the plant in order to proceed to the recognition of the CO2 which is actually avoided the issue;
• A management protocol that defines the commitments of the subject owner of the building involved the replacement of the system during the implementation period of the project Life + and in a period "after LIFE" next equal to the estimated duration of life of the facility;

The verification and validation of scientific qualitative and quantitative definition of the real effects of reduction of CO2 emissions will be entrusted to GESAAF-Florence University, a scientific research institute, in

relation to sub-contractor.

How
The quantitative definition of the real effects of reduction of CO2 emissions, also in relation with the different sizes of the plants, resulting from the use of high-performance technologies in terms of performance will be achieved through:

- an analysis of what has been achieved (studies and implementation) in relation to any plant substitutions in the different partner countries, if any, verifiable in terms of results achieved through ex ante and ex post or as an object of other programs and projects subject of European, national or regional;

- Implementation of the analysis mentioned above through the development of a methodology for analysis of spatial detail (to put at the disposal of the partnership) can identify the buildings most suited to energy conversion (both fossil -> Renewable High Efficiency, Low Efficiency and renewable - > renewable AE). The local survey precedes a campaign of questionnaires on a sample of users, identified by the application of the methodology of territorial analysis, in order to locate the buildings are able to optimize the proposed investment from both the economic and environmental point of view. This analysis will also be useful to carry out the simulation on action C2.

- development of an assessment of the sustainability of interventions, starting with an analysis and studies on the availability of biomass carried out within the project LIFE BIOSIT and updated by the cross-border project BIOMASS. This allows an assessment of the maximum number of buildings convertible from the point of view of energy (in particular from fossil to renewable) considering the constraint of local availability of biomass. What is proposed is useful to define the scenario presented with the simulation area under Action C2.

- the replacement of two fossil fuel power plants and two biomass power plants with low efficiency (open fireplaces, stoves, boilers of older generation) that will take place for every country in each pilot area.

- A series of strategic and legislative measures. Central to the project will be the creation of a corridor crossing the city and connecting different elements of its environmental and cultural heritage.

For the buildings listed above, we will proceed to:

• The evaluation of the thermal requirements of the buildings for which the intervention and the design of the new high-efficiency system in compliance with the specifications scheme and shared through the identification of the type of boiler will be determined by a principle of best value for money by giving the most weight weighted to the higher level of energy efficiency;
• The installation of the new plant, testing and commissioning with simultaneous formation of the manager, both in terms of the technical aspects as well as for ordinary aspects of accounting under the protocol signed.

With regard to the second type (from woody biomass low-yield to high-yield biomass) will be replaced in private buildings identified with the notice with the following procedure:

• The identification of manufactured according to the criteria established by the specifications scheme shared between the partners giving priority to those that are installed systems more representative of the local situation in terms of diffusion;
• Execution of one public tender procedure for the identification of the private buildings undergoing intervention and consequent assignment of co-financing;
• The other two steps in the same way of first type (from fossil fuels to biomass).

Tasks of the B2 action:

B 2-1 Seven technical workshops combined with the Steering Committee and B1 workshop on a six-monthly basis (June and December). During the first workshop, the partner will put in place a common working methodology as B1 action.

B 2-2 Define specifications scheme shared between the partners setting limits from January 2015 to June 2015;

B 2-3 Development of a methodology for analysis of spatial detail (to put at the disposal of the partnership) can identify the buildings most suited to energy conversion from January 2015 to June 2015;

B 2-4 Analysis of what has been achieved (studies and implementation) in relation to any plant substitutions from October 2015 to December 2017;

B 2-5 Execution of one public tender procedure for the identification of private buildings undergoing intervention for replacement of their heating system (identification of manufactured according to the criteria established by the specifications scheme) from July 2015 and December 2015;

B 2-6 Evaluation of the thermal requirements of the buildings for which the intervention and design of the new high-efficiency system in compliance with the specifications scheme from October 2015 and December 2015;

B 2-7 Installation of the new plants (replacement of two fossil fuel power plants and two biomass power plants with low efficiency) from January 2016 to December 2017;

B 2-8 Realization of protocol that defines the commitments of the subject owner of the building involved the replacement of the system during the implementation period of the project Life + and in a period "after LIFE from April 2015 from September 2015.

B2-9: Testing and scientific validation of the effects of reduction must be completed by the person in charge within the first quarter of 2018

Where
The definition of the real effects of reduction of CO2 emissions resulting from the actions described above, made in each pilot area identified by the partners (a pilot area for every Model Forest for each country), will be determined from the integrated analysis of data provided by the different pilot areas; 4 plants will be built in total for each partner country in each of the territories Model Forest as specified above (map attached)

When
From the Q1/2015 to Q1/2018; equipment replacement must be completed by the Q3/2016, testing and training of fund manager by the Q4/2016. Testing and scientific validation of the effects of reduction must be completed by the person in charge within the Q1/ 2018.

Constraints and assumptions:

The definition of the real effects of reduction of CO2 emissions will have to be unique for the types of substitutions identified for all project partners. The changes must be made through the use of high throughput technologies but at the same time readily available in the different countries of the partners. The reference period for the evaluation of the results at the end of the definition of avoided CO2 can not be less than one year and will have to continue beyond the end of the project Life +. The replacement of low-efficiency plants fueled by biomass should cover plants with an efficiency of no more than 60% while for the replacement of existing fossil fuel power plants will be of interest primarily manufactured outside the distribution network of natural gas (therefore fueled by gas or liquid Propane).

Beneficiary responsible for implementation:

UCVV

Responsibilities in case several beneficiaries are implicated:

UCVV for the Italian activities
CESEFOR for the Spanish activities

Expected results (quantitative information when possible):

• Generation of carbon credits by definition of the real effects of CO2 reduction actions implemented by the project.

• Construction of eight new plants for the production of thermal energy-efficient to replace low-yielding plants with a total power of at least 600 kW.

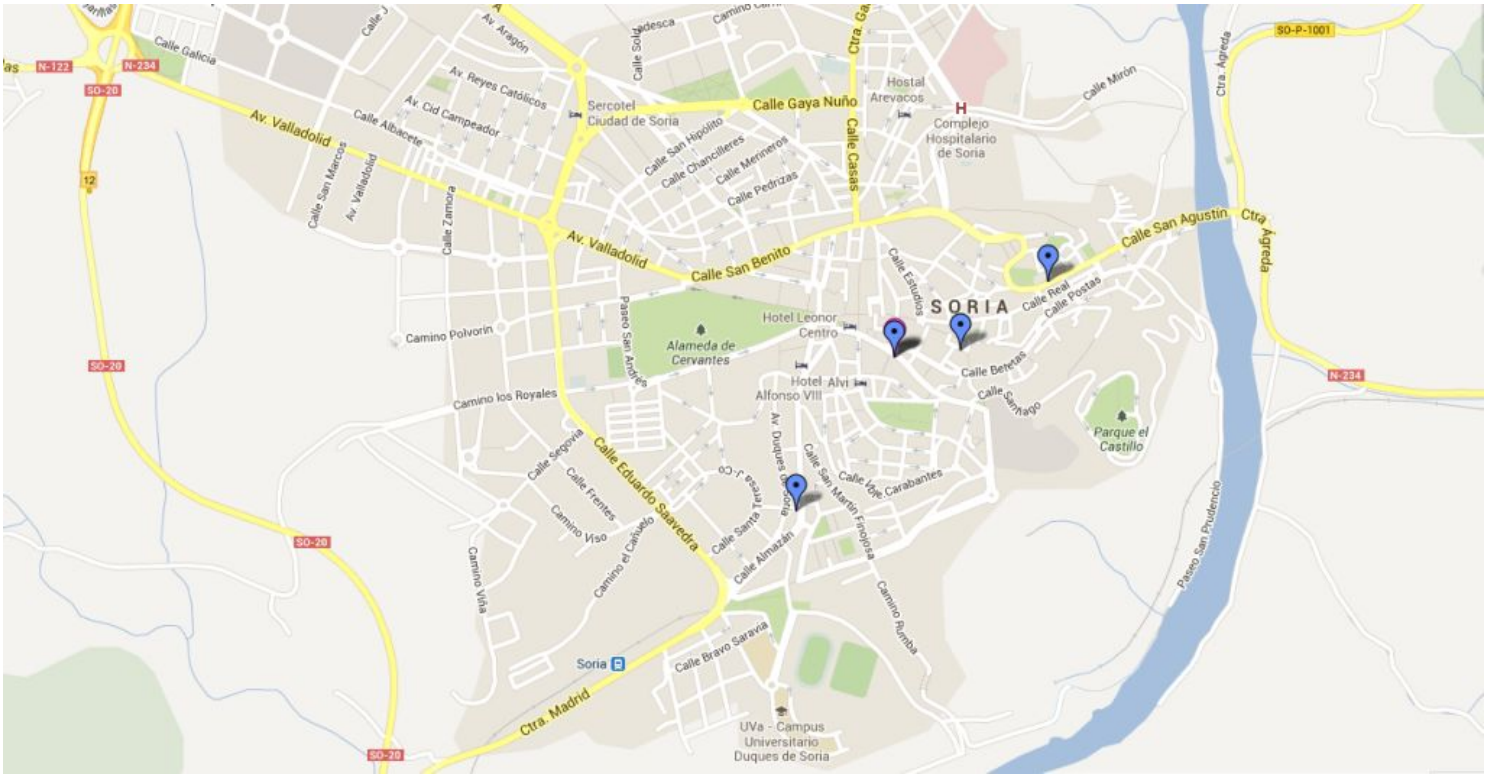
Indicators of progress:

• coordination meeting for setting of the shares between partners within the Q4/2014;
• definition of the specifications scheme shared among the partners for replacement of the heating-plants by the Q1/2015;
• analysis of what has been achieved (studies and implementation) in relation to any plant substitutions in the different partner countries: by Q4-2015 assessments, verification and validation by Q4/2017;
• identifying of the manufactured where we realize plants replacement: within Q3/2015;
• evaluation of the thermal requirements of the buildings for which the intervention and the design of new plants: within Q1/2016;
• Installation of high efficiency boilers within the Q3/2016;
• Average of B2 workshop per year: 2
• Validation of the technical assumptions: 100%

Name of the picture: Map of the Municipality of San Godenzo - Castagno d´Andrea

Wood chips biomass heating plant in Castagno D'Andrea

Name of the picture: Map of the Municipality of Soria - Spain



B. Implementation actions

ACTION B.3: Silvicultural interventions climate change mitigation

Description and methods employed (what, how, where and when):

What

1. Implementation of silvicultural demonstration for the production of work timber and carbon storage for a period of time longer than the current base line characterized by the use of wood for the production of thermal energy.

