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Intelligent Energy Europe

CALL FOR PROPOSALS 2010

Promotion / Dissemination Projects: SAVE, ALTENER, STEER and INTEGRATED INITIATIVES

[CIP-IEE-PROMO-P]

Part B – Detailed description of the action

Full title of the action:	Development of biomass trade and logistics centres for sustainable mobilisation of local wood biomass resources
Action Acronym:	BiomasTradeCenterII
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[Call Identifier: CIP-IEE-2010]

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‚Read me first:

- Use the instructions and guidance in the Guide for Proposers!
- Follow closely the structure for Part B (headlines, tables etc.) given in the application form. The forms are designed to correspond to the evaluation criteria which will be applied.
- Remember to keep to maximum page lengths where these are specified. It is in your interest to keep your text concise.
- Please bear in mind that your proposal should be self-explanatory and easy to understand. Its assessment will be based on your descriptions, not taking into account any information elsewhere (e.g. on websites etc.).
- Ensure that you and all your participants have read closely the Call for proposals 2010 and this Guide for Proposers.
- Ensure that information in all three parts of the application (A, B and Detailed Budget) is consistent.
- Maximise your chances: edit your proposal tightly, strengthen or eliminate weak points. Put yourself in the position of an evaluator who only has a few hours to assess each proposal. Remind yourself again of the selection and award criteria given in the Call for Proposals. Arrange for your draft to be reviewed by experienced colleagues; use their advice to improve it before submission.
- Use a clear format and a font of minimum 11pt.
- **NOTE**: before uploading this Part B in EPSS, you must save the file with the name "**IEE-10-ACRONYM**". The acronym part of the file name can only contain Latin letters (a-z), digits (0-9), the underscore (_), the dash (-) and the dot (.) character. It cannot contain any special characters or spaces.

1. Summary

(a) Abstract

The BiomasTradeCentreII project aims at increasing the production and the use of energy from wood biomass with realization of motivation events that will engage identified target groups to invest in production of energy from biomass. Implementation of quality standard will encourage consumption and boost the biomass market. Additionally, it will raise awareness among decision makers at the local and regional levels to introduce the use of renewable energy in public sector.
The proposed project will further develop the idea of its predecessor - the BiomassTrade Centers project. The main lesson learned from this project is that apart from a concept of trade and logistics centres quality assurance and quality control (QA/QC) are decisive for a greater consumption of energy from biomass on the market.

The aim of the BiomasTradeCentreII project is to transfer existing good practices in biomass production, biomass trade centres and energy contracting to all project partner countries. However, the main focus of the project is put on the quality assurance and quality control. The BiomasTradeCentreII project aims at creating a network of wood biomass laboratories that will help biomass producers and users to check wood biomass quality.

The BiomasTradeCentreII project will present clear, integrated and market orientated information to potential investors: farmers and forest owners, forest entrepreneurs, wood energy contractors and other stakeholders regarding business opportunities to produce and sell energy products and services to the market.

All project partners: from Slovenia, Austria, Italy, Germany, Spain, Croatia, Greece, Ireland and Romania are playing a key role in the development of the national bio-energy sectors. The consortium consists of partners from research institutes, forestry and agriculture chambers, energy agencies and biomass associations that can contribute to the durable impact of the project activities.

(b) Expected Impact - including main quantitative targets

The most important results of this project are:

- A solid overview of biomass production chains and identification of main barriers along the whole production chain (state-of-the-art biomass production in 9 participating countries and regions);
- Mobilisation of wood biomass from private forests with market orientated actions (9 catalogues of forestry companies and biomass producers, 29 match-making events, 29 open days, 32 feasibility studies, readymade business model for energy contracting, implementation of QA/QC system in 26 SMEs);
- Promotion of good practice examples (selection of 27 good practice examples on wood biomass production, at least 20 good practice examples on QA/QC implementation or labelling of wood biomass in participating regions or countries) through study tours (38 study tour will be organised);
- Education and training of representatives of different target groups along biomass production chain trough workshops, trainings, study tours, one-to-one meetings and dissemination of booklets (Energy contracting, General information on EU CEN standards and green labelling), technical papers (Energy contracting, Generic guidelines for Biomass trade and logistics centres, QA/QC system for SMEs, guidelines for wood fuel labelling) and handbook (Biofuel handbook);
- Overview of sustainable criteria in wood biomass production (relevant for 9 participating countries or regions);
- Realisation of new biomass trade and logistics centres (32 feasibility studies) and professional help to the existing centres (29 open days and 53 one to one meetings);

- Promotion of energy contracting model among forest owners, biomass producers and potential users (more than 900 participants on workshops and study tours) and help to potential investors with "Lessons learnt from the existing plants";
- Promotion and implementation of EU CEN standards through building a simplified Quality control and quality assurance system and its implementation in 26 SMEs in participating countries and regions;
- Guidelines for products labelling with special emphasis on exploring possibilities to implement Carbon foot printing for wood fuels;
- Implementation of EU CEN technical specifications in wood biomass laboratories with a proposal for standards setting-up and operation procedures for that type of laboratories;
- Up-to-date material for training sessions and workshops in 9 languages covering the whole wood biomass production from forests to energy production and wood fuels quality provision.

The expected impacts of this project are mobilisation of wood biomass from private forests, increase of energy production from wood biomass, implementation of sustainability criteria in biomass production, implementation of EU CEN normative documents through QA/QC system and building up a network of qualified wood biomass laboratories.

2. Overview of the starting point of the proposed action

a) Current situation in the target countries/regions:

The main motivation for starting the BiomasTradeCenterII project is the predicted future impact that the promotion of new business opportunities in the field of wood biomass can have on the production and use of energy from renewable sources.

The BiomasTradeCenterII project partners build on their past project experience and aim to transfer the most suitable practices among each other to further exploit biomass potential. Apart from this, the recurring problems existing on the biomass market (e.g. import/export of biomass, quality criteria etc.) will be tangled and innovative solution sought after.

Finally, the project partnership aims at elaborating an integrated solution for the whole chain in the biomass production – from biomass production, logistics and distribution of biomass products to energy contracting and ensuring quality control.

The project will link partners from European countries with different traditions in biomass use:

- some have long tradition in efficient use of biomass, advanced technologies, private investments in energy production (Austria, Germany);
- some countries with extensive biomass production and some private investments (Italy, Slovenia, Ireland, Greece); and
- some countries with under-exploited potential for the use of biomass, mostly public investments, out-dated technologies (Spain, Romania, Croatia).

To achieve the 20/20/20 objective, each of the project countries has a potential for realization of a substantial part of its national obligation through the use of biomass. Comparison of the growth of forest stand to removal shows that in the majority of European countries 2/3 of biomass potential at the most are currently being exploited. (ecoprog, Fraunhoper UMSICHT, The Market for Biomass Power Plants in Europe)

1. EXISTING AND EMERGING MARKETS:

According to the *ecoprog* and Fraunhofer UMSICHT's study, the capacity of biomass power plants will grow from the current 3,000 MWel (around 350 power plants) to 5,000 MWel in the next 5 years. Likewise, the energy contracting market, i.e. distant cooling/heating as an alternative to gas or oil heating, will grow significantly. For the growth of private investments in biomass boilers, higher awareness is decisive. During the last few years, the awareness of potential investors has increased thanks to several successful show cases already running, which may act as reference models to be replaced in the regions with a less developed bioheat market (BiomassTradeCentres and plants already running). Additionally, the prices of primary energy produced with fossil fuels are very high related to those based on wood fuels.

In Slovenia, Italy, Germany and Austria, the main biomass markets are:

- FOR WOOD AND SPLIT LOGS: households
- FOR WOOD CHIPS: households and industry, public district heating, systems for combined production of electricity and heat, electric power plants
- PELLETS, BRIQUETTES: thermal power plants, households
- FOR DISTANT COOLING/HEATING: town districts, settlements, public infrastructure
- FOR ENERGY CONTRACTING: public building, tourist places, shopping centres

In SLOVENIA, AUSTRIA, ITALY and GERMANY, the current approximate market shares of biomass energy are the following: the largest amount of wood for energy purposes is used by households, followed by industry (production of process heat), public district heating systems with systems for combined production of electricity and heat.

Biomass production: in Slovenia, biomass constitutes around 4% of energy from renewable sources, i.e. woodchips: more than 460,000 loose m^3 (loose cubic metres), pellets: 55,000 tons in 2007 (Slovenian Forestry Institute, 2008). Primary energy production from wood biomass in 2008 was 0.42 Mtoe, share of RES is estimated at around 16%.

According to Austrian statistics, primary energy production from wood biomass was 4.7 Mtoe (2008); 18.8 million solid cubic metres are produced per year (in contrast to 31.3 million solid cubic metres of wood growth each year.) In Austria, the main focus lies on the production of heat based on biomass. In the early 1990s, farmers and forest owners started to develop the Wood Energy Contracting model, which is well known in some European regions.

In Italy, biomass constitutes 30% of energy from renewable sources (share of RES is 5.2%).In Germany, biomass constitutes 69% of energy from renewable sources (share of RES is 7%). In 2009, wood energy contributed around 83 TWh to heat supply. Compared to the situation of 2004, the market share of solid biomass within the heat producing market increased from 3.9 to 7.7 %, which indicates an annual growth of 19.5%. More than 1,200 biomass heating plants (>500 kWh) based on wood and more than 200 cogeneration heating plants with a total power production of 11.7 TWh have been installed within recent years. Furthermore, there are about 125,000 pellet boilers and 40 pellet producing facilities with a total capacity of 2.3 million tonnes per year. The number of small-scale chip boilers and private fire places indicates even a more substantial role in the wood energy market as 64.1 % of the renewable heat supply is shared by solid biofuels in private households.

Jobs: The study, which was coordinated by the Fraunhofer Institute for Systems and Innovation Research ISI[1], shows that by improving current policies the target of 20% RES in final energy consumption can be achieved by 2020, which will provide a net effect of about 410,000 additional jobs as well as a 0.24% additional gross domestic product (GDP). In the 2004-2009 period, the number of jobs in Germany increased by 92% up to 109,000. This sets an example for other countries. In Austria, the main focus lies on the production of heat base on biomass. In the early 1990s, farmers and forest owners started to develop the Wood Energy Contracting model, which is well known in some European regions.

In Croatia, Romania, Greece, Ireland and Spain, the main biomass products markets are:

- FOR LOG WOOD: households,
- FOR WOOD CHIPS: industry, public district heating, systems for combined production of electricity and heat, power plants and households
- FOR DISTANT COOLING/HEATING: town districts, settlements, public infrastructure

All five countries have up to 50% of their biomass unexploited.

Croatia has 36% of its territory covered with forests biomass, with 1.8-1.9 million solid m3 (12,1 PJ) of woody residues available for energy production, about half of which originates from the wood processing industry.

Romania is covered by 40% of agricultural land and 27% of forest. The South Plain region looks most promising for the future utilization of agricultural waste, while the Carpathian and Subcarpathian mountains look most promising for the development of district-heating plants from firewood and wood waste in a range of 1-6 MWth. Romania has a great biomass potential, which is estimated at 88,000 GWh per year.

Energy production from biomass: Croatia has two biomass plants (in the towns of Gospić and Ogulin), both owned and operated by the state forest management company Hrvatske Šume. Several projects for cities and municipalities are still in their implementation phase.

[1] http://www.isi.fraunhofer.de/isi-en/service/presseinfos/2009/pri09-10.php?WSESSIONID=4093e654bfa2a51519d81cd6afb8401e

Production: In Croatia, the produced energy for heat and electricity reached 4.59 MW in 2008 (installed capacity of biomass was 513.5 MW).

In Catalonia, the processed forest biomass production in 2008 was essentially distributed through 8,000 tons of pellets and 29,500 tons of wood chips. The target of the Catalan Energy Plan for 2015 is 270 kTEP from wood biomass, i.e. approximately 890,000 tons of wood biomass. An average forest harvesting in Catalonia reaches 400,000 tons/year (weight without bark), 79% of which (by weight without bark) is for commercial use (63-69% for timber and 10-16% for fuelwood).

In Romania, the share of biomass in total energy of the country was 10.94% in 1998. Currently, biomass is used only for heating purposes, direct burning for cooking and hot water preparation.

In Ireland: The share of electricity generated from renewable energy sources (RES-E) in 2009 was 14.4%. Industrial biomass energy use (mostly in the wood and food sectors) accounted for 70% of all thermal renewable energy used in 2008, which corresponds to 2.8% of all thermal energy use in Ireland.

Industrial biomass energy use increased by 106% (3.9% average annual growth) between 1990 and 2008. However, there has been a decrease in industrial RES-H recently with an average annual reduction of 5.6% since 2005.

Residential biomass energy use increased by 9.5% between 1990 and 2008 (0.5% average annual growth). However, the average annual growth rate between 2005 and 2009 was 18%".

Renewable Transport Energy (RES-T) Biofuels accounted for 1.2% of road transport consumption in 2008. Provisional 2009 data estimates biofuels at 1.5% of road transport, indicating the scale of the challenge to meet the Government target of 4.1% RES-T by 2010. The Government target for RES-T of 2% by 2008 was not achieved despite the considerable growth since 2005. The dominant biofuel is biodiesel, representing 63% of biofuel usage in 2008, followed by bioethanol (32%) and finally pure plant oil (5%).

Indigenous production accounted for 43% of biofuels used or stockpiled in 2008.Progress Towards Overall Renewable Energy Directive Target – The contribution of renewable energy to overall energy demand rose from 2.3% to 3.9% between 1990 and 2008. The provisional 2009 figure is 4.7% and Ireland's target is to achieve 16% by 2020 under Directive (2009/28/EC). Renewable electricity contributed 2.2% to the Directive target in 2008 (2.8% in 2009). Renewable transport energy contributed 0.4% in 2008 (0.5% in 2009) and the renewable heat contribution was 1.4% in 2008 (1.6% in 2009)".

CHALLENGES TO BE ADDRESSED THROUGH PROJECT IDEA

Regardless all the significant work carried out at the policy level related to better exploitation of wood biomass for energy purposes, there are still several challenges to be addressed for a successful wood biomass mobilization. The most important challenges are: burdensome administration procedures, lack of appropriate information and expert support for potential investors in the field of biomass production, unsecure supply of biomass products at the local and regional levels and low awareness of the energy users regarding the benefits of the use of energy from renewable sources. Mobilising more wood for energy production is a general effort, which requires the cooperation of all relevant actors – forest services, forest owner groupings, forest industry, energy producers, market actors and decisions makers.

2. 1. LOW AWARENESS OF THE BIOMASS POTENTIAL IN SOME PARTNERS' STATES

Nearly 50% of all forests in Europe (more than 69 MIO ha) are privately owned. However, forest owners often do not recognise the biomass production as one of new opportunities for income. In Austria, Italy, Spain, Ireland and Slovenia, it is expected that private forest owners will be a main driving force for a greater biomass utilisation in the near future. Markets in these countries can grow significantly, since there are numerous good practices applicable to their markets, or they will be established within the framework of the project, e.g. how to build the market, quality criteria. In

Romania, provisions for public support have been made, but renewable energy projects have not been financed so far. In all other participating countries, public support is being provided for through public calls for proposals.

2.2. LOW AWARENESS OF PUBLIC ADMINISTRATION AND INDUSTRY CONCERNING THE USE OF ENERGY FROM BIOMASS

Generally speaking, we can say that households, public administration and industry lack awareness of the use of energy from renewable sources. This is especially critical in the following partner states: Spain, Croatia, Greece, Romania and Slovenia. The reduction of green house gases in public administration and industry can add significantly to the achievement of this objective through the use of energy from alternative sources. Promotion activities, motivating energy users to switch to renewables should be carried out, considering their multiple benefits.

Within the framework of the BiomasTradeCentreII project, good practice from Austria and Italy will be transferred to achieve this objective.

2.3. SUSTAINABLE SUPPLY OF BIOMASS PRODUCTS TO THE MARKET

Securing a sustainable energy supply will be the greatest challenge in Austria, Italy and Slovenia. The "forest" resource is primarily privately owned, i.e. owned by a large number of small foresters. For a secure supply of biomass, mobilization of small forest owners will be necessary. Currently, they lack relevant information on the most suitable investment opportunity and income from their property are low, if any. Apart from more transparent rules and simplification of administration procedures declared in the new RES Directive (2009), potential investors and customers should be given integrated and concise practical information to support their decision. This would help small forest owners to mobilize their wood biomass in economic and sustainable ways.

2.4. OUT-DATED TECHNOLOGIES AND LOW EFFECTIVENESS OF THE USE OF BIOMASS PRODUCTS

Out-dated technologies with relatively low efficiency rate are still in use in most partner countries (except Austria), which prevents them to exploit their full biomass potential. Potential investors lack initiative, knowledge and support from external advisers to opt for suitably high investments.

2.5 LACK OF QUALITY CRITERIA

Quality requirements are essential for ensuring that wood as an energy resource is used as efficiently as possible. Currently, biomass products brand has either no quality assurance or the quality assurance is to complex. Establishment of clear simple quality criteria concerning biomass products will advance the growth of the market. Consumers should be better informed regarding the quality (in terms of efficiency). One of the objectives of the proposed project is also to prepare provisions regarding quality criteria.

Through IrBEA, the experiences of the Woodfuel Quality Assurance (WFQA) Scheme in Ireland and associated National Workshop Agreement 'NWA 4:2009 Woodfuel Quality Assurance – Requirements' will be harnessed as a foundation for these works and as a template from which to build. The WFQA was formally launched in Ireland in Feb 2009 and the first certified product will be available to consumers in September 2010.

2.6. GROWING ENTHUSIASM FOR BIOMASS SHOULD SUPPORT GROWTH OF LOCAL ENTREPRENEURSHIP AND NEW JOBS

National financial schemes in the field of energy from renewable sources leverage substantially the number of investments in biomass production. Implementation of new businesses in rural areas means growth and consequently new jobs. However, integrated information regarding subsidiaries schemes, administration rules and potential market are still hard to find for local population in most partner states. Therefore, promotion activities for identified target groups should be carried out, e.g. workshops for potential investors, match-making events with potential buyers, study tours, etc.

Currently all member states follow the realization of the provisions of the new RES directive with preparation of the national energy action plans. The proposed project will support realization of the action plans with bottom-up approach: it will encourage new investments in biomass production.

(b) Link to relevant actions beyond the target countries/regions:

The most relevant actions in EU and beyond are:

- Implementation of Eco labels and "green" labels or other certification schemes, which include labelling of final products, are e.g. FSC and PEFC, which are well known on the EU market. Environmental labels based on sustainable forestry management followed by chain of custody certification and product labelling are a possible means to reach public awareness and to promote use of wood products including wood biomass from sustainable managed forests. Global concern for climate change and increased interest in the role of forests in mitigation strategies has major implications for the practice of forest certification. By May 2009, the global area of certified forest endorsed by one or other of the international frameworks – the Forest Stewardship Council (FSC) and the Programme for Endorsement of Forest Certification (PEFC) – amounted to 325,2 million hectares, approximately 8% of the global forest area. The concerns that commitments on use of biomass for energy may have negative social and environmental consequences – for example increased conversion of forestland or diversion of farm land away from food production – have led to a profusion of initiatives to develop standards for "sustainable" biofuel production. The economic crisis has not reduced the demand for wood energy, which is expected to continue to grow.
- EU climate change policies to reduce CO_2 emissions by 20% by 2020 (COM(2008) 30 final). According to IPCC AR4 report, key mitigation technologies and practices currently commercially available are:
    - Afforestation; reforestation; forest management; reduced deforestation; harvested wood product management; use of forestry products for bioenergy to replace fossil fuel use; tree species improvement to increase biomass productivity and carbon sequestration; improved remote sensing technologies for analysis of vegetation/soil.
    - Carbon sequestration potential and mapping land-use change.

  When used to displace fossil fuels, woodfuels can provide sustained carbon benefits, and constitute a large mitigation option.

Here is a short description on actions among partner countries on which project will build on:

Project Agriforenergy - EIE-05-073 (2006-2008)

The main objectives of the successful predecessor project Agriforenergy was to mobilise the large biomass potential from fragmented privately owned forests and from agricultural land by increasing the co-operation among farmers and forest owners. Project started to promote energy contracting among forest owners. Some positive experiences from this project will be used in implementing planed tasks in WP4.

Project Agriforenergy II- IEE/08/600/SI2.528577, (2009-2012)

The aim of the project AGRIFORENERGY 2 is promoting and securing the production of biomass from forestry and agriculture without harming the food production. The activities are based on the three core sectors Heat from Biomass, PVO (Pure Vegetable Oil) and Biogas/Biomethane. Some material produced in this project will be used in implementing planed tasks in WP4 and vice versa.

"Woodheat Solutions« EIE-07-726/S12.499568 (2008 – 2011),

This project aims to inspire investment in wood-based heat generation from unmanaged/under-managed forest by demonstrating how to reduce costs of production and guarantee high standards of

performance. Experiences in engaging forest owners and material produced will be used in organising workshops and other events.

"The importance of forest based production chain for mitigation and adaptation to climate change" (2008-2010) National project supported by the Ministry of Agriculture, Forestry and Food of the Republic of Slovenia – This action is important to understand the significance of wood biomass production as an important part of all forest based production chains. Methodologies for calculation of CO2 sinks and emissions will be used in our calculation of CO_2 displacement with substitution of fissile fuels with wood biomass and for preparation of carbon foot print.

CTFC is involved in several projects and actions linked to the logistics of forest biomass supply including the WOOD 3E (Programme MED), specifically focused on Mediterranean environments, where the results of another project will be exploited (ENERSILVA, SUDOE). Within the strategic projects framework of the Programme MED, the CTFC will work with the Catalonian Housing Department to evaluate the feasibility of urban district heating short supply chains.

BEPLAN IEE/09 (Under negotiations): AVEBIOM is involved in IEE project under negotiations that aims to develop, in selected regions and communities, participatory and integrated bioenergy action plans focusing on solid biomass (forest products and residues, energy crops and agricultural residues) for energy use (heating and CHP);

In order to gather relevant and up-to-date information regarding biomass supply and demand in Croatia and Slovenia, the application of the WISDOM (Woodfuel Integrated Supply/Demand Overview Mapping) methodology developed by FAO was applied for both countries within two separate FAO TCP projects (Croatia: TCP/CRO/3101 Development of a Sustainable Charcoal Industry, Slovenia: TCP/SVN/2901 Supply and Utilization of Bioenergy to Promote Sustainable Forest Management). The application includes gathering of data regarding the biomass supply from the forestry sector (including wood-processing industries), and data on demand from the households and wood industry sector.

Useful results and strategies of the project Supporting the organization of spot markets supply for wood chips and firewood BIOMASSTRADECENTRES (IEE/07/054/SI2.466833) - (www.biomasstradecentres.eu) will be continued and reinforced in a key market oriented way. Therefore, the added value of the proposed BiomasTradeCentreII action is not only to help wood fuels producers and to set up local biomass centres but to go beyond this and help forest owners and farmers to organise the whole production chain from forest to heat selling, to help existing suppliers to guarantee a stable and secure supply, to connect supply and demand sides and to build a quality control system for small biomass producers and suppliers. All these actions will help to further develop wood fuels market and can function as the needed "push up" to enlarge use of renewable energy sources in participating countries and beyond. BIOMASSTRADECENTRES project was also selected as one of the Good practice examples in Good practice guidance on the sustainable mobilisation of wood in Europe, prepared by Forest Europe, DG Agriculture and Rural development and UNECE/FAO Timber section.

3. Objectives and Impacts

The Intelligent Energy – Europe II 2010 Work Programme supports promotion of new and renewable energy sources as a general objective (Intelligent Energy – Europe II 2010 Work Programme, p. 8, 38) and, more specifically, among its operational objectives. Firstly, it aims to boost investments across Member States in new and best performing technologies in the fields of energy efficiency, renewable energy sources and energy diversification, including transport. Secondly, it aims to remove the barriers to renewable energy production and consumption by raising awareness and encouragement of exchanges of good practices.

In this respect, it follows the new RES Directive "In order to exploit the full potential of biomass, the Community and the Member States should promote greater mobilisation of existing timber reserves and the development of new forestry systems" and reports on Biomass Action Plan, where it is stated

that biomass can contribute, by 2020, up to two thirds of the expected 20% energy from renewable sources.

The BiomasTradeCenterII project will present clear and integrated information to potential investors: farmers and forest owners, forest entrepreneurs and other stakeholders regarding business opportunities to produce and sell energy product and services from wood biomass to the market. Additionally, it will raise awareness among decision makers at the local and regional levels to introduce the use of renewable energy in public sector and industry.

ALTENER - BIOENERGY:

In the framework of this priority actions bringing untapped bio-resources onto the energy market are being supported.

The BiomasTradeCentreII project will boost bio-resources on energy market by "supporting the implementation of local/regional bioenergy plans, stimulating investments and business agreements in sustainable bioenergy supply chains supporting strategic initiatives to promote quality, standards & sustainability schemes for bioenergy products." (Intelligent Energy – Europe II 2010 Work Programme, p. 42).

BiomasTradeCentreII project will cover all possible approaches to promote the use of biomass for energy production: from production of biomass products to independent logistics and distribution of the biomass products through biomass trade centres and to distribution of energy through electrical grids and remote heating/cooling systems. The best existing practices from partner states will be exchanged to foster production of energy from renewable sources. Potential investors, SMEs ... will be able to decide upon the model most suitable for their situation, aiming at achieving the highest added value to their initial investment.

The BiomasTradeCentreII project will raise awareness among decision makers regarding advantages of renewable energy sources; establish sustainable bioenergy supply chain in the field of biomass by supporting the use of biomass products that originate from local and regional environment. It will show ways to achieve best added value to biomass - through good quality of products, direct distribution to the end user and energy contracting. Consequently, the project will support and promote the already existing certification schemes - regarding quality and origin of biomass - and will, if appropriate, introduce its own (inter)national certificate(s).

The pathway to reaching the 2020 target – to produce 20% of the energy from renewable sources – depends on SMEs and potential investors (also from rural areas) that need a clear vision regarding the future of renewable energy sector. Apart from reduction of administration burden and stable support schemes, awareness raising activities and introduction of innovative business models will increase the number of successful investments in the field of energy production from renewable sources.

