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Project Acronym: greenGain

Project title: Supporting Sustainable Energy Production from Biomass from Landscape Conservation and Maintenance Work

Periodic Technical Report

Part B

Period covered by the report: from 01/01/2015 to 30/06/2016
Periodic report: 1st

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1. Explanation of the work carried out by the beneficiaries and overview of the progress

WP1 - Project management

FNR is leading this work package (WP), and thus facilitates, coordinates and ensures the execution of the project in close and positive cooperation between project partners to achieve the project goals, outputs and deliverables. The coordinator is the responsible body and contact point for the European Commission (EC). Until the end of the first reporting period, four project meetings and four telephone conferences with the Consortium have been held to guarantee a fast and direct exchange within the Consortium. For the internal project communication a restricted online platform has been created in cooperation with WP2. The first of two internal progress reports has been requested in month nine (M9) to monitor progress and financial matters. The result was that all partners calculated and spent their resources as planned and no major deviations have been discovered. Members of an internal project coordination group (ICG) were appointed at the kick-off meeting. The ICG is responsible for a smooth on-going project progress and also for a high quality and research standard regarding deliverables. A working plan was elaborated for the ICG, describing the function of the group, communication flows, responsibilities and paths for interaction with the stakeholders.

WP2 - Dissemination and Use of Results

The WP2, led by CZ Biom, contributes to the objectives of the greenGain project through building its presence on the web, in the media and among key stakeholders and general public. The main results are the project website, newsletters, and promotional materials, e.g. leaflets, flyers and banners, organisation of workshops, presentation on external conferences, publications and other media outcomes. The project website is a central tool to communicate and disseminate information about the greenGain project. The main language of the project website is English and parts of it are also available in Czech, German, Italian and Spanish helping to attract more local visitors (stakeholders) from the partner countries. The first workshop (M11) was organised by CZ Biom in Czech Republic and was part of the 20th annual Conference biomass, biogas & energy. Two international conferences, which will be organised in the middle and at the end of the project implementation period inform about project results, receive and evaluate feedback and strengthen the network of stakeholders in the EU. The first conference will be held in October 2016 in Germany as a side event of the fair “Heizen mit Holz” and will be combined with the 2nd greenGain workshop.

WP3 - Creating an EU knowledge platform for LCMW feedstocks and reach the commitment of non-project LCMW stakeholders

The public Comprehensive Stakeholder Database (CSD), which was set-up in WP3 (led by COALS), serves the project partners as an internal tool to collect, store and update information and contacts of relevant stakeholders in the field of biomass deriving from LCMW, renewable energy, waste management, conversion technologies, etc. and their involvement in greenGain tasks. The database provides a basic overview which helps to communicate and disseminate project activities and results among the key stakeholders (SWGs, LWGs, interviewees, speakers at greenGain events, etc.). The database is continually updated and expanded during the course of the project, both in its structure and the contacts. Three stakeholder working groups (SWG), with the overall topics “Feedstock Supply Concepts”, “LCMW Utilisation Pathway Strategies” and “Policy, Finance and Public Participation” were launched at the beginning of 2016. The greenGain Information Platform is a website in English that provides information about biomass from LCMW and in particular about the potential of this biomass as a source of renewable energy. Besides the Information Platform, the production of the “Good practice guidelines for regional players” and the “Handbook for know-how on LCMW chains” is the synopsis work of the project.

WP4 - LCMW feedstock potential and best usage in conversion routes to bioenergy

The status quo of the occurrence and use of LCMW feedstock in Europe was investigated and documented within the first task of greenGain WP4, led by SYNCOM. To support an efficient treatment of LCMW biomass, the data on its potential, types and possible utilisation technologies were reviewed. A number of best practice applications were found and prepared for publication. Although the energetic utilization of biomass from LCMW is not yet common practice, it includes an added value, which should be exploited. The biomass potential estimations yield substantial amounts on the European level. The amounts are scattered over the regions and the potential of green residues has been evaluated in a number of smaller regions aiming at the incorporation of this biomass into the local energy cycles. When focusing on the implementation of a more effective use of LCMW biomass it became clear, that economics play the most important role. The benefits of LCMW feedstock utilization are numerous. A crucial factor from an economic perspective is income originating from selling LCMW biomass or from bioenergy sales, which can decrease the cost of processes and enable investment in more efficient machinery. Savings in LCMW costs can also be achieved by using the feedstock for own energy needs. Further it is investigated, if the most promising pathways from the greenGain model regions are transferable to other regions in Europe.