2. Proposal to adopt a specific action to be included in the Regional Development Programme (RDP) 2014-2020, at national and regional level, to support silviculture in order to produce work timber in areas which is currently the predominantly woody biomass for energy use.

3. Create a shared protocol to connect the forest management to the storage of CO2 resulting from the use of timber in the B1 action in the Model Forest area and calculation of potential opportunities generated for owners and forest users.

.

How - Each partner in charge of the national operations of this project will implement, in the territory of his Model Forest :

1. In a pilot area, a municipal scale, we have to prepare a mapping of forest areas where it would be potentially possible to produce work timber and where it currently uses, for the exclusive or predominant, as woody biomass for energy use.

2. 20 ha of forest operations, preferably in areas of public property, chosen from the areas identified with the mapping created in the previous step. The silvicultural operations, from the experience of the LIFE + PProSpoT (LIFE09 ENV/IT/000087) will have to demonstrate techniques to increase the production of work timber in which to store longer the CO2 through the production of long-lasting manufactured goods. Unlike the LIFE + PProSpoT in this project beyond the protection of sporadic tree species we will pay particular attention to all tree species are able to produce work timber and therefore capable of mitigating climate change even after use.

In addition, using data on the economic and financial assessments and those on climate change mitigation provided in the monitoring and control of this project will be advanced, both on a regional and national level:

1. a proposal of a protocol approved and shared between the partners of the project which, in the light of the results obtained by the action above concerning the silvicultural demonstration, provide the data for the quantification of carbon credits may be generated;

2. a proposal for the introduction of a measure in the RDP 2014-2020 support to forestry operations similar to those used in the demonstration areas of the LIFE + WoodForClimate. This in particular will encourage the establishment of forestry interventions aimed at mitigating climate change in the forests of private and public property.

3. a public invitation to local authorities to adopt the same strategy as the LIFE + project WoodForCLimate both in the identification of forest areas suitable for producing work timber (cartography), and to take action in these areas to mitigate climate change over a longer period of time (forestry aimed at the production of trees which could give wood for structural use).

For the preparation of an agreement PES after the project timelife will be involved a banking institution, with strong interests in the territory of the Model Forest (for example: Cooperative Credit Bank and Banca Popolare Etica) or companies belonging to professional associations (eg Confindustria) willing to recognize the value environmental, social and economic development of a local local wood aimed at mitigating climate change.

B3 tasks

B 3-0 Workshops (8). As for the other implementation actions, the common working methodology will be define during the first technical workshop organized in Firenze on December 2014;

B 3-1 Action report during each Steering Committee (8);

B 3-2 Realization of thematic cartography of forests where it is possible to produce wood for building (in pilot-area) from January 2015 to June 2015;

B 3-3 Silvicultural interventions on a total area of 40 hectares in the two Model Forest: Model Forest of Montagne Fiorentine in Region Tuscany-Italy and Model Forest of Urbión in Region Castile and Leon-Spain) from October 2015 to December 2017;

B 3-4 Proposal of introduction of measures aimed at supporting forestry timber production work through RDP 2014-2020 from July 2017 to March 2018;

B 3-5 Document / invitation to the promotion of forestry activities similar to those of the LIFE + WoodForClimate from October 2017 to June 2018.

Where - In the Model Forest of each state represented by the partners of LIFE + WoodForClimate.

When - from the Q1/2015 to Q4/2017

Constraints and assumptions:

The operations must be differentiated according to the type of forest ecosystem in which we will work. We will have also to pay particular attention to the presence of sporadic tree species which are able to produce valuable timber used for artifacts of long and very long lasting.

It will be important to pay attention to the ease of access to the areas where the forest operations will be carried out in order to increase the effectiveness demonstration.

Beneficiary responsible for implementation:

UCVV

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

• 2 maps, one for each Model Forest, wooded areas currently dedicated solely to the production of biomass for energy use and potentially also likely to produce wood for building;

• 40 ha of demonstration, approximately 20 ha for each Model Forest

• 2 Proposals for targeted interventions to support the production of wood for building, one for each state represented by the partnership of the LIFE + WoodForClimate

• 2 formal invitations to local governments, one for each state represented in the partnership of the LIFE + WoodForClimate, to adopt silvicultural strategy for the mitigation of climate change demonstrated with this project.

• 1 shared protocol to connect the forest management to the storage of CO2 resulting from the use of timber in the actions of B1 in the Model forest and calculation of potential generated for owners and forest users.

Indicators of progress:

Indicators of progress (max 2,000 characters including spaces)

Q2/2015 - cartography realized.

Q4/2015- 20% of forest operations carried out

Q4/2016 - 80% of forest operations carried out

Q4/2017 - 100% of forest operations carried out

Q1/2018 - Proposals for 2014-2020 to support RDP interventions aimed at the production of wood for building

Q2/2018 - Formal Invitation to local governments to adopt the strategy LIFE + WoodForClimate

Q2/2018 – Shared protocol realized

C. Monitoring of the impact of the project actions

ACTION C.1: Assessment of reduction of GHG and the amount of CO2 stored

Description and methods employed (what, how, where and when):

What

The actual reduction of CO2 emissions as a result of actions taken in the B1 phase and the potential for reduction in the event of widespread adoption of the proposed actions must be verified.

At this verification, made by the CNR, I.VA.LSA which is the scientific subject subcontractor must follow the detailed accounting of the amount of CO2 in tonnes, resulting from the comparison between the CO2 footprint of the structures built of wood and that they would have the same structure if built with high energy-intensive raw materials. UNCEM as responsible of the B1 implementation will lead the C1 action-monitoring of the impact. During each technical B1 workshops, a part of the agenda will be dedicated to the monitoring of the impact

How

The accounting of the actual reduction will be achieved through the proposed methodology developed inside the implementation action B1 (UCVV, the partner in charge of the B1 implementation is responsible of its impact monitoring).

In addition to the recognition of any experience / studies conducted on partner's territories will be conducted an analysis of the main kind of artifacts more widespread that could be wooden built and that are currently produced with raw materials high energy-intensive and / or high emission new CO2.

from this survey should emerge data about the techniques and materials used today in constructions and architectonics' guidelines to minimize the use of such materials. There also will be a refer to high efficiency energy standards for construction,

Public tenders for the creation of new structures will be launch under the B1 action

Analyzing projects for the construction of the new wooden structures will derive the data needed to perform the following calculations:

• calculating the amount of CO2 stored in wood products through the application of the draft standardprEN16449 " Wood and wood-based products - Calculation of sequestration of atmospheric carbon dioxide;
• Calculating carbon footprint for each kind of structures identified using Life Cycle Analysis (LCA) methodology
• comparison between the LCA of timber structures and those of the structures built with raw materials high energy-intensive and calculating of the amount of CO2 saved

Where

In the forest model territory (Montagne Fiorentine for the Italian partners and Urbión for the Spanish partner) for each partner involved

When

Approved on December 2014 by the first Steering Committee, a public tender for the construction of private buildings will be launched from January 2015 within the B1 action; From June 2015 to December 2017 the amount of CO2 stored could be calculated and realized the LCA's calculation for the kind of structures individuated; verification and scientific validation of the effects of reduction must be completed by the person appointed by March 2018.

Constraints and assumptions:

Kinds of structures that will be realized could also be different in different partner's territories but the processing for the application of the rules of calculation should be the same in Italy and Spain, and they will be the result of collusion between partners and subcontractors scientific subjects.

In particular, for the calculation of the LCA of the structures identified by the project will be conducted an accurate survey on existing databases to use when calculating those deemed most accurate for the purpose of the project; as well as any data gaps will be integrated with surveys carried out specially.

Beneficiary responsible for implementation:

UCVV

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

• Testing of the draft standard prEN16449 “Wood and wood-based products - Calculation of sequestration of atmospheric carbon dioxide”;
• Developing of a computational model for the accounting of CO2 emissions saved as a result of the replacement of high energy-intensive raw materials for construction with wood
• Development of a simulation model of the territorial effects of the widespread adoption of "best practice" proposals and accounting of CO2 emissions potentially saved at the level of the entire territory involved.

Indicators of progress:

• Number of structures identified in which the wood can replace energy-intensive raw materials
• number of applications received in response to the public tender for the realization by private wooden structures
• Number of structures actually realized / replaced for partners.
• Percentage increasing of wooden structures compared to the previous three years.
• Evaluation of the emission reduction (ton)
• Quantification of CO2 reductions as a result of the actions of your project and the potential of the whole investigation (ton);

C. Monitoring of the impact of the project actions

ACTION C.2: Verification of the amount of avoided CO2 emission with biomass heating and with replacement with high/low system(impact of B2 action)

Description and methods employed (what, how, where and when):

What

Must be verified actual reduction of CO2 emissions as a result of actions taken in the B2 phase. In this check, by the GESAAF University of Florence in Italy and the University of Valladolid in Spain, scientific subjects subcontractors must follow precise accounting of the amount of CO2 in tonnes, resulting from the replacement of existing plants. In this way we get an application protocol of the calculation for the types of substitutions made during the duration of the project, even taking into account any replacements made in each territory during the period of three years prior to the start of the project Life +. UCVV as responsible of the B2 implementation will lead the C2 action-monitoring of the impact. During each technical B2 workshops, a part of the agenda will be dedicated to the monitoring of the impact

How

The analysis proposed in the action B2, facilitate the identification of the most suitable buildings in which operations are carried out, including a part where they are reconstructed energy consumption and conversion systems used.

The processed data, collected in a geographic database that can handle any implementations, form the basis for identifying the CO2 emissions in the pre-intervention (boiler replacement), and, for buildings identified as being suitable for replacement of boilers, we can identify and quantify, through analysis and sample surveys, the greenhouse gases and the presence of other pollutants, including the assessment of total dust.

The analysis will be repeated in the post-intervention (boiler replacement), to verify the results obtained. The sampling will allow knowing the energy mix used and the energy conversion systems used and consequently allow the quantification of CO2 emissions of the entire field of study, both in the situation pre-intervention and post-intervention.

The results of the sampling will also be used for the development of a model, based on GIS, aimed at the realization of a simulation territorial time to quantify the emissions in the area of investigation.
In this way, it is equally possible to estimate the potential reductions of CO2 that would be achievable by extending the substitution of low-efficiency boilers with high efficiency boilers, as well as to estimate the reduction of emissions due to the replacement of boilers fired by fossil fuels with high boilers efficiency powered by renewable sources.

In addition, with this action effects monitoring, in the case of replacement by systems powered by biomass is not efficient to efficient systems, it is possible to quantify the renewable resources (firewood, etc) are spared due to the increase of the efficiency of conversion of the boilers used. This allows a more sustainable use of the resource and therefore this parameter sustainability will be quantified and monitored.