3.1. Specific objectives of your project

1) To boost investments in biomass production by demonstrating modern technologies along wood biomass production chains to forest owners, farmers, forest entrepreneurs, members of machinery rings, cooperatives of farmers and SME in rural areas in sustainable way trough implementation of trainings, study tours, workshops.
2) To support establishment of new regional Biomass trade centres and to promote existing Biomass trade centres in promotion of their activities.
3) To promote energy contracting with study tours, promotion material and workshops where suppliers and potential users will meet and discus. Special emphasis will be given to public bodies, local communities and policy makers.
4) To encourage the use of biomass by building a simplified quality assurance and quality control (QA/QC) system for small wood biomass business and to create a proposal for labelling wood biomass to create awareness of the quality and efficiency of a local or regional biomass pathway (sustainability).

5) To improve and build up network of qualified wood biomass laboratories among participating countries.
6) To support capacity building among participating countries and institution

3.2. Strategic objectives of your project

1) To support development of common European biomass market and development of strong bio-based industry and energy supply trough market orientated actions for different target groups along biomass production chains.
2) To contribute towards increase of energy from renewable sources and consequently to guarantee more secure supply of energy with mobilisation of wood biomass from private forests trough promotion of modern and sustainable wood biomass production chains.
3) To contribute towards sustainable use of renewable sources with promotion of sustainability criteria and boosting concrete implementation on the biomass market of EN/CEN technical specifications.
4) To contribute towards job creation, especially in rural areas, and consequently encouragement of local and regional development, with concrete marker orientated actions for SME's, forest entrepreneurs/companies and forest owners and farmers.
5) To encourage research and development in the field of renewable energy technologies with strong collaboration of research institutions and development organisation with other stakeholders and key actors. Project will help to build a network of organisations around EU with capacity to develop further wood biomass sector during the project duration and also beyond.

As far as sustainability of the project after the conclusion of the project is concerned all project partners are professionally involved in economy exploitation of the forest and biomass. Therefore, each partner will continue with the realization of the promotion activities in its own country. Additionally, the network among partners will encourage exchange of good practices even after the project has finished. Partners will also informally cooperate for finding solution to recurring problems of them all.

3.3. Performance indicators and targets – overview tables

- **Outcomes and impact within the project duration:**

Specific Objective(s) of your proposal	Key Outputs (services and material deliverables) including their quantification where appropriate	Work package(s)	Performance Indicators & quantified targets within the project duration:	How will you monitor your performance indicators?
1. To boost investments in biomass production by demonstrating modern technologies along wood biomass production chains to forest owners, farmers, forest entrepreneurs, members of machinery rings, cooperatives of farmers and SME in rural areas in sustainable way trough implementation of trainings, study tours, workshops	· 45 Workshops and demonstrations of modern technologies for forest owners · 28 Technical trainings for forest entrepreneurs, members of machinery rings, cooperatives of farmers and SME · 20 Study tours to best practice examples of Biomass trade centres and energy contracting · 29 Match-making events	WP2 WP 3 WP4	▪ No. of participants at workshops and demonstration events (1200 participants) ▪ No. of participants at trainings (420 professionals) ▪ No. of participants on study tours (350 participants) ▪ No. of participants in match-making events (1100 participants) ▪ No. of downloads of the biomass producers' catalogue (more than 1500) ▪ No. of new business in rural areas ▪ No. of forest owners started with biomass business (50)	- Lists of participants - Field-in questionnaires - Download counter (No. of downloads) - Feedback from participants
2. To support establishment of new regional Biomass trade centres and to promote existing Biomass trade centres in promotion of their activities.	· 26 preliminary workshops · 11 advanced workshops · 29 open days · 10.000 copies of handbook and generic guidelines · 32 feasibility studies · 53 one to one meetings for technical support	WP3	▪ No. of participants at workshops (850 participants) ▪ No. of visitors at Open days (1300 visitors ▪ No. of new Biomass trade centres established (at least 20) ▪ No. of downloads (more than 2.000) ▪ Enlargement of Biomass trade centres activities	- Lists of participants - No. of feasibility studies - Download counter (No. of downloads) - Feedback from Biomass trade centres operators
3. To promote energy contracting with study tours, promotion material and workshops where suppliers and potential users will meet and discus. Special emphasis will be given to public bodies, local communities and policy makers.	· Readymade business model · 26 workshops · 23 study tours · Booklet on Energy contracting	WP4	▪ No. of participants at workshops (650 participants) ▪ No. of participants on study tours (340 participants) ▪ No. of planned energy contracting systems (at least 20) ▪ No. of booklets disseminated (8.000 copies)	- Lists of participants - Download counter (No. of downloads) - Feedback from participants

			▪ No. of downloads (more than 2.500)	
4. To encourage the use of biomass by building a simplified quality assurance and quality control (QA/QC) system for small wood biomass business and to create a proposal for labelling wood biomass to create awareness of the quality and efficiency of a local or regional biomass pathway.	· Simplified QA/QC system for small biomass businesses · Best practice examples · Guidelines for product labelling and implementation of Carbon foot printing	WP5	▪ No. of companies with 26 system implemented ▪ No. of downloads of documents (more than 2.500) ▪ No. of booklets disseminated (8.000 copies)	- Download counter (No. of downloads) - Report from partners -
5. To improve and build up network of qualified wood biomass laboratories among participating countries.	· Network of laboratories for wood biomass quality analysis	WP5	▪ No. of laboratories included in network (at least 15) ▪ No. of downloads of documents (more than 500) ▪ No. of laboratories with implemented EU CEN technical documents (at least 10)	- Download counter (No. of downloads) - List of laboratories
6. To support capacity building among participating countries and institution	· Network of institutions working on wood biomass · Training of partners · Good practice examples · Innovative solutions for common barriers	WP2 WP 3 WP4 WP5	▪ No. of participants on training for partners (at least 22 participants) ▪ 6 Project meetings followed by presentations of good practice examples ▪ Meetings of steering group ▪ At least two innovative solutions to accruing problems in partner countries, e.g. motivation of private forest owners to invest, establishing a common QA7QC system.	- Lists of participants - Minutes from meetings - Recommendations from steering group

- **Long-term impact <u>beyond the project duration until 2020</u>:**

Strategic Objective(s) of your proposal	Target by 2020:
1. To support development of common European biomass market and development of strong bio-based industry and energy supply	▪ Development of at least 1,000 biomass trade and logistics centres all around EU to support development of regional wood biomass market and to guaranty the wood biomass quality.
2. To contribute towards increase of energy from renewable sources	▪ 600 toe heat from biomass generated.
3. To contribute towards sustainable use of renewable sources with promotion of sustainability criteria and EU CEN normative documents	▪ Implementation of EU CEN technical documents in at least 10 % of SME producing and marketing wood biomass in rural areas where wood biomass is an important source of energy.
4. To contribute towards job creation, especially in rural areas, and consequently encouragement of local and regional development	▪ Mobilisation of wood biomass and support to the whole biomass production chain will create new direct, indirect and induced jobs. We estimate that on average each 2,500 cubic metres solid volume under bark of wood biomass will create one direct job.
5. To encourage research and development in the field of renewable energy technologies	▪ At the national level, at least 10% of total investments in BLTC and energy contracting and other wood biomass technologies will be transferred to national research and development activities to support further development of biomass production chains and to remove the barriers for further mobilisation of biomass resources.

- **IEE Common performance indicators:**

Specific and strategic objectives	Target within the project duration :	Target by 2020:
Contribution to the EU 2020 targets on energy efficiency and renewable energy sources	▪ 7.600.000 € Cumulative investment made by European stakeholders in sustainable energy	▪ 17.000.000 Cumulative investment made by European stakeholders in sustainable energy
	▪ 774 toe Renewable energy production triggered (toe/year)	▪ 2000 toe Renewable energy production triggered (toe/year)
	▪ 155 toe Primary energy savings compared to projections (toe/year)	▪ 400 Primary energy savings compared to projections (toe/year)
	▪ 43.200 t CO_2e Reduction of green house gas emissions (t CO_2e/year)	▪ 100.000 t CO_2e Reduction of green house gas emissions (t CO_2e/year)

Your baseline and assumptions for the extrapolation:

1. Cumulative investments: an average investment in Biomass trade centres is from 150,000 to 500,000 €. The consortium will support the creation of 20 Biomass trade centres (with tasks in WP 3, like 3.4, 3.5. and especially 3.6). Cumulative investment in Biomass trade centres during project duration will be 4.000.000 € in participating countries and +20% in other EU countries. Average investment in energy contracting (depends mainly on capacity of boiler installed) is from 100,000 € up to 500,000 €. Through its actions, the consortium will support 20 new plants. We estimated that cumulative investment in energy contracting systems will be 3.600.000 €.

2. In case of energy contracting, mainly small and medium boilers are installed (capacity from (120 kWh to 1 MWh). Yearly production of this kind of boilers is from 180 MWh to 1,500 MWh.
3. Modern wood biomass boilers have higher efficiency (by approx. 20%) than old boilers in households. With the implementation of 20 new energy contracting models with modern boilers installed we will save from 50 to 100 toe per year.
4. With 250.000 of loose m^3 of wood chips sold through new Biomass trade centres and 25.000 loose m3 of wood chips used in planned energy contracting systems, we will save more than 43.000 t CO2eqv per year. (Our assumption is that alternative fuel is heating oil with average emissions of 77g CO_{2eq}/MJ). For our calculation we considered wood chips P 45 with M =35 %, caloric value of 1 loose m^3 is 0,669 MWh or 2,4 GJ primary energy.

4. Target Groups and Key Actors

(a) Target Group(s):

The project is targeting all the actors and subjects involved directly and indirectly in the production, storage, distribution and use of wood biomass, having in mind other users of wood biomass (e.g. producers of fibre and particle board or pulp and paper industry). The project targets especially those that may find their business opportunity in wood biomass production, e.g. small forest owners and those already involved in biomass production, to further explore their market opportunities, e.g. move from mere biomass products to the organised distribution within the framework of trade centres or find their opportunity in energy contracting sector. Our target groups are fundamental subjects in order to mobilise wood biomass potentials, to bring quality biomass to the market and to balance supply and demand sides. Project results will be disseminated through already established network of relevant forestry and agricultural institutions and associations and by producers, traders, professionals and policy makers. These groups will be targeted also beyond the project life time.

Our main target groups are:

Forest entrepreneurs and companies, members of machinery rings, cooperatives of farmers, SME in rural areas, farmers and forest owners, local communities, regional and national policy makers, energy planners, biomass plant operators, biomass trading companies, forest based industry and general public.

(b) Key Actors:

Forest owners associations, Forestry service with its regional advisory service, Chamber of agriculture and forestry with its regional advisory service, Energy agencies, rural development officials, biomass plant operators, Regional Bioenergy Co-ordinators, public policy makers, research and development organisations, governmental bodies, Associations of forest entrepreneurs.

Overview Table:

(a) Target Group(s)	Benefit to the target group
1. Farmers and forest owners	- Raising awareness of farmers and forest owners regarding biomass production potentials - Active involvement of farmers and forest owners in biomass production chains by trainings and preparation of feasibility studies - Setting up of new businesses in biomass sector - Practical information and new knowledge about whole biomass production chain, practical information on how to start and run biomass business - How to produce high quality wood fuels
2. Forest entrepreneurs and companies	Higher level of services provided to the end-users and quality assurance system including labelling options, and business to business (B 2 B) communication
3. Members of machinery rings	Higher level of services provided to the end-users and new activities
4. Local communities	-New jobs through recruitment of technically skilled work force -Higher share of renewable sources of energy in the overall energy consumption -Higher utilisation of local resources
5. Small and medium enterprises in rural areas	-Information on new business possibilities -Quality assurance system for higher added value to their end products -Support in upgrading the current business by providing guidelines to set up new biomass trade centres or energy contracting
6. Farmer cooperatives	Information on possible new activities and new sources of income; guidelines to set up new Biomass trade centres or energy contracting
7. Regional and national policy makers	Professional support for policy decision to promote biomass use in public and private buildings
8. Biomass trading companies	Information on biomass producers and biomass users, QA/QC system, possible contacts with the existing and new Biomass trade centres
9. Forest based industries	Information on biomass producers and biomass users, QA/QC system, possible contacts with the existing and new biomass producers and Biomass trade centres. Information on possible new activates (wood furl production)
10. General public	Information on efficient biomass production, information on biomass origin and biomass quality
(b) Key Actor(s)	**Benefit to your proposal / the work programme**
1. Forest owners associations	Help to motivate and mobilise forest owners and help to reach forest owners at the regional level
2. Forestry service	Help to reach forest owners at the local level, dissemination of results
3. Chamber of agriculture and forestry	Mobilisation of members - help to reach forest owners at the local level, dissemination of results
4. Energy agencies	Mobilisation of local communities and local / regional policy makers, dissemination of results and project outputs
5. Rural development officials	Implementation of project results into rural development programs
6. Biomass plant operators	Implementation of project results
7. Regional Bioenergy Co-ordinators	Mobilisation of local communities and local / regional policy makers, involvement of existing biomass plant operators and biomass producers
8. Research and development organisations	Knowledge input and mobilisation of professionals and implementation of project results

9. Public policy makers and governmental bodies	Mobilisation of local communities and local / regional policy makers, active participating in relevant project actions (for example: workshops)
10. Associations of forest entrepreneurs	Mobilisation of forest based companies and entrepreneurs
11. Project partner organisations	Mobilisation of national and regional policy makers, general public and biomass and forestry professionals

5. EU Added Value

(a) Evidence for the benefit of EU collaboration:

The European added value consists of the transnational cooperation and cooperation between science and practice with the objective to support mobilisation of wood biomass resources and to promote biomass production chains. The project dissemination and knowledge transfer will be performed at the following three levels:

1. The first is capacity building among project partners – knowledge transfer, learning from experience, building on existing knowledge and existing initiatives.
2. The second is knowledge transfer, trainings, promotion of good practice examples and boosting development among targets groups and involvement of key actors in participating regions or partner countries.
3. The third is transfer of project results and main products all across Europe trough web page, international articles, international conferences and fairs.

The project is built on previous IEE action "BiomassTradeCentres I". Additional materials from the ongoing IEE Project "Agriforenergy II" (www.agriforenergy.com) will be used as a helpful tool to train farmers and forest owners. This approach shall ensure an efficient use of materials produced during previous and ongoing IEE projects and dissemination of this knowledge also to partners that are not involved in these IEE actions.

The BiomasTradeCentreII project will provide potential investors with integrated information on advantages and formal provisions regarding the renewable energy sector. All activities will be target group oriented, aiming at actions resulting in investments in renewable energy production and will be applicable all around Europe.

The project partners have the capacity and enough references to show ways to achieve best added value to wood biomass - through good quality of products, direct distribution to the end user and different target groups, using participatory methods and also one-to-one meetings when concrete technical advice is needed.

(b) Geographical focus:

Project is addressing following target areas:

- Mediterranean areas (Spain, Italy, Greece, Croatia) with small forest estate, large amounts of low quality deciduous trees and still relatively undeveloped wood biomass markets;
- Alpine areas (Austria, Slovenia, part of Italy and part of Germany) with a bigger forest estates, predominant coniferous and with longer experiences in wood biomass market development;
- South-eastern countries (countries in transition – like Romania, Croatia, Slovenia) with still unorganized forest owners, larger potential of wood biomass and undeveloped biomass markets

- Western European countries (Ireland) with longer tradition in forest plantation and developing wood biomass markets.
- Central European countries (Germany and Austria) with developed biomass markets and organised biomass production chains.

The Consortium is built by partners from different regions of Europe, but with some similar conditions (small forest owners, unused biomass potentials, relative high targets for RES). So the materials prepared by different partners during the project will be easily translated and adapted to specific national or regional conditions.

All partners have their own national professional and training networks, which will be used to disseminate results from this project, and they all play key roles in the development of biomass sector in their own countries or regions.

(c) Transferability:

It is a special challenge to involve countries at different development stages of the wood biomass sector. These differences in conditions and in development give an excellent opportunity to learn from experience and to gather best practice examples along the whole biomass production and value chain. Partners are also jointly focused on their activities in different phases of biomass production chain and can contribute more compared to the others. Our idea is to connect competent partners along the entire biomass value added chain and with international and interdisciplinary cooperation build a new knowledge platform on wood biomass production chain around Europe. We will build on the existing knowledge and contribute new insights that will be useful for market orientated development of wood biomass production and use all around EU. Quality assurance and quality control base on EU standards, eco labelling and carbon footprinting are topics that are important all across EU and will be addressed through this project. Development of certifying laboratories for wood chips quality is a very topical subject in many EU countries, and practical results of this project will present a solid background for further development and networking of that kind of laboratories.

Results can easily be disseminated to some Balkan countries like Serbia, Bosnia and Herzegovina, Macedonia, Montenegro or Kosovo to help boost development in biomass sector in these countries as well. Representatives from these countries will be invited to some events organised in Croatia and Slovenia (easy to overcome language barriers). Results will be useful for all countries in EU that want to develop private biomass businesses and wish to provide for wood fuel quality and sustainability of its production.

Websites, international and national networking meetings will be used to extend geographical outreach in the less experienced Member States and the more experienced partners will promote the project at conferences etc. on the European stage.

6. Composition and Rationale for the Consortium

6.1. List of Participants

Partic N°	Participant name	Participant short name	Country code	Main activities in Consortium
CO 1	Slovenian Forestry Institute	**SFI**	SLO	Coordinator and Leader of WP1, WP5 and WP7
CB 2	Styrian Chamber of Agriculture and Forestry	**Lk Stmk**	AT	Active Partner and WP 4 Leader
CB 3	Italian Agriforestry Energy Association	**AIEL**	IT	Active Partner and WP 3 Leader
CB 4	North-West Croatia Regional Energy Agency	**REGEA**	CRO	Active Partner and WP
CB 5	Forest Sciences Center of Catalonia (Centre Tecnologic Forestal de Catalunya)	**CTFC**	ES	Active Partner
CB 6	Spanish Bioenergy Association (Asociación Española de Valorización Energética de la Biomasa)	**AVEBIOM**	ES	Active Partner and WP 6 Leader
CB 7	Waldverband Steiermark GmbH Styrian Forest Owners Association	**WVB-Stmk GmbH**	AT	Active Partner and WP 2 Leader
CB 8	Centre for Renewable Energy Sources and Saving	**CRES**	GR	Active Partner
CB 9	S.C. I.C.P.E. BISTRITA S.A.	**ICPE**	RO	Active Partner
CB 10	Irish Bioenergy Association	**IrBEA**	IRL	Active Partner
CB 11	Technische Universität München	**TUM**	D	Active Partner

6.2. Rationale for the composition of the Consortium

All partners are playing key roles in the development of the national bioenergy sectors. The Consortium consists of partners from research institutes, Chambers of Forestry and Agriculture, forestry institutes, Energy agencies and Biomass associations. This mixture guarantees a wide dissemination of outputs and a strong link to the target groups and key actors. The principal work will be carried out by the Consortium members, although every participant incorporates in the project activities some key national institutions as well as experts. The Consortium consists of experts on wood biomass from different countries and complementary backgrounds. This project will be an important platform for information and experience exchange between partners and capacity building in the participating regions or countries.

The Consortium has:

1. Scientific excellence: selected partners have competences in the field of forest management, renewable resources of energy or in technologies. Excellency will provide for a solid background in the preparation of material for workshops, trainings and other public events and will guarantee high quality of the published deliverables (like deliverables: D2.2, D 2.6, D3.2, D3.3, D3.6, D4.1, D4.2, D5.1, D5.4, D5.6);
2. Geographical distribution: the variety of situations in wood biomass production chains as well as natural and socio-economic situations will serve as a wide platform for the existing knowledge transfer and give an opportunity to "learn from experience" on the one hand and to disseminate project results beyond partner countries on the other.
3. Link to target groups: all partners in the Consortium have a strong link to the selected target groups. If their connection is in some cases (with some target groups) weak, they will consider subcontracting out other organisations in the country that could help them to reach a specific target group.
4. Stakeholders along biomass production chain: a number of different stakeholders along biomass production have expressed their interest in the project (see Letters of support) and their wish to actively participate in project meetings and events. The pool of different stakeholder will acknowledge project results and ensure their exploitation for drawing policies and support measures.

In all participating countries, the project Consortium is to reach, motivate and help forest entrepreneurs, members of machinery rings, farmer cooperatives, SME in rural areas, farmers and forest owners, local communities and policy makers in rural areas to mobilise wood biomass potential from private forests, bring quality wood fuels to the market and to enter energy markets (energy contracting).

7. Work Programme

7.1 Introduction to the Work Programme

(a) Rationale and structure of your work programme:

The work plan has a durability of 36 months and is divided into 7 interdependent work packages. Each of them has its specific goals and outcomes. For realization of each work package a methodology for achieving its objectives and outcomes will be agreed among the project partnership. Monitoring and supervision of the project's realization will be provided through the whole project duration by Slovenian Forest Institute. An overview of the project work plan is shown in Figure b and consists of the following work packages:

WP1: Project management
WP2: Promotion of new investments in wood biomass production
WP3: Implementation of biomass trade and logistics centres
WP4: Implementation of wood energy contracting
WP5: Promotion of Quality standards and sustainability criteria
WP6: Communication and dissemination of project results
WP7: EACI dissemination activities

The structure of the project follows the production and value chain "from standing trees to heat or electricity sold to end users". Project's timetable follows its structure and suggests transition from production of biomass to – in business sense - more complex forms of involvement in the field of biomass, such as establishment of trade centres and energy contracting. In this respect each target group will be addressed by the most suitable business opportunity and the greatest impact may be achieved.

Special emphasis will be given to quality control and sustainability criteria through whole production chain, aiming to achieve growth of the consumption of the biomass products on the market. Steering committee will monitor the project running and will be responsible for risk management in case of any problems or delays in project activities.

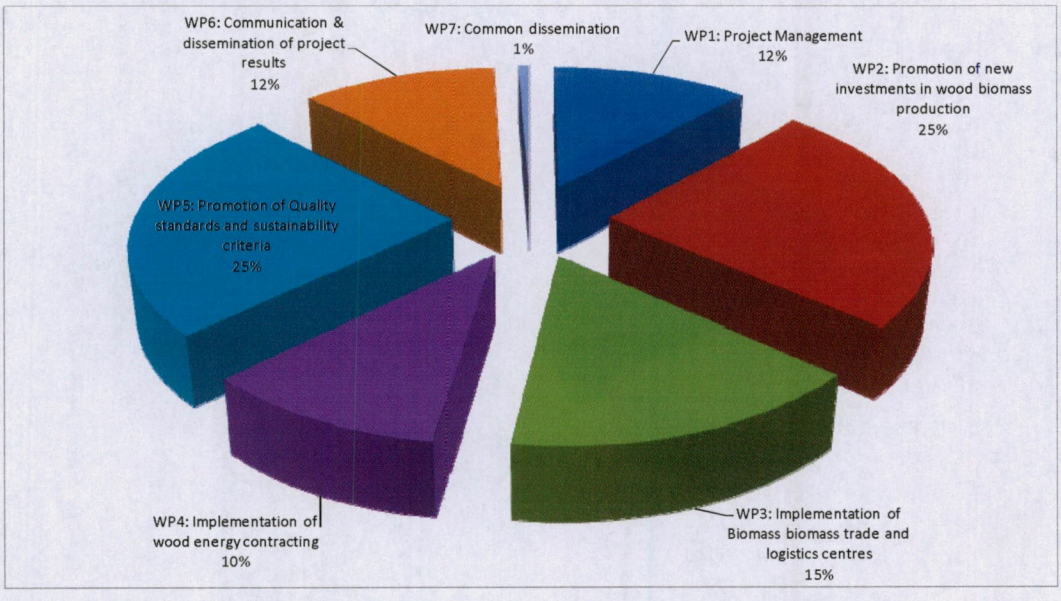
Following this production chain, the project starts with **WP2** "Promotion of new investments in wood biomass production" to present the state-of-the-art biomass production and to mobilise, through different actions, the unused biomass potential referring to the selected target groups and key actors mentioned in Chapter 4 of the project proposal (i.e. small forest owners, rural entrepreneurs, farmers, forest companies).

WP3 "Implementation of Biomass trade and logistics centres**"** is a logical second step in the production chain, offering modern and efficient solutions for storing, selling and supplying wood biomass to local markets.

WP4 "Implementation of wood energy contracting" is the final step in biomass use and gives a new opportunity for income to different target groups identified in Chapter 4 (farmers, forest owners, potential investors, cooperatives of farmers, small and medium-sized enterprises in the rural areas, public bodies and local communities). At the same time, it is a new way to add a higher added value to low quality wood by selling it as heat. All three WP's (WP 2, 3 and 4) are targeting not only farmers and forest owners, but also forest entrepreneurs, members of machinery rings, cooperatives of farmers, SME's in rural areas, which means a more business orientated approach. To overcome the risk of failure in reaching target groups in different WP's or to reach our goals the Steering committee will monitor closely the progress in this first WP's and will in case of any problems organize additional meeting of involved partners (internet conference) to solve the problem and boost the development of project ideas.

WP5 "Promotion of Quality standards and sustainability criteria" is the core action of the project dealing with EU CEN technical specifications, Quality assurance and Quality control and exploring possibilities for labelling wood fuels. **WP6"** Communication and dissemination of project results**",** on the other hand, aims at effectively disseminating the project results across EU and especially to new EU member states. Actually all WP are orientated in dissemination and communication with different target groups and key actors, but via internet page, articles and other promotion activities the results and new ideas developed through the project will reach different and new target groups all across Europe.