WP5 - Pilot experiences for market supply of LCMW

The main objective of WP5, led by CIRCE, is to create pilot experiences serving as base for Europe for the creation of a sustainable market for LCMW biomass. WP5 is focused on the seven greenGain model regions and is part of the greenGain bottom-up approach strategy. A

guideline to approach stakeholders has been designed, and the contacts monitored by means of an excel tool represent the current state of stakeholders readiness and the existing gaps. The local actors aligned with greenGain were denoted as Local Working Groups (LWG). All regions offer ca. 55 stakeholders in average per country. The status quo provided a wide vision of the most interesting LCMWs and its status in the regions. A total of 18 biomass types were defined: five in Spain, Italy and Czech Republic each, and three in Germany. These LCMW biomass types were described according to their current extent, current management methods, legal framework, environmental issues, and potential extraction methods. The potential consumers and the current use of LCMW biomass for energy have been explored within the model regions. A key result of WP5 is the elaboration of the sustainable LCMW biomass potentials for 17 LCMW biomass types. An intense work of data search, elaboration of productivity ratios, and site inspections has been carried out. The sustainable potentials have been assessed for greenGain model regions. The most promising pathways for each LCMW type have been consulted with local actors, according to the existing biomass facilities. The suitable supply chains and the potential most interesting consumers have been identified for each region. As a final step during the first reporting period, the design of eight pilot sites has been prepared: three in Spain, one in Italy, three in Germany, and one in Czech Republic.

WP6 - Policies, Finance, Governance and Public acceptance

The overall aim of this WP is to reinforce regional, national and EU policy by a systematic analysis of the legal, policy, financial and governance frameworks firstly in the model regions and secondly in the EU 28, regarding energetic use of feedstock from LCMW, and is led by SOGESCA. To reach these objectives, a comprehensive literature research and expert interviews have been conducted. Assessments for legal, finance, governance as well as public participation measures to be implemented in model regions have been elaborated until the end of the first reporting period. Results are available in the Literature Database of the greenGain Information Platform. Entries are tagged accordingly to their specific focus and a selection of most relevant publication is described by excerpt in English language. To receive theoretical and practical information on policies, finance, governance and public acceptance stakeholders from local, national and European level have been interviewed. An individual set of measures to improve the current situation of the use of biomass from LCMW in the seven greenGain model regions in terms of legal regulations, finance tools, public participation and good governance and a specific plan for the implementation of these measures have been developed in cooperation with regional stakeholders. The majority of recommended measures are workshops and round table discussions, which have been performed – and also will be in the second period - with regard to legal regulations and to propose possible improvements of the current situation. Results are to be used to formulate concrete recommendations for the model regions and for other European regions.

1.1 Objectives

Objective 1

greenGain will unlock and mobilize currently not used/underused resources for bioenergy from LCMW, which are not assigned to material use or biological energy production, but need maintenance done in public interest, which results in obtaining biomass as a by-product. The use of this LCMW resource as defined above will contribute to increasing bioenergy share in the final energy consumption in accordance with sustainability requirements, not competing with food and feed production.

The achievement of this objective is fostered mainly by communication, networking, and exchange of all participating parties, i.e. the project coordinator and project partners, stakeholders and potential end-users of LCMW biomass for the production of electricity and heat. Knowledge dissemination is ensured by the project website greenGain.eu, the greenGain.eu Information Platform, newsletters and through presentations of the advantages and technological possibilities of using LCMW biomass for the production of electricity and heat (website with around 3,000 unique visitors, three issues of newsletter with around 800 recipients each). In the first National Workshop in Czech Republic participants transferred and exchanged results and good practices on bioenergy from LCMW, and networked on a regional and national level. Due to the establishment of a European network of EU 28 stakeholders, greenGain relevant content has been uploaded to the Information Platform and made accessible for the public. In three established Stakeholder Working Groups (SWG) an active exchange of information regarding LCMW is taking place. In the first reporting period one of each SWG meetings had been conducted. The identification of the status quo is leading to the recognition of the feedstock potential of LCMW and present use; it has formed the prerequisite for all exploitation measures. The biomass potential estimations yield substantial amounts on the European level. Its energetic utilization includes an added value which should be exploited. Based on a bottom-up approach, publicly available information on currently not used and/or underutilised LCMW sources in the seven pilot regions was assessed and best local strategies for a feasible utilisation of the LCMW biomass illustrated. A total of eight pilot experiences for mobilisation of LCMW biomass have been planned for them. Main obstacles and barriers are identified and appropriate measures that are related to a sustainable LCMW use have been elaborated in order to be implemented in the model regions.