Besides the verification of the emissions along entire production chain of fuels, will be achieved through the comparison of all the variables included in the previous processes replacements and subsequent substitutions. The variables to consider are the CO2 emissions related to:

• processes for the production of fuels considered (fossil and wood)
• chains of transportation fuels considered (fossil and wood)
• qualitative characteristics of wood fuels;
• technical characteristics of the equipment used for the combustion of fuels (fossil and wood), especially in terms of efficiency in the plant output;
• processes of ordinary and extraordinary maintenance of technological equipment used;
• procedures for disposal at end of cycle facilities;

To this aim, the analysis model GEMIS (Global Emissions Model for Integrated Systems) will be used and sources offers, and implemented by IINAS Institut für Internationale Nachhaltigkeitsanalysen und Strategien (http://www.iinas.org).

Finally it will be realized a specific system for monitoring, even remotely, for pilot cases in order to constantly check the operation and consequently emissions. The monitoring system remotely, in relation to the

quantification of the reduction of CO2 emissions, is a first step towards the development and dissemination of a permanent observatory of the plants that could be of support to the regional administrations also for the quantification of renewable energy production in relation to the provisions of the Burden Sharing.

Where
In the territories of the pilot areas identified by each partner, but it will be possible to implement a spatial simulation of the potential effects of reducing emissions in the areas of model forest partner.

When
- Q1/2015 sample for testing chimneys through the analysis of direct emissions of air pollutants (CO2, SO2, NOx, dust, CO, H2 S, NH3) and for the analysis of greenhouse gas emissions (CO2, CH4, N2O, SF6), for the situation pre-implementation operations;
- Q2 and Q3/2015 to the overall analysis of emissions throughout the supply chain "from cradle to grave" situation in the pre-implementation operations;

- Q1/2017 sample for testing chimneys through the analysis of direct emissions of air pollutants (CO2, SO2, NOx, dust, CO, H2 S, NH3) and for the analysis of greenhouse gas emissions (CO2, CH4, N2O, SF6) for the post-implementation operations;
- Q2 and Q3/2017 to the overall analysis of emissions throughout the supply chain "from cradle to grave", in the post-implementation operations;

- Q3/2016 to Q3/2017 development of a simulation model for the evaluation of territorial potential reduction of CO2;

- Q2/2016 to Q1/2017 development and implementation of a specific system of remote monitoring, for the evaluation of plant operations and emissions.

Constraints and assumptions:

The methodologies employed in the action will be agreed with the Partnership and must be assumed as a shared method of working. The working methodology will be define and approve during the first B2 workshop on December 2014 in Firenze where all the working methodology will be discussed among the partnership.

Beneficiary responsible for implementation:

UCVV

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

• Development, according to the local characteristics of each partner, the system for the quantification of emissions on the basis GEMIS aimed at accounting for emissions;

• Development of a simulation model of the territorial effects of the substitution of fossil fuel plants and inefficient systems with high efficiency and powered by renewable energy and the accounting of CO2 emissions avoided;

• Development of a remote monitoring system for the continuous monitoring of the plants built for the certification of the proper functioning of the energy produced and the emissions avoided;

Indicators of progress:

• Validation of the methodologies and sharing of protocols to be followed;

• Assessment of emission reduction (t);

• Evaluation of the unit cost (€ / t) due to the reduction of emissions in the case of replacement of boilers fired by fossil fuels;

• Evaluation of the unit cost (€ / t) due to the reduction of emissions in the case of replacement of boilers fueled by renewable sources with low efficiency;

• Quantification of CO2 reductions as a result of the actions of your project and the potential of the whole territory of investigation (t);

• Quantification of the necessary investments in the area of investigation for the reduction of emissions (€) in relation to the constraint of local availability of biomass;

• Remote Control of the plants; • Quantification of renewable resources (biomass) saved through increased energy efficiency, both in the pilot cases which, through simulation, on the whole territory involved in the project.

C. Monitoring of the impact of the project actions

ACTION C.3: Assessment of costs and benefits deriving from the adoption of forest management

Description and methods employed (what, how, where and when):

The C3 action is the assessment of costs and benefits deriving from the adoption of forest management which, in the appropriate areas, allows to shift the focus from the production of one crop biomass for the production of roundwood and wood biomass (only residual) and evaluation of carbon credit generated on finished wooden product.

What
This action concerns the monitoring of forestry activities provided for in Action B3. In particular, it aims to:

1. verify the effectiveness of interventions silvicultural proposed, as regards both the quality potential of the timber producible in demonstration areas, both as regards the simultaneous protection of tree species sporadic and, therefore, biodiversity;

2. really assess the sustainability economic/financial of the proposed interventions and quantify the possible need for public support through tools such as the RDP 2014-2020.

3. Verification and validation of the protocol of correlation between the silvicultural actions taken and generation of carbon credits to be accounted on the woody artifact resulting from the actions themselves (connection with action C1).

UCVV as responsible of the B3 implementation will lead the C3 action-monitoring of the impact. During each technical B3 workshops, a part of the agenda will be dedicated to the monitoring of the impact

How
The effectiveness of silvicultural proposed will be evaluated both at the level of individual plants objective (in the case of forestry tree) of that population (in the case of forestry population). The first will be conducted on at least 30% of the plants selected target in the demonstration areas, in order to have a representative sample for each species and type of intervention. The verification will be conducted through indices of competition.

- For plants goal: to be recognized about 6,000 data on a sample of about 400 trees, will determine the coverage area of the foliage and its compression (overlapping with foliage of other competitor trees). Subsequent to the implementation of the intervention will be measured the space available for its development and its growth in view of the subsequent action silvicultural. This can be synthetically evaluated by measuring before and after surgery, 4 crown radii and the distance to this by the foliage of the nearest competitors. It will also calculated the index of competition Hegyi (**Hegyi Index**) before and after the implementation of the intervention.

- for interventions on trees population: structural surveys will be carried out on the main types through the creation of 2 permanent transects for each Model Forest where it will be calculated various indices including the index of **Cox** (horizontal diversity), indices **VE** (vertical diversity), **SHL** index of species diversity of Shannon for layers and index of **Pretzsch**.
The comparison of the indices listed above and in particular the SHL specific diversity of for layer and the

index of Pretzsch, calculated before and after the implementation of the interventions, will assess changes in species diversity, the weight of each species and particular of those rare, both in the various social strata in the entire population. It should be noted that the index of is sensitive relative abundance of rare species (sporadic species).
The evaluation of the effectiveness of interventions on populations will be carried out on plots comparing particles treated areas and witness.

For the effects on biodiversity will also take account of the ornithological component providing a monitoring network to test changes as a result of silvicultural treatments. This monitoring based on listening points will be repeated in 2 areas witness in the absence of silvicultural operations. The indicators that will be used as a reference address the specific diversity indices and those of environmental preference.

For this activity, for the Italian partners, will be mobilized subcontractor relationship with CRA-SEL (Council for Agricultural Research). CESEFOR will define the corresponding subcontractor during the first months of the project duration.

For the evaluation of sustainability economic / financial of this proposal of forestry (single tree silviculture and of population) will be recognized costs for the performance of technical activities in the forest, the costs of farming operations and any income in any type of forest in which interventions will be made. Also, do not referring to the single intervention, but to the entire crop cycle, will be taken into account the investment plan, the costs and revenues. These assessments will be compared with economic cycles resulting from the management of traditional coppice through the use of indicators easily understood by operators and technicians, as the NPV (Net Present Value), the SRI (internal rate of return) , the ratio C / B (cost / Benefit) and Bn (value of the forest in the medium to long term). By doing so we will be able to compare, for a crop period of about 100 years, investments, costs and revenues of the ordinary management of the coppice and those which would result from forest management aimed at the production of timber work to increase the length of time carbon storage.

For the verification and validation of the protocol will proceed according to the method already described in the action C1 with regard to the generation of carbon credits to be accounted for on the woody finished product, and verifying the change of type of assortment produced due to the actions silvicultural proposals.

The results of this comparison are then organized in popular form to be used in the campaign of communication and dissemination.

For this activity, for the Italian partners, will set up a subcontracting relationship with the Department of GESAAF (Agrarian and Forestry Systems Management) of the University of Firenze. See their attached letter of support in the relevant section.

Where
The measurements for the silvicultural will be made in the forest of pilot area identified by each partner, within the demonstration areas and areas witness. The processing will be carried out by own means and scientific subjects subcontractors in and for Italian partners and with the for the Spanish partners.

When

This activity will take place between the Q1/2015 and Q1/2017.

Constraints and assumptions:

The measurements of time and cost can be made either by staff of regional partners on the instructions and procedures set out by subcontractors scientific.

The criteria for relief and development should be the same in Italy and Spain, will be the result of collusion between partners and subcontractors scientific subjects.

Beneficiary responsible for implementation:

UCVV

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

• 1 Report on the results of monitoring of forest operations carried out
• 1 Report on the indicators to be used for the evaluation of interventions and in the authorization phase.
• 1 Report on the economic opportunities linked to the enhancement and protection of sporadic species and the extent of any public support via Regional Development Programme 2014-2020 depending on the type of wood and the type of silvicultural intervention.

• 1 Report of evaluation of the protocol for the correlation between the silvicultural actions taken and generation of carbon credits to be accounted for on the woody artifact resulting from the actions themselves (connection with action C1).

Indicators of progress:

Q2/2016 => conclusion of the findings in the forests

Q4/2016 => Reports on the results of monitoring of forest operations carried out

Q4/2016 => Reports on indicators to be used for the evaluation of interventions and in the authorization phase.

Q1/2017 => Reports on the economic opportunities.

Q2/2017 => Reports of protocol correlation forestry activities / manufactured woody / carbon credits generation

D. Communication and dissemination actions

ACTION D.1: COMMUNICATION AND DISSEMINATION ACTIONS

Description and methods employed (what, how, where and when):

What: This action defines the overall strategy, timetable and procedures for LIFE+ WOOD FOR CLIMATE dissemination activities to be developed during the project timelife. It also defines the various target groups to be reached and the various communications channels used to reach them to be used to achieve successful dissemination and reach the largest possible audience.

How:

D1 Drafting annual communication report and updating of the communication plan

At the end of the annual seminar on December on a yearly basis, CESEFOR will publish (for an internal use among the partners) a communication report documenting all communication activities that have occurred and their respective indicators during the previous year (i.e copies of press articles, number of press conferences, congress attendances, number of website connections…). There will be three communication reports during the project timelife (December 2015, December 2016 and December 2017). On the same date, the communication plan drafted during the preparatory action and approved during the first Steering Committee on December 2014 will be updated.