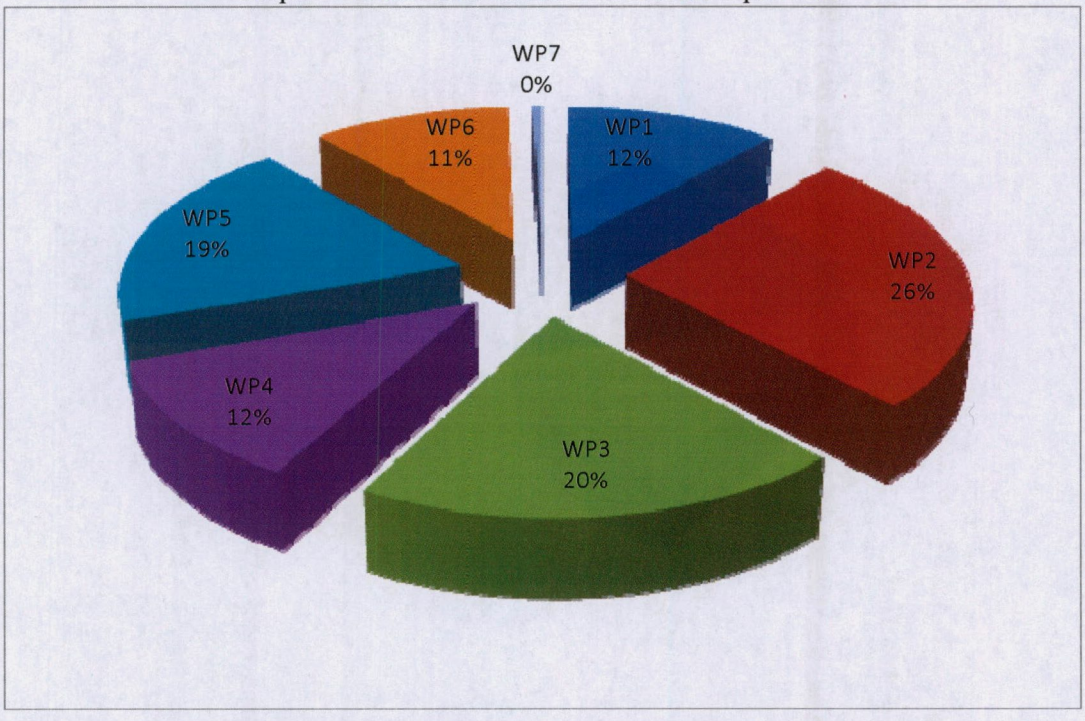
Graph 1 Distribution of working hour dedicated to different work package shows the importance of WP 2 and WP5.



Allocation of financial resources per WP and cost categories (The value of money)

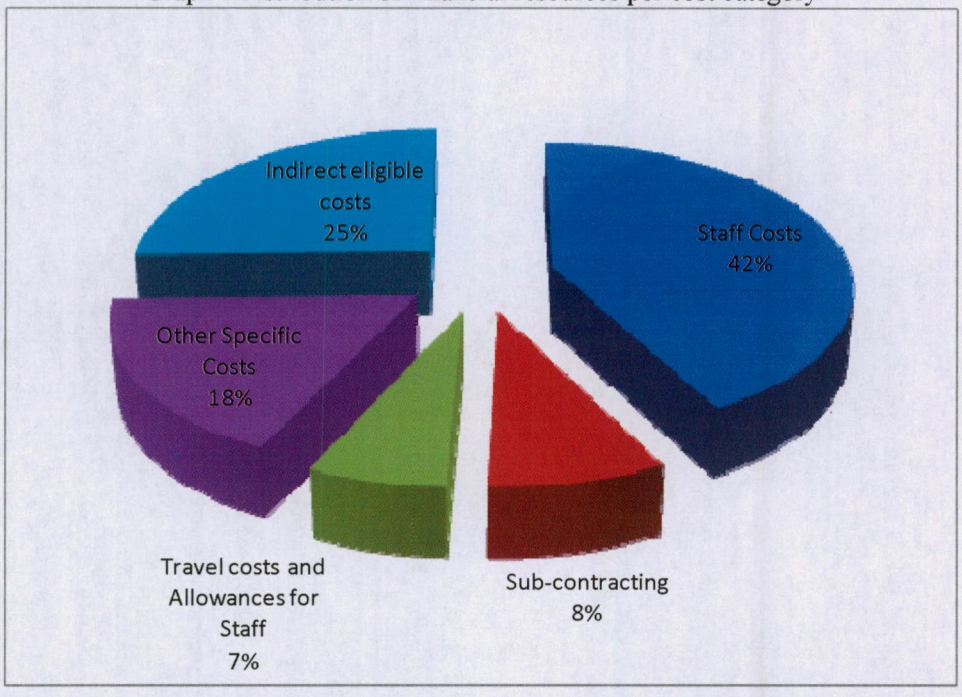
The largest part of financial resources (see graph 2) are dedicated to mobilization of wood biomass from forests and other resources (WP 2), promotion of biomass trade centres (WP 3) and promotion of energy contracting (WP 4). Printing material, organisation of workshops, trainings, study tours and practical demonstrations of modern technologies are costly but effective ways to reach main target groups (forest owners and forest companies), "armed" them with all necessary knowledge and to bring them to the market. Nearly 60 % of financial resources will be dedicated to this three Work packages. For the realisation of this three WP's more than 11.000 working hours will be dedicated. Around 19 % of financial resources will be allocated to WP 5 "Promotion of Quality standards and sustainability criteria" which is the core action of the project and which will give practical and market orientated solutions for biomass producers on one hand and will help to rise consumers awareness about wood fuel quality and sustainability on the other hand. The distribution of financial resources per WP's points out that the majority of financial resources will be spend for actions that will educate, train and trough professional help mobilise the forest owners, forest companies, biomass producers and new investors. All prepared and printed material will be available for dissemination beyond the participating countries or regions and beyond the duration of the project

Graph 2 Distribution of financial resources per WP's



The analysis of financial resources dedicated to different cost category points out that the majority of financial resources will be dedicated to stuff costs, which shows the capacity of partners to perform all the tasks but also gives the partner an opportunity for capacity building and a coherent base for common search for "the best solutions". Other specific costs cover the costs of organisation of events, printing and translation of all produced documents. Allocation of financial resources among partners shows a balance between partners.

Graph 3Distribution of financial resources per cost category



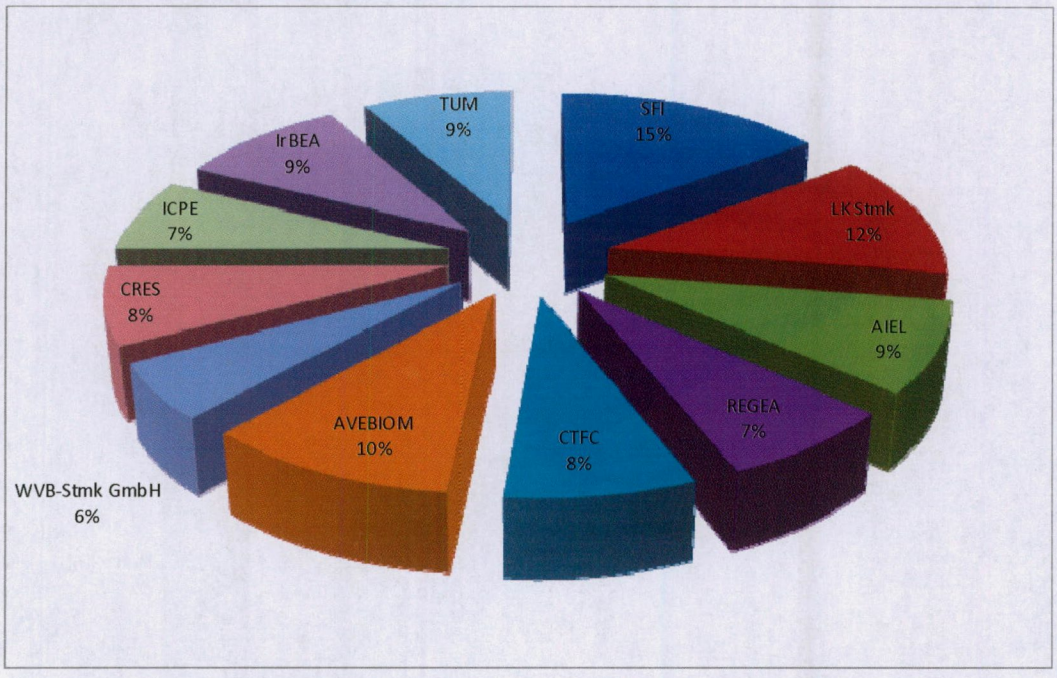
Partners from more advanced countries (countries with already developed biomass markets) will need more financial resources for knowledge and experiences transfer, but also for further development of domestic wood biomass markets. Partners from less advanced countries (with developing biomass markets) will need more financial resources for capacity building, education, training and promotion of market orientated actions.

Allocation of responsibility for conducting the WP's:
Each partner has its specific responsibility and goals:
SFI is the coordinator of the project and the leader of **WP1**, **WP5** and **WP7** as well;

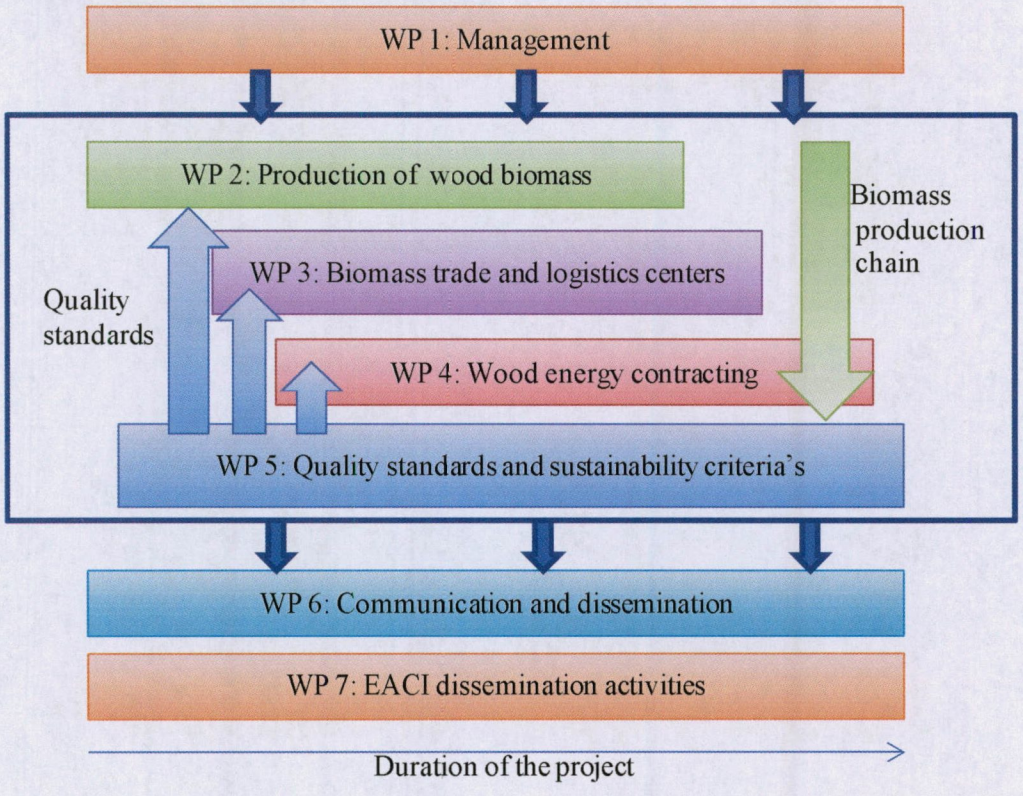
- Leader of the **WP 2**: WVB-Stmk GmbH
- Leader of the **WP 3**: AIEL
- Leader of the **WP 4**: Lk Stmk
- Leader of the **WP 6:** AVEBIOM

The distribution of hour of work per partners shows balanced involvement of all partners. Work package leader has a significant higher amount of hours for coordination of work in WP's. Lk Stmk has as the partner with the largest experiences in wood biomass field larger amount of hours dedicated to transfer of knowledge and know-how to partners and he has to organise 6 study tours for participants coming from partner's countries.

Graph 4 Distribution of working hours per partner shows balance contribution and efforts of all partners in the project.



(b) Flow chart of your work programme:



7.2 Work Packages

7.2.1 Work Package 1: Project management

N° of work package: 1	Project management
Duration in months: 36	SFI

I. Description of the work:

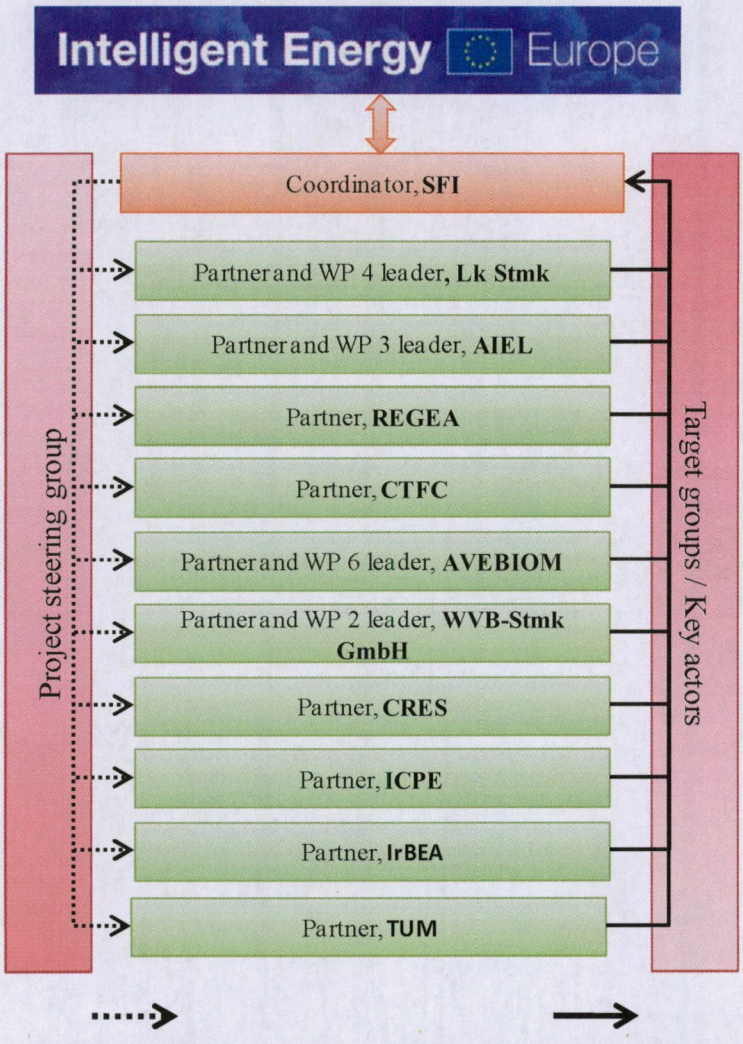
a) Overview of the Work Package:

The project will be managed and co-ordinated by SFI. It will lead the project by agreeing on the protocol with partners for financial management, project reporting and communications. The WP Management will provide for the monitoring of project results on one hand but on the other will give an opportunity to project partners to meet and discus different topics. Exchanging experiences and looking for new and innovative ways to overcome common barriers in biomass production chains are topics that will be addressed during project meetings. Capacity building among partners is very important issue that will be addressed during whole project duration. The co-ordinator will have regular contact with each national partner to follow the advancement of the actions. The undertaking will be monitored from the beginning (kick-off meeting) and regularly (5 further project meetings). Reports on realised and all upcoming project activities will be mentioned clearly in the minutes of the meetings. In addition, reminders will be given by e-mails a few weeks before deadlines for realisation of the tasks. Each project partner will be responsible for its subcontractors fulfilling their work according to the planned work programme.

Slovenian forestry institute has long experiences in coordinating regional and national project and has all capacity needed for coordination of this project. Project coordinator is responsible for ensuring that the project runs smoothly, achieves targets and deliverables and make a compilation of the administration and financial reports to the Commission within required deadlines. Project coordinator will arrange that payments are made on time to the Consortium partners. Very important roll of project coordinator is also ensuring information exchange and capacity building among partners.

The coordinator will initiate an informal e-mail bulletin board to which all partners will be required to contribute a bullet point update of activities, good and bad experiences, ideas and suggestions. This will ensure ongoing communications and awareness of the progress being made by all partners, as well as a sharing of good ideas. As a mean of communication regular e-mail, telephone and free on-line telephone communications (Skype system) will be used. Technical, financial and administrative reporting templates and deadlines will be uploaded and displayed onto the one part of project web page – available only with password for all project partners..

The workload has been spread across all of the partners to ensure active participation, and each has considered and determined individually the level of activity within the overall theme that is practicable and realistic for them, and at the level they are able to co-finance.



b) Description of the tasks:

1. Monitoring of the project's implementation: project implementation will be monitored through quality control plan and will be discussed on project meetings. Steering group and External project evaluator will play an important role in monitoring the quality of project results and success in reaching our main target groups.

1.1. Quality control plan

1.2. Monitoring performance indicators

1.3. Project meetings: the coordinator will organise, together with his partners, the kick-off meeting and 5 project meetings. The kick-off meeting will be held in Slovenia in the first month of the project's implementation. Other meetings will be organised in partner countries and will be combined (when possible) with other professional events (like final project conference (WP6), training of partners (WP 3), others international fairs and conferences of interest). Dates and places will be agreed at the kick-off meeting.

1.4 External project evaluator: after the start of the project, an external expert from wood biomass sector will be chosen to join the project steering group (an expert who is not involved in any project activity). He will be selected at the kick-off meeting. His main task would be to follow the

project through the eyes of an expert and to monitor different project dissemination materials (also before the final version is published), as well as to help the project coordinator and task leaders to produce quality output. He will also monitor the project progress and prepare a short report for the envisaged reports (1st brief technical progress report, 2nd brief technical progress report, Interim report, Final Report and Final Publishable Report). This independent professional opinion can help the Project officer as well as the wider public (readers of Final Publishable Report).

1.5 Project steering group: the project steering group will be officially established at the kick-off meeting and will be comprised of representatives of all partners. The main task of this group is to monitor the project implementation and performance indicators and to give support to Coordinator in achieving all envisaged results.

1.6. Reporting

1.6.1. Project reports

1.6.2 Financial reports

IIa. Outputs of this work package (apart from deliverables):

- Defined project management
- Monitoring of the project success and its impact on the market – the project success will also be monitored by the external expert
- Submission of the necessary progress, interim and final reports to the Commission
- A successful international exchange of experiences and knowledge
- Performance reports, measuring the success of separate WPs

These actions will guarantee:

- Quality control, follow-up and permanent evaluation
- Successful IEE project

IIb. Deliverables of this work package:

D1.1 Quality control plan; added to progress reports

D1.2 6 project meetings with minutes of the international project meetings; added to progress reports

D 1.3 performance reports, measuring the success of WPs (external expert)

D1.4 4 project reports during the project and Final Publishable Report

D1.4.1 1st brief technical progress report, covering months 1-9 (Month 10)

D1.4.2 2nd brief technical progress report, covering months 10-27 (Month 28)

D1.4.3 Interim report, covering months 1-18 (Month 19)

D1.4.4 Final Report, covering months 1-36 (Month 38)

D 1.4.5 Final Publishable Report (Month 38)

III. Distribution of each partner's tasks in this work package (Award criterion 5):

Partner	Task(s) for this partner organisation	Related to Task N°
SFI	The WP will be managed by the project coordinator – SFI SFI, as the project leader, will plan and prepare regular meetings. As such, the lead partner will offer assistance to the rest of the partners and facilitate the management framework (templates, reports, contracts, etc.) and tools designed to arrange partner relations and information exchange	All,
All partners	Each involved partner is responsible for the technical, administrative and financial project coordination, in particular:	1.2 1.3

	- monitoring of the project implementation - monitoring the success of the project and its impact on the market - Active participation at the Consortium's meetings - Project reporting (technical progress, interim and final reports). - International co-operation and involvement of target groups and key actors	1.5 2

Major other specific costs:

[List major other specific cost – if any - by task and describe them shortly]

Other specific costs	Related to Task N°	Description	Relevant for partners
Organisation of project meetings	1.3	Organisation of venue	SFI, CRES, Lk Stmk, AIEL, REGEA, AVEBIOM
External project evaluator	1.4	Fee for external evaluator that will evaluate the project results as wood biomass expert	SFI,

Major subcontracts:

[List major subcontracts and shortly describe the tasks covered]

Mandatory phrase to keep: The subcontractors identified / to be identified were / will be selected following the provisions of Article II.9 of the Grant Agreement on competitive grounds on the basis of best value for money.

7.2.2. Work Package 2 Promotion of new investments in wood biomass production

N° of work package: 2	Promotion of new investments in wood biomass production
Duration in months: 29	WVB-Stmk GmbH

I. Description of the work:

a) Overview of the Work Package:

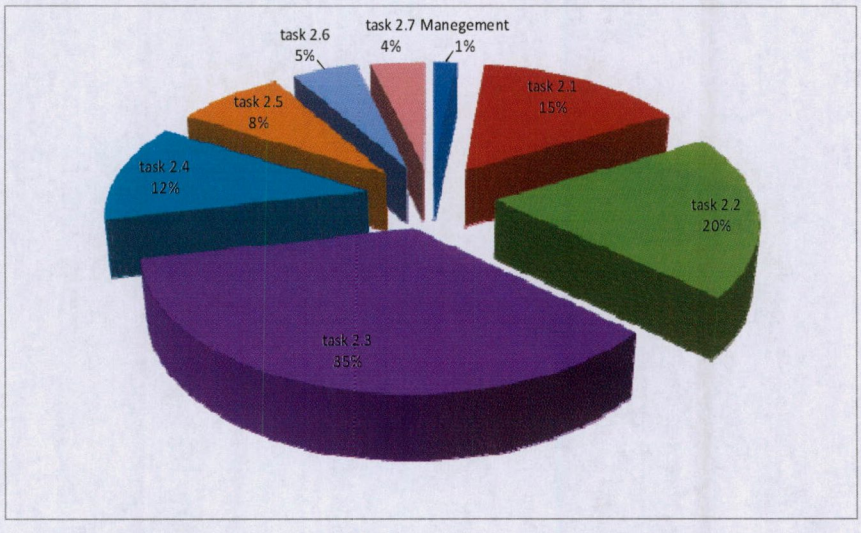
There are still unused potentials in the forests all across Europe. Actions envisaged in this WP will contribute to sustainable mobilisation of wood biomass from forests, short rotation plantations and other resources. Partners will on the basis of events fit beck (questioners for participants) give a special effort to mobilise potential investors.

WP 2 will contribute to the realization of the following objectives:

- Biomass production from forests, short rotation plantations (SRC) and other sources (orchards, vineyard ...)
- Mobilisation of forest owners by bringing them to the market as biomass producers or link them with the existing forest entrepreneurs, forest companies or biomass producers
- Mobilisation of farmers with land available for SRC by bringing them to the market as biomass producers or link them with the existing forest entrepreneurs, forest companies or biomass producers
- Training of employees of the existing forest entrepreneurs, forest companies or biomass producers to produce biomass efficiently, economically and environmentally friendly.
- Production environmental assessment
- Development of new business in rural areas

The most important tasks are task 2.2, 2.3, 2.4 in which we will prepare necessary background materials for workshops and trainings and will try to identify potential participants for planned the events. We are planning to spend less working hour on tasks like 2.5 and 2.6, which are very important for mobilisation of main target groups (forest owners and forest companies) while all partners have foreseen subcontractor for realisation of this tasks. Planned subcontractors will help the consortium to engage larger number of participants from rural areas and will help us to build informal local networks of potential investors.

Graph 5 Distribution of working hours planned per tasks in WP 2



WP 2 will be coordinated by WVB-Stmk GmbH and all partners will actively participate in the preparation of the state-of-the-art biomass production reports and by organising workshops,

demonstration events, trainings and selection of best practice examples as described in tasks below. Styrian Forest Owners Association is dedicated to help forest owners in management of forest; they have long experiences in organisation of different events for forest owners and their positive experiences in motivating forest owners will help the consortium to achieve all tasks.

b) Description of the tasks:

2.1 Analysis of the State-of-the-art wood biomass production in all participating countries – looking for main barriers for mobilisation of wood biomass from forests, SRC or other land.

Minimum contents of this report will be:

a) Short description of wood biomass market
b) Description of wood biomass production chains from forests
c) Description of wood biomass production chains from short rotation forests
d) Description of wood biomass production chains from other resources (vineyards, orchard, parks, other agricultural or urban areas)
e) Socio-economic and other constrains
f) Existing policy measures (subsidy schemes, environmental limitations ...
g) Main barriers for further development

2.2 Preparation of the Catalogues of forestry companies and biomass producers (building on the "Catalogue of regional biomass wood fuels producers" from Biomass trade centres) including Good practice examples of wood biomass production – each partner presents at least 3 different production chains. The catalogues will be published also on the internet in national languages and in English. With this action we will help to develop not only local markets but also regional and international markets. The catalogues will contain addresses of different companies performing forest operations and producing wood fuels. The addresses will be arranged by locations and type of operations (forest cutting, skidding, wood logs production, wood chips production).

2.3 Preparation of the Technical backgrounds for advanced techniques and technologies in biomass production for workshops and trainings. At the beginning of the project, partners will prepare a list of relevant topics on advanced techniques and technologies in biomass production. Each partner will select some of the topics and prepare short technical backgrounds (up to 10 pages in English). The leading partner will collect all this material and prepare a common document (pdf format). This document will delineate technical backgrounds for advanced techniques and technologies in biomass production and will give an overview of the latest research and development achievements in this field. The gathered material will be used as background material for all partners in the preparation of workshops and trainings (tasks 2.5 and 2.6).

2.4 Preparation of an overview of sustainability criteria for biomass production – building on the existing EU policies and initiatives having in mind also the common principles, criteria and guidelines for sustainable forest management, the Consortium will prepare a list of sustainability criteria that are of relevance when wood biomass production chains are analysed..

2.5 Realization of 45 workshops directly linked to demo events or study tour for forest owners, members of machinery rings, cooperatives of farmers – to promote biomass production and modern technologies (half-day workshop and half-day practical demonstration of modern technologies and presentation of national or regional subsidy schemes.

Minimum contents of the workshops: biomass potentials, biomass production technologies, biomass logistics and trade centres (link to WP 3), selling of heat as a new opportunity (link to WP 4), quality standards for wood fuels (link to WP 5) and new business models.