Objective 2

The action will help private and public actors and stakeholders to develop energy projects, supporting the commitments of the EU2020 – 2030. This approach will cover planning, harvesting, transport, individual handling (e. g. drying, conditioning), measuring and energy conversion of non-food biomass resources and financial frameworks. The results will be published in reports and good practices databases on categorized supply chains with measurable data like time, energy and financial consumption. The project will also explore, classify and quantify actual and potential consumers according to their conversion needs (heat or other energy products), main branches (households, industries, public buildings), used feedstock (wood-pellets, woodchips, wood briquettes, fuel-wood, herbs-gasification, combustion) and geographical distribution.

The publication and dissemination of project outputs on the project website greenGain.eu has been made available in English, Czech, German, Italian and Spanish with regular updates (approx. 5 000 sessions, 3.000 unique visitors until June 2016). Moreover, project

results have been published in the regular greenGain newsletter (three issues until 06/2016, five language versions, on average 800 recipients per issue). During the 1st National Workshop in Czech Republic good practice of an energy project and of the different technologies used for LCMW has been demonstrated to local stakeholders. Meetings of the three SWG and the use of the Comprehensive Stakeholder Database function as networking tool, as well as the greenGain.eu Information Platform. The collection of information on best practise intends to include LCMW feedstock into considerations in the discussion with stakeholders regarding usable feedstock for energy purposes. This will foster the utilisation of LCMW in conducted bioenergy projects. The chances to implement energy projects based on this resource have been evaluated on the base of: type of existing potential consumers for LCMW biomass, assessment of the potential that can be exploited in a sustainable way and compatibility of each LCMW biomass with the local existing final consumers. Private and public actors will be prepared and encouraged in using LCMW biomass by presenting the evaluated financial possibilities, e.g. financial supporting schemes, local, national and international programmes etc. Policy makers will be encouraged by explaining the financial and governmental advantageous of using LCMW biomass through presentation of the current situation and adapted possible solutions also by presenting best practice examples. Publicly available information and thus involvement of all parties of civil society from private entities, NGOs and administrative bodies are provided to secure a widely accepted and successful use of biomass from LCMW for energy purposes.

Objective 3

Since the resources in question derive from operations done in public interest or even by public order, the project has the objective to describe the legal and overall societal framework and the predominant goals of each specific landscape or infrastructural element, from which the biomass is obtained. The legal character of the respective regulations will be classified in terms of governance instruments (e. g. law, regulation, recommendation and support scheme) and administrative level (EU, national, county, municipality level etc.). Administrative and legal tools required to implement an optimized LCMW utilisation pathway will be identified.

In order to make administrative and legal tools publically available, all relevant greenGain documents have been uploaded to either the greenGain website or the Information Platform with its knowledge section and database section, respectively Literature Database, Expert Database and Project Database, e.g.

- Summaries of SWG “Policy, Finance and Public Participation” meetings;
- Comprehensive information regarding political strategies, legal regulations, finance tools, public support;
- Interview summaries regarding policies, finance, governance and public acceptance with experts form local, national and European level;

Further, several regulations affecting the use of LCMW were identified and led to a more realistic consideration of the LCMW use in the future. This includes e.g. laws on environmental protection, classification of hazard materials, safety regulations for transport and regulations for waste treatment. In model regions a status-quo of legal and administrative constraints and benefits for the LCMW biomass feedstocks has been identified. The biomass assessment carried out has considered the reduction of the potentials for LCMW biomass according to the legal and administrative constraints. The Local Working Group (LWG) have been a source of information and contact to build-up the

bottom-up strategy as planned when integrating the seven model regions into the greenGain project. By mapping the regional, national and EU 28 legal and policy frameworks as well as financial barriers and bridges to the corresponding supply chains, a focused research for the seven model regions and research results have been provided in the Literature Database of the greenGain Information Platform. The availability of regional (renewable) energy plans and the inclusion of LCMW in current regional planning in target countries have been investigated and provided in the greenGain Literature Database.

Objective 4

Beyond the legal framework, many of the resources in question are under intensive public observation. The project aims to support the local energy planning governance process, developing tools for an active and supportive citizenship (public meetings and communication and dissemination activities, creating e.g. 3D visualisation of landscape effects or local collaboration formats for civil society) and realising a good practices know-how platform, enabling good and best practices.