Target audience of the communication activities

European Commission;

- **International and Mediterranean Model Forest network;**
- **Consortium partners;**
- **The project management entities;**
- **Regional and local authorities which have built their part of their territorial strategy around environment resources;**
- **Forest owners hence bring new business development opportunities;**
- **Experts, foresters, technicians, operators working in the fields;**
- **General public using the forest as recreational area.**

D2 Creating communication materials

These activities will be prepared during the first six months of the project, from July to December 2014, approved for the first Steering Committee on December 2014 with the communication plan and launched officially during the first weeks of 2015 during:

D2-1Development of the project and network identity: to design a professional logo, an image by which the project can be easily identified.

D2-2 Website: In order to support general dissemination activities, the LIFE+ WOOD FOR CLIMATE website will be created as the main tool for presenting the project to the outside audience. The website is just one of the elements that integrate the complete dissemination plan of the project. The website will be used to promote events and action results or even to push key messages on the home page. Besides these project news, we will open three specific page, one page with a discussions forum open to stakeholders and main target audience, one page wiki with a discussion forum between partners (in a reserved area) and one page intranet for document exchange between the project partners and products. Cooperation between the partners will be ensured on a daily basis thanks to the intranet site of collaborative work where the partners will follow all new contributions (news, documents, deliverables, minutes…).

The website will be used after the conclusion of the project as a common platform to the Model Forest network. Website statistics (Google analytics) will be reported on a yearly basis about the number of visits, the type of visitors (e.g. classifications per countries) and their interest, i.e. the most visited pages and downloaded files.

D2-3 Social networks: creation of accounts within the most popular social networks. Indeed, we believe that they are strong attractors of attention that allow us to multiply significantly raise awareness of the issues and facilitating the involvement of the project.

D2-4 Newsletter: The project newsletter will convey a description of the different partners as well as brief notes of interesting news items that are relevant to the fire prevention community. The newsletter will be published in PDF six times a year basis. Two or three pages. Will be distributed as an attachment to Sherwood magazine. Each partner will establish a diffusion list of 2500 contacts (in total 7 500 people regularly informed).

D2-5 Notice board: a notice board will be prepared including a short summary, objectives and partnership of the project. The notice board will include the LIFE logo, the EU flag and the partner's logo. The master will be redacted in English but the partners will choose whether to translate it into their native languages.

4 notice boards will be distributed to each partner and one of them will be displayed in the reception of each partner office. Each project representative invited to a congress/seminar will plan to bring a project notice board.

Target audience two main target audience groups identified: scientific and forest management communities (including the Model Forest network) in one hand and in another hand other stakeholders and citizens. Coherence and consistency between the two is maintained, but the language and the level of detail given is adapted depending on the target.

The partners have identified the main congresses where the project will be presented in the form of oral communications or on a notice board.

This list will be regularly updated and will help us to select, prioritize and create a balanced calendar to optimize the effort devoted to this task.

D4-2 Kick-off, annual seminar and final conference

For the kick-off (action A7), a list of stakeholders and forest managers will be invited for the project presentation on Dec. 2014. The same audience will be invited after the first year of the project in Dec. 2015, to a yearly open seminar where the project progress will be diffused to a target audience of 100 people. Four different partners will host these seminars. The first one will be in Firenze.

D4-3 Communication with other projects

The partnership has identified a number of other Life projects dealing with similar issues to our project (BIOSIT, CARBOMARK, PPROSPOT, LAIKA, SORIA CO2CERO, OPERATION CO2). Contacts have already been made with them. These contacts are being taken through personal communication (CESEFOR and University of Valladolid which is the OPERATION CO2 coordinator, CESEFOR and the City of Soria which is the SORIA CO2CERO coordinator), exchange of information (UNCEM and Regione Veneto which is the CARBOMARK coordinator). The experts from these projects will be invited for the kick-off on December 2014 (A7), a specific workshop for the following workshop will be included to the agenda of the annual seminar.

D5 Layman report

Following the good layman´s reports submitted by LIFE projects and highlighted on the EC website, LIFE+ WOOD FOR CLIMATE will produce its layman report in paper and electronic format at the end of the project. It will be presented in English and in the partner's language in the same page. This report will have around 10 pages and will present the project, its objectives, its actions and its results to a general public. The layman report will be prepared and published for the final conference.

Each partner will receive 500 copies.

D6 Publications

Two publications will be edited: one technical manual to promote the construction of wooden artefacts (eg houses, shelters, furniture) and one technical manual to promote the replacement of heating systems powered by fossil fuels or low-efficiency systems powered by wood;

Where: partners territories and other EU and worldwide regions

When: during all the project timelife

Constraints and assumptions:

The assumptions on which the communication activities are based: communication activities has already commenced with the early phases of the project.

Operational risks (linked to all actions): the partnership demonstrates a poor cooperation for lack of commitment and/or changes in staff/organization (probability low, impact medium). The strong level of interest from the European and National Institutions (consequently a specific focus to our project and its results), the high budget, the limited number of partners and the strong motivation of the institutions within the project would resolve in a simple management structure with immediate transmission to individual team members; positive project leadership, strong monitoring, and high level of communications among the partnership and the stakeholders are key ingredients for prevent and manage possible issues;

Political risks (linked to all actions): poor stakeholder involvement (probability low, high impact). Without involvement from our stakeholders it will not be feasible to reach our objective to draft a credit carbon programme but the positive interest demonstrated during the project idea dissemination authorizes us to

think that the probability is low. Political elections and political changes will not have impact due to the profile of our partners

Financial risks (linked to all actions): (probability medium; high impact), with the financial crisis, the public funds dedicated to the project can be cut. According to the strategic interest of the project at the European level, our objective will be in this unfavorable case to find another source of funding. Constraints

The constraints on which the communication activity is based are:

Lack of time from stakeholders to effectively assist in the communication process

Beneficiary responsible for implementation:
CESEFOR

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):
Expected results

D1 COMMUNICATION REPORT: 3 communication reports (2015,2016,2017) and one communication plan updated twice during the project timelife (M20, M30 and M42);

D2 COMMUNICATION MATERIAL: 1 logo, 1 website, 100 monthly connections, 3 social networks accounts, 21 newsletters, 7 500 contacts within the mailing list of the project, 12 notice boards;

D3 MEDIA: 4 press conferences by the hosting partner during the project timelife corresponding to the annual conference on December + 4 final press conference per for presenting the project results + 4 kickoff press conference for presenting the project objectives

• 3 press releases per partner during the project timelife
• 3 press articles at least per partner per year from 2015 to 2018
• 500 DVD copies showing the implementation experience

D4 PROMOTIONAL EVENTS

• 1 kick-off (dec 2014)+ 3 open seminars (dec 2015-dec 2016-dec 2017) + one final seminar on June 2018 Total audience: 400 participants
• Three specific workshops with the other Life+ projects
• Two participations to external seminar per partner for presenting the project

D5 LAYMAN REPORT

• 1500 copies (500 per partner)

D6 PUBLICATIONS

• Two publications: available on PDF version. Around 50 pages with photos in color. Available in all consortium languages (Italian, Spanish and English) downloaded from the project website.

Indicators of progress:

ACTION	Indicators of progress	Target
D1 – Communication plan and communication report	Number of updating of the communication plan	3
	Number of communication reports	3
D2 – Communication materials	Number of dvd copies distributed	500
	Number of website connections per month	100
	Number of notice boards (roll up) exposed	12
	Number of accounts in social networks	3
	Number of e-newsletters	21
	Number of people that received the e-newsletter	2500
D3 – Media	Number of press release	20 at least (1 per partner for each dissemination event)
	Number of press articles	27 (9 per partner)
D4 – Promotional events	Number of participants in the promotional events (5 in total)	400
	Average of networking meeting per year with other Life+ experts	1
	Participation of the other Life+ projects	100%
D5 – Layman report	Number of layman report copies distributed	1500 (500 per partner)
D6 – Publication	Number of publication copies distributed downloaded	3000
D7- After Life Communication plan	Project’s website operational and on line (including the afterlife)	4 + 5 = 9 years

Name of the picture: External events calendar (will be updated each year)

D1 - WOOD FOR CLIMATE

D. Communication and dissemination actions (obligatory)
D1 Communication and dissemination

D4-1 Presentations at external conferences and events

The partners have identified the main congresses where the project will be presented in the form of oral communications or on a notice board.
This list will be regularly updated and will help us to select, prioritize and create a balanced calendar to optimize the effort devoted to this task.

Event name	Place	Date	Target Audience	Type of participation	Leading partner
COFO – 22sd session	Roma Italy	23-27 June 2014	FAO members	tbd	UNCEM and UCVV
Expobioenergia	Valladolid Spain	October 2014	The entire bioenergy value chain:	Oral presentation and stand	CESEFOR
European Forest Week	Tbd	December 2014	UNECE Timber Committee and the FAO European Forestry Commission-government, NGOs	Oral presentation	CESEFOR
Mediterranean Forest Week (event organized each two years)	Barcelona, Spain	2015	The political administrative and technicians authorities at national, regional and local level of Mediterranean territories	Oral presentation	CESEFOR

E. Project management and monitoring of the project progress

ACTION E.1: MANAGEMENT, COORDINATION AND MONITORING

Description and methods employed (what, how, where and when):

What: These actions will be focused on the effective administrative and financial coordination and proper implementation of the project and to measure the effectiveness of the project actions as compared to the initial situation and the objectives and expected results

How:

E1 Project management

The principal beneficiary will undertake the effective administrative, technical and financial coordination and proper project implementation. The Project Management Team (PMT) will include:
- The Project Management Team leader

- The project manager

- The external assistance

The PMT will be selected following a strong experience in the project management. To reinforce the team, UNCEM will hire two senior experts for acting as Projct Management Team Leader and Project Manager respectively. UNCEM will launch a public tender for selecting an external assistance on financial and administration tasks. They will be in charge to put in place the internal and reporting procedures, to draft the monitoring check-list (E2), to plan quarterly conference calls, to build specific tools (reporting form which will have to filled in by the partner during each reporting, to build an accounting tool where all project expenditures will be entered by actions and budget line using as a specific accounting, time sheets by action allocation and calculation of hourly rate).

The PMT will start and implement the project according to the descriptions of the actions available on the application. and the partners will implement the part of the project for which they will be responsible on due time according to the descriptions of the actions.
The PMT will be responsible for the overall management of the project and the timely preparation of the reports that will be submitted to the EC (inception, intermediate and final reports with the payment request). The work of the Project Management Team will secure the effective communication and coordination among the partners and external institution. The PMT will be responsible for the overall monitoring of the project undertaking the quarterly conference call reviewing progress of each action with the technical representative and financial point with the financial officer of each partner.

Each beneficiary will constitute a team with two peoples at least (one of them acting as project manager); these people will participate to the quarterly conference call.

The beneficiaries will archive for audit purposes all documents.A structure management is available within the "Pictures" section below.