Localization and number of "Workshops and demo events" activities organized by the Consortium:

Partners	Regions	N° of workshops and

		demo events
SFI	Slovenia	6
Lk Stmk	Styria	8
AIEL	Lombardia, Toscana, Triveneto, Molise	5
REGEA	NW Croatia	6
CTFC	Catalonia-in each rural province (Girona, Lleida, Tarragona)	3
AVEBIOM	Castilla y León	4
WVB-Stmk GmbH	-	0
CRES	Greece (northern, central, southern)	3
ICPE	Romania	3
IrBEA	1 in each province (4)	4
TUM	Bavaria	3
Total		45

For each workshop and demo event, a report will be prepared and sent to the WP leader (electronic version with the list of participants, programme and invitation letter). A common layout for writing reports will be prepared preliminary by the WP leader. WP leader will prepare a common questionnaire for the participants to get feedback from them. This will help us to monitor the project success in addressing the identified barriers.

Envisaged number of participants per workshop: 20-30

Envisaged number of participants per demo event: 60-100

2.6 Realization of 28 trainings of forest entrepreneurs, forest companies and biomass producers – one-day training.

Minimum contents of the training: Modern technologies for biomass production (machinery, costs, environmental aspects), biomass logistics and trade centres (link to WP 3), environmental constrains, selling of heat as a new opportunity (energy contracting - link to WP 4), quality standards for wood fuels (link to WP 5).

Localization and number of "training" activities organized by the Consortium:

Partners	**Regions**	**N° of trainings**
SFI	Slovenia	2
Lk Stmk	-	0
AIEL	Toscana, Molise	2
REGEA	Croatia	2
CTFC	Catalonia (organized in collaboration with forest owners associations)	3
AVEBIOM	Castilla y León	2
WVB-Stmk GmbH	Styria	5
CRES	Greece (northern, central)	2
ICPE	Romania	3
IrBEA	1 in each province (4)	4
TUM	Bavaria	3
Total		**28**

For each training, a report will be prepared and sent to the WP leader (electronic version with the list of participants, programme and invitation letter). A common layout for writing reports will be prepared preliminarily by the WP leader. WP leader will prepare a common questionnaire for

participants to get feedback from them. This will help us to monitor the project success in addressing the identified barriers.

Envisaged number of participants per trainings: 20-25

2.7 Realization of 29 match-making events to bring together forest owners, companies performing work in forests, biomass producers, owners of Biomass trade centres and potential users of wood biomass. These events will be linked to the existing events and other actions in this project (like workshops and trainings).

Localization and number of "match-making events" organized by the Consortium:

Partners	Regions	N° of match making events
SFI	Slovenia	4
Lk Stmk	-	0
AIEL	Lombardia, Toscana, Triveneto, Molise	4
REGEA	NW Croatia	3
CTFC	Catalonia	1
AVEBIOM	Castilla y León	4
WVB-Stmk GmbH	Styria	5
CRES	Greece (northern, central or southern)	2
ICPE	Romania	1
IrBEA	1 in each province (4)	4
TUM	Bavaria	1
Total		**29**

For each match-making event, a report will be prepared and sent to the WP leader (electronic version with invitation letter). A common layout for writing reports will be prepared preliminarily by the WP leader.

Envisaged number of companies and other interested individuals per match-making event: 20-30

IIa. Outputs of this Work Package (apart from deliverables):

- Effective and practical basis for comparing the state-of-the-art biomass production within the Consortium members; highlighting most important barriers and constrains in biomass production chains in the participating countries
- List of potential new participants in WP3, WP4 and WP5
- Mobilisation of forest resources
- Matching the supply and demand sides
- Technical backgrounds for advanced techniques and technologies in biomass production (pdf in English language) and set of material for training and workshops (ppt presentations in national languages).

IIb. Deliverables of this Work Package:

D 2.1 **9** national reports on the state-of-the-art wood biomass production (national language with shorter version in English) with identification of main barriers (pdf documents, downloadable document)

D 2.2 **9** Catalogues of regional forestry companies and biomass producers in national language and in English (building on Biomass trade centres BiomassTradeCentres I) including 27 Fact sheets on good practice examples in national languages and in English – in common template

D 2.3 Organisation of 45 workshops and demo events for forest owners

D 2.4 Organisation of 28 trainings forest entrepreneurs, forest companies and biomass producers

D 2.5 Organisation of 29 match-making events
D 2.6 List of sustainable criteria for biomass production

III. Distribution of each partner's tasks in this Work Package (Award criterion 5):

Partner	Task(s) for this partner organisation	Related to Task N°
WVB-Stmk GmbH	Overall co-coordination of WP's tasks Prepare a short template for state-of-the-art of wood biomass production for the project partners Collection of national reports Final layout of the international report (pdf) Prepare a common template for catalogues and fact sheets First draft of an overview on sustainability criteria for biomass production Preparation of questionnaire for workshop participants Realization of a common layout for meeting reports Preparation of a list of relevant topics for technical backgrounds in advanced techniques and technologies in biomass production and preparation of technical paper for selected topics Planning and organization of 5 training sessions Planning and organization of 5 match-making events	All tasks
SFI	Preparation of the state-of-the-art biomass production in SL Realisation of a catalogue of regional forestry companies and biomass producers Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production Help in preparation of sustainable criteria Planning and organization of 6 workshops and demonstration events Planning and organization of 2 training sessions Planning and organization of 4 match-making events	2.1 2.2 2.3 2.4 2.5 2.6 2.7
Lk Stmk	Preparation of the state-of-the-art biomass production in German language Realisation of a catalogue of regional forestry companies and biomass producers Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production Help in preparation of sustainable criteria Planning and organization of 8 workshops and demonstration events Support in organisation of 5 training sessions Support in organisation of 5match-making events	2.1 2.2 2.3 2.4 2.5 2.6 2.7
AIEL	Preparation of the state-of-the-art biomass production in Italian language Realisation of a catalogue of regional forestry companies and biomass producers Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production	2.1 2.2 2.3

	Help in preparation of sustainable criteria Planning and organization of 5 workshops and demonstration events Planning and organization of 2 training sessions Planning and organization of 4 match-making events	2.4 2.5 2.6 2.7
REGEA	Preparation of state-of-the-art biomass production in Croatian language Realisation of a catalogue of regional forestry companies and biomass producers Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production Planning and organization of 6 workshops and demonstration events Planning and organization of 2 training sessions Planning and organization of 3 match-making events	2.1 2.2 2.3 2.5 2.6 2.7
CTFC	Preparation of the state-of-the-art biomass production in Catalan language Realisation of a catalogue of regional forestry companies and biomass producers Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production Help in preparation of sustainable criteria Planning and organization of 3 workshops and demonstration events Planning and organization of 3 training sessions Planning and organization of 1 match-making event	2.1 2.2 2.3 2.4 2.5 2.6 2.7
AVEBIOM	Preparation of the state-of-the-art biomass production in Spanish language Realisation of a catalogue of regional forestry companies and biomass producers Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production Planning and organization of 4 workshops and demonstration events Planning and organization of 2 training sessions Planning and organization of 4 math-making events	2.1 2.2 2.3 2.5 2.6 2.7
CRES	Preparation of the state-of-the-art biomass production in Greek language Realisation of a catalogue of regional forestry companies and biomass producers Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production Help in preparation of sustainable criteria Planning and organization of 3 workshops and demonstration events Planning and organization of 2 training sessions Planning and organization of 2 match-making events	2.1 2.2 2.3 2.4 2.5 2.6 2.7
ICPE	Preparation of the state-of-the-art biomass production in Romanian language Realisation of a catalogue of regional forestry companies and biomass producers in Romania	2.1 2.2

	Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production Planning and organization of 3 workshops and demonstration events Planning and organization of 3 training sessions Planning and organization of 1 match-making events	2.3 2.5 2.6 2.7
IrBEA	Preparation of the state-of-the-art biomass production in English Realisation of a catalogue of regional forestry companies and biomass producers Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production Planning and organization of 4 workshops and demonstration events Planning and organization of 4 training sessions Planning and organization of 4 match-making events	2.1 2.2 2.3 2.5 2.6 2.7
TUM	Preparation of the state-of-the-art biomass production in German language Realisation of a catalogue of regional forestry companies and biomass producers Preparation of technical paper for selected topics in technical backgrounds for advanced techniques and technologies in biomass production Help in preparation of sustainable criteria Planning and organization of 3 workshops and demonstration events Planning and organization of 3 training sessions Planning and organization of 1 match-making events	2.1 2.2 2.3 2.4 2.5 2.6 2.7

Major other specific costs:

[List major other specific cost – if any - by task and describe them shortly]

Other specific costs	Related to Task N°	Description	Relevant for partners
Organisation of workshops and demonstration events	2.5	Renting premises for workshops, organisation of demonstration events, printing invitations	WVB-Stmk GmbH, SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, IrBEA, TUM
Organisation of training sessions	2.6	Renting room for trainings	WVB-Stmk GmbH, SFI, CTFC, AVEBIOM, REGEA, AIEL, CRES, ICPE, IrBEA, TUM
Organisation of match-making events	2.7	Renting premises for match-making events	WVB-Stmk GmbH, SFI, CTFC, AVEBIOM, REGEA, AIEL, CRES, ICPE, IrBEA, TUM
Translation into English	2.1, 2.2	Translation of the State-of-the-art biomass production and Catalogue from national language into English	SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, TUM
Printing and graphic adjusting	2.2	Printing and graphical adjusting of catalogue	WVB-Stmk GmbH SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, IrBEA, TUM

Major subcontracts:

[List major subcontracts and shortly describe the tasks covered]

Relevant for partner	Related to Task N°	Description	Envisaged amount	Organisation
SFI	2.5, 2.6	Support in organisation of demonstration events and trainings	8,000	Association of Machinery Rings in Slovenia
CTFC	2.5	Support in organisation of demonstration events	4,500	local forest owners associations
REGEA	2.5	Support in organisation of demonstration events	5,000	private forest owners associations
AIEL	2.3, 2.4, 2.5 and 2.6	Support in organisation of demonstration events, workshops and training sessions	8,000	TeSAF – University of Padua
ICPE	2.5, 2.6, 2.7	Support in organisation of events	3,500	local forest owners associations
AVEBIOM	2.5, 2.6	Support in organization of demonstration events	4,000	Local/regional forest owners associations
TUM	2.5, 2.6	Support in organisation of demonstration events and trainings	5,000	TFZ
CRES	2.5	Support in organisation of demonstration events	8,000	forest owners associations, machinery rings
IrBEA	2.5, 2.6	Support in organisation of demonstration events and trainings	4,000	to be selected

Mandatory phrase to keep: The subcontractors identified / to be identified were / will be selected following the provisions of Article II.9 of the Grant Agreement on competitive grounds on the basis of best value for money.

7.2.3. Work Package 3 Implementation of Biomass trade and logistics centres

N° of work package: 3	Implementation of Biomass trade and logistics centres
Duration in months: 29	AIEL

I. Description of the work:

a) Overview of the Work Package:

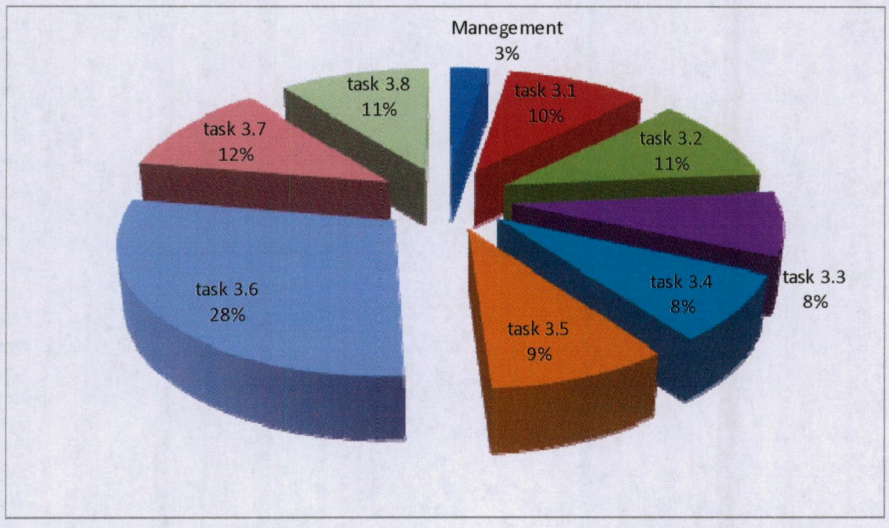
Local biomass markets in many countries are fragmented and unorganised, Biomass trade and logistics centre is a new and innovative way to develop and organise local biomass supply. Biomass trade and logistics centres are regional centres with optimised logistics and trading organisation, where different biomass fuels (firewood, chips, pellets, energy crops etc.) are marketed at guaranteed quality and prices. The main aims of this WP is to bust investments in new Biomass logistics and trade centres and help in further development of existing centres. This will be achieved through workshops for potential investors and Biomass trade centres operators, feasibility studies and open days.

WP 3 will contribute to the realization of the following objectives:

- Promotion of new Biomass Logistics&Trade Centres with workshops, study tours and feasibility study – trough lessons learnt from BiomassTradeCentres I
- Implementation of new Biomass trade centres at the regional level that will have a positive influence on regional biomass production chains (continuation of BiomassTradeCentres project)
- Supporting new regional Biomass trade centres in partner countries that have no or limited number of Biomass trade centres (like Spain, Greece, Croatia, Slovenia)
- Professional support in promotion of the existing Biomass trade centres in countries that already have Biomass trade centres (like Austria, Italy, and Germany).

The most market orientated and pro development orientated task is 3.6 in which partners will prepare 32 feasibility studies for new Biomass trade and logistics centres. In WP 3 partners from Austria, Italy and Germany will transfer knowledge and experiences with existing Biomass Trade centres to less developed countries (Task 3.1, 3.5), that why their engagement is also high, focus of their activities is beside knowledge transfer also help for further development and extension of markets for existing centres..

Graph 6 Distribution of working hours planned per tasks in WP 3



WP 3 will be coordinated by AIEL. AIEL was a coordinator of the BIOMASSTRADECENTRES project. WP 3 represents the main WP that builds on experiences and lessons learnt from previous project. All materials (Biofuels Handbook, Catalogue of biomass producers, SRC booklet, feasibility studies) from BTC project will be used and translated into national languages of the "new partners" (like Croatia, Spain, Catalan, Greece). In partner countries (regions) that already have Biomass trade centres, a special attention will be given to professional help (building-up a system for quality control – link to activities in WP 5) and to promotion of Biomass trade centres (linking the supply and demand sides).

b) Description of the tasks:

3.1 Organization of Training of project partners – presentation of the main results of the BTC project and presentation of lessons learnt in Italy, Austria, and Slovenia. The WP leader will organise, together with Austrian partners LK-Stmk and WVB-Stmk, a two-days training course in Styria with a study tour addressed to all other project partners. Each partner will participate at the course with one or more experts for creating the technical staff. This task is also linked to task 4.3 and to second project meeting (WP 1). One day will be dedicated to Biomass trade centres and one to energy contracting. Partners will see some good practice examples of Biomass trade centres and energy contracting in operation.

3.2 Translation of Biofuel handbook into Croatian, Spanish, Romanian, Catalan and Greek languages. This literature prepared during the BiomassTradeCentres project is crucial for technical training and professional advice for establishing Biomass trade centres. They were very useful as background material for technical training sessions organised in Italy, Austria and Slovenia. (Printed document and pdf document to download)

3.3 Translation of Biomass trade centres generic guidelines into Croatian, Spanish, Romanian, Catalan and Greek languages. This literature prepared during the BiomassTradeCentres project is crucial for the establishment of BLTCs; it was were very positively accepted in Italy, Austria and Slovenia and used as background material for technical support in the organisation of new Biomass trade centres. (pdf document to download)

3.4 Organisation of technical workshops: **37 half-day workshops** will be organized in different countries and regions, inviting specifically the private-public market protagonists already identified and involved in further formative activities (WP2). The number of participants expected is 20 - 30. Two types of technical workshops will be organised: initial workshops for the regions where new Biomass trade centres will be initiated, and "advanced" workshops for the regions that already have their Biomass trade centres.

The aim of the preliminary workshop is to educate and motivate the market protagonists at the regional level supporting technically the concrete implementation of new Biomass trade centres across the pilot regions. This task is an important action for the transfer of transnational know-how from the BTC project.

The aim of the "advanced" workshops is to educate suppliers of wood biomass and Biomass trade centres owners about quality provision (link to WP 5).

The minimum contents of the workshops will be:

a) Different aspects of biomass production (technological, economical and sustainability) (link to WP 2) - for preliminary and advanced workshops
b) Presentation of Biomass trade centres (advantages, technical and economical aspects) – for preliminary workshops
c) Marketing of the existing Biomass trade centres , possibilities for extending and reaching new markets – for advanced workshops
d) Basics about energy contracting (advantages, technical and economical aspects) (link to WP4) - for preliminary and advanced workshops
e) Quality provision for wood fuel supply, labelling, certification, wood biomass laboratories, EU CEN technical specifications (link to WP 5) - for preliminary and advanced workshops, but with more details in advanced workshops

Localization and number of **"workshop"** activities organized by the Consortium:

Partners	**Regions**	**N° of preliminary workshops**	**N° of advanced workshops**
SFI	Slovenia	3	1
Lk Stmk	Styria	2	3
AIEL	Lombardia, Triveneto Toscana, Molise	2	2
REGEA	Croatia	2	1
CTFC	Catalonia	3	0
AVEBIOM	Castilla y León	6	0
WVB-Stmk GmbH	-	0	0
CRES	Greece (northern, central or southern)	2	0
ICPE	Romania	2	1
IrBEA	1 in each province (4)	4	0
TUM	Bavaria	0	3
Total		26	11

For each workshop and demo event, a report will be prepared and sent to the WP leader (electronic version with the list of participants, programme and invitation letter). A common layout for writing reports will be prepared preliminary by the WP leader. WP leader will prepare a common questionnaire for workshop participants to get feedback from them. This will help us to monitor the project success in addressing the identified barriers.

Envisaged number of participants per workshop: 20-25

3.5 Organisation of Study tours to Biomass trade centres in operation: the Consortium will organize **20 one-day study tours** bringing the market protagonists to visit the more advanced Biomass trade centres already in operation. The aim is favouring a transnational know-how transfer from more advanced countries or regions to the market protagonists coming from less developed countries or regions. The number of **participants** expected for each study tour is **10-20**. Study tour can last for one or two days – in case of a two-day study tour, the program will be combined with WP4 topic (Energy contracting).

Localization and number of "study tour" activities organized by the Consortium:

Partners	Regions	N° of study tours	Country to visit
SFI	Slovenia	2	Austria, Italy
Lk Stmk	Styria	3	Austria
AIEL	Italy	2	Lombardia, Veneto
REGEA	Croatia	1	Austria
CTFC	Catalonia	2	Austria, Slovenia
AVEBIOM	Castilla y León	3	Will be selected
WVB-Stmk GmbH	-	0	-
CRES	Greece	2	Austria, Italy
ICPE	Romania	2	Styria, Romania
IrBEA	Ireland	1	Austria
TUM	Bavaria	2	Germany
Total		**20**	

For each study tour, a report will be prepared and sent to the WP leader (electronic version with the list of participants, programme and invitation letter). A common layout for writing reports will be prepared preliminary by the WP leader. He will also prepare a common questionnaire for participants to get feedback from them. This will help us to monitor the project success in addressing the identified barriers.

3.6 Preparation of Feasibility study for the selected initiatives. The platform for feasibility studies will be results from BiomassTradeCentres I and Biomass trade centres generic guidelines (prepared already in BiomassTradeCentres I project), which will be translated into all national languages (see task 3.3). The most important part of this feasibility study is description of technologies and economic aspects.

The feasibility study will include: the analysis of regional biomass potential, market analysis (demand), best localization of Biomass trade centres, technical and logistic aspects (processing, storing and delivering issues), economic assessments, marketing and trading systems to be implemented (quality standards, contractual framework), legal and administrative aspects, management of Biomass trade centres.

Number of "feasibility study" activities organized by the Consortium:

Partners	Feasibility study
SFI	4
Lk Stmk	6
AIEL	3
REGEA	3
CTFC	1
AVEBIOM	5
WVB-Stmk GmbH	0
CRES	2
ICPE	2
IrBEA	4
TUM	2
Total	**32**

3.7 Organisation of open days at the existing Biomass trade centres for promotion of their activities in the regions. To these open days, different target groups (forest owners, farmers, forest companies, existing biomass producers and potential users of wood biomass) from the region will

be invited. On open days, Biomass trade centres activities will be presented; one of the important issues to be addressed on these open days is also QA/QC (link to WP 5, task 5.3).

Localization and number of "open day" activities organized by the Consortium:

Partners	Regions	N° of open days
SFI	Slovenia	2
Lk Stmk	Styria	5
AIEL	Toscana, Triveneto, Lombardia	3
REGEA	Croatia	2
CTFC	Catalonia	0
AVEBIOM	Castilla y León	2
WVB-Stmk GmbH	Styria	5
CRES	Greece	2
ICPE	Romania	2
IrBEA	1 in each province (4)	4
TUM	Bavaria	2
Total		**29**

For each open day, a report will be prepared and sent to the WP leader (electronic version, programme and invitation letter). A common layout for writing reports will be prepared preliminary by the WP leader.

Expected number of open day visitors: 50-100

3.8 Organisation of One-to-one meeting with owners of Biomass trade centres (technical support and help in implementation of quality control system in the existing Biomass trade centres (link to WP 5, task 5.3 and 5.5). One-to-one meetings will help the potential investors to overcome technical, economical or legal barriers. Experts from partner organisation will help investors on line with needed information. This action is closely connected with task 3.6.

Localization and number of "one-to-one meeting" activities organized by the Consortium:

Partners	Regions	One-to-one meetings
SFI	Slovenia	8
Lk Stmk	-	0
AIEL	Lombardia, Triveneto, Toscana	4
REGEA	Croatia	4
CTFC	Catalonia	2
AVEBIOM	Castilla y León	10
WVB-Stmk GmbH	Styria	5
CRES	Greece	7
ICPE	Romania	3
IrBEA	2 in each province (4)	8
TUM	Bavaria	2
Total		**53**

For each one-to one meeting, a short report will be prepared and sent to the WP leader (electronic version with the list of participants). A common layout for writing reports will be prepared preliminary by the WP leader.

Envisaged number of participants per one-to-one meeting: 3-5

IIa. Outputs of this Work Package (apart from deliverables):

The most important outputs of this WP are:

- concrete and very market orientated information for new Biomass trade centres establishment – for new investors
- technical and promotional support to the existing Biomass trade centres
- strong link to the QA/QC system establishment and implementation (WP 5, task 5.3 and 5.5)

IIb. Deliverables of this Work Package:

D3.1 One training of project partners (together with WP 4, task 4.3)

D3.2 Translation of Biofuels Handbook into Croatian, Catalan, Spanish and Greek languages

D3.3 Translation of Biomass trade centres generic guidelines into Croatian, Catalan, Spanish and Greek languages

D3.4 26 half-day preliminary technical workshops and 11 half-day advanced technical workshops

D3.5 20 Study tours Biomass trade centres in operation

D3.6 32 Feasibility studies

D 3.7 29 Open days at the existing Biomass trade centres

D 3.8 53 One-to-one meetings

III. Distribution of each partner's tasks in this Work Package (Award criterion 5):

Partner	Task(s) for this partner organisation	Related to Task N°
AIEL	Overall co-coordination of WP's tasks	All tasks
	Preparation of questionnaire for workshop participants	
	Realization of a common layout for meeting reports	
	Facilitating preparations for partners' training	3.1
	Planning and organization of 2 preliminary and 2 advanced workshops	3,4
	Planning and organization of 2 study tours	3,5
	Realisation of 3 feasibility studies	3,6
	Planning and organization of 3 open days at the existing BLTCs	3,7
	Implementation of 4 one-to-one meetings	3,8
SFI	Participation at partners' training	3.1
	Planning and organization of 3 preliminary and 1 advanced workshops	3,4
	Planning and organization of 2 study tours	3,5
	Implementation of 4 feasibility studies	3,6
	Planning and organization of 2 open days at the existing BLTCs	3,7
	Implementation of 8 one-to-one meetings	3,8
Lk Stmk	Planning and organization of training the project partners	3.1
	Planning and organization of 2 preliminary and 3	3,4

	advanced workshops Planning and organization of 3 study tours Implementation of 6 feasibility studies Planning and organization of 5 open days at the existing BLTCs	 3,5 3,6 3,7
REGEA	Participation at partners' training Translation of Biofuel handbook Translation of BLTC generic guidelines Planning and organization of 2 preliminary and 1 advanced workshops Planning and organization of 1 study tour Realisation of 3 feasibility studies Planning and organization of 2 open days at the existing BLTCs Implementation of 4 one-to-one meetings	3.1 3.2 3,3 3,4 3,5 3,6 3,7 3,8
CTFC	Participation at partners' training Translation of BLTC generic guidelines Planning and organization of 3 preliminary workshops Planning and organization of 2 study tours Implementation of 1 feasibility study Planning and organization of open days at the existing BLTCs Implementation of one-to-one meetings	3.1 3,3 3,4 3,5 3,6 3,7 3,8
AVEBIOM	Participation at partners' training Translation of Biofuel handbook Planning and organization of 6 preliminary workshops Planning and organization of 3 study tours Implementation of 3 feasibility studies Planning and organization of 2 open days at the existing BLTCs Realisation of 10 One-to one meetings	3.1 3.2 3,4 3,5 3,6 3,7 3,8
WVB-Stmk GmbH	Planning and organization of project partners' training Planning and organization of 5 open days at the existing BLTCs Implementation of 5 one-to-one meetings	3.1 3,7 3,8
CRES	Participation at partners' training Translation of Biofuel handbook Translation of BLTC generic guidelines Planning and organization of 3 preliminary and 0 advanced workshops Planning and organization of 2 study tours Implementation of 2 feasibility studies Planning and organization of 2 open days at the existing BLTCs Implementation 7 of one-to-one meetings	3.1 3.2 3,3 3,4 3,5 3,6 3,7 3,8
ICPE	Participation at partners' training Translation of Biofuel handbook Translation of BLTC generic guidelines	3.1 3.2 3,3

	Planning and organization of 2 preliminary and 1 advanced workshops	3,4
	Planning and organization of 2 study tours	3,5
	Implementation of 2 feasibility studies	3,6
	Planning and organization of 2 open days at the existing BLTCs	3,7
	Realisation of 3 one-to-one meetings	3,8
IrBEA	Participation at partners' training	3.1
	Planning and organization of 4 preliminary and 0 advanced workshops	3,4
	Planning and organization of 4 study tours	3,5
	Implementation of 4 feasibility studies	3,6
	Planning and organization of 2 open days at the existing BLTCs	3,7
	Implementation of 8 one-to-one meetings	3,8
TUM	Participation at partners' training	3.1
	Planning and organization of 0 preliminary and 3 advanced workshops	3,4
	Planning and organization of 2 study tours	3,5
	Implementation of 2 feasibility studies	3,6
	Planning and organization of 2 open days at the existing BLTCs	3,7
	Implementation of 2 one-to-one meetings	3,8

Major other specific costs:

[List major other specific cost – if any - by task and describe them shortly]

Other specific costs	Related to Task N°	Description	Relevant for partners
Organisation of partners' training	3.1	Renting a bus, external experts	Lk Stmk, WVB-Stmk GmbH
Organisation of workshops	3.4	Renting premises for workshops, external experts, printing invitations	SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, IrBEA, TUM
Organisation of study tours	3.5	Renting a bus, plane tickets for non-partner participants (from Spain, Greece, Ireland, Romania)	SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, IrBEA, TUM
Organisation of open days	3.7	Promotion material	WVB-Stmk GmbH SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, IrBEA, TUM
Translation into national languages	3.2, 3.3	Translation of Biofuels Handbook and Generic guidelines from English into national languages	REGEA, CTFC, AVEBIOM, CRES, ICPE
Printing and graphic adjusting	3.2, 3.3	Printing and graphical adjusting of the Handbook and Guidelines	REGEA, CTFC, AVEBIOM, CRES, IrBEA,

Major subcontracts:

[List major subcontracts and shortly describe the tasks covered]

Relevant for partner	Related to Task N°	Description	Envisaged amount	Organisation
SFI	3.4, 3.5, 3.6, 3.7	Support in organisation of workshops, study tours, open days and feasibility studies (data from Slovenian wood biomass information system WISDOM Slovenia)	5,000	Slovenian forest service
ICPE	3.4, 3.5, 3.6, 3.7	Support in Organisation of workshops, study tours, Open days and feasibility studies	4.000	To be selected
TUM	3.4, 3.5, 3.6, 3.7	Support in Organisation of workshops, study tours, Open days and feasibility studies	5.000	TFZ
AIEL	3.4, 3.5, 3.6	Support in Organisation of workshops, study tours, Open days	4.500	3 Italian Biomass Logistic&Trade Centres: CIP CALOR, DE LUCA Forest company, Cooperative E.L.E.N.A.
IrBEA	3.4, 3.5, 3.6	Support in Organisation of workshops, study tours, Open days	3.500	to be selected

Mandatory phrase to keep: The subcontractors identified / to be identified were / will be selected following the provisions of Article II.9 of the Grant Agreement on competitive grounds on the basis of best value for money.