Public acceptance and good governance are supported by publication and dissemination of know-how and good practice examples, e.g.

- on the project website greenGain.eu in English, Czech, German, Italian and Spanish with regular updates;
- in regular greenGain newsletters;
- on the Information Platform with its knowledge and database sections, respectively the Literature Database, Expert Database and Project Database using the relevant labels: good governance, best practice, public acceptance;

As well as knowledge dissemination through participation in:

- 7 conferences, 3 workshops, 1 other event;
- 40 non-scientific and non-peer-reviewed publications (popularised publication);
- 15 press releases;
- 3 newsletters, 3 leaflets, 1 conference flyer, 3 other;
- 2 websites and 3 social media;
- 3 interviews, 3 appearances in the radio/on TV;

Recommendations for an active and supportive citizenship have been obtained with the support of SWG “Policy, Finance and Public Participation”. Results of a working group in Friesland, Germany showed that local LCMW generation and utilisation needs intensive socio economic planning. Biomass assessment has been used to quantify the relevance of LCMWs in the territory, which is a basic starting point for designing any energy planning; it is furthermore an appropriate tool for raising awareness and overcoming some social barriers.

1.2 Explanation of the work carried out per WP

1.2.1 Work Package 1 - Project Management

In general the work carried out in WP1 during the reporting period includes the organisation of Consortium meetings, Consortium telephone conferences, ICG telephone conferences, the communication with the EC, the internal communication and coordination regarding technical and financial issues, quality review of deliverables and internal progress reports.

Task 1.1 Ensure internal communications and coordination as well as the communication with the EC (FNR, M1-26)

The preparation of the four project meetings included the elaboration of the agenda managed by the coordinator, the logistical and technical organisation managed by the hosts and the coordinator and the presentations about urgent topics, current state and following actions of the single WPs accomplished by the WP leaders. Besides that the coordinator prepared presentations about urgent topics, the current state of the project and about general topics related to the project coordination.

All minutes of the four project meeting have been prepared by the coordinator with the support of the partners CIRCE and COALS and provided to the Consortium for the review. The four periodic consortium telephone conferences were prepared by the coordinator. The tool GoToMeeting of CITRIX is used for all telephone conferences within the project. The telephone conferences have a duration of about 2 hours and are recorded with the consent of all members. The records, presentations and final minutes of the telephone conferences are available for all partners after the review by all participants. The minutes include an overview of the decisions made and a comprehensive documentation of discussed topics.

Project meeting No.	Date	Location	Host
1.	10/11-02-2015	German Federal Ministry for Agriculture (BMEL), Berlin, Germany	FNR
2.	5/6-06-2015	Building of CM-ACT, Perugia, Italy	CM-ACT
3.	26/27.11.2015	Czech News Agency, Prague, Czech Republic	CZ Biom
4.	5/6-05-2016	Building of CIRCE, Zaragoza, Spain	CIRCE

For the internal project communication a restricted online platform has been created via the online Smartsheet tool in cooperation with WP2. It allows the centralised storage and access of project documentation for all project partners. All shared documents which have been prepared within the project work are collected on Smartsheet and thus provided to the whole Consortium in order, store and share documents, to track dissemination and exploitation activities and to better assess the current state and help the planning of dissemination and communication activities. The data included there is also used to gather data for the periodic and final reports as well as for respective deliverables (D2.4 and D2.10) in WP2 by CZ Biom.

All partners are encouraged to use these documents on an ongoing basis to track the activities in real-time.

Task 1.2 Project monitoring and reporting (FNR, M1-36)

FNR as coordinator manages, supervises and coordinates the work flow in the different tasks, between these tasks and by all partners. The whole Consortium is in regular contact via email or phone and in case of communication between the single partners via email, the coordinator is always in copy.

The coordinator attends ad-hoc telephone conferences between a part of the Consortium regarding special task or urgent topics.

Task 1.3 Internal Coordination Group (ICG) (COALS, M3 - 36)

The Internal Coordination Group (ICG) is set up by the technical partners FNR, SYNCOM, COALS, CZ Biom, SOGESCA and CIRCE. Each of the partners is responsible for supporting one of the model regions as well as contributing their pilot experience and/or is WP leader. As such this group has the detailed overview of project actions. To secure an efficient task force to keep track with all project elements and execute the best possible interactions, regular contact guarantees information exchange.