E2 Monitoring of the project

This action was specifically designed to measure the effectiveness of the project actions as compared to the initial situation and the objectives and expected results. For the sound monitoring of the project's activities a "monitoring check-list" will be developed during the preparatory actions updated twice a year during the Steering Committee that will include the full methodology for the monitoring of the project's activities.

The monitoring check-list will describe:
- the indicators of the project
- the party that will be responsible for the monitoring of each indicator
- the sources of information that will be used for the monitoring of each indicator
- the assessment criteria for each indicator
- the time-frame of the assessment for each indicator
- the target numbers (where applicable) for each indicator and for different phases of the project.

The monitoring check-list will be prepared by the PMT (see E1) during the preparatory actions (A5) and it will be presented during the first Steering Committee on Dec. 2014 distributed to all partners, for their own monitoring and reporting during the quarterly conference call.

The PMT will be responsible for the overall monitoring of the project.

E3 Steering Committee (SC)

It is the supreme organ of decision in which to debate and to decide on the Coordination and Management of the project. The SC will undertake the strategic decisions. The PMT will circulate previously among the partnership the SC rules which will have one authorized representative by partner. The frequency of the SC meetings will be twice a year (June and December). The SC will be chaired by the principal beneficiary and the hosting partner.

The SC will attend to these tasks:

1. Approving the SC internal rules, the different reports and the updated “monitoring check-list”;
2. Examining, on a regular basis, the situation regarding the project’s progress, the responsibility and technical contribution of partners, adherence to the timetable; establishing the “rules of play”;
3. Taking decisions concerning any deviation or possible scheduling or re-scheduling of the project which may be deemed necessary in order to ensure the concrete implementation of project activities within the imposed timeframe;
4. Adopting a new workplan and timetable which is submitted to the Life+ programme in case of a change in direction or major changes in the project;
5. Approving the communication plan drawn up by the partner responsible of the relevant component ;
6. Analysing, on a regular basis, the results achieved by the project;
7. Ensuring and supporting the definition and implementation of a policy of dissemination of result of the work undertaken ;
8. Approving the project final report after assessing the qualitative and quantitative compliance of the project with the indicators chosen by the project itself ;
9. Checking that financing is granted in full respect of the principles of sound financial management, correctness and transparency, to avoid any conflict of interest ;
10. Ensuring maximum dissemination of the project results.

E4: Audit

The coordinating beneficiary will selected after a public tender an independent auditor who will certify the reported expenditures in the final report before sending it to the EC. The independent auditor will verify the statement of expenditure and revenue in compliance with national legislation and accounting standards and LIFE programme.

E5: Networking with other projects

We will provide a platform for networking of all previous and current LIFE+ projects and Interreg project with a focus on the credit carbon/biomass and forest management in Mediterranean area, through which scientific information and best practices will be exchanged. More specifically, through the project an effort will be made to link the previous and current Life+ projects.

From the beginning of the project (A7), the consortium will be connected to six other LIFE+ projects thanks to the connection existing between partners:

• **BIOSIT -** GIS-based planning tool for greenhouse gases emission reduction through biomass exploitation LIFE00 ENV/IT/000054 – Existing link between University of Florence as principal beneficiary and UNCEM/UCVV belonging to the same region Tuscany;
• **CARBOMARK** - Improvement of policies toward local voluntary carbon markets for climate change mitigation LIFE07 ENV/IT/000388 – Existing link between Regione Veneto, principal beneficiary of the project which is currently in process to be a Model Forest and Mediterranean Forest Model Network;
• **P.Pro.SPO.T. -** Policy and Protection of Sporadic tree species in Tuscany forest LIFE09 ENV/IT/000087 – Existing link between UNCEM/UCVV and the Tuscany region;
• **LAIKA -** Local Authorities Improving Kyoto Actions - LIFE09 ENV/IT/000200 – Existing link between UCVV and the City of Milano which the principal beneficiary of the Laika project;
• **Soria CO2Cero –** Urban Environmental Corridor CO2Zero, territorial axis for a sustainable culture in the city of Soria - LIFE09 ENV/ES/000437 – Existing link between Cesefor and the City of Soria;
• **OPERATION CO2 - "Operation CO2" -** Integrated agroforestry practices and nature conservation against climate change LIFE11 ENV/ES/000535 - Existing link between University of Valladolid, principal beneficiary of the project and CESEFOR belonging to the same region Castile and León;

In order to bring together forester and scientists from the projects mentioned above, a workshop will be organized with focus on carbon management during kickoff on December 2014. In this workshop, scientists and forester who participated in the projects mentioned above (10 persons) will be invited to share their experiences and contribute propositions for the best implementation of the project. Moreover, 3 forester engineers from other Mediterranean countries and members of the Mediterranean Model Forest network (e.g. Tunisia, Morocco, Algeria) will be invited by the European partners to participate in the workshop. See their letter of support. These experts will be informed and familiarized to the credit carbon and biomass concepts in order to promote the idea of establishing similar best practices in their countries. These external experts (Life+ projects and Mediterranean Forest Model network) will be regularly invited to the annual Expoenergia seminar organized by CESEFOR in Valladolid on October each year and for the final conference for updating the shared experiences.

E6: After LIFE Communication plan

The "After-Life communication plan" will describe how the partners plan to continue and develop the actions that will have been initiated through this project, after the end of the project. It will give details on the actions that will be carried out in the future and it will form a separate chapter of the final report (Dec. 2017).
This action aims to ensure the sustainability of the project actions: all the project results will be maintained after the end of the project, the indicators will be regularly presented during the annual MedForum and Expoenergia event and the DVD showing the experience will be diffused among the Model Forest Network

Where: The Project HQ will be located in Firenze in the UNCEM office

When: During the entire project life from Q3/2014 (M1) to Q2/2018 (M48) adding three months for the project closure. On a regular basis by the PMT and the partner team, on a quarterly basis with the conference call and on a six-monthly basis by the SC.

Constraints and assumptions:

The constraints which can have a negative impact for building the project are:

• Delay of the selection of the project management team
• Unavailability of the other selected Life+ projects: BIOSIT, PPROSPOT, SORIA CO2CERO, CARBOMARK, LAIKA and OPERATION CO2
• A significant deterioration in the financial situation of the beneficiaries and their co-financing
• A significant deterioration of the social conditions in the selected areas
• Non-availability of pilot sites for reasons of natural disasters (pest, forest fires...)

The assumptions which we have made for building this project are a full involvement of the consortium partners and the stakeholders designated by each beneficiary. Availability of adequate resources on each beneficiary team for the submission of correct financial (audit) and administrative data (reports).

Beneficiary responsible for implementation:

UNCEM

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

E1: this action will result in a well-organised team, which will effectively deal with all the s management, financial and administrative issues that will be raised during the project implementation / 15 quarterly conference calls

E2: A well managed project reaching its objectives, without serious conflict between the partners, without irregularities and with smooth reporting to the LIFE programme. One “monitoring check-list” approved by the Steering Committee and updated on a quarterly basis during the conference calls

E3: Eight Steering Committee meetings

E4: 0 financial irregularities.

E5: The main result of this action will be the organisation of experts workshops, which will transfer to the project the knowledge and experience gained from similar projects in other Mediterranean countries (members or not to the Mediterranean Model Forest network). 5 expert workshops (1 during the project Kickoff, 3 during the Expoernergia forum on October in each year in Valladolid and 1 final conference).

E6: The "After-Life communication plan" will be the main deliverable of this action. The plan will be presented in English (project´s language), in paper and electronic format, and will form a separate part of the final report.

Indicators of progress:

ACTION Indicators of progress Target

E1 – Project management Deliverables on time 100%

Number of participants in the Conference call 1 participant per partner (minimum)

Average of conference call per year 4

E2 – Project Monitoring EC reports on time 100%

Average of the update of indicators checklist 4

E3 – Steering Committee Number of participants in the Steering Committee meeting 1 participant per partner (minimum)

Average of Steering Committee meeting per year 2

E4 - Audit Financial documents kept 100%

Average of the expenditures certification during the project duration 1

E5 - Networking Average of networking meeting per year 1

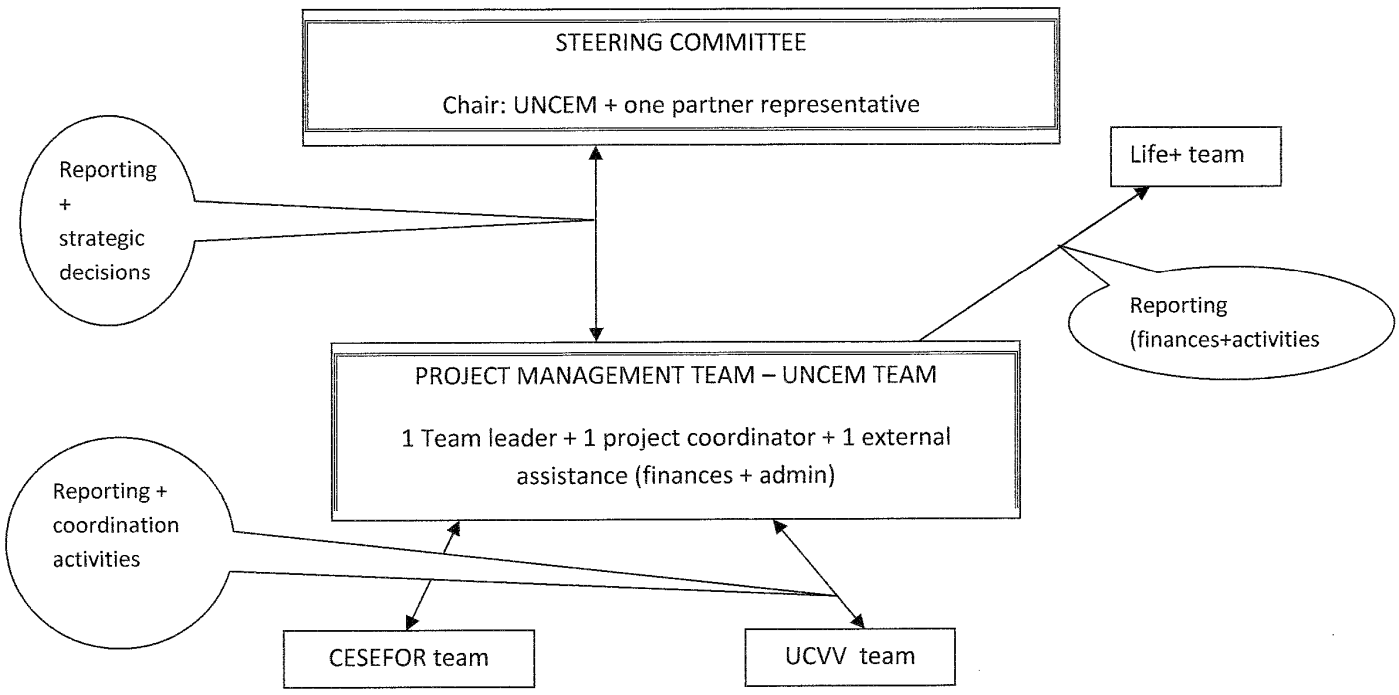
Participation of the other Life+ projects 100%