7.2.4. Work Package 4 Implementation of wood energy contracting

N° of work package: 4	Implementation of wood energy contracting
Duration in months: 29	Lk Stmk

I. Description of the work:

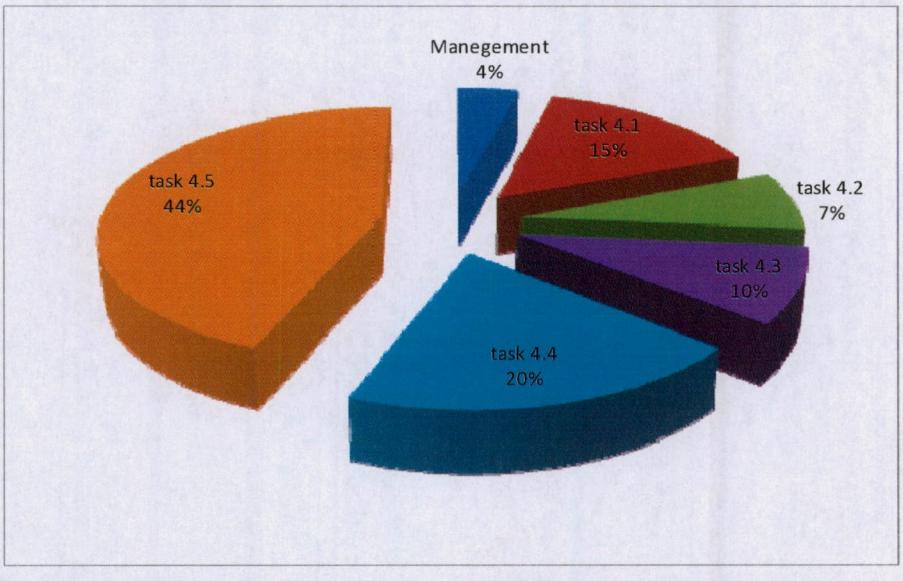
a) Overview of the Work Package:

Energy contracting is a market orientated model for selling heat produced from biomass to one or more users (as local or district heating). It is a new and innovative opportunity for investments with high added value appropriate for forest owners, farmers, and other target groups in rural areas. There is a good potential of selling energy through energy contracting to public infrastructure and industry. This work package aims at encouraging potential investors to implement energy contracting.

WP 4 will contribute to higher awareness of the energy users regarding the possibility of energy contracting, increased demand on the market and new investments in energy contracting by forest owners and other target groups. Firstly we will help to develop the demand side at the regional level (energy contracting in public and other buildings…) by organizing workshops and study tours. Secondly we will contribute to balancing the supply and demand sides at the regional level through promotion of good practice examples of energy contracting, promotion material and workshops where suppliers and potential users will meet and discuss. Special emphasis will be given to public bodies, local communities and policy makers. Thirdly we will promote small - regional energy contracting models where economical operations can be easily integrated into the existing infrastructure and have different positive socio-economic impacts on rural development (new income on farms, new job creation, energy independence...).

The largest effort will be given to knowledge transfer from more advanced partners to less advanced (Task 4.1, 4.2 and 4.5) this represents capacity building among partners and this is mainly the task of Sk Stmk, AIEL and TUM. Workshops will represent knowledge transfer and implementation of energy contracting in the partner regions and states. Booklet prepared during task 4.5 will enable to spread these ideas all around EU countries.

Graph 7 Distribution of working hours planned per tasks in WP 4



The Work Package will be led by the Styrian Chamber of Agriculture and Forestry with the longest tradition in developing and implementing energy contracting in the EU. This WP is the smallest in view of the envisaged actions, but is the final stage in biomass production chain.

b) Description of the tasks:

4.1 Preparation of Technical paper on energy contracting model (with at least 6 examples of good practice) dealing with technical, economic and legal aspects. This technical paper presents a readymade business model for energy contracting (pdf document - downloadable document in English) that will be used to promote energy contracting model.

4.2 Preparation of an overview of Lessons learnt from the existing biomass plants and a list of recommendation to avoid the same mistakes (pdf document - downloadable document). The partner that already has the energy contracting model in the country or region will prepare a list of recommendations for new investors. Through lessons learnt, new investors will be able to check out what are the critical points in the way to successful energy contracting projects.

4.3 Organisation of training of partners (together with WP 3, task 3.1) – a special emphasis will be given to the presentation of modern technologies and new options from small biomass heating plants (for example: ready-made container boiler house).

4.4 Organisation of Workshops to meet the supply and demand sides in combination with study tour to show best practice examples (if possible and when applicable they will be combined with task 3.5 – WP3).

Minimum contents of the workshops: energy contracting model (technical, economic and legal aspects), presentations of lessons learnt (from task 4.2), QA/QC system and wood biomass quality measurements (material prepared in task 5.6), presentation of BLTCs (link to WP 3), biomass production chains (link to WP 2, with a special emphasis on task 2.4).

Localization and number of the "workshop and study tour" activities organized by the Consortium:

Partners	Regions	Workshops	Region	Study tour
SFI				
Lk Stmk				
AIEL				
REGEA	Croatia	2	Austria	2
CTFC	Catalonia	3	Austria (together with WP 3)	1
AVEBIOM	Castilla y León	5	Castilla y León	5
WVB-Stmk GmbH	Styria	5	Styria	5
CRES	Greece	2	Austria, Italy (with WP3 event)	2
ICPE	Romania	2	Romania, Austria (together with WP 3)	2
IrBEA	1 in each province (4)	4	4 in Ireland and 1Austria(together with WP 3)	4+1
TUM	Bavaria	3	Bavaria	2
Total		**26**		**23**

For each workshop and study tour, a report will be prepared and sent to the WP leader (electronic version with the list of participants, programme and invitation letter). A common layout for writing reports will be prepared preliminary by the WP leader. WP leader will prepare a common questionnaire for participants to get feedback from them. This will help us to monitor the project success in addressing the identified barriers.

Envisaged number of participants per workshop: 30-40

Task 4.4 intends to develop energy contracting model in partner countries, which are not participating in the AGRIFOENERGY II project. Partners like SFI, Lk Stmk or AIEL are partners in the GRIFOENERGY II project, and to avoid overlapping of activities they will not plan any workshops in this task but will link the activities in AGRIFOENERGY II and utilise useful material from tasks 4.1, 4.2 and 4.3 together.

4.5 Preparation of the booklet: "Energy Contracting" (printed document: 12-16 pages in English and in national languages) – a promotion booklet on the basis of tasks 4.1 and 4.2 will be prepared and disseminated to our main target groups.

The minimum contents of "Energy contracting":

a) General description of energy contracting
b) Technical and economical aspects
c) Main lessons learnt from the existing biomass plants
d) QA/QC for biomass plants
e) Good practice examples

IIa. Outputs of this Work Package (apart from deliverables):

- The most important output of WP 4 is the ready made business model of energy contracting (Technical paper - up to 30 pages) prepared by the leading partner. This paper will give some professional background on energy contracting to all partners and also to other interested target groups all around Europe.
- Set of material for training sessions and workshops dealing with energy contracting (activities planned for WP 2 and WP 3).

IIb. Deliverables of this Work Package:

4.1 Technical paper on energy contracting (pdf document - up to 30 pages)
4.2 Booklet on energy contracting (12-16 pages, printed document)
4.3 List or recommendations for new energy contracting systems – lessons learnt (pdf document)
4.4 26 Workshops and 23 study tours

III. Distribution of each partner's tasks in this Work Package (Award criterion 5):

Partner	Task(s) for this partner organisation	Related to Task N°
Lk Stmk	Overall co-coordination of WP's tasks	All
	Preparation of Technical paper on energy contracting	4.1
	Preparation of document "Lessons learnt from existing biomass plants"	4.2
	Planning and organization of project partners' training	4.3
	Preparation of a proposal for a common English version and realisation of a German version of the booklet "Energy Contracting"	4.5
SFI	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Realisation of s Slovenian version of the booklet	4.5

	"Energy Contracting	
AIEL	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Realisation of an Italian version of the booklet "Energy Contracting"	4.5
REGEA	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Planning and organization of 2 workshops and 2 study tours	4.4
	Implementation of a Croatian version of the booklet "Energy Contracting"	4.5
CTFC	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Planning and organization of 3 workshops and 1 study tour	4.4
	Implementation of a Spanish version of the booklet "Energy Contracting" together with AVEBIOM	4.5
AVEBIOM	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Planning and organization of 10 workshops and study tours	4.4
	Realisation of a Spanish version of the booklet "Energy Contracting" together with CTFC	4.5
WVB-Stmk GmbH	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Planning and organization of 10 workshops and study tours	4.4
	Implementation of a German version of the booklet "Energy Contracting" together with Lk Stmk	4.5
CRES	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Planning and organization of 22 workshops and 2 study tours	4.4
	Implementation of a Greek version of the booklet "Energy Contracting"	4.5
ICPE	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Planning and organization of 2 workshops and 2 study tours	4.4
	Implementation of a Romanian version of the booklet "Energy Contracting"	4.5
IrBEA	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Planning and organization of 4 workshops and 4 study tours	4.4

	Implementation of an English version of the booklet "Energy Contracting"	4.5
TUM	Active participation in the preparation of "Lessons learnt from the existing biomass plants"	4.2
	Participation at partners' training	4.3
	Planning and organization of 3 workshops and 2 study tour	4.4
	Implementation of a German version of the booklet "Energy Contracting" together with AVEBIOM	4.5

Major other specific costs:

[List major other specific cost – if any - by task and describe them shortly]

Other specific costs	Related to Task N°	Description	Relevant for partners
Organisation of workshops	4.4	Renting premises for workshops, external experts	WVB-Stmk GmbH SFI, CTFC, AVEBIOM, REGEA, CRES, ICPE, IrBEA, TUM
Organisation of study tours	4.4	Renting a bus	WVB-Stmk GmbH SFI, CTFC, AVEBIOM, REGEA, CRES, ICPE, IrBEA, TUM
Translation of the booklet	4.5	Translation of the booklet "Energy Contracting" into national language	SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE,TUM
Printing and graphical adjustment	4.5	Printing and graphical adjustment of the booklet "Energy Contracting"	SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, IrBEA, TUM

Major subcontracts:

[List major subcontracts and shortly describe the tasks covered]

Relevant for partner	Related to Task N°	Description	Envisaged amount	Organisation
REGEA	4.4, 4.5	Technical support in the organisation and realisation of booklet	2,000	to be selected
ICPE	4.4, 4.5	Support in organisation of workshops and study tours and preparation of booklet	1.000	to be selected
TUM	4.4	support in organisation and realisation of workshops and study tour	4.000	Biomass Logistic&Trade Centres Achental
LK-Stmk	4.1, 4.2, 4.5	Technical supports in organisation and realisation of task in WP 4	5.000	Bioenergie-Service
LK-Stmk	4.5	graphic adjustment and layout of the booklet	1.500	theSIGN werkstatt
AIEL	4.1, 4.2	Technical supports and collecting data	1.000	Ecodolomiti – wood-energy heat supplier
IrBEA	4.4	support in organisation and realisation of workshops and study tour	1.500	to be selected

Mandatory phrase to keep: The subcontractors identified / to be identified were / will be selected following the provisions of Article II.9 of the Grant Agreement on competitive grounds on the basis of best value for money.

7.2.5. Work Package 5 Promotion of quality standards and sustainability criteria

N° of work package: 5	Promotion of Quality standards and sustainability criteria
Duration in months: 34	SFI

I. Description of the work:

a) Overview of the Work Package:

Having in mind that systems for quality assurance and quality control (QA/QC) and tracing the origin of wood biomass will play an important role in the heat and electricity market. (National schemes will support only quality and sustainable produced energy from renewable sources) this WP will help small biomass business to implement sustainable criteria in the production of biomass and appropriate QA/QC system, having in mind also carbon foot printing. The aim of this WP is to increase consumers' confidence in biomass quality and its sustainable production.

According to GEN (Global Eco-labelling Network), Eco labels and "green" labels can encourage consumers to buy products with less environmental impact and to encourage businesses to market products that are kind to the environment. Environmental labels and declarations are thoroughly defined in ISO 14020, 14021, 14024 and 14025 standards. Other certification schemes, which include labelling of final products, are e.g. FSC and PEFC, which are well known on the EU market (like EU flower and Nordic Swan) will be analysed. Different trade marks in participating countries (like PELLET GOLD, BiomasseHoff, WFQA) will be used as background material for further development. In this WP, all these schemes will be analysed and target groups will be encouraged to implement them.

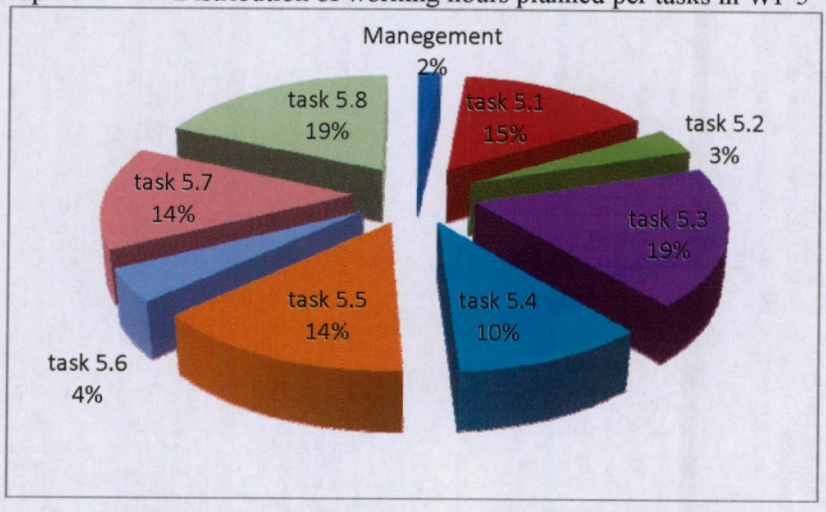
WP 5 is building on the results and outcomes from WP2, WP3 and WP4, but on the other hand it gives an important input to these WP's. Namely, quality standards and sustainability criteria have to be implemented in all parts of the biomass production chain, from wood biomass products to trading centres, special emphasis will be given on building capacity of wood biomass laboratories.

Through the planned tasks, WP 5 will address the following main issues:

- Meeting sustainability criteria – by labelling wood biomass to create awareness of the efficiency of a biomass pathway, to ensure regional and sustainable production of wood biomass (listed and defined in WP 2, task 2,4).
- Implementation of European standards and other normative documents: by building a quality assurance and quality control (QA/QC) system for small wood biomass producers and suppliers based on EU CEN technical documents for wood fuels (wood logs, chips and pellets)
- Creation of practical guidelines of certification and labelling schemes for wood fuels relevant for EU market with special emphasis on carbon foot printing for wood fuels. The guidelines of certification should be testable and understandable for the customer and will present a professional background for establishing new trademarks or eco-labels for wood fuels.
- Establishment of network laboratories for wood biomass testing (testing of quality) to exchange experiences and to start building setting-up and operation procedures for biomass laboratories (based on EU CEN technical specification and standards).

The most important task in this WP are tasks dedicated to quality assurance and quality control (QA/QC) system for small wood biomass producers and suppliers based on EU CEN technical documents (task 5.3) and its implementation (task 5.5). Support in development of credible wood biomass laboratories all around partner countries is also important task. Larger part of the work will be performed by partners with longer experiences in this field (SFI, IrBEA, AIEL, TUM and Lk Stmk).

Graph 8 Distribution of working hours planned per tasks in WP 5



WP 5 will be lead by Slovenian forestry institute. SFI has experiences in implementations of PEFC and FSC certification schemes in Slovenia and is familiar with Eco labels and "green" labels. SFI is active member of Slovenian standardisation organisation and has experiences in implementation of EU CEN technical specifications in practice.

b) Description of the tasks:

5.1 Preparation of State-of-the-art Certification schemes and labelling in participating countries – the leading partner will prepare a common template. A report will be 5-10 pages long prepared in national languages, with an extended summary in English. This report will also include a list of relevant standards and other normative documents.

5.2 Collection of good practice examples of QA/QC implementation or labelling of wood fuels in participating countries. Leading partner will prepare a common layout for description of good practice examples.

5.3 Building a quality control and quality assurance (QA/QC) system for small biomass producers and suppliers based on EU CEN standards. SFI will, with the support of IrBEA, AIEL, TUM ans Lk Stmk prepare the first draft of common QA/QC system in English (document with 20 to 30 pages). Partners will translate it into national languages and adjust it to national conditions.

5.4 Preparation of Guidelines for products labelling with special emphasis on exploring possibilities to implement carbon foot printing for wood fuels. SFI will, with the support of IrBEA, AIEL, TUM ans Lk Stmk prepare the first draft of Guidelines for products labelling in English (document with 10-15 pages). Partners will translate it into national languages and adjust it to national conditions.

5.5 Implementation of QA/QC system for small biomass producers and suppliers in selected companies/producers in participating countries.

Localization and number of the "Implementation of QA/QC" activities organized by the Consortium:

Partners	**Regions**	**N° Implementation of QA/QC**
SFI	Slovenia	2
Lk Stmk	Styria	2
AIEL	Lombardia, Triveneto	2
REGEA	Croatia	2
CTFC	Catalonia	5
AVEBIOM	Spain	3
WVB-Stmk GmbH	-	0
CRES	Greece	2
ICPE	Romania	2
IrBEA	1 in each province (4)	4
TUM	Bavaria	2
Total		**26**

For each case study a short report will be prepared in which main barriers will be addressed and improvements will be suggested. Leading partner will prepare a common layout for this reports.

5.6 Preparation of materials for workshops and training sessions in WP 2, 3 and 4 on EU CEN standards, QA/QC system, product labelling and carbon foot printing for wood fuels

5.7 Preparation of Booklet on general information about EU CEN standards, their implementation, and basic information on QA/QC implementation. Booklet (printed version with 12 to 16 pages) will be prepared from material gathered in tasks 5.1, 5.2, 5.3 and 5.4. SFI will, with the support of IrBEA, AIEL, TUM ans Lk Stmk, prepare the first draft of booklet. Partners will translate it into national languages and adjust it to national conditions.

5.8 Preparation of Technical paper on wood biomass laboratories, which will cover the most important questions about setting-up and operation procedures for biomass laboratories (based on EU CEN technical specification and standards). Technical paper will give an overview of the needed steps for the establishment of new biomass laboratories and first ideas about standard operation procedures for wood biomass quality measurements. SFI will, with the support of IrBEA, AIEL, TUM ans Lk Stmk, prepare the first draft of technical paper. Partners will translate it into national languages and adjust it to national conditions.

IIa. Outputs of this Work Package (apart from deliverables):

- A solid overview of different certification schemes, labelling programs and trademarks in participating countries and elsewhere in Europe, with a link to new trends like foot printing for wood fuels.
- Implementation of EU CEN standards in small business and technical support (one-to-one meetings) to implement QA/QC system in selected small biomass producers and suppliers
- Implementation of sustainability criteria through QA/QC system
- Set of material for training sessions and workshops dealing with EU CEN standards, QA/QC, labelling and sustainability criteria.

IIb. Deliverables of this Work Package:

D 5.1 State-of-the-art report on certification schemes, labelling programs and trademarks with up-to-date list of bodies/companies/authorities responsible for certification/labelling and testing (pdf document, downloadable document)

D 5.2 Fact sheets on good practice examples of QA/QC implementation or labelling of wood fuels in participating countries (in national languages and in English) (pdf document, downloadable document)

D 5.3 QA/QC system for small biomass producers and suppliers based on EU CEN standards (pdf document, downloadable document, in national languages and in English)

D 5.4 Guidelines for wood fuels labelling (pdf document, downloadable document, in national languages and in English)

D 5.5 Report on the implementation of QA/QC system in 26 companies/producers in participating countries (pdf document, downloadable document, in national languages and in English)

D 5.6 Booklet with general information on EU CEN standards, their implementation, and basic information on QA/QC implementation, list of bodies/companies/authorities responsible for certification/labelling and testing (12-16 pages, printed document)

D5.7 Technical paper on wood biomass laboratories (pdf document in English)

III. Distribution of each partner's tasks in this Work Package (Award criterion 5):

Partner	Task(s) for this partner organisation	Related to Task N°
SFI	Overall co-coordination of WP tasks	All tasks
	Preparation of a common template and first draft of the state-of-the-art biomass production in English for partner to fill in and preparation of the state-of-the-art BP for Slovenia	5.1
	Preparation of a common layout for best practice examples	5.2
	Preparation of best practice examples for Slovenia	5.3
	Preparation of the first draft of common QA/QC system in English	5.4
	Co-coordination of work with other partners and preparation of final document	
	Preparation of first draft of common guidelines for product labelling in English	5.5
	Co-coordination of work with other partners and preparation of final document	5.6
	Implementation of QA/QC system in 2 companies	5.7
	Preparation of the material for workshops in Slovenian language	
	Preparation of proposal for a common English version and implementation of Slovenian version of the booklet "General Information On EU CEN Standards"	5.8
	Preparation of the first draft of Technical paper in English – together with Lk Stmk	
Lk Stmk	Participation in the preparation of the state-of-the-art biomass production in English and preparation of the state-of-the-art BP for Austria together with WVB-Stmk GmbH	5.1
	Preparation of best practice examples for Austria	5.2
	Participation in the preparation of the first draft of a common QA/QC system in English and its translation into German language	5.3
	Participation in the preparation of common Guidelines for product labelling in English and translation into German language	5.4
		5.5

	Implementation of QA/QC system in 2 companies	5.6
	Preparation of the material for workshops in German language	5.7
	Implementation of a German version of the booklet "General Information On EU CEN Standards" together with WVB-Stmk GmbH	5.8
	Support in preparation of the first draft of Technical paper in English	
AIEL	Participation in the preparation of the state-of-the-art BP in English and preparation of the state-of-the-art BP for Italy	5.1
	Preparation of best practice examples for Italy	5.2
	Participation in the preparation of the first draft of common QA/QC system in English and its translation into Italian language	5.3
	Participation in the preparation of common guidelines for product labelling in English and translation into Italian language	5.4
	Implementation of QA/QC system in 2 companies	5.5
	Preparation of the material for workshops in Italian language	5.6
	Implementation of an Italian version of the booklet "General Information On EU CEN Standards"	5.7
	Support in preparation of Technical paper in English	5.8
REGEA	Participation in the preparation of the state-of-the-art BP in English and preparation of the state-of-the-art BP for Croatia	5.1
	Preparation of best practice examples for Croatia	5.2
	Participation in the preparation of the first draft of common QA/QC system in English and its translation into Croatian language	5.3
	Participation in the preparation of common guidelines for product labelling in English and translation into Croatian language	5.4
	Implementation of QA/QC system in 2 companies	5.5
	Preparation of the material for workshops in Croatian language	5.6
	Implementation of a Croatian version of the booklet "General Information On EU CEN Standards"	5.7
	Support in the preparation of Technical paper in English	5.8
CTFC	Participation in the preparation of the state-of-the-art BP in English and preparation of the state-of-the-art BP for Spain together with AVEBIOM	5.1
	Preparation of best practice examples for Spain	5.2
	Participation in the preparation of the first draft of common QA/QC system in English and its translation into Spanish	5.3
	Participation in the preparation of common guidelines for product labelling in English and translation into Spanish	5.4