By M6 a working plan for the group was developed by the ICG group leader COALS and ratified by all group members. The plan shows the communication flows, responsibilities and paths for interaction with the stakeholders and further defines the roles and responsibilities of the partners in the model regions.

Starting from M2 the ICG held monthly telephone conferences, until M18 a total of 14 meetings took place. The organisation, leading of discussions and minute taking is done by the task leader COALS. One week before the single meetings all ICG members are asked to contribute relevant topics and issues which need to be discussed, and to send according documents (mainly PowerPoint slides) to COALS, which prepares a presentation including all topics. The ICG telephone conferences are held (1-2 hours) and, with the consent of all members, also recorded. At the end of every ICG telephone conference the date for the next meeting is set by the participants.

COALS writes the minutes latest until two weeks after each conference. These include an overview of the decisions made and a comprehensive documentation of discussed topics. The minutes are then sent to all ICG members for reviewing. Finally, COALS adapts the minutes according to the inputs and provides the final version to all by email. All minutes, presentations and recordings are stored on Smartsheet as well.

Del. N°	WP N°	Deliverable name	Month of completion	Submitted	Deliverable uploaded at website?
D1.1	*1*	*1st Summary report on results of project meetings*	*3*	*19-03-2015*	*no*
D1.2	*1*	*Set-up of ICG (Internal Coordination Group)*	*7*	*01-07-2015*	*yes*
D1.3	*1*	*2nd Summary report on results of project meetings*	*7*	*01-07-2015*	*no*
D1.4	*1*	*3rd Summary report on results of project meetings*	*12*	*28-12-2015*	*no*
D1.5	*1*	*4th Summary report on results of project meetings*	*18*	*30-06-2016*	*no*

Exploitable result	Way of Exploitation	Month of Exploitation
D1.2	*Publication on the project website*	*7*

1.2.2 Work Package 2 - Dissemination and Use of Results

Task 2.1 – Project presentation and project website (CZ Biom, M1 - M36)

CZ BIOM secured the domain and hosting for the greenGain project website (http://greengain.eu/) at the beginning of January 2015 (M1). The project website has been launched in June 2015 (M6) as a central tool to communicate and disseminate information about the greenGain project. The most important sections of the website are "Project news", "Events" and "Documents". CZ BIOM leads the works on the project website structure, design and content and prepared the online presence of the greenGain project with the assistance of an external web design company. Five separate websites (in English, Czech, German, Italian and Spanish) were designed, programmed and are maintained, which is helping to attract more local visitors (stakeholders) from partner's countries. The website is built using a responsive design to provide optimization for devices with smaller screens. The website (its original English content) has been translated by individual project partners to Czech, German, Italian and Spanish and individual articles important for special partner countries have been published. The website is being continually updated in its structure and design to optimize the performance and usability since its launch. Its content is also being translated on regular basis with frequent translation requests by the whole consortium. CZ BIOM also incorporates relevant feedback from the partners regarding the content, design and translation work.

The 1st Report of dissemination activities (D2.4) summarizes dissemination activities carried out within the greenGain project in the first reporting period of the project (from January 2015 until June 2016). A full list of all the dissemination activities carried out by the Consortium with estimated number of persons targeted is a part of the publicly available deliverable D2.4 1st Report of dissemination activities (Annex II, p. 19 - 35).

Task 2.2 – Project promotional materials (CZ Biom, M3 - M9)

Promotional materials are prepared on *ad hoc* basis to present and communicate key information about the project and energy utilization of biomass from LCMW. These can be leaflets, flyers, banners, etc. which are prepared in printed and electronic versions and to be downloaded. CZ BIOM prepared together with an external graphic design company and the consortium a general greenGain promotion leaflet for the web and to be printed out. Partners provided their feedback to the content and layout of the leaflet in English and prepared translations into Czech, German, Italian and Spanish (M14). The leaflets have already been made available at various external events to attract potential audiences (e.g. at EUBCE 2016 in Amsterdam, at a workshop in Gummersbach, etc.). Additionally, a promotional flyer in English (and German) has been prepared (M17) to promote the greenGain conference and workshop in Germany. This has been adapted/ updated also to serve as a program for the conference (see task 2.6). At the same time (M18) electronic banners in various formats (for different platforms and use cases) have been prepared for various social media and partners' websites. A plastic banner will be used during the greenGain conference and workshops in Germany and Spain and other events. Partners (namely COALS and SYNCOM) also prepared *ad hoc* posters for the EUBCE 2016 (M18).