E6- After Life Communication plan Project’s website operational and on line (including the afterlife) 4 + 5 = 9 years

Name of the picture: Wood for climate - Structure management

WOOD FOR CLIMATE

MANAGEMENT STRUCTURE OF THE PROJECT



DELIVERABLE PRODUCTS OF THE PROJECT

Name of the Deliverable	Number of the associated action	Deadline
Accounting tool drafted by the external assistance in excel format including a timesheet template and a audit trail	E 1	01/11/2014
Steering Committee internal rules and list of permanent and substitute member (one by partner) drafted by the external assistance and approved by the consortium	E 1	01/11/2014
Accounting tool drafted by the external assistance in excel format including a timesheet template and a audit trail	A 1	30/11/2014
Communication and dissemination plan - Will be used under the action D	A 1	30/11/2014
Drafting the indicators check-list for the project monitoring - Will be used under the action E2	A 1	30/11/2014
Drafting the public tender for private buildings construction - Will be used under the action B1	A 1	30/11/2014
Common methodology report drafted during the first technical workshop - Firenze - Italy	B 1	31/12/2014
First Steering Committee minutes and decision report signed by each representative of consortium member	E 1	31/12/2014
First press conference for the kick off meeting	D 1	31/12/2014
Minutes of the first B2 workshop - Firenze - Italy	B 2	31/12/2014
Minutes of the first B3 technical workshop - Firenze - Italy	B 3	31/12/2014
Minutes of the first technical B1 workshop - Firenze - Italy	B 1	31/12/2014
First newsletter (every two months on pdf version)	D 1	28/02/2015
Inception report	E 1	31/03/2015
Indicators of project monitoring (updated each quarter for the corresponding conference call)	E 1	31/03/2015
Specifications report	B 2	31/03/2015
Analysis of the already realized experience (studies and / or achievements of buildings / structures in wood) in the different partner countries	B 1	30/04/2015
Minutes of the second B2 workshop - Soria - Spain	B 2	30/06/2015
Minutes of the second B3 technical workshop - Soria - Spain	B 3	30/06/2015

Minutes of the second technical B1 workshop - Soria - Spain	B 1	30/06/2015
Second Steering Committee minutes	E 1	30/06/2015
Overall analysis of CO2 emissions	C 2	30/09/2015
Report of the manufactured plant identified for replacement	B 2	30/09/2015
Minutes of the third B2 workshop - Firenze - Italy	B 2	31/12/2015
Minutes of the third B3 technical workshop - Firenze - Italy	B 3	31/12/2015
Minutes of the third technical B1 workshop - Firenze - Italy	B 1	31/12/2015
Third Steering Committee minutes	E 1	31/12/2015
Yearly analysis of the achievements	B 2	31/12/2015
Evaluation report	B 2	31/03/2016
Fourth Steering Committee minutes	E 1	30/06/2016
Mid-term report with a payment request (intermediate M24)	E 1	30/06/2016
Minutes of the fourth B2 workshop - Soria - Spain	B 2	30/06/2016
Minutes of the fourth B3 technical workshop - Soria - Spain	B 3	30/06/2016
Minutes of the fourth technical B1 workshop - Soria - Spain	B 1	30/06/2016
Fifth Steering Committee minutes	E 1	31/12/2016
Minute of the fifth B2 workshop - Firenze - Italy	B 2	31/12/2016
Minutes of the fifth B3 technical workshop - Firenze - Italy	B 3	31/12/2016
Minutes of the fifth technical B1 workshop - Firenze - Italy	B 1	31/12/2016
Protocol of the common building specifications	B 1	31/12/2016
Reports on indicators to be used for the evaluation of interventions and in the authorization phase.	C 3	31/12/2016
Reports on the results of monitoring of forest operations carried out	C 3	31/12/2016
Reports on the economic opportunities.	C 3	31/03/2017
Minutes of the sixth B2 workshop - Soria - Spain	B 2	30/06/2017

Minutes of the sixth B3 technical workshop - Soria - Spain	B 3	30/06/2017
Minutes of the sixth technical B1 workshop - Soria - Spain	B 1	30/06/2017
Reports of protocol correlation forestry activities / manufactured woody / carbon credits generation	C 3	30/06/2017
Second progress report (intermediate M36)	E 1	30/06/2017
Sixth Steering Committee minutes	E 1	30/06/2017
Action B1 final report: state of the art, implementation, verification, validation and conclusions	B 1	31/12/2017
Action B2 final report: state of the art, implementation, verification, validation and conclusions	B 2	31/12/2017
Annual communication report presented during the Steering Committee organized on December each year in Firenze	D 1	31/12/2017
Minutes of the seventh B3 technical workshop - Firenze - Italy	B 3	31/12/2017
Minutes of the seventh and B2 final workhop - Firenze - Italy	B 2	31/12/2017
Minutes of the seventh and final technical B1 workshop - Firenze - Italy	B 1	31/12/2017
Report of the amount of new CO2 avoided. Yearly update. Last report on December 2017	C 2	31/12/2017
Seven Steering Committee minutes	E 1	31/12/2017
The minutes of the B2 workshops (7) from Q1/2015 to Q4/2017 will include a section referring to the monitoring of the impact	C 2	31/12/2017
Drafting a proposal document for the Regional Programme of each Region (Tuscany and Castile and León)	B 3	31/03/2018
Report of the reduction of greenhouse gas emissions and the amount of CO2 stored. Yearly update. Last report on March 2018	C 1	31/03/2018
Action B3 progress report (a progress of the action will be done during each Steering Committee)	B 3	30/06/2018
After Life report	E 1	30/06/2018
Eight and last Steering Committee minutes	E 1	30/06/2018
Last newsletter (nº21)	D 1	30/06/2018
Layman report	D 1	30/06/2018

Minutes of the eight and last B3 technical workshop in Firence or Brussels (Committee of Regions)	B 3	30/06/2018
Publication of the document "Invitation to the forestry activities"	B 3	30/06/2018
The minutes of the B1 workshops (8) from Q1/2015 to Q2/2018 will include a section referring to the monitoring of the B1 impact	C 1	30/06/2018
The minutes of the B3 workshops (8) from Q1/2015 to Q2/2018 will include a section referring to the monitoring of the B3 impact	C 3	30/06/2018
project DVD	D 1	30/06/2018
Final report (M48 + three months after the project closure)	E 1	30/09/2018

MILESTONES OF THE PROJECT

Name of the Milestone	Number of the associated action	Deadline
Selection of the project management team and designation of one project team per partner	A 1	30/09/2014
Kick-off with the EC represenatives in Brussels	A 1	31/10/2014
Approval of the Indicators check-list by the First Steering Committee	E 1	31/12/2014
Approval of the communication and dissemination plan by the Steering Committee during its first meeting	E 1	31/12/2014
Approval of the communication plan during the first Steering Committee on December 2014	D 1	31/12/2014
Approval of the public tender for the construction of three private building by the First Steering Committee - Firenze - Italy	B 1	31/12/2014
Approval of the public tender for the replacement of the heating systems during the first Steerig Committee	B 2	31/12/2014
Common working methodology for the B3 action (discussed and approved during the first technical workshop in Firenze on December 2014)	B 3	31/12/2014
Creating the communication materials	D 1	31/12/2014
Defining a common methodology and approach between partners during the first technical workshop - Firenze - Italy	B 1	31/12/2014
First Steering Committee with one designated partner representative	E 1	31/12/2014
First annual seminar in Firenze + second `press	D 1	31/12/2014

conference		
First coordination meeting with the consortium and common methodology of work for this action - Firenze - Italy	B 2	31/12/2014
First expert meeting of the Life+ projects networking	E 1	31/12/2014
Kick-off	E 1	31/12/2014
Kickoff meeting + First networking meeting in Florence	D 1	31/12/2014
Launching of the project website	D 1	31/12/2014
Preparation of the project kick-off	A 1	31/12/2014
State of the art	A 1	31/12/2014
Launching of the public tender (B1 action)	C 1	31/01/2015
Launching of the public tender for the construction of three private buildings	B 1	31/01/2015
Common specifications for the woody buildings: trees species, construction techniques...	B 1	31/03/2015
Definition of the specifications scheme for replacement of the heating-plants	B 2	31/03/2015
First quarterly conference call	E 1	31/03/2015
Sample for testing chimneys through the analysis of direct emissions of air pollutants and for the analysis of greenhouse gas emissions	C 2	31/03/2015
Starting of the building construction (new public and private buildings)	B 1	31/03/2015
Starting of the construction of the public and private buildings (B1 action)	C 1	01/04/2015
GIS mapping of the selected forest areas	B 3	30/06/2015
Plants identification for replacement	B 2	30/09/2015
Starting of the silvicultural interventions	B 3	01/10/2015
Starting of the silvicultural interventions (B3 action)	C 3	01/10/2015
Participation to the annual event Expoenergia + second networking meeting	D 1	31/10/2015
Evaluation of the thermal requirement of the selected buildings	B 2	31/12/2015
Starting of the replacement of the heating system (private buildings)	B 2	31/01/2016
First update of the communication plan	D 1	29/02/2016

Starting of the development and implementation of a specific system of remote monitoring, for the evaluation of plant operations and emissions.	C 2	01/06/2016
Starting of the development of a simulation model for the evaluation of territorial potential reduction of CO2	C 2	01/09/2016
Second update of the communication plan	D 1	31/12/2016
End of the development and implementation of a specific system of remote monitoring, for the evaluation of plant operations and emissions.	C 2	31/03/2017
End of the development of a simulation model for the evaluation of territorial potential reduction of CO2	C 2	30/09/2017
End of heating system replacement (private buildings)	B 2	31/12/2017
End of the building construction (new public and private buildings)	B 1	31/12/2017
End of the silvicultural interventions	B 3	31/12/2017
End of the silvicultural interventions (B3 action)	C 3	31/12/2017
Last verification and validation	B 2	31/12/2017
Third and last update of the communication plan	D 1	31/12/2017
Selection of the external auditor for certifying the final report of the project	E 1	31/01/2018
Monitoring of the CO2 in the new public and private buildings	C 1	31/03/2018
Test and scientific validation	B 2	31/03/2018
Test and scientific validation of the GHG reduction	B 1	31/03/2018
Starting the draft of the final and after-Life reports	E 1	01/05/2018
Last Steering Committee meeting (nº8)	E 1	30/06/2018
Last expert meeting of the Life+ projects networking (nº5)	E 1	30/06/2018
Last quarterly conference call (nº15)	E 1	30/06/2018