	Implementation of QA/QC system in 5 companies Preparation of the material for workshops in Spanish language Support in the preparation of Technical paper in English	5.5 5.6 5.8
AVEBIOM	Participation in the preparation of the state-of-the-art BP in English and preparation of the state-of-the-art BP for Spain together with CTFC Preparation of best practice examples for Spain Participation in the preparation of a common implementation of QA/QC system in 3 companies Preparation of the material for workshops in Spanish language Implementation of a Spanish version of the booklet "General Information On EU CEN Standards"	5.1 5.2 5.3 5.4 5.5 5.6
WVB-Stmk GmbH	Participation in the preparation of the state-of-the-art BP in English and preparation of the state-of-the-art BP for Austria together with Lk Stmk Preparation of best practice examples for Austria Participation in the preparation of the first draft of common QA/QC system in English and its translation into German language Participation in the preparation of common guidelines for product labelling in English and translation into German language Preparation of the material for workshops in German language together with Lk Stmk Implementation of a German version of the booklet "General Information On EU CEN Standards" together with Lk Stmk Support in the preparation of Technical paper in English	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8
CRES	Participation in the preparation of the state-of-the-art BP in English and preparation of the state-of-the-art BP for Greece, together with FRI Preparation of best practice examples for Greece Participation in the preparation of the first draft of common QA/QC system in English and its translation into Greek language Participation in the preparation of common guidelines for product labelling in English and translation into Greek language Implementation of QA/QC system in 2 companies Preparation of the material for workshops in Greek language Implementation of a Greek version of the booklet "General Information On EU CEN Standards" Support in the preparation of Technical paper in English	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8

ICPE	Participation in the preparation of the state-of-the-art BP in English and preparation of the state-of-the-art BP for Romania	5.1
	Preparation of best practice examples for Romania	5.2
	Participation in the preparation of the first draft of common QA/QC system in English and its translation into Romanian language	5.3
	Participation in the preparation of common guidelines for product labelling in English and translation into Romanian language	5.4
	Implementation of QA/QC system in 2 companies	5.5
	Preparation of the material for workshops in Romanian language	5.6
	Implementation of a Romanian version of the booklet "General Information On EU CEN Standards"	5.7
	Support in preparation of Technical paper in English	5.8
IrBEA	Participation in the preparation of the state-of-the-art BP in English and preparation of the state-of-the-art BP for Ireland	5.1
	Preparation of best practice examples for Ireland	5.2
	Participation in the preparation of the first draft of common QA/QC system in English	5.3
	Participation in the preparation of common guidelines for product labelling in English	5.4
	Implementation of QA/QC system in 4 companies	5.5
	Preparation of the material for workshops in English	5.6
	Implementation of an English version of the booklet "General Information On EU CEN Standards"	5.7
	Support in the preparation of Technical paper in English	5.8
TUM	Participation in the preparation of the state-of-the-art BP in English and preparation of the state-of-the-art BP for Germany	5.1
	Preparation of best practice examples for Germany	5.2
	Participation in the preparation of the first draft of common QA/QC system in English	5.3
	Participation in the preparation of common guidelines for product labelling in English	5.4
	Implementation of QA/QC system in 2 companies	5.5
	Preparation of the material for workshops in German language	5.6
	Implementation of a German version of the booklet "General Information On EU CEN Standards"	5.7
	Support in the preparation of the first draft of Technical paper in English	5.8

Major other specific costs:

[List major other specific cost – if any - by task and describe them shortly]

Other specific costs	Related to Task N°	Description	Relevant for partners
Translation	5.2, 5.3, 5.4	Translation of good practice examples, QA/QC system, Guidelines for wood fuels labelling and booklet on EU CEN standards	SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, TUM
Printing and layout adjustment	5.4	Booklet about general information on EU CEN standards	SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, IrBEA, TUM

Major subcontracts:

[List major subcontracts and shortly describe the tasks covered]

Relevant for partner	Related to Task N°	Description	Envisaged amount	Organisation
SFI	5.8	Support in Technical paper on wood biomass laboratories	1.500	Biomass laboratory in Te-Tol – cogeneration plant Ljubljana
REGEA	5.5	Implementation of QA/QC system for small biomass producers and suppliers	6,000	Faculty of Forestry, University of Zagreb, or similar educational organization
ICPE	5.5	Support for implementation of QA/QC system	2.500	to be selected
AIEL	5.1, 5.2 5.8	implimentation of QA/QC system for small biomass producers and suppliers and support in preparation of State-of-the-art report and selection of good practice examples	3,500	Dept. TeSAF University of Padua
TUM	5.5, 5.8	implimentation of QA/QC system for small biomass producers and suppliers and support technical paper on wood biomass laboratories	3.000	to be selected
LK-Stmk	5.7	graphical adjustment and layout of the booklet	1.500	theSIGN werkstatt
LK-Stmk	5.3, 5.4	external advice for the implementing of quality standards	3.000	BLT - Biomass-Logistics-Technolog
IrBEA	5.1, 5.2, 5.8	implimentation of QA/QC system for small biomass producers and suppliers and support in preparation of State-of-the-art report and selection of good practice examples	12.000	to be selected

Mandatory phrase to keep: The subcontractors identified / to be identified were / will be selected following the provisions of Article II.9 of the Grant Agreement on competitive grounds on the basis of best value for money.

7.2.6. Work Package 6: Communication and dissemination of project results

N° of work package: 6	Communication and dissemination of project results
Duration in months: 36	AVEBIOM

I. Description of the work:

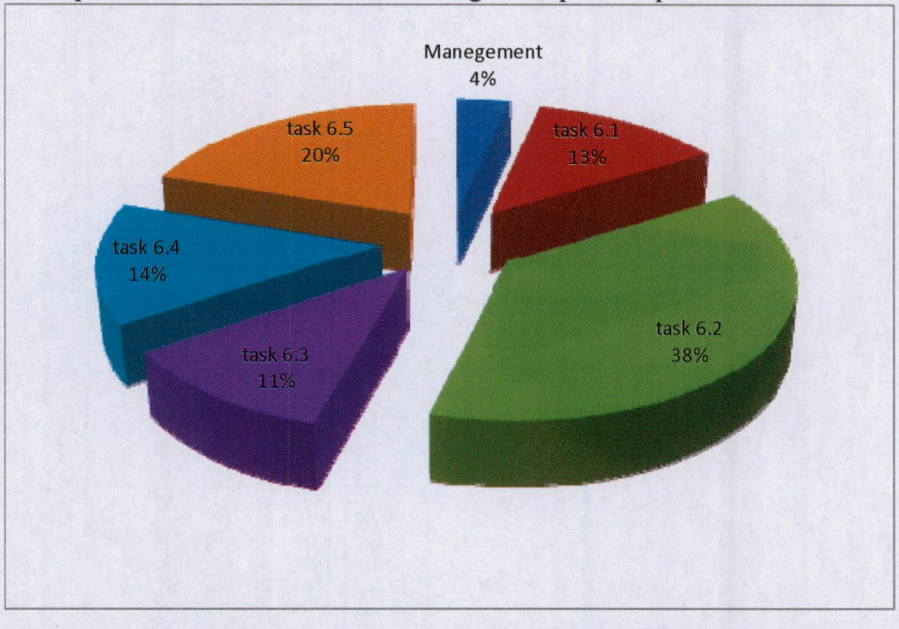
a) Overview of the Work Package:

The project idea, aims and results will be disseminated to the larger interested public through electronic media, events, articles etc. Provided that activities in other work packages will effectively address main target groups and key actors, activities of this work packages will bring information about the project to scientists, teachers, school population, professionals ... Dissemination activities will be continually realised, so as the recognition of the project idea and its results expands through-out the European regions. This will be mainly provided by presentation of the project on the project website, publication of the articles, presentation of the project on national and international fairs and conferences. The project consortium will use its existing networks to expand the project information. Such activities will bring information about the project outside the project partners' countries. Each project partner will also add project information on its own website.

A strategy for dissemination of project results will be prepared according to "Guide to developing the dissemination strategies" at the beginning of the project period. In this strategy we will define how different target groups will be reached and motivated to act.

More effort in WP 6 will be given to dissemination of project ideas to professional and larger public trough articles (task 6.2) and presentations on different fairs (task 6.3). Dissemination of project results to policy makers and professionals on EU level will be performed trough tasks 6.1, 6.2 and 6.5.

Graph 9 Distribution of working hours planned per tasks in WP 6



Work package leader AVEBIOM is an active member of the European network of Biomass, actively participating in the EU actions organized in the framework of this organization. AVEBIOM has conducted numerous informational seminars, training courses and meetings with stakeholders and decision makers to encourage the implementation of biomass-related businesses.

b) Description of the tasks:

6.1 Internet site of the project

The project website will be maintained for at least two years after the end of the project by SFI. All project deliverables and results will be uploaded on the website. The well known project website from the previous project BTC will be upgraded. The established and well known domain www.biomasstradecenters.eu will be used also for this project. New content concerning the BiomasTradeCenter II project will be available online within 6 months of the project duration. The general language of the project website will be English, but there will be also a section of the website, where information in the national languages of project partners will be provided. Especially, information announcing the forthcoming events will be available in respective national language.

The website will be structured into the following parts:

- Introduction and general description of the project (in English and each national language of the partners) including contact details of all partners;
- Announcement of events including contact and registration details;
- Download corner (with monitoring counters for reporting the number of downloads and pages visited by country and frequency;) for information available in English and national language (including short introduction):
- Pdf document of Key market aspect report in EN and national languages
- Pdf document of main deliverables, e.g. brochures,

6.2 Articles

In total, the Consortium will disseminate results trough 61 articles in scientific and professional magazines and in newspapers.

Partner	National articles	International articles
SFI	5 articles in Slovenian for newspapers and magazines – main target groups are professionals, forest owners and farmers	2 articles in English for international bioenergy magazines
Lk Stmk	8 articles in Austrian newspapers and magazines	2 articles in English for international bioenergy magazines
AIEL	3 articles in Italian for newspapers and magazines – main target groups are professionals, forest owners and farmers	-
REGEA	4 articles in Croatian - main target groups are professionals, forest owners and farmers	2 articles in English for international bioenergy magazines
CTFC	2 articles per year in Catalonian newspapers and magazines – main target group are professionals, forest owners and farmers	2 articles in English/French in European media
AVEBIOM	5 articles in Spanish for newspapers and bioenergy/forestry magazines	5 articles in English for the Bioenergy International magazine (every 3 months)
WVB-Stmk GmbH	1 article in Austria	
CRES	3 articles in Greek for magazines	2 article in English
ICPE	4 articles in Romanian for newspapers and magazines – main target group are professionals, forest owners and farmers	2 article in English for international bioenergy magazines
IrBEA	5 articles in professional for magazines	2 in European media
TUM	2 articles in Germany	-
Total	42	19

6.3 Participation at bioenergy related fairs

Project ideas and results will be presented on dedicated stands at bioenergy related fairs held in participating countries and elsewhere. Partners will present project ideas, deliverables and results also during other relevant bioenergy events (conferences, meetings ....). Presentation of project results will during relevant bioenergy events will guarantee dissemination of results and ideas beyond project partner countries and regions.

Partner	**Bioenergy related fairs**	Other related events
SFI	2 – Agricultural Fair in Gornja Radgona, Energy Fair in Celje	Presentations at 3 national and international conferences
Lk Stmk	2	-
AIEL	2 – Progetto Fuoco 2012 and 2014, Verona Fair	Realization of a dedicated stand for delivering main project results (deliverables)
REGEA	1	Presentations at 2 national and international conferences
CTFC	Bioenergy GENERA in Madrid Expobioenergy in Valladolid DERBI in Perpignan 1 in Austria	
AVEBIOM	4	3
WVB-Stmk GmbH	1	1
CRES	1European bioenergy fair	1national exhibition on eco-technologies and RES
ICPE	1	Presentations on 3 national and international conferences
IrBEA	1	Presentations on 4 national and international conferences
TUM	2	Presentations on 3 national and/or international conferences
Total	21	20

6.4 National system for dissemination of project results via e-mail lists to our target groups (when needed but at least every 3 months): each partner will build a list of e-mail addresses of participants at workshops, training sessions and other events, list of important representatives of target groups and key stakeholders. At least each 3 months he will send an e-mail alert to all these addresses. Through this alert system target groups and key actors will be informed about project activities (workshops, trainings, match making events, study tours) and about all new materials published on web page. This is the easiest and the cheapest way to reach our target groups and have them informed on regular basis. These information's will be disseminated and send also to other existing information platforms in EU (like AEBIOM).

6.5 Final international conference: international conference will be organised by AVEBIOM. Three months before the completion of the project, an international event that hosts about 200 people from all around Europe will be organized in Spain to promote and disseminate the activities and project results and to cooperate in the sustainability of Biomass Logistic and Trade Centres. This event will also serve as a multiplier of good practices in international bioenergy schemes.

6.6 Preparation of **Strategy for dissemination of project results** to ensure impacts on wider scale. A strategy to disseminate project results on local, regional, national and European scale will be prepared. The strategy will give partners clear suggestions what should be disseminated, who should be informed or involved and how or when to involve different target groups and key actors.

IIa. Outputs of this Work Package (apart from deliverables):

- Large dissemination of project ideas across EU
- Disseminations of project results among target groups in participating countries or regions.
- Capacity building among partners (articles, participating on conferences and related events)
- Exchange of information's trough web page (sections for partners only)

IIb. Deliverables of this Work Package:

D 6.1 Project Web site:SFI creates, manages and maintains the project website
D 6.2 National and international articles
D 6.3 Participation at bioenergy fairs
D 6.4 National system for promotion and dissemination of results
D 6.5Final international conference
D 6.6 Strategy for dissemination of project results

III. Distribution of each partner's tasks in this Work Package (Award criterion 5):

Partner	Task(s) of this partner organisation	Related to Task N°
AVEBIOM	Overall co-coordination of WP's tasks	All tasks
	Providing for the information requested by the coordinator for web site uploading	6.1
	Writing 20 articles in professional and general magazines and newspapers	6.2
	Preparation of common layout for reports from fairs	6.3
	Active participation at 4 relevant fairs and 3other related events	6.4
	Establishment and running of e-mail alert system to disseminate project results	6.5
	Organisation of final conference	6,6
SFI	Providing for the information requested by the coordinator for web site uploading	6.1
	Writing 7 articles in professional and general magazines and newspapers	6.2
	Active participation at 2 relevant fairs and 3other related events	6.3
	Establishment and running of e-mail alert system to disseminate project results	6.4
	Active participation at the concluding conference	6.5
Lk Stmk	Providing for the information requested by the coordinator for web site uploading	6.1
	Writing 10 articles in professional and general magazines and newspapers	6.2
	Active participation at 2 relevant fairs	6.3
	Establishment and running of e-mail alert system to disseminate project results	6.4
	Active participation at the concluding conference	6.5
AIEL	Providing for the information requested by the	6.1

	coordinator for web site uploading Writing 3 articles in professional and general magazines and newspapers Active participation at 2 relevant fairs Establishment and running of e-mail alert system to disseminate project results Active participation at the concluding conference	 6.2 6.3 6.4 6.5
REGEA	Providing for the information requested by the coordinator for web site uploading Writing 6 articles in professional and general magazines and newspapers Active participation at 3 relevant fairs Establishment and running of e-mail alert system to disseminate project results Active participation at the concluding conference	6.1 6.2 6.3 6.4 6.5
FRI	Providing for the information requested by the coordinator for web site uploading Writing 5 articles in professional and general magazines and newspapers Active participation at 1 relevant fair Establishment and running of e-mail alert system to disseminate project results Active participation at the concluding conference	6.1 6.2 6.3 6.4 6.5
CTFC	Providing for the information requested by the coordinator for web site uploading Writing 8 articles in professional and general magazines and newspapers Active participation at 4 relevant fairs Establishment and running of e-mail alert system to disseminate project results Active participation at the concluding conference	6.1 6.2 6.3 6.4 6.5
WVB-Stmk GmbH	Providing for the information requested by the coordinator for web site uploading Writing 1 article in professional and general magazines and newspapers Active participation at 2 relevant fairs Establishment and running of e-mail alert system to disseminate project results Active participation at the concluding conference	6.1 6.2 6.3 6.4 6.5
CRES	Providing for the information requested by the coordinator for web site uploading Writing 5 articles in professional and general magazines and newspapers Active participation at 1 relevant fairs Establishment and running of e-mail alert system to disseminate project results Active participation at the concluding conference	6.1 6.2 6.3 6.4 6.5
ICPE	Providing for the information requested by the coordinator for web site uploading Writing 6 articles in professional and general magazines and newspapers Active participation at 1 relevant fairs	6.1 6.2

	Establishment and running of e-mail alert system to disseminate project results Active participation at the concluding conference	6.3 6.4 6.5
IrBEA	Providing for the information requested by the coordinator for web site uploading Writing 7 articles in professional and general magazines and newspapers Active participation at 1 relevant fairs Establishment and running of e-mail alert system to disseminate project results Active participation at the concluding conference	6.1 6.2 6.3 6.4 6.5
TUM	Providing for the information requested by the coordinator for web site uploading Writing 2 articles in professional and general magazines and newspapers Active participation at 2 relevant fairs and 3other related events Establishment and running of e-mail alert system to disseminate project results Active participation at the concluding conference	6.1 6.2 6.3 6.4 6.5

Major other specific costs:

[List major other specific cost – if any - by task and describe them shortly]

Other specific costs	Related to Task N°	Description	Relevant for partners
setting up a project web page with common logo and layout	6.1	Setting up and maintaining the internet site of the project	SFI,
Participation at bioenergy fairs	6.3	Fees for participation at fairs	SFI, WVB-Stmk GmbH SFI, CTFC, AVEBIOM, REGEA, Lk-Stmk, AIEL, CRES, ICPE, IrBEA, TUM
Final international conference	6.4	Renting the venues, invitations, fees for non-partner speakers	AVEBIOM,

Major subcontracts:

[List major subcontracts and shortly describe the tasks covered]

Relevant for partner	Related to Task N°	Description	Envisaged amount	Organisation
SFI	6.1	support in setting up a project web page	1,500	To be selected
SFI	6.6	Preparation of Strategy for dissemination of project results	1.500	Pro-Eco
AVEBIOM	6.5	Support in organization of final conference	10.000	Org: Energy Agencies and other Renewable Energy associations

Mandatory phrase to keep: The subcontractors identified / to be identified were / will be selected following the provisions of Article II.9 of the Grant Agreement on competitive grounds on the basis of best value for money.

7.2.7. Work Package: EACI Dissemination Activities

N° of work package: 7	EACI dissemination activities
Duration in months: 36	SFI

I. Description of the work:

a) Overview of the Work Package:
The work package covers resources to contribute, upon request by the EACI, to common dissemination activities in order to increase synergies between, and the visibility of IEE-supported projects.

b) Tasks

7.1 Contribution, upon request by the EACI, to the development of information material (Intelligent Energy News Review, videos, images, etc.) in the quality and form specified.

7.2 Participation and/or contribution, upon request by the EACI, to information, training and dissemination events such as contractors' workshops, conferences, briefing days, exhibitions, etc) related to IEE or other relevant EU programmes.

II.a. Outputs of this Work Package:

- Delivery of agreed presentation materials and media tools
- Participation at events, such as contractor's workshops, conferences, etc.

II.b. Deliverable(s) of this Work Package:

- To be agreed specifically at the time of the request.

III. Role and contribution (tasks) of each partner in this Work Package (Award criterion 5):

Partner	Task(s) for this partner organisation	Related to Task N°
SFI	As directed	all
AIEL	As directed	all

7.3 Overview of Deliverables

(TG = Target Group, KA = Key Actors)

Work Package	Deliverable N°	Deliverable name [a]	Type of deliverable [b]	Format [c]	Language(s) [d]	Target group [e]	Leading participant [f]	Dissemination level [g]	Month of completion [h]
WP 1	D1.1	Quality control plan	4 written reports	up to 2-page word document	English	IEEA, Commission services	SFI	CO	1, 10, 19, 28,36
WP1	D1.2	International project meetings	6 meetings	number of participants: 8-10 Number of days for each meeting: 2 2-page minutes from meetings	English	IEEA	SFI	CO	1, 8, 16, 23, 30, 36
WP1	D 1.3	Performance reports	4 written reports	word document	English	Consortium and IEEA	SFI	CO	10, 19, 28,36
WP1	D1.4.5	Final Publishable Report [i]	1 Report	100-page word document	English	Commission services + all TG and KA	SFI	PU	36
WP2	D2.1.	National reports on the state-of-the-art wood biomass production	9 National reports – working paper	10 – 15 pages Pdf document	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Catalan, Romanian	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7 Policy decision makers on national Level	WVB-Stmk GmbH	PU	4
WP2	D2.2	Catalogues of regional forestry companies and biomass producers	9 National /regional catalogues - brochure	20-25 pages 1000 copies per participant	English, German, Italian, Slovenian, Spanish, Greek, Croatian,	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	WVB-Stmk GmbH	PU	10

					Catalan, Romanian				
WP2	D2.3 ✓	45 workshops and demo events	Report with invitation letter or agenda and list of participants - working paper	3-4 pages Pdf document	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Romanian	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	WVB-Stmk GmbH	PU	24
WP2	D2.4 ✓	28 trainings	Report with invitation letter or agenda and list of participants - working paper	3-4 pages Pdf document	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Romanian	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	WVB-Stmk GmbH	PU	29
WP2	D2.5 ✓	29 match- making events	Report with invitation letter or agenda working paper	3-4 pages Pdf document	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Romanian	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	WVB-Stmk GmbH	PU	30
WP2	D2.6 ✓	List of sustainable criteria for biomass production	List of sustainable criteria - working paper	From 5 to 10 pages Pdf document	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Romanian	all TG and KA	WVB-Stmk GmbH	PU	8
WP3	D3.1 ✓	1 training of project partners	Report with invitation letter or agenda and list of	3-4 pages with ppt presentations Pdf document	English	Project partners	AIEL	CO	8

			participants working paper						
WP3	D3.2	Biofuels handbook	Handbook - brochure	50-60 pages 1000 copies in selected languages	Spanish, Greek, Croatian, Catalan, Romanian	all TG and KA	AIEL	PU	10
WP3	D3.3	Biomass trade centres generic guidelines	Guidelines - brochure	15-20 pages Pdf document selected languages	Spanish, Greek, Croatian, Catalan, Romanian	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	AIEL	PU	10
WP3	D3.4	26 half-day preliminary technical and 11 advanced workshops	Report with invitation letter or agenda and list of participants – working paper	3-4 pages with ppt presentations Pdf document	English, German, Italian, Slovenian, Spanish, Catalan, Greek, Croatian, Romanian	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	AIEL	PU	29
WP3	D3.5	20 Study tours	Report with invitation letter or agenda and list of participants - working paper	3-4 pages s Pdf document	English, German, Italian, Slovenian, Spanish, Catalan, Greek, Croatian, Romanian	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	AIEL	PU	29
WP3	D3.6	32 Feasibility studies	Report- working paper	3-4 pages s Pdf document	English, German, Italian, Slovenian, Spanish, Catalan, Greek,	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	AIEL	PU	34

					Croatian, Romanian				
WP3	D3.7	29 Open days at the existing Biomass trade centres	Report with invitation letter or agenda - working paper	2-3 pages Pdf document	English, German, Italian, Slovenian, Spanish, Catalan, Greek, Croatian, Romanian	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	AIEL	PU	34
Wp3	D3.8	53 One-to-one meetings	Short report - working paper	1 page report	English, German, Italian, Slovenian, Spanish, Catalan, Greek, Croatian, Romanian	TG 1, 2,3,5, 6, 8 KA 1,2,3,5,7	AIEL	PU	34
WP4	D4.1	Technical paper on energy contracting	Working paper	Up to 30 pages, pdf document	English,	TG:1, 2, 3, 4, 6, 7 and biomass plant operators and KA: 1, 4., 5., 6.	Lk Stmk	PU	6
WP4	D4.2	"Energy contracting" booklet	Booklet - brochure	12-16 pages 1,000 copies per country	English, German, Italian, Slovenian, Spanish, Catalan, Greek, Croatian, Romanian	All TG and KA	Lk Stmk	PU	28
WP4	D4.3	List or recommendations for new energy	Report - working paper	8-10 pages, Pdf document	English, German, Italian,	TG:1, 2, 3, 4, 6, 7 and biomass plant operators	Lk Stmk	PU	12

		contracting systems			Slovenian, Spanish, Greek, Croatian, Romanian	and KA: 1, 4., 5., 6.			
WP4	D4.4	26 Workshops and 23 study tours	Report with invitation letter or agenda and list of participants - working paper	3-4 pages s Pdf document	English, German, Spanish, Catalan Greek, Croatian, Romanian	TG 1, 2,3,4, 6, 7, 8 All KA	Lk Stmk	PU	31
WP5	D5.1	State-of-the-art report on certification schemes and trademarks	Report - working paper	10 – 15 pages Pdf document	English	TG 2,3,4, 6, 7, 8 All KA	SFI	PU	10
WP5	D5.2	Fact sheets on good practice examples of QA/QC implementation or labelling	Fact sheets - flyer	1 page per good practice example Pdf document At least 2 per participating country	English, German, Italian, Slovenian, Spanish, Catalan, Greek, Croatian, Romanian	All TG and all KA	SFI	PU	10
WP5	D5.3	QA/QC system for small biomass producers and suppliers	Description of the system working paper	10-15 pages Pdf document	English, German, Italian, Slovenian, Spanish, Catalan Greek, Croatian, Romanian	TG 2,3,4, 6, 7, all KA	SFI	PU	20
WP5	D5.4	Guidelines for wood fuels	Guidelines - working paper	10-16 pages Pdf document	English, German,	TG 2,3,4, 6, 7, all KA	SFI	PU	28

		labelling			Italian, Slovenian, Spanish, Catalan, Greek, Croatian, Romanian				
WP5	D5.5	Report on the implementation of QA/QC system in 26 companies/producers	Report	3-5 pages per partner	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Romanian	TG 2,3,4, 6, 7, all KA	SFI	PU	36
WP5	D5.6	Booklet on general information about EU CEN standards and labelling	Booklet	12-16 pages 1,000 copies per participating country	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Romanian	All TG all KA	SFI	PU	32
WP5	D5.7	Technical paper on wood biomass laboratories	Working paper	Up to 30 pages, pdf document	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Romanian	TG 2, 5, 8, 9 KA 4, 6, 8	SFI	PU	34
WP6	D6.1	Web Site	Web site	With a restricted part for project partners and a public part	English	All TG and KA	AVEBIOM/ SFI	PU	3
WP6	D6.2	42 National and 19 international	Published articles	61 articles	English, German,	All TG and KA	AVEBIOM	PU	36

		articles			Italian, Slovenian, Spanish, Greek, Croatian, Romanian				
WP6	D6.3	Participation at 21 bioenergy fairs and 20 related events	Report	1-2 pages Pdf	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Romanian	All TG and KA	AVEBIOM	CO	36
WP6	D6.4	National system for promotion and dissemination of results	e-mail alerts	e-mail alerts to TG and KA and potential participants during events and to users of results	English, German, Italian, Slovenian, Spanish, Greek, Croatian, Romanian	All TG and KA	AVEBIOM	PU	36
WP6	D6.5	Final international conference	Conference	From up to 200 participants	English	All TG and KA	AVEBIOM	PU	36
WP 6	D6.6	Strategy for dissemination of project results	Working paper	Up to 20 pages, pdf document	English	KA 11	AVEBIOM	CO	3
WP7	D 7.1, D7.2	Deliverables to be agreed							

a) Please use the same deliverable name as indicated in the work package descriptions in section 6.2. of your work programme. The deliverable name should be self-explanatory.

b) The type of deliverable could be: a publication (flyer/brochure/working paper/paper/article/press release/slides/Cd-rom),website/webtool, etc.

c) The format could be: printed and/or electronic (downloadable), the approx. number of pages / number to be printed of a publication

d) Please specify each language in which the deliverable will be available - indicating 'all' or 'national' is not sufficient.

e) Please indicate the specific target group for each deliverable. The target groups indicated should be consistent with section 4 of your work programme. Indicating 'all' is not sufficient.

f) Name the participant of your consortium who will lead the preparation of the deliverable.

g) Please indicate the dissemination level using one of the following codes:

PU = Public, to be freely disseminated, e.g. via the project website

CO = Confidential, only for members of the consortium including the Commission/EACI Services (mainly for internal working documents and only in exceptional cases for results)

h) Month in which the deliverables will be actually completed (not the submission to the EACI services). Month 1 marks the start of the project, and all deadlines should be relative to this starting date.

i) Each IEE project must produce a (Final) Publishable Report. Its form and shape can vary depending on the nature of the project. It must be delivered to the EACI with the Final Report.