Task 2.3 – Publication of a regular newsletter (CZ Biom, M6 - M36)

The newsletter (and the website) is actively promoted during various tasks within the project such as Stakeholder Working Groups (SWG), Local Working Groups (LWG), interviews and other meetings. The greenGain newsletter is distributed twice a year. There will be six newsletters for the whole project period. Newsletters are prepared as HTML template and are sent via e-mail (first issue to 700 e-mail addresses, the last one to 840). Together with an external web design company CZ BIOM prepared a HTML template for the greenGain newsletter and lead the works on the three issues of the newsletter so far (#1 in October 2015 (M10), #2 in January 2016 (M13), #3 in June 2016 (M18)) with five articles per issue on average. The Consortium has decided that the whole newsletter will be published in English, Czech, German, Italian and Spanish to attract attention of local actors from the field of LCMW and energy producers. So far three issues of the greenGain newsletter were produced and distributed. CZ Biom distributes all newsletters to contacts received by partners or to those who subscribed to the respective list on the website greengain.eu.

CZ BIOM facilitated identification and selection of articles and coordinated their creation, translation, preparation of the HTML template and distribution to the recipients. CZ BIOM also keeps the newsletter recipient list within the dedicated online marketing service Smartemailing.cz. Individual project partners contributed through the creation and translation of articles and also by promoting the newsletter among their contacts. The newsletter recipients list is used also for other coordinated messaging from the consortium, e.g. to promote and invite to greenGain (related) events such as national workshops (2.5) and conferences (2.6).

Task 2.4 – Exploitation of project results (CZ Biom, M3 – M36)

With contributions from other partners CZ BIOM prepared the D2.1 Communication Plan to coordinate and plan communication activities within the Consortium (objectives, messages, target groups, activities, etc.) and submitted the report in June 2015 (M6). Content of the Communication plan served as a basis for creation of the website, newsletter and other promotional materials.

To facilitate the exploitation of greenGain results, CZ BIOM prepared D2.3 "Plan for the Exploitation and Dissemination of Results" (PEDR; PUDF according to the DoA) together with the Consortium which summarises strategies and activities related to the knowledge management, protection, dissemination and exploitation of the greenGain project results (M15). The PEDR has been created based on the Communication plan (D 2.1) and the experiences gained during the first months of the project implementation. The PEDR gives guidance to the Consortium in the various tools partners can use for dissemination and exploitation. It provides an overview of expected results and plans to facilitate dissemination and exploitation of project results and maximize the impact of the greenGain project.

The main activities and tools in this respect are the project website, the greenGain.eu Information Platform, regular newsletters, workshops, conferences, handbooks and guidelines, scientific publications and the Stakeholder Working Groups. A special plan (outline) has been prepared to coordinate the works on the greenGain.eu Information Platform (D 3.2), which serves as the main tool to disseminate and exploit project results, even after the end of the project. To build on the Communication plan, internal outlines for the website were prepared and a shared document is tracking received feedback to the website (regarding the content and desing). Outlines are prepared on regular basis to plan articles for the regular newsletters and identify best content to be disseminated based on the work being done in all WPs.

Project partners also participated during events organised by external parties where the greenGain project has been presented and promoted and thus energy utilization of LCMW biomass is highlighted. These activities from the beginning of the project help to build awareness and increase chances of future exploitation of project results. These major conferences and events related to waste, energy or natural protection were the EUBCE 2016 in Amsterdam (presentation and posters sessions), Biomass to Power and Heat in Zittau (presentation), Biomass from Nature Parks in Gummersbach (presentation) and Biologicky rozložitelné odpady 2015 in Náměšt nad Oslavou.

Articles and other media activities (appearances) were executed to communicate the project itself and the rationale behind energy utilization of LCMW biomass in general, starting with a press release at the beginning of the project implementation period (M2). Partners take advantage of the existing channels in their countries to communicate and disseminate greenGain project results. In Czech Republic it is e.g. a major biomass related website biom.cz, printed magazine BIOM, in other countries besides partners' homepages and newsletters, e.g. magazine Land & Forst in Germany or La Comarca and Radio Aragón in Spain and TV Umbria or La Nazione in Italy. Journalists were e.g. invited for the project meetings and field trips in Magione in Italy or Bajo Aragón (Zaragoza) in Spain.