ACTIVITY REPORTS FORESEEN

Please indicate the deadlines for the following reports:

- Inception Report (to be delivered within 9 months after the project start);
- Progress Reports n°1, n°2 etc. (if any; to ensure that the delay between consecutive reports does not exceed 18 months);
- Mid-term Report with payment request (only for project longer than 24 months)
- Final Report with payment request (to be delivered within 3 months after the end of the project)

Type of report	Deadline
Inception report	31/03/2015
Midterm report	30/06/2016
Progress report	30/06/2017
Final report	30/09/2018

TIMETABLE

Action		2014				2015				2016				2017				2018				2019			
Action numbe	Name of the action	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
A. Preparatory actions:																									
A.1	PREPARATORY ACTIONS			■	■																				
B. Implementation actions:																									
B.1	Development of strategic actions to mitigate climate change - Reduce the footprint of buildings using wood						■	■	■	■	■	■	■	■	■	■		■	■						
B.2	Development of strategic actions to mitigate climate change - Energy-high efficient by wood					■	■	■	■	■	■	■	■	■	■	■	■	■							
B.3	Silvicultural interventions climate change mitigation					■	■	■	■	■	■	■	■	■	■	■	■								
C. Monitoring of the impact of the project actions:																									
C.1	Assessment of reduction of GHG and the amount of CO2 stored					■	■	■	■	■	■	■	■	■	■	■	■	■							
C.2	Verification of the amount of avoided CO2 emission with biomass heating and with replacement with high/low system(impact of B2 action)					■	■	■	■	■	■	■	■	■	■	■	■								
C.3	Assessment of costs and benefits deriving from the adoption of forest management					■	■	■	■	■	■	■	■	■											
D. Communication and dissemination actions:																									
D.1	COMMUNICATION AND DISSEMINATION ACTIONS			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■						
E. Project management and monitoring of the project progress:																									
E.1	MANAGEMENT, COORDINATION AND MONITORING			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■						

LIFE13 ENV/IT/000560

FINANCIAL APPLICATION FORMS

Part F – financial information

Budget breakdown cost categories		Total cost in €	Eligible Cost in €	% of total eligible costs
1. Personnel			678,362	71.53 %
2. Travel and subsistence			19,500	2.06 %
3. External assistance			250,490	26.41 %
4. Durable goods				
4.a	Infrastructure	0	0	0.00 %
4.b	Equipment	0	0	0.00 %
4.c	Prototype	0	0	0.00 %
5. Land purchase / long-term lease /one-off compensation payments		Not applicable		
6. Consumables			0	0.00 %
7. Other Costs			0	0.00 %
8. Overheads			0	0.00 %
TOTAL		948,352	948,352	100 %

Contribution breakdown	In €	% of TOTAL	% of total eligible costs
Requested EU contribution	474,175	50.00 %	50.00 %
Coordinating Beneficiary's contribution	149,440	15.76 %	
Associated Beneficiaries' contribution	324,737	34.24 %	
Co-financiers contribution	0	0.00 %	
TOTAL	948,352	100.00 %	

Cost category in Euro									
Project action	1. Personnel	2. Travel	3. External assistance	4.a Infra-structure	4.b Equipment	4.c Prototype	6. Consumables	7. Other	TOTAL
A1 PREPARATORY ACTIONS	25,493	3,000	0	0	0	0	0	0	28,493
B1 Development of strategic actions to mitigate climate change - Reduce the footprint of buildings using wood	135,763	6,000	31,000	0	0	0	0	0	172,763
B2 Development of strategic actions to mitigate climate change - Energy-high efficient by wood	111,233	4,500	31,000	0	0	0	0	0	146,733
B3 Silvicultural interventions climate change mitigation	151,199	6,000	0	0	0	0	0	0	157,199
C1 Assessment of reduction of GHG and the amount of CO2 stored	23,648	0	25,000	0	0	0	0	0	48,648
C2 Verification of the amount of avoided CO2 emission with biomass heating and with replacement with high/low system(impact of B2 action)	13,968	0	20,000	0	0	0	0	0	33,968

C3 Assessment of costs and benefits deriving from the adoption of forest management	9,817	0	20,000	0	0	0	0	0	29,817
D1 COMMUNICATION AND DISSEMINATION ACTIONS	86,060	0	30,490	0	0	0	0	0	116,550
E1 MANAGEMENT, COORDINATION AND MONITORING	121,181	0	93,000	0	0	0	0	0	214,181
Overheads									0
TOTAL	678,362	19,500	250,490	0	0	0	0	0	948,352

Coordinating Beneficiary's contribution				
Country code	**Beneficiary short name**	**Total costs of the actions in € (including overheads)**	**Beneficiary's own contribution in €**	**Amount of EU contribution requested in €**
IT	UNCEM	298,880	149,440	149,440

Associated Beneficiaries' contribution				
Country code	**Beneficiary short name**	**Total costs of the actions in € (including overheads)**	**Associated beneficiary's own contribution in €**	**Amount of EU contribution requested in €**
IT	UCVV	342,475	171,238	171,237
ES	CESEFOR	306,997	153,499	153,498
TOTAL Associated Beneficiaries		**649,472**	**324,737**	**324,735**

TOTAL All Beneficiaries	**948,352**	**474,177**	**474,175**

Co-financiers contribution	
Co-financier's name	**Amount of co-financing in €**
TOTAL	**0**

Direct Personnel costs

Calculation =>				A	B	A x B
Beneficiary short name	Action number	Type of contract	Category/Role in the project	Daily rate (rounded to the nearest €)	Number of person-days	Direct personnel costs (€)
UNCEM	A 1	Temporary staff specifically hired for this project	Senior expert - Will act as Project Managemen Team Leader	220	30	6,600
UNCEM	A 1	Temporary staff specifically hired for this project	Senior expert. Will act as UNCEM project manager	220	30	6,600
UNCEM	B 1	Temporary staff specifically hired for this project	Senior expert. Will act as UNCEM project manager	220	104	22,880
UNCEM	B 1	Temporary staff specifically hired for this project	Senior expert - Will act as Project Managemen Team Leader	220	104	22,880
UNCEM	B 2	Temporary staff specifically hired for this project	Senior expert - Will act as Project Managemen Team Leader	220	22	4,840
UNCEM	B 2	Temporary staff specifically hired for this project	Senior expert. Will act as UNCEM project manager	220	22	4,840
UNCEM	B 3	Temporary staff specifically hired for this project	Senior expert. Will act as UNCEM project manager	220	22	4,840
UNCEM	B 3	Temporary staff specifically hired for this project	Senior expert - Will act as Project Managemen Team Leader	220	22	4,840
UNCEM	C 1	Temporary staff specifically hired for this project	Senior expert - Will act as Project Managemen Team Leader	220	28	6,160
UNCEM	C 1	Temporary staff specifically hired for this project	Senior expert. Will act as UNCEM project manager	220	28	6,160
UNCEM	C 2	Temporary staff specifically hired for this project	Senior expert. Will act as UNCEM project manager	220	6	1,320
UNCEM	C 2	Temporary staff specifically hired for this project	Senior expert - Will act as Project Managemen Team Leader	220	6	1,320

Direct Personnel costs

			Calculation =>	A	B	A x B
Beneficiary short name	**Action number**	**Type of contract**	**Category/Role in the project**	**Daily rate (rounded to the nearest €)**	**Number of person-days**	**Direct personnel costs (€)**
UNCEM	C 3	Temporary staff specifically hired for this project	Senior expert - Will act as Project Managemen Team Leader	220	6	1,320
UNCEM	C 3	Temporary staff specifically hired for this project	Senior expert. Will act as UNCEM project manager	220	6	1,320
UNCEM	D 1	Temporary staff specifically hired for this project	Senior expert. Will act as UNCEM project manager	220	63	13,860
UNCEM	D 1	Temporary staff specifically hired for this project	Senior expert - Will act as Project Managemen Team Leader	220	63	13,860
UNCEM	E 1	Temporary staff specifically hired for this project	Senior expert - Will act as Project Managemen Team Leader	220	173	38,060
UNCEM	E 1	Temporary staff specifically hired for this project	Senior expert. Will act as UNCEM project manager	220	173	38,060
UCVV	A 1	Temporary staff specifically hired for this project	Junior expert	119	24	2,856
UCVV	A 1	Permanent staff or civil servant	Senior expert.Will act as UCVV´s project manager	202	12	2,424
UCVV	B 1	Temporary staff specifically hired for this project	Junior expert	119	173	20,587
UCVV	B 1	Permanent staff or civil servant	Senior expert.Will act as UCVV´s project manager	202	140	28,280
UCVV	B 2	Permanent staff or civil servant	Senior expert.Will act as UCVV´s project manager	202	140	28,280
UCVV	B 2	Temporary staff specifically hired for this project	Junior expert	119	281	33,439
UCVV	B 3	Permanent staff or civil servant	Chief forest worker	178	108	19,224
UCVV	B 3	Permanent staff or civil servant	Technician	185	65	12,025

Direct Personnel costs

			Calculation =>	A	B	A x B
Beneficiary short name	Action number	Type of contract	Category/Role in the project	Daily rate (rounded to the nearest €)	Number of person-days	Direct personnel costs (€)
UCVV	B 3	Permanent staff or civil servant	Forest worker	159	108	17,172
UCVV	B 3	Permanent staff or civil servant	Forest worker	159	108	17,172
UCVV	B 3	Temporary staff specifically hired for this project	Junior expert	119	86	10,234
UCVV	B 3	Permanent staff or civil servant	Forest worker	159	108	17,172
UCVV	B 3	Permanent staff or civil servant	Senior expert.Will act as UCVV´s project manager	202	43	8,686
UCVV	C 1	Temporary staff specifically hired for this project	Junior expert	119	34	4,046
UCVV	C 1	Permanent staff or civil servant	Senior expert.Will act as UCVV´s project manager	202	11	2,222
UCVV	C 2	Permanent staff or civil servant	Senior expert.Will act as UCVV´s project manager	202	11	2,222
UCVV	C 2	Temporary staff specifically hired for this project	Junior expert	119	34	4,046
UCVV	C 3	Temporary staff specifically hired for this project	Junior expert	119	11	1,309
UCVV	C 3	Permanent staff or civil servant	Senior expert.Will act as UCVV´s project manager	202	4	808
UCVV	D 1	Permanent staff or civil servant	Senior expert.Will act as UCVV´s project manager	202	18	3,636
UCVV	D 1	Temporary staff specifically hired for this project	Junior expert	119	18	2,142
UCVV	E 1	Temporary staff specifically hired for this project	Junior expert	119	19	2,261
UCVV	E 1	Permanent staff or civil servant	Senior expert.Will act as UCVV´s project manager	202	19	3,838