7.4. Project Schedule

Project phase / Duration of the project	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Work package 1: Management																																				
Work package 1: Task 1.1.																																				
Work package 1: Task 1.2.																																				
Work package 1: Task 1.3.	X							X								X							X						X						X
Work package 1: Task 1.4.																																				
Work package 1: Task 1.5.																																				
Work package 1: Task 1.6.										PR									IR									PR								FR[c]
Work package 2: Wood biomass production																																				
Work package 2: Task 2.1.																																				
Work package 2 - Task2.2.																																				
Work package 2 - Task2.3.																																				
Work package 2 - Task2.4.																																				
Work package 2 - Task2.5.																																				
Work package 2 - Task2.6.																																				
Work package 2 - Task2.7.																																				
Work package 3 - BLTC																																				
Work package 3: Task 3.1.																																				
Work package 3: Task 3.2.																																				
Work package 3: Task 3.3.																																				
Work package 3: Task 3.4.																																				
Work package																																				

3: Task 3.5.																																				
Work package 3: Task 3.6.																																				
Work package 3: Task 3.7.																																				
Work package 3: Task 3.8.																																				
Work package 4: Energy contracting																																				
Work package 4: Task 4.1.																																				
Work package 4: Task 4.2.																																				
Work package 4: Task 4.3.																																				
Work package 4: Task 4.4.																																				
Work package 4: Task 4.5.																																				
Work package 5: Quality standards and s. criteria																																				
Work package 5: Task 5.1.																																				
Work package 5: Task 5.2.																																				
Work package 5: Task 5.3.																																				
Work package 5: Task 5.4.																																				
Work package 5: Task 5.5.																																				
Work package 5: Task 5.6.																																				
Work package 5: Task 5.7.																																				
Work package 5: Task 5.8																																				
Work package 6: Comm.and d.																																				
Work package 6: Task 6.1.						X																														
Work package 6: Task 6.2.																																				
Work package 6: Task 6.3.																																				

Work package 6: Task 6.4.																																					
Work package 6: Task 6.5.																																					
Work package 6: Task 6.6.																																					
Work package 7: EACI Dissemination Activities																																					
Project meetings [a)]	X							X								X							X						X							X
Project reports to EACI [b)]										PR									IR									PR									FR[c]
Project Information Sheet & Slides to EACI		X								X									X									X								X
Project Webpage/site creation and update -task 6.1						X																															
Project deliverables [d)]	D1.1 D1.2		D6.1 D6.6	D2.1		D4. 1		D1.2 D2.6 D3.1		D1.1 D1.3 D2.2 D3.2 D3.3 D5.1 D5.2	D4.3					D1.2			D1.1. D1.3	D5.3			D1.2	D2.3 D4.2			D5.6	D1.1 D1.3 D5.4	D2.4 D3.5 D5.7	D1.2 D2.5	D4.4 D3.4	D3.6 D3.7 D3.8		D5.8		D1.1 D1.2 D1.3 D1.4.5 D5.5 D6.2 D6.3 D6.4 D6.5

(Template for a 30-month project - Please adapt as appropriate)

[a)] It is recommended to hold project meetings about every 6 months. A kick-off meeting should take place in the first 1-2 month(s). A final meeting should be foreseen to present the results to the EACI.

[b)] According to the model Grant Agreement the minimum number of reports to EACI:

- 1-2 Progress reports (PR; the number of progress reports depends on the project duration).
- 1 Interim report (IR – technical and financial),
- 1 Final report (FR – technical and financial) at the end of the project, including a final publishable report.

Please be aware that submission deadlines for the three types of reports have to be indicated in this time schedule, whereas the period covered is fixed in the grant agreement (PR/IR within 1 month after the end of the period, FR at the latest 2 months after the end of the period). The submission deadline of the interim report is to be proposed by the contractors, bearing in mind that it should represent a substantial advancement of the works performed. It is recommended to set the end of the interim period when about 50-60% of the works will have been accomplished.
Examples of submission deadlines (depending on the duration of the project):
24-months-project [month]: PR: 7; IR: 14 / 30-months-project [month]: PR: 10; IR: 19 / 36-months-project [month]: PR: 10, 28; IR: 19

c) The Final Report will be due at the latest 2 months after the end of the project (in this 30 month example: at the end of month 32). Only costs related to the preparation of the Final Report and to an audit certificate (where applicable) are eligible during these 2 months. Note: the Final Report can of course be submitted immediately at the end of the project.

d) Please ensure that the deadlines indicated in the List of Deliverables and the Schedule are consistent.

8. Co-financing sources

Participant	Co-financing source	Comments / Justification
SFI	From 3rd parties and from own resources	The Ministry of Economic Affairs of the RS will launch a call for co-financing up to 25% of the projects.
Lk Stmk	From own resources	Lk-Stmk will finance 25% out of its regular activities
AIEL	From own resources	AIEL will finance 25% out of its regular activities
REGEA	From own resources	REGEA will finance 25% out of its regular activities
CTFC	From own resources and regional government	CTFC is a public consortium depending on the regional Ministry of the Environment and as such will provide 25% of its budget from its own resources
AVEBIOM	Own co-financing,	AVEBIOM co-funding will be provided from their main activities. As AVEBIOM embraces 150 companies within the Spanish bioenergy sector, the search of Bio-businesses is a main task included in the foundation statutes. Also, it is important to appreciate that AVEBIOM has well know reputation for its work with regional and national governmental entities to promote bioenergy previous to this project.
WVB-Stmk GmbH	From own resources	WVB GmbH will finance 25% out of its regular activities.
CRES	Ministry for the Environment, Energy and Climate Change	After the approval of the project and the signature of the Grant Agreement, an application will be submitted to the Hellenic Ministry of Economics in order the proposal to be co-financed by the programme of the Ministry for the Environment, Energy and Climate Change
ICPE	From own resources	ICPE will finance 25% out of its regular activities
IrBEA	From own resources	IrBEA will finance 25% out of its regular activities
TUM	From own resources	TUM will finance 25% out of its regular activities

9. Overview of Letters of support

a) Ministry of Agriculture, Forestry and Food of the R Slovenia
b) Ministry of Regional Development, Forestry and Water- management of the R Croatia,
c) Land Steiermark – Regional Ministry of Agriculture and Forestry
d) Austrian biomass association
e) Mediterranean forest owners association – ARCMED
f) Consorci forestall de Cataloya (leading forest owners association in Catalonia)
g) Municipality Šentrupert - Slovenia
h) TE-TOL - the biggest, highly-efficient cogeneration facility in Slovenia
i) Istrabenz Energy Systems – energy and Trade Company (SLO)
j) Biomasa – SME covering the entire biomass production chain in Slovenia
k) Forestry Company Postojna – one of the biggest forest companies in Slovenia
l) Tisa – The biggest company in Slovenia producing wood fuels
m) Wood Catalan Institute – Incafust
n) Velenje coal mine company – owner of first commercial Short rotation plantations in Slovenia

10. Description of each participant

10.1 Description of the organisation and the key personnel

a) Description of the organisation

Slovenian Forestry Institute

The Slovenian Forestry Institute is a public institution of national importance, competent for research in the fields of forest, forest technique and economics, wildlife, game management and use of wood biomass for energy. It was founded by the Government of the Republic of Slovenia and operates - in accordance with modern environmental thought - under the auspices of the Ministry of Science and Technology, Ministry of Agriculture, Forestry and Food, and the Ministry of the Environment and Spatial Planning. The Slovenian Forestry Institute is a multidisciplinary fundamental and development research institution, where basic and applicative projects as well as numerous operational activities are taking place within particular research projects.

Department of Forest Techniques and Economics follows the development of modern forest techniques and efficient technologies appropriate for our geographical and socio-economic conditions. Important activities are: creation of modern technological maps, evaluation and standards setting for particular phases of technological processes, economic evaluation of forest functions, effective use of wood biomass for energy, monitoring of tree, soil damages caused by felling and skidding, wood flow analysis, roundwood balances and calculation of CO2 sink form forests and harvested wood products.

The Slovenian Forestry Institute / Department of Forest Techniques and Economics has been involved in R&D projects, dealing with the evaluation of the biomass and energy potential of Slovenian forests and with other important topics regarding wood biomass production and use for more than 20 years. We are dealing mostly with wood biomass because more than 60% of the land is covered by forests.

Slovenian forestry institute is closely connected with Slovene forest service and Machinery ring association which are also the major subcontractors. The advantages of these institutions are regional offices and permanent work with forest owners, farmers and forest companies. In last 10 years we were involved in common wood biomass promotion activities like Forest and Bioemnergy Demo event organised together in Davča in 2008 (with more than 2500 visitors).

Landeskammer für Land- und Forstwirtschaft Steiermark – Styrian Chamber of Agriculture and Forestry

LK-Stmk was established in 1929 as a representative of interests of Styrian farmers. Each Styrian farmer is a member of LK-Stmk by Styrian law. Through its intensive advice activity in the last 20 years, LK-Stmk has played a decisive role that Styria has developed into a model region in the field of heat and electricity production based on biomass and biogas as well as biofuels for transportation purposes. Lk-Stmk is also in charge of handling financial support schemes for biomass district heating projects, logwood, woodchips and wood pellet heating systems as well as biogas plants in Styria. Lk - Stmk has organised "The Second Central European Biomass conference" with more than 1,100 participants from over 60 countries worldwide. The conference took place in Graz between 16 - 19th January 2008. About 80 presentations dealt with subjects like climate change and security of energy supply, raw material supply, heat and electricity from biomass, transport biofuels, biogas, new energy crops, and financing bioenergy projects.

AIEL – Italian Agriforestry Energy Association

AIEL is a non-profit association founded in September 2001 – promoted by the Italian Confederation of Farmers, which associates around 150,000 farms - with the aim to promote, disseminate and stimulate across Italy the use of biomass as renewable energy source. AIEL works together with institutions, organizations and individuals, especially farmers, forest owners and entrepreneurs and

their organization involved in the different segments of biomass chain. The legal centre of AIEL is in Rome, while its two operative centres are located in Florence and in Padua, where 4 technicians (2 seniors and 2 juniors) and 2 directive and administrative persons are employed. AIEL has currently 250 members, 120 of which operate in the field of wood energy (wood fuels producers/retailers and heating systems producers/retailers). Since October 2006, it has been a member of the European Biomass Association (AEBIOM).

North-West Croatia Regional Energy Agency - REGEA

The North-West Croatia Regional Energy Agency - REGEA has been established by the Counties of Zagreb, Karlovac and Krapina-Zagorje, and by the City of Zagreb within the framework of the Intelligent Energy Europe programme. The main objectives and role of the Agency are promoting and encouraging regional sustainable development in the fields of energy and environmental protection through renewable energy sources utilization and energy efficiency measures implementation. Furthermore, the Agency's scope of work includes: promotion and implementation of "best practices" and "case-studies" in the regional energy management, promotion and implementation of sustainable development concept, public awareness activities in the fields of energy and environmental protection, up-to-date information and advices regarding the regional energy issues, and advisory support for the implementation of regional energy plans and programs. REGEA started to function in April 2008, with its key projects and activities including the following:

- Development of strategic documents for each of the four founders
- Start-up and implementation of numerous projects aimed at increasing energy efficiency
- Start-up and implementation of numerous projects aimed at renewable energy sources utilisation
- International projects.

REGEA is also one of the key biomass promoters in Croatia and a leading consultant in many implementation projects like the pellet fired small scale district heating plant in the Zakanje Municipality (500 kW) or wood chips fired district heating plant in the Pokupsko Municipality (1 MW), which are both the very first projects of this kind in Croatia. In its daily work, REGEA actively collaborates and communicates with private forest owners associations, pellet producers as well as regional and national decision-making organisations. REGEA also boasts great international experience and several successful projects.

AVEBIOM

AVEBIOM (Spanish Bioenergy Association) was founded in 2004 with the aim to promote the development of the Bioenergy sector in Spain. The main objectives of this organization can be summarised as follows:

- To promote the creation and the development of the Bioenergy sector in Spain.
- To involve public administration dealing with the Agriculture, Environment, Industry and Economy sectors.
- To stimulate the establishment of business enterprises for the transformation, commercialization and supply of solid bio-combustibles, as well as companies working in the field of energy valorisation, production of bio fuels and bio gas, and the related devices for production, transport and valorisation purposes.

AVEBIOM puts its experiences and means at the disposal of all stakeholders who require information or play a role in the improvement and development of biomass use in the energy sector: farmers, forest sector agents, companies for the agriculture products transformation, industries, individuals, producers of specific devices for combustion, manufacture, transport; universities and research institutes, etc. We offer to our members the collaboration, help and consultancy they need in the field of bioenergy; contacts with public administration and organisation of several initiatives and events for dissemination and awareness raising about the potentialities of this resource in the fight against climate change, and

for the promotion of rural areas and their sustainability at the environmental and economic levels. AVEBIOM is member of the European Biomass Network (AEBIOM), actively participating in the EU actions organized within the framework of this organization.

In addition, AVEBIOM offers help and cooperation to develop the bioenergy sector in Spain, providing information, advice and assistance to its members, a dialogue with the Government, and promoting the implementation of events and actions relating to knowledge and development of the opportunities provided by bioenergy to combat climate change.

AVEBIOM has conducted numerous informational seminars, training courses and meetings with stakeholders and decision-makers to encourage the implementation of biomass-related businesses. An example is the Grants and Aid for Biomass Boiler Installation carried out in an autonomous province of Spain for the Government of the "Principado de Asturias".

Forest Sciences Centre of Catalonia – CTFC

CTFC is a public consortium administratively attached to both regional ministries of the environment and agriculture. It participates in the mid-term and final evaluations of structural funds, regional allocations and policies, and gives policy advice to the administration in charge. CTFC participates as an independent expert in the preparation, evaluation and updating of regional forest strategy plans for the Ministry of the Environment (DMAH), and biennially organizes the Spanish Forest Policy Forum.

CTFC has been particularly active in the promotion and development of wood bioenergy and is in charge of the bioenergy and non-wood forest products and services R&D agendas of the Spanish Forest Technology Platform. CTFC acts as an operational body for the Catalan Ministry of the Environment in wood biomass projects and is in the process of establishing a joint research centre for wood-based bioenergy in Girona.

In partnership with the University of Lérida (GREA laboratory on renewable energies), CTFC is working on the development of a wood recollecting machine adapted to Mediterranean environments (high slopes and rocky soils), with national financing.

CTFC cooperates with a sectorial committee, grouping all major industrial and sectorial protagonists of the region. The committee acts as a consultative body to the General Management of the Centre and provides insights for CTFC specific necessities or R&D needs.

Waldverband Steiermark GmbH –WVB-STMK-GmbH

The WVB-STMK-GmbH was founded in 2003 as Forest Service GmbH and renamed in 2005 to „Waldverband Steiermark GmbH". Waldverband Steiermark has more than 12,000 members in Styria and owns 49% of the Waldverband Steiermark GmbH; the other 51% are owned by the local "Forest Owner Associations".

The WVB STMK GmbH coordinates the selling process for owners of 0-200 ha large forests. We prepare sale contracts and, if needed, organize harvesting and transport from forests to sawmills, papermills, biomass power stations, etc. In the last few years, from 700,000 to 1.000.000 m^3/year have been managed.

Another important part is managing woodlands of private owners (harvesting, thinning, reforestation, etc.).

For wood users (sawmills, papermills, biomass power stations.....) we guarantee a certain amount of wood and a specific supply profile. We participate in research projects to mobilize the unused biomass and wood. We support the existing Biomass trade centres in Styria (business plan, controlling, providing raw material....) and encourage forest owners to establish new Biomass trade centres .

Centre for Renewable Energy Sources and Saving - CRES

The Centre for Renewable Energy Sources and Saving (CRES) is the Greek national centre for Renewable Energy Sources (RES), Rational Use of Energy (RUE) and Energy Saving (ES). Its main goal is the promotion of RES/RUE/ES applications at a national and international level, as well as the support of related activities taking into consideration the environmental impacts, on energy supply and use. It is the official Greek government consultant on matters of RES/RUE/ES in national policy, strategy and planning.

CRES Biomass Research Team has long-term experience in biomass resource assessment and energy crops as well as in economic appraisal and environmental assessment of bioenergy and biofuel chains. The medium term RTD priorities include biofuels, energy crops, and biomass logistics while the long term will also include biorefinery, pyrolysis and hydrogen from biomass. In addition to the above CRES provides technical support in the Greek market on resource supply issues (including economics and environmental assessments), energy cropping as well as in small-scale heat applications fuelled with biomass. Finally, the potential active involvement in the development of biomass supply networks could provide is seen as a high added value topic for the development of the bioenergy sector in Greece.

ICPE

ICPE Bistrita was established in 1983, as a branch of the Institute in Research and Design in Electrics Bucharest, performing research, design and development activities for the environment protection as well as production activities for equipments and technologies implementation.

ICPE Bistrita currently operates as an independent stock company with 48 experienced employees. The company's activities, including research contracts and execution works, concern the following spheres: technologies and equipment for water treatment, technologies and equipment for ozone disinfection of closed rooms, technologies and equipment for wastewater treatment, alternative energy sources, and environmental assessments.

As regards the alternative energy sources, the ICPE performs applied research in the sphere of methods and technologies and offers feasibility studies, technical documentation, consultancy, design and installation of alternative energy systems.

The environmental assessments include analyses to determine the concentration of substances in the processed waters, analyses to determine the concentration of substances in used waters, drawing up of environment engineering studies, drawing up of impact studies and environment balances.

IrBEA

IrBEA represents the bioenergy industry on the island of Ireland. IrBEA is an association of people working within the bioenergy industry and for people interested in the development of the industry in Ireland, both North and South of the border. The members are the 'core' of the Association and decide the direction and actions that IrBEA takes.
IrBEA seeks to maximise the use of bioenergy and the awareness of its benefits on the island of Ireland. This is achieved by influencing Government policy and public opinion, project facilitation and the provision of support to existing and potential bio-energy users and producers.
The overall aim of the IrBEA is to promote biomass as an environmentally, economically and socially sustainable indigenous energy resource and to also promote its non-energy related benefits - including.

- Improve public awareness of biomass as a realistic option for energy supply;
- Influence policy makers to promote the development of bioenergy;
- Networking and information sharing among those interested in bioenergy development.
- Promote the interests of its members
- Liaise with similar interest groups.
- Promote the implementation of bioenergy projects.

IrBEA is a Limited Company governed by a Management Committee elected by IrBEA members. There are eight other members of the management committee, who are elected by all the paid-up members of IrBEA, during a General Meeting, which is held at least once a year. There are several subgroups within IrBEA. Currently there are four subgroups. The sub-groups work autonomously, under the co-ordination of the IrBEA management committee.
Website : www. irbea.org

TUM

The Chair of Forest Work Science and Applied Computer Science is part of the Study Faculty of Forest Science and Resource Management sited at the Science Centre Weihenstephan in Freising. The Institute has made a lot of scientific efforts on the issue of energetic wood consumption regarding economic, technical and ecological aspects.

PATZAK has studied the procurement of forest biomass from early thinnigs of Norway spruce and Scots pine in 1984, at a time when the process of the energetic use of forest chips was at the very beginning in Europe. However the Chair had to suffer from the funding strategies of regional and national institutions that – in this field - boosted agricultural institutions rather than forestry research organisations.

Due to that the Chair had to focus on other fields of research like round wood logistics, mobilization, low impact forestry and forest engineering. During that time a matter of particular interest was set to the problems of mobilization and efficient timber harvesting within the small-scale forestry sector. This topic still is one of the most crucial ones when matching the current development of wood consumption. As resources become scarce and conflicts between material and energetic use arise the issue becomes even more essential.

In close cooperation with the LWF (research station of State Department of Forestry) the Chair conducted the Phd of Stefan WITTKOPF (2005) who was working as an energy consultant at the LWF. His work includes an overview of the Bavarian wood energy market as well as a frequently cited analysis and matrix of the most relevant supply chain alternatives for the procurement of forest chips.

The chair is still cooperating with the LWF and recently working on a national funded project about process analysis and life cycle assessment of the procurement of forest chips (FNR Project). Apart from that the Chair is involved in an international project – including the Research Centres METLA in Finland and IVALSA in Italy – dealing with markets and technology transfer for know-how on small scale production and the use of energy wood in the European Union (SMEuFire Project).

Furthermore the Institute is participating at a new Cost Action which has been accepted on the 26th of May 2009 entitled: "Development and harmonisation of new operational research and assessment procedures for sustainable forest biomass supply". Finally the Chair is maintaining a long tradition of training programmes and know-how transfer to forest entrepreneurs and other forestry staff, specifically during a yearly forest operation conference.

b) Relevant experience of the key personnel proposed to work on this project

SFI

Organisation:	Slovenian Forestry Institute				
Name :	Nike	**First Name:**	Krajnc	**Nationality:**	Slovenian
Qualification:	PhD in Forestry (with specialisation in wood biomass)				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Nike Krajnc is a PhD in forestry. She has been working in the field of effective wood biomass use for more than 13 years. She was awarded her MSc degree on the basis of the thesis entitled »Extension for forest owners in the field of effective use of wood as energy-producing raw material« and eventually obtained her doctorate with the thesis on socio-economic and environmental aspects of biomass use. As a researcher, she has been employed by the Slovenian Forestry Institute for more than 13 years. She was a project coordinator in more than 7 international and more than 8 national projects. Her bibliography includes more than 200 bibliographic units mainly from the field of wood biomass utilisation and use. She is qualified moderator for using participatory methods, with good experiences in organising and moderating national and international workshops. In the last few years she has been organising training sessions for the advisors on effective use of wood biomass, workshops for forest owners and demonstrations of modern technologies. In the last 5 year she has published (as co-author) more than 5 technical and promotional publications that are free of charge and through which the SFI is attempting to promote modern and efficient technologies of biomass production, preparation and use. She is also a member of the Technical Group in the Slovenian Standardisation Office, dealing with the preparation of standards for biomass as a fuel.				

Organisation:	SFI				
Name :	Mitja	**First Name:**	Piškur	**Nationality:**	SLO
Qualification:	MSc if Forestry				
Staff category*:	Expert				
Short description of work experience, relevant to the proposal:**	Mitja Piškur is a MSc in forestry. His Master of Science thesis entitled ''Certified wood tracking options in Slovenia'' covers aspects of labelling, certification of sustainable forest management and requirements for assuring the legality of wood. He was involved in FSC Chain of custody certification in largest Slovenian companies. He is a member of the Technical Committee for wood and wood products in the Slovenian Standardization Office. In the last 5 years, his work has been focused on wood flows analysis and modelling of carbon sequestration in wood products using the principles of Substance Flow Analysis (SFA).				

*: e.g. Senior expert, Expert, Junior Expert / **: 1 paragraph per person

Organisation:	SFI				
Name :	Robert	**First Name:**	Robek	**Nationality:**	SLO
Qualification:	MSc in Forestry				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Robert Robek, Master of Forestry Sciences and a PhD candidate, holds a permanent position at the SFI as a senior researcher at the Department of Forestry Engineering and Economics. He is also a licensed road designer and holds a license for investment processes at the Chamber for Civil Engineers in Slovenia. He has much experience in forestry undergraduate courses (Business Management) led by him at the Biotechnical Faculty, University of Ljubljana. His research expertises are road engineering and environmental impacts of forestry operations. His professional expertises are forest access optimisation in farm forests, ITC in forest operations and remediation of degraded natural sites. He has had some 20 scientific works and around 15 professional articles published in various research papers or presented at scientific conferences. He is co-author of three expert books and co-editor in chief for two proceedings of scientific conferences. He was the Editor in Chief for the Slovene vocational forestry magazine 'Gozdarski vestnik' for six years, and a member of the Editorial Board of the national scientific journal 'Zbornik gozdarstva in lesarstva' for five years. He was the project leader in three international projects from the field of forestry engineering and two FAO projects in Central and Southeast Europe. He co-supervised two BSc theses.				