Task 2.5 National Workshops (COALS, M6 - M32)

The first greenGain national workshop was organised by CZ Biom in Milovy in the Czech Republicas part of the 20th annual Conference biomass, biogas & energy 2015 on the 24th and 25th of November 2015. In total about 140 interested stakeholders took part at the event, while approximately 60 people attended the greenGain workshop itself. greenGain was represented in a dedicated panel of four lectures in the afternoon of the 25th November and by a field trip to a near-by biogas plant in Ždár nad Sázavou. During the workshop different aspects of the utilisation of biomass from LCMW were discussed with the aim to raise awareness and to attract stakeholders to the activities of the greenGain project.

Based on a template provided by task leader COALS, a report on the event and its results was written by CZ Biom (1st National workshop summaries: minutes and highlights (D2.2). It describes how greenGain was represented during the workshop, presents the invited speakers and summarises the presentations, discussions and site visit. The document was published in M12 on the greenGain homepage, in the second project Newsletter in January 2016 and shared with Czech media agencies. According to the DoA the second workshop is scheduled for M21 in Germany. However, during the second project meeting (M12) held in Prague, the Consortium decided to postpone the workshop to M22, in order to combine it with the fair „Heizen mit Holz“ (Heating with Wood) and the first greenGain conference (task 2.6). No deviations for the scheduled workshops in M24 (Spain) and M30 (Italy) are expected until this point.

Task 2.6 Organisation of two conferences (CZ Biom, M6 - M36)

Two conferences will be organised in the middle and at the end of the project implementation period with the aim to gather experts and stakeholders in the field, inform about project results, receive and evaluate feedback and strengthen the network of stakeholders in the EU.

According to the DoA the first conference was supposed to be organised in M18 in Czech Republic alongside the annual conference Biomasa a Energetika 2016 [Biomass and Energy]. Nevertheless, the Consortium decided to take advantage of the fair “Heizen mit Holz” and organised the first conference on the 21st October 2016 in Germany in Soltau (Lower Saxony) together with the 2nd National Workshop. The conference is currently being prepared and promoted (programme, logistics, etc.). The conference consists of two main panels; first one giving a necessary context for the role of bioenergy in the EU, and the second one is about details of LCMW feedstock, its exploitation and relevant policies, finance and governance issues. CZ Biom leads the work and all partners reviewed the program, identified possible speakers and are promoting the event in their countries and model regions as well as on the EU level.

Del. N°	WP N°	Deliverable name	Month of completion	Submitted	Deliverable uploaded at website?
2.1	*2*	*Communication Plan*	*6*	*01-07-2015*	*yes*
2.2	*2*	*1st National workshop summaries: minutes and highlights*	*12*	*18-12-2015*	*yes*
2.3	*2*	*1st Interim PUDF*	*18*	*14-04-2016*	*yes*
2.4	*2*	*1st Interim report of dissemination activities*	*19*	*07-07-2016*	*yes*

Exploitable result	Way of Exploitation	Month of Exploitation
Project website	*Promoting the website during other tasks of the greenGain project: key reference for greenGain outcomes (e.g. at partner's websites, newsletters, events, meetings, etc.)*	*M6*
Newsletters	*Sharing the newsletter with greenGain stakeholders (SWGs, LWGs, greenGain events participants, etc.)*	*M10*
Workshops	*Gathering of experts in the field, increasing contact list of greenGain stakeholders.*	*M12*

1.2.3 Work Package 3 - Creating an EU knowledge platform for LCMW feedstocks and reach the commitment of non-project LCMW stakeholders

In general the work carried out in WP3 during the reporting period includes the establishment and management of the Comprehensive Stakeholder Database, the formation and organisation of Stakeholder Working Groups (SWG), the achievement of external stakeholders commitment, the development and management of the Information Platform and the elaboration of Guidelines and the Handbook.

Task 3.1 Set-up of a stakeholder database (Cz Biom, M1 – M5)

The Comprehensive Stakeholder Database was originally planned to be a public deliverable, but this was not possible without violation of data protection laws. It includes the data of all external stakeholders involved in the different tasks of the project by being a member of a Local Working Group (LWG) or a Stakeholder Working Group (SWG), by being interviewed in the course of the work in WP4 or 6, by participating in Task 3.3 "Attracting and supporting external stakeholders to achieve their commitments to implement project results fostering landscape conservation and maintenance work (LCMW)" or by just receiving the regular newsletter.