Direct Personnel costs

			Calculation =>	A	B	A x B
Beneficiary short name	Action number	Type of contract	Category/Role in the project	Daily rate (rounded to the nearest €)	Number of person-days	Direct personnel costs (€)
CESEFOR	A 1	Permanent staff or civil servant	Senior expert. Will act as CESEFOR´s project manager	289	10	2,890
CESEFOR	A 1	Permanent staff or civil servant	Senior expert - Communication specialist - Networking facilitator	217	19	4,123
CESEFOR	B 1	Permanent staff or civil servant	Senior expert - Communication specialist - Networking facilitator	217	103	22,351
CESEFOR	B 1	Permanent staff or civil servant	Senior expert. Will act as CESEFOR´s project manager	289	65	18,785
CESEFOR	B 2	Permanent staff or civil servant	Senior expert. Will act as CESEFOR´s project manager	289	65	18,785
CESEFOR	B 2	Permanent staff or civil servant	Senior expert - Communication specialist - Networking facilitator	217	97	21,049
CESEFOR	B 3	Permanent staff or civil servant	Senior expert. Will act as CESEFOR´s project manager	289	65	18,785
CESEFOR	B 3	Permanent staff or civil servant	Senior expert - Communication specialist - Networking facilitator	217	97	21,049
CESEFOR	C 1	Permanent staff or civil servant	Senior expert. Will act as CESEFOR´s project manager	289	10	2,890
CESEFOR	C 1	Permanent staff or civil servant	Senior expert - Communication specialist - Networking facilitator	217	10	2,170
CESEFOR	C 2	Permanent staff or civil servant	Senior expert. Will act as CESEFOR´s project manager	289	10	2,890
CESEFOR	C 2	Permanent staff or civil servant	Senior expert - Communication specialist - Networking facilitator	217	10	2,170
CESEFOR	C 3	Permanent staff or civil servant	Senior expert - Communication specialist - Networking facilitator	217	10	2,170
CESEFOR	C 3	Permanent staff or civil servant	Senior expert. Will act as CESEFOR´s project manager	289	10	2,890
CESEFOR	D 1	Permanent staff or civil servant	Senior expert - Communication specialist - Networking facilitator	217	145	31,465
CESEFOR	D 1	Permanent staff or civil servant	Senior expert. Will act as CESEFOR´s project manager	289	73	21,097
CESEFOR	E 1	Permanent staff or civil servant	Senior expert - Communication specialist - Networking facilitator	217	77	16,709
CESEFOR	E 1	Permanent staff or civil servant	Senior expert. Will act as CESEFOR´s project manager	289	77	22,253

TOTAL =>	3,436	678,362

Travel and subsistence costs

				Calculation =>	A	B	A + B
Beneficiary short name	Action number	Destination (From / To)	Outside EU (YES / NO)	Purpose of travel/number of trips and persons travelling, duration of trip (in days)	Travel costs (€)	Subsistence costs (€)	Total travel and subsistence costs (€)
UNCEM	A 1	Florence to Brussels	No	Florence to Brussels - Kickoff with EC - 2 people - 2 days	1,000	500	1,500
UNCEM	B 1	Florence to Soria (Spain)	No	Technical workshop + Steering Committe - 2 people - 3 days	1,000	500	1,500
UNCEM	B 2	Florence to Soria (Spain)	No	Technical workshop + Steering Committe - 2 people - 3 days	1,000	500	1,500
UNCEM	B 3	Florence to Soria (Spain)	No	Technical workshop + Steering Committe - 2 people - 3 days	1,000	500	1,500
UCVV	B 1	Rufina (Italy to Soria (Spain)	No	Technical workshop + Steering Committe - 2 people - 3 days - 2 trips	2,000	1,000	3,000
UCVV	B 2	Rufina (Italy to Soria (Spain)	No	Technical workshop + Steering Committe - 2 people - 3 days	1,000	500	1,500
UCVV	B 3	Rufina (Italy to Soria (Spain)	No	Technical workshop + Steering Committe - 2 people - 3 days	1,000	500	1,500
CESEFOR	A 1	Soria (Spain) to Florence/Rufina (Italy)	No	Kickoff + Steering Committee - 2 people - 3 days - 1 trip	1,000	500	1,500
CESEFOR	B 1	Soria (Spain) to Florence/Rufina (Italy)	No	Technical workshop + Steering Committee - 2 people - 3 days -	1,000	500	1,500
CESEFOR	B 2	Soria (Spain) to Florence/Rufina (Italy)	No	Technical workshop + Steering Committee - 2 people - 3 days -	1,000	500	1,500
CESEFOR	B 3	Soria (Spain) to Florence/Rufina (Italy)	No	Technical workshop + Steering Committee - 2 people - 3 days - 2 trips	2,000	1,000	3,000
				TOTAL =>	13,000	6,500	19,500

External assistance costs

Beneficiary short name	Action number	Procedure	Description	Costs (€)
UNCEM	D 1	Public tender for a communcation agency	Communications activities: press releases for the kick-off, annual seminar, final conference - DVD realisation	10,120
UNCEM	E 1	Public tender launched during the first months of 2018 -	Selection of an external auditor for certifying the last financial report of the project	3,000
UNCEM	E 1	Public tender launched during the first months of the project - Contract duration: 4 years	External assistance for financial and admininistrative tasks: drafting the Steering Committee rules, building an accounting tool, preparation for Steering Committee, assistance conf call	80,000
UCVV	B 1	Public tender launched during the first months of the project - Technical assistance	Realisation of design	16,000
UCVV	B 2	Public tender launched during the first months of the project - Technical assistance	Realisation of design	16,000
UCVV	C 1	Public tender launched during the first months of the project - Technical assistance	research institute for monitoring and validation - Monitoring of B1 activities	20,000
UCVV	C 2	Public tender launched during the first months of the project - Technical assistance	research institute for monitoring and validation - Monitoring of B2 activities	15,000
UCVV	C 3	Public tender launched during the first months of the project - Technical assistance	research institute for monitoring and validation - Monitoring of B3 activities	15,000
UCVV	D 1	Public tender for a communication agency	Publication,layman translation into Italian or English	10,394
CESEFOR	B 1	Public tender launched during the first months of the project - Technical assistance	Realisation of design	15,000
CESEFOR	B 2	Public tender launched during the first months of the project - Technical assistance	Realisation of design	15,000

External assistance costs

Beneficiary short name	Action number	Procedure	Description	Costs (€)
CESEFOR	C 1	Public tender launched during the first months of the project - Technical assistance	research institute for monitoring and validation - Monitoring of B1 activities	5,000
CESEFOR	C 2	Public tender launched during the first months of the project - Technical assistance	research institute for monitoring and validation - Monitoring of B2 activities	5,000
CESEFOR	C 3	Public tender launched during the first months of the project - Technical assistance	research institute for monitoring and validation - Monitoring of B3 activities	5,000
CESEFOR	D 1	Public tender for a communcation agency	Logo research, website, translation of communication documents into Spanish	9,976
CESEFOR	E 1	Framework contract with a travel agency	Travel cost for external experts within the framework of the networking activities with Life+ projects and Mediterranean Model Forest Network	10,000
			TOTAL =>	250,490

Proposal attachments

Attachment title	Attachment type	Included? Yes	No
Letter of support - Confindustria Toscana - Italy	declaration of support (other than form A8)		
Letter of support - Comune di Londa - Provinzia de Firenze - Regione Toscana	declaration of support (other than form A8)		
Letter of support - Comune di Pelago - Provinzia di Firenze - Regione Toscana	declaration of support (other than form A8)		
Letter of support - International Model Forest Network Secretariat - Canada	declaration of support (other than form A8)		
Letter of support - Model Forest of Urbión - Region of Castilla y León - Spain - Member of the Mediterranean Model Forest Network - Pilot territory in our project	declaration of support (other than form A8)		
Letter of support - Model Forest of Yalova - Turkey - Member of the Mediterranean Model Forest Network - Observer in our projet	declaration of support (other than form A8)		
Letter of support of Municipio de La Gallega - Provincia de Burgos - Region of Castilla y León	declaration of support (other than form A8)		
Letter of support - Model Forest of Montagne Fiorentine - Region of Tuscany - Italy - Member of the Mediterranean Model Forest Network - Pilot territory in our project	declaration of support (other than form A8)		
Letter of support - Comune di San Godenzo - Provinzia de Firenze - Regione Toscana	declaration of support (other than form A8)		
Letter of support- Universidad de Valladolid - Instituto de Gestión Sostenible - Spain	declaration of support (other than form A8)		
Letter of support - Comune di Rufina - Provinzia de Firenze - Regione Toscana	declaration of support (other than form A8)		
Letter of support - Municipio de Duruelo de la Sierra - Provincia de Soria - Region of Castilla y León-	declaration of support (other than form A8)		
Letter of support - Region of Western Machedonia - Greece - Member of the Mediterranean Model Forest Network	declaration of support (other than form A8)		
Letter of support - Consiglio Nazionale delle Ricerche - IVALSA - Trees and Timber Institute - Italy -	declaration of support (other than form A8)		
Letter of support - Corpo Forestale dello Stato	declaration of support (other than form A8)		
Letter of support - Municipio de Hontoria del Pinar - Provincia de Burgos - Region Castilla y Leon	declaration of support (other than form A8)		
Letter of support - City of Soria - Provincia de Soria - Region Castilla y Leon	declaration of support (other than form A8)		
Letter of support - GESAAF - UNIFI Toscana - Italy	declaration of support (other than form A8)		
Letter of support - Model Forest of Ifrane - Marocco - Member of the Mediterranean Model Forest Network - Observer in our projet	declaration of support (other than form A8)		
Letter of support of Municipio de Rabanera del Pinar - Provincia de Burgos - Region of Castilla y León	declaration of support (other than form A8)		
Letter of support - Region of Tuscany - Italy	declaration of support (other than form A8)		
Letter of support - FIPER Federazione italiana produttori da energie rinnovabili - Italian federation of producers by renewable energies	declaration of support (other than form A8)		

Proposal attachments

Attachment title	Attachment type	Included? Yes	No
Map of the Model Forest of Urbión - Spain - Pilot territory of our project	map of the project area (other than overview map)		
Map of the Model Forest of Montagne Fiorentine - Italy - Pilot territory of our project	map of the project area (other than overview map)		
Map of the Model Forest of Ifrane - Marocco - Mediterranean observer	map of the project area (other than overview map)		
Recent Profit and Loss 2011 - UNCEM	beneficiary annual accounts (profit and loss account, balance sheet)		
Balance UNCEM 31-12-2011	beneficiary annual accounts (profit and loss account, balance sheet)		