Organisation:	Association of Machinery rings of Slovenia				
Name :	Marjan	**First Name:**	Dolenšek	**Nationality:**	SLO
Qualification:	MSc in Agriculture				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Present position: he is agricultural equipment adviser. He is also secretary of Machinery Ring Association of Slovenia. He works as Member of commissions of Ministry of Agriculture, Forestry and Food for Regulation preparation for work safety with tractors, homology of tractors, plant protections equipment, etc. He has long experience in organization of local, regional and national Demonstration events. He was main organizer of more than 20 demonstration events in last 5 years.				

LK-Stmk

Organisation:	Chamber of Agriculture and Forestry in Styria (LK-Stmk)				
Name :	Loibnegger	**First Name:**	Thomas	**Nationality:**	AT
Qualification:	Expert in Energy and Biomass				
Staff category*:	Expert				
Short description of work experience, relevant to the proposal:**	Thomas Loibnegger is a MSc of environmental-system-science with focus on economy. He obtained his Master of Science degree with the thesis entitled Economic analyses and environmental aspects of the energy crops production in East-Styria. He has worked as a young scientist at the Wegener Centrum for climate and global change in Graz from 2007 to 2008. He has worked on national projects dealing with regional economic impacts of the increased biomass energy use. Since 2008, he has been a project manager of EU-funded THERMIE-, ALTENER-, EIE and INTERREG-projects and bio-energy expert at the Styrian Chamber of Agriculture and Forestry. His main focus lies on the support of biomass district heating systems and biogas plants. He is also involved in the topic of short rotation coppice. He published (as co-author) several texts in the field of biomass technologies, energy crops and energy efficiency. Languages: German and English.				

Organisation:	Chamber of Agriculture and Forestry in Styria (LK-Stmk)				
Name :	Metschina	**First Name:**	Christian	**Nationality:**	AT
Qualification:	Expert in Energy and Biomass				
Staff category*:	Expert				
Short description of work experience, relevant to the proposal:**	Born 1979 in Austria Academic studies in environmental-system-science at the Karl Franzens University in Graz 2002 project manager at the Verbund-Umwelttechnik GmbH, coordination and project management work in the field of green electricity, since 2003 project manager and bio-energy expert at the Styrian Chamber of Agriculture and Forestry, member of the coordination and management unit in EU funded THERMIE-, ALTENER-, EIE and INTERREG-projects, project manager in the Austrian Biomass Association. Participates in the composition of statistical reports on the contribution of bio-mass to the energy system in the EU 27 (in Brussels) published by the European Biomass Association AEBIOM in 2007 Mr. Metschina is a qualified moderator for using participatory methods, with a solid experience in organising and moderating national and international workshops. His mother tongue is German. Other language are English, Slovenian (fluent).				

Organisation:	Chamber of Agriculture and Forestry in Styria (LK-Stmk)				
Name :	Jauschnegg	**First Name:**	Horst	**Nationality:**	AT
Qualification:	Senior Expert in Bioenergy				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the	Born 1968 in Wagna Academic studies in agriculture at the University of Agricultural Sciences in Vienna 1994 –1997 project manager at the Institute of Agricultural, Environmental and				

proposal:**	Thermal Engineering at the University of Agricultural Sciences in Vienna since 1997: project manager and bio-energy adviser at the Styrian Chamber of Agriculture and Forestry, manager of EU funded THERMIE-, ALTENER-, EIE- and INTERREG-projects 1997 – 1999: secretary of the Green Electricity Association since 1999: secretary of the Styrian Biomass Association since 2007: head of the Energy and Biomass Department at the Lk Stmk Mother tongue: German Other language: English

AIEL

Organisation:	**AIEL**				
Name :	Antonini	**First Name:**	Eliseo	**Nationality:**	IT
Qualification:	Project Manager				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Born in Riva del Garda (TN), 1969 1989 – 1996 - Academic studies in forestry science at the University of Agricultural Sciences in Padua 1998-2001 – Adviser and consultant for public and private forest owners in Forest Management 2001-2003 – Coordinator of the EU LIFE Environmental Programme "Woody buffer Strips" LIFE99/ENV/IT/000083 and adviser to farmers in planting edges and producing wood for domestic heating systems. Since 2003, Senior Expert and co-responsible of the management in the project listed in Chapter B 8.2. In charge of the section dealing with economic and market analysis related to the biomass sector.				

Organisation:	**AIEL**				
Name :	Francescato	**First Name:**	Valter	**Nationality:**	IT
Qualification:	Project Manager				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Born in Mirano (VE), 1971 1991-1998 - Academic studies in forestry science and environment at the University of Agricultural Sciences in Padua Since 2001 – Project Manager of AIEL, co-responsible of the management in the project listed in Chapter B 8.2. In charge of the section dealing with biomass technologies appliances.				

Organisation:	AIEL				
Name :	Analisa	**First Name:**	Paniz	**Nationality:**	It
Qualification:	Project Manager				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Born in Feltre (BL), 1979 Master of Science in Forestry and Environmental Science Working in the sphere of wood fuel quality, in particular in the standardization of pellet quality provision Carrying out and updating the first pellet market research in Italy Creating and managing "Pellet Gold", the unique pellet quality standard certification in Italy – www.pelletgold.net Organizing and running the First and Second "International Pellet Forums" in Italy in January 2008 and February 2010 Contributing to the publications dealing with pellet market situation at the national and international levels				

REGEA

Organisation:	North-West Croatia Regional Energy Agency - REGEA				
Name :	Domac	**First Name:**	Julije	**Nationality:**	CRO
Qualification:	PhD in Energy, Managing Director				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Recognised international expert with more than 15 years experience in renewable energy and energy efficiency projects. His current position is Managing Director of the North-West Croatia Energy Agency, while in the past he acted as Deputy Head of the Department for Renewable Energy at the Energy Institute *Hrvoje Pozar* in Zagreb, Croatia, and International Projects Adviser at TV Energy Ltd, a SAVE regional energy agency in Newbury, UK. Julije worked as the national biomass programme coordinator in Croatia, international expert for Tipperary Institute, Ireland, project leader for UNIDO, lead expert for the World Bank, project director and technical editor for FAO, expert evaluator for the European Commission and Task Manager for the International Energy Agency (IEA). Over the last four years, his main focus has been biomass energy, especially socio-economic modelling, biofuels, local communities and biomass conversion.				

*: e.g. Senior expert, Expert, Junior Expert / **: 1 paragraph per person

Organisation:	North-West Croatia Regional Energy Agency - REGEA				
Name :	Segon	**First Name:**	Velimir	**Nationality:**	
Qualification:	MSc in Energy, Head of Department				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	BSc and MSc in power systems received at the Faculty of Electrical Engineering and Computing, University of Zagreb. From 1997 to the end of 2002 worked as a junior researcher at the Faculty's Department of Power Systems, where his work was related to safety analysis of nuclear power plants. From January 2003 to April 2008 worked as a senior researcher at the Energy Institute Hrvoje Pozar, implementing various national and international projects related to the utilisation of renewable energy sources and specifically biomass. Participated in European Commission projects within the 6th and 7th Framework Programme and the Intelligent Energy Europe programme, projects under the International Energy Agency (IEA), FAO, UNIDO, Energy Community and others. Since May 2008 works at the North-west Croatia Regional Energy Agency as Expert Advisor. Responsible for development of local and regional energy strategies and action plans, preparation and implementation of international projects (IPA, IPARD, FP7, IEE and others). Velimir is also coordinating projects aimed at the implementation of biomass district heating in 8 Croatian municipalities and projects aimed at the introduction of biomass heat contracting model in public buildings.				

CTFC

Organisation:	Forest Sciences Center of Catalonia (CTFC)				
Name :	Pere	**First Name:**	Navarro	**Nationality:**	ES
Qualification:	Head of the Department of Wood Mobilisation and Biomass				
Staff category*:	Expert				
Short description of work experience, relevant to the proposal:**	Mr. Pere Josep Navarro is a forest operations, forest surveys and market studies specialist. He has been working on forest operations monitoring, timber markets prospection and forest road information for many year. He is also involved in other woody biomasses for composting and bioenergy activities.				

Organisation:	Centre Tecnologic Forestal de Catalunya (CTFC)				
Name :	RODRIGUEZ	**First Name:**	Judit	**Nationality:**	ES
Qualification:	Engineer				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Ms. Judit Rodríguez, bioenergy and wood markets specialist, has been the Head of Forest Harvesting and Biomass Department at the CTFC since its creation in 2005. She has been working on projects dealing with forest harvesting, bioenergy and wood markets. She has participated in several European projects.				

Organisation:	Centre Tecnologic Forestal de Catalunya (CTFC)				
Name :	LOPEZ	**First Name:**	Ignacio	**Nationality:**	Es
Qualification:	Engineer				
Staff category*:	Research Engineer, Junior Expert				
Short description of work experience, relevant to the proposal:**	Mr. Ignacio López, biomass harvesting and supply chain, wood energy specialist, has participated in several European projects as principal organizer of several seminars. He is in charge of subjects such as quality wood chips, optimization forest value chains, bioenergy facilities, etc.				

AVEBIOM

Organisation:	**Spanish Bioenergy Association - AVEBIOM (Spain)**				
Name :	**Martin**	**First Name:**	**Marcos**	**Nationality:**	Spanish
Qualification:	Bioenergy Expert				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Marcos Martín, 34 years old Spanish, has a master degree in forestry (University of Valladolid, Spain) and a specialization degree in Sustainable Management (University Autonoma of Madrid, Spain). Has worked as Bioenergy Manager at the Forest Research Centre of Castilla y León. He was also a Forestry Consultant in various international projects, and since September 2007 a Bioenergy Expert in the Spanish Bioenergy Association (AVEBIOM).				

Organisation:	**Spanish Bioenergy Association - AVEBIOM (Spain)**				
Name :	**Díaz**	**First Name:**	**Javier**	**Nationality:**	Spanish
Qualification:	President				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Javier Díaz, Spanish, has a degree in Enterprise Management and Direction (Centro Superior de Estudios Empresariales. CESEDEM). From 1977 has worked for FASA RENAULT, SOCIEDAD GENERAL DE BIOMASA DE CASTILLA Y LEÓN; FOMENTO DE ENERGÍAS RENOVABLES, S.A., FOMENTO DE ENERGÍAS RENOVABLES DE ALAVA, S.A., LAS PEDRAJERAS, S.L. where he acquired much experience in bioenergy. Since 2004, he has been the President of the Spanish Bioenergy Association - AVEBIOM				

Waldverband Steiermark GMBH

Organisation:	Waldverband Steiermark GMBH				
Name :	Christian	**First Name:**	Schnedl	**Nationality:**	AUT
Qualification:	PhD in Forestry; Managing Director				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Christian Schnedl is a wood market, harvesting (especially biomass) and logistics specialist. He has been working on projects dealing with forest harvesting, bioenergy and wood markets. In 2005, he founded WVB STMK GMBH in its actual existing form.				

CRES

Organisation:	Centre for Renewable Energy Sources and Saving (CRES)				
Name :	Eleftheriadis	**First Name:**	Ioannis	**Nationality:**	Hellenic
Qualification:	BSc on Forestry, MSc on Geo-informatics				
Staff category*:	Expert				
Short description of work experience, relevant to the proposal:**	More than 9 years experience in R&D projects focused on fields of assessment of biomass potential at local, regional and national level, growth and productivity of several energy crops under Greek climatic conditions, evaluation of energy potential of fuelwood and forest residues, evaluation of forest biomass production cost and management for energy purposes, natural resources' remote sensing and GIS use in order to plot land uses and create thematic maps, aerial photo's interpretation in forestlands, environmental effects caused by forest biomass production for energy purposes. He has been involved in projects focusing on market barriers and trends for wood fuels, analysis of prices and trading of solid biofuels for energy production and development of wood supply chains for heating.				

*: e.g. Senior expert, Expert, Junior Expert / **: 1 paragraph per person

Organisation:	Centre for Renewable Energy Sources and Saving (CRES)				
Name :	Tsiotas	**First Name:**	Kostas	**Nationality:**	Hellenic
Qualification:	BSc on Agricultural engineering, MSc on Geo-informatics on Natural Resources				
Staff category*:	Expert				
Short description of work experience, relevant to the proposal:**	More than 9 years in RTD projects, focused on energy crops evaluation of growth and productivity, biofuels analysis and testing. Involved in several EU projects like ENK-CT-2001-00524 "Bio-energy chains from perennial crops in South Europe", QLRT5-CT2002-01729 "Biomass production chains and growth simulation model for kenaf".				

*: e.g. Senior expert, Expert, Junior Expert / **: 1 paragraph per person

Organisation:	Centre for Renewable Energy Sources and Saving (CRES)				
Name :	Papamichael	**First Name:**	Ioanna	**Nationality:**	Hellenic
Qualification:	BSc on Chemical Engineering				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Research on a number of potential energy crop fuels concerning their handling and characteristic performance in various thermo-chemical processes. Coordinator of 'small scale combined heat and power (CHP) from bio-crude oil fuelled to a stirling engine' project. Biomass conversion technologies and on-going developments at the biomass cogeneration sector at national and European level. Feasibility studies for the development of medium-scale power plants fuelled with biomass in Greece. Implementation and monitoring of a demo hybrid (pellet/solar) heating plant. SWOT analysis in local use of medium/low quality fuels for heating.				

ICPE

Organisation:	ICPE				
Name :	BEGEA	**First Name:**	MIHAELA	**Nationality:**	Romanian
Qualification:	PhD, Expert in Renewable Energy				
Staff category*:	Senior Expert				
Short description of work experience, relevant to the proposal:**	Mihaela Begea received her PhD in Industrial Engineering. She began employment in 1993 as food engineer with specialization in fermentation technologies and biotechnology within the Laboratory for Fermentation Technologies at the Institute for Food Chemistry Bucharest, Romania, and has been a scientific researcher since 1994. As the head of the laboratory she has been successful, together with her team, in knowledge and technology transfer of research results into the industrial sector in the field of food technology, food safety and quality, biofuels (bioethanol) from specific renewable resources; efficient utilization of energy resources, especially the renewable energy sources and high valorisation of the energy crops; environmental protection and utilization of by-products resulted from agri-food industries (especially from vegetal sectors of the food industry and from fermentation industry – bioethanol, alcohol, malt & brewing, wine); utilisation of agri-food products for non-food purposes.				

	She is very much involved in standardization, certification and accreditation activities in Romania; she has been a member of different committees within the Romanian Association for Standardization, and since March 2009 she has presided over the Technical Committee 367– Beer, alcohol and spirits. She is also member of the Technical Group for bioethanol within the Romanian Association for Bioenergy (ARB). In this respect she is involved in the collaboration with companies and small producers in the field of bioethanol and the utilisation of locally available renewable energy sources. She is an expert and auditor for TŰV Hesse and British Standard Institution (BSI) for management systems (ISO 22000 / HACCP and ISO 9000). Mihaela Begea is an independent expert-evaluator for FP7 (Doc Label EX2002B076593) for the Research Executive Agency and for the Directorate-General for Energy for the RDI and demonstration projects, for the Research Promotion Foundation from Cyprus, for the Bulgarian Ministry of Education and Science-National Science Fund and is a technical expert and evaluator for the Romanian Ministry of Education and Research for the RDI Romanian national programmes.

IrBEA

Organisation:	IrBEA				
Name :	O'Brien	**First Name:**	John	**Nationality:**	Irish
Qualification:	MBA (Complete Sept 10), Diploma Const Health & Safety, NEBOSH Cert Occupational Health & Safety, HNC Building Studies, Time Served Tradesperson.				
Staff category*:	Senior expert				
Short description of work experience, relevant to the proposal:**	An experienced manager. Having entered employment in a technical role, progressed into management in 1990. With nineteen years management experience ranging from single site maintenance management through to multi site, multi jurisdiction complex facilities management contracts, a competent Facilities Professional with sound knowledge of many aspects of the Energy Sector including the Renewable Energy Sector. Strong operational management capabilities, technical experience, commercial and marketing understanding, broad ICT knowledge and the ability to develop and support strong teams. Chaired the Woodfuel Quality Working Group (in Ireland) from January 2009 to September 2009, during the period the National Workshop Agreement (NWA4:2009 Woodfuel Quality Assurance – Requirements) was developed and the outline of the Woodfuel Quality Assurance Scheme was developed. Chair of the Woodfuel Quality Assurance Scheme Oversight Committee (again in Ireland) since September 2010, the first certified fuel is expected to be available to consumers in September 2010.				

TUM

Organisation:	TUM				
Name :	Johann	**First Name:**	Kremer	**Nationality:**	GER
Qualification:	PHD of Forestry; soil protection, low impact forestry,				
Staff category*:	Senior expert				
Short description of work experience, relevant to the proposal:**	Johann Kremer is a PhD of forestry, LMU Munich. His PhD thesis is dealing with impacts of modern harvesting technology on soil and stand. He is a forest expert and consultant for private forest owners. Working for 24 years as a researcher on the field of soil protection, soil physics and –mechanics, reclamation of open pit mining areas, technology impact due to harvesting operations and low impact forestry. He is giving training courses for forest staff and entrepreneurs, is a co-supervisor and lecturer for diploma and master theses. Several scientific and professional publications in those fields. Languages: German, English and Romanian				

*: e.g. Senior expert, Expert, Junior Expert / **: 1 paragraph per person

Organisation:	TUM				
Name :	Warkotsch	**First Name:**	Walter	**Nationality:**	GER
Qualification:	Prof. Dr.				
Staff category*:	Senior expert				
Short description of work experience, relevant to the proposal:**	He is head of the chair of Forest Work Science and Applied Computer Science. He is a researcher at TUM since 1995. Previously he was working as Professor in Forest Engineering for twelve years at the University of Stellenbosch, South Africa. His fields of expertise include forest technology, work science and work safety, low impact forestry and timber logistics. He has been involved in all the projects and networks listed below.				

*: e.g. Senior expert, Expert, Junior Expert / **: 1 paragraph per person

10.2 List of most relevant projects

SFI

Project (not more than 5 items per organisation)	**European, national or local/regional**	**Year of finalisation**	**Budget**	**Website**
Supply and Utilization of Bioenergy to Promote Sustainable Forest Management-	European (FAO),	2005	270,000 $	-
AGRIFORENERGY I ;	IEE-Project	2008	524,072 €	www. agriforenergy.com
AGRIFORENERGY II ;	IEE-Project	2012	1,523,520€	www. agriforenergy.com
BIOMASSTRADECENTRES Supporting the organization of spot markets supply for wood chips and firewood	IEE-Project	2010	705,497 €	www.biomasstradecentres.eu
The importance of forest based production chain on mitigation and adaptation on climate change	National project	2010	120,000 €	-
Reporting and accounting for UNFCCC and Kyoto protocol for sector Land use, land use-change and forestry	National project	2014	400,000 €	-

LK-Stmk

Project (not more than 5 items per organisation)	**National or local/regional or European**	**Year of finalisation**	**Budget**	**Website**
BIOMASSTRADECENTRES Supporting the organization of spot markets supply for wood chips and firewood	IEE-Project	2010	705,497	www.biomasstradecentres.eu
AGRIFORENERGY 2 – Promoting and securing the production of biomass from forestry and agriculture without harming the food production	IEE-Project	2012	1,523,520	www.agriforenergy.com
AGRIFORENERGY 1 – Promoting the use of biomass from agricultural and forestry sector for heating, electricity and transport purposes	IEE-Project	2008	524,072	www.agriforenergy.com
NETBIOCOF – Integrated European Network for Biomass Co-firing	FP6-Project	2007	...	www.netbiocof.com
ALPENERGYWOOD Together for the promotion of sustainable energy	INTERREG III B ALPINE SPACE project	2006	1,846,300	www.alpenergywood.org

AIEL

Project (not more than 5 items per organisation)	European, national or local/regional	Year of finalisation	Budget	Website
Project (not more than 5 items per organisation)	**European, national or local/regional**	**Year of finalisation**	**Budget**	**Website**
AGRIFORENERGY 2 – Promoting and securing the production of biomass from forestry and agriculture without harming the food production	IEE-Project	2012	1,523,520	www.agriforenergy.com
BIOMASSTRADECENTRES Supporting the organization of spot markets supply for wood chips and firewood	IEE-Project	2010	705,497	www.biomasstradecentres.eu
AGRIFORENERGY Promoting the use of biomass from agricultural and forestry sector for heating, electricity and transport purposes	IEE-Project	2008	524,072	www.agriforenergy.com
ALPENERGYWOOD Together for the promotion of sustainable energy	INTERREG III B Alpine Space	2006	1,846,300	www.alpenergywood.org
WOODLANDENERGY The wood energy chain as a tool for energetic valorisation of woody biomass coming from agri-forestry sectors	National - PROBIO	2008	1,350,000	www.woodland.arsia.toscana.it
LEGNOENERGIA Production and energetic use in modern boilers of fire wood and chips on farm scale	Regional Research project	2005	150,450	www.aiel.cia.it

REGEA

Project (not more than 5 items per organisation)	National or local/regional or European	Year of finalisation	Budget	Website
SERVE - Sustainable Energy of the Rural Village Environment	European FP6 (Concerto)	2012	4,107,404	www.servecommunity.ie
IEA Bioenergy Task 29: Socio-Economic Drivers in Implementing Bioenergy Projects	International Energy Agency	2012	70,000	www.task29.net
Socio-economic Aspects of Renewable Energy	National	2010	40,000	-
Development of National Biomass Market in Croatia	National	2010	30,000	www.sumska-biomasa.info
Development of pellet fired DH plant for Zakanje Municipality	Regional	2011	60,000	www.regea.org

CTFC

Project (not more than 5 items per organisation)	National or local/regional or European	Year of finalisation	Budget involved for your organisation	Website
Wood Energy Exploitation for Entrepreneurship	European Interreg MED project	2012	168,100€	n/a
Enersylva project: promotion of the wood biomass market operators	European Interreg SUDOE project	2008	387,428€	http://www.enersilva.org/
Catalan Biomass Office	Regional	ongoing	160,000 €	http://observatoribiomassa.forestal.cat/
Development and Harmonisation of New Operational Research and Assessment Procedures for Sustainable Forest Biomass Supply	COST Action *FP0902*	2013	n/a	http://www.cost.esf.org
Feasibility study of a wood bioenergy strategy in the Osona county	Local	2010	45,000€	n/a

AVEBIOM

Project (not more than 5 items per organisation)	National or local/regional or European	Year of finalisation	Budget involved for your organisation	Website
Bioenergy Fair	International	2006/2007/ 2008	130,000 €	www.expobioenergia.com
BIOPAC	National	2007	20,000 €	www.biopac.es
Bonos tecnológicos. FP7-FEDER	International	2010	200,000 €	n/a
International seminars	International	2006	17,000 €	n/a
BEPLAN (Under negotiations)	European	2013	220,000 €	n/a

Waldverband Steiermark GMBH

Project (not more than 5 items per organisation)	National or local/regional or European	Year of finalisation	Budget involved for your organisation	Website
Developing a business model for providing wood biomass, especially by mobilization of unused potentials	National project	2006	120,000 €	http://www.nachhaltigwirtschaften.at/
BIOMASSTRADECENTRES Supporting the organization of spot markets supply for wood chips and firewood	IEE-Project	2010	705,497 €	www.biomasstradecentres.eu
Optimation of transport and preparation of costs of wood-biomass through biomass logistics centres	National project	2008	114,500 €	http://www.nachhaltigwirtschaften.at/

CRES

Project (not more than 5 items per organisation)	National or local/regional or European	Year of finalisation	Budget involved for your organisation	Website
ENK5-CT-2002-00623, ECHAINE	European/ 5th FP	2005	2,311,416€	www.echaine.org
SES6-CT-2003-502705, RENEW	European/ 6th FP	2007	19,843,358€	www.renew-fuel.com
EIE-04-214-S0738602 - ELVA	European/ IEE	2007	581,940€	http://www.nepas.net/elva.html
EIE/04/065/S07.38628, EUBIONET II	European/ IEE	2007	1,238,466€	http://eubionet2.ohoi.net/
IEE/07/777/SI2. 499477 - EUBIONET III	European/ IEE	2011	1,822,119€	www.eubionet.net

ICPE

Project	National or local/regional or European	Year of finalisation	The budget involved for your organisation	Website
Technological solutions for rendering the warehouse gas valuable by using an air-derivative turbo-generator	National	2009	RON 2,422,000 (576,700 €)	www.icpebn.ro
A computing system for monitoring and controlling wastewaters purging stations	National	2009	RON 1,983,402 (472,240 €)	www.icpebn.ro
Applying the technologies for pre-purging wastewaters in the sewerage system	National	2009	RON 2,281,735 (543,270 €)	www.icpebn.ro
Designing, creating and experimenting a performance system for transferring oxygen into aired biological reactors	National	2009	RON 2,113,270 (503,160 €)	www.icpebn.ro
Research for establishing processing biotechnologies to use renewable indigenous agricultural resources	National project	2010	157,000 €	
Complex clean technology for the efficient conversion of the renewable biodegradable vegetal wastes to bioethanol	National project	2010	160,000 €	

IrBEA

Project (not more than 5 items per organisation)	National or local/regional or European	Year of finalisation	Budget involved for your organisation	Website
Wood Fuel Quality Assurance Scheme	National	2010	€40,000	www.wfqa.org
Irish Bioenergy MAp	National	2010	€20,000	www.irbea.org
VOBI (Views of the Bioenergy Industry on Targets, Barriers, Pitfalls and Solutions)	National	2005	€30,000	www.irbea.org
RAGS (Regional Anaerobic Digestions Groups)	Europe	2003		www.aebiom.org
Sensibilisation of the population	Europe	2000		www.aebiom.org

in favour of biomass - an European information campaign				

TUM

Project (not more than 5 items per organisation)	**National or local/regional or European**	**Year of finalisation**	**Budget involved for your organisation**	**Website**
C A: "Development and harmoni-sation of new operational research and assessment procedures for sustainable forest biomass supply"	European	2013	500.000 €	www.cost.eu/domains actions/fps/Actions/FP0902
Process reengineering and life cycle assessment of the wood chips supply chain.	National	2009	135.00 €	
Markets and technology transfer for know-how on small-scale production and use of energy wood in the European Union.	European	2009	7.500 €	
The potential for improvements on harvesting energy wood by using the ABAB feller-buncher systems as well as the ABAB Carrier	National	2009	11.500 €	
Analysis about the potentials and fields of application of NaarvaGrip felling heads within the supply of forest energy wood.	Regional	2007	11.700 €	

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