The database serves the project partners as a tool to collect, store and update the information about the stakeholders and their involvement in greenGain tasks. Additionally, it serves as a tool for contacting stakeholders and to communicate and disseminate project activities and results. The database will be continuously updated and expanded during the course of the project and the involvement of further stakeholders, both its structure and the contacts. The data of external stakeholders have been detected through the research work in the different WPs or through the project partners contacts from other projects or research work obtained independently of the project. All project partners contributed with contact data and proposals for the structure at the beginning of the establishment of the Comprehensive

Stakeholder Database. The data included in the Comprehensive Stakeholder Database are stored and managed with the online project management tool Smartsheet and just the project partners have access to it. CZ Biom, as task leader, prepared a common template for the internal stakeholder database hosted on the Smartsheet.com service with the assistance of relevant task leaders. A special internal report has been prepared and submitted by CZ Biom (D3.1 Comprehensive Stakeholder Database) in June 2015 (M6). The latest structural update of the database took place in March 2016 (M15) in order to streamline and simplify the database and to adapt it based on the developments in the project and needs of the single tasks.

Task 3.2 Formation and organisation of stakeholder working groups (SWG) (FNR, M5-30)

Three SWG with a total number of 29 participants have been established and have biannual telephone conferences to evaluate project results. The members of the SWG have been invited based on recommendations of project partners. For the selection of relevant stakeholders all partners were asked to propose stakeholders and to classify them to one of the three SWG. These selected stakeholders got an invitation to regularly participate in one or more SWG. The partners are encouraged to engage further relevant experts for the SWG during the subsequent work with external stakeholders in the different tasks of the project. The WP leader FNR is in charge of the formation, organisation and support of the SWG and the compliance with the time schedule and the quality of the agenda, presentations and the summaries and the information of the stakeholders about new project results. FNR elaborates for all SGW telephone conferences a working plan.

The following table shows the steps and deadlines to prepare the telephone conferences for launching the SWG.

Task	**Responsibility**	**Deadline**	**Tool/(form of) result**
Selection of stakeholders suitable for SWG (stakeholder database/own sources) & classification to one of the 3 SWGs	All partners	30.11.2015 (M11)	Smartsheet “greenGain stakeholder database”
Invitation templates	SWG leaders	30.11.2015 (M11)	Templates for invitation by email
Invitation of selected Experts to regularly participate in a SWG	All partners	04.12.2015 (M12)	Emails
Preparation (topics, invitations, information), implementation & moderation of telephone conferences	SWG leaders/FNR	21./28.01.2016 (M13); 4./11.02.2016 (M14)	Go-To-Meeting, PPT-presentation
Minutes & summaries of results	SWG leaders	1 – 2 weeks after telephone conference	Reports (close/public)
Publication of the summaries	SWG leaders/CZ Biom	4 weeks after telephone	Project website

The following table shows the number of participants of the first SWG telephone conferences.

	SWG 1 “Feedstock Supply Concepts”	SWG 2 “LCMW Utilisation Pathway Strategies”	SWG 3 “Policy, Finance and Public Participation”
Date	28.01.2016	21.01.2016	04.2.2016/11.02. 2016
Number of participants	9	15	6

The next telephone conferences of the SWG will be conducted in September 2016. Following working plan for sessions has already been circulated and presented to the SWG leaders.

Task	**Responsibility**	**Deadline**	**Tool/(form of) result**
Selection of stakeholders suitable for SWG (stakeholder database/own sources) & classification to one of the 3 SWGs	All partners	All the time	Smartsheet “greenGain stakeholder database” & table “SWG Participants”
Agenda for SWG telephone conference	SWG leaders	26.08.2016	Pdf as appendix for email
Invitation templates	SWG leaders	26.08.2016	templates for invitation by email
Invitation of selected Experts	SWG leaders	31.08.2016	Emails (FNR in CC)
Preparation (topics), implementation & moderation of telephone conferences	SWG leaders/FNR	20./22./23.09.2016	Go-To-Meeting, PPT-presentation
Minutes & summaries of results	SWG leaders	1 – 2 weeks after telephone conference	reports (close/public)
Report of SWG plenaries	FNR	M18, (M34)	report (public)

The SWG leaders prepared new topics for discussion and sent the invitations with appropriate agendas to the SWG members until the end of August 2016. The SWG leaders are COALS (SWG1), CIRCE (SWG2) and SOGESCA (SWG3). They provide topics to be discussed according to the current state of the WP in which they are involved, look for expert that could provide interesting inputs to the discussion, organise and moderate the telephone conferences and prepare the minutes and public available summaries of SWGs’ results. The summaries will be published on the greenGain website after the review and the agreement for publication of all members of the respective SWG. To develop a flexible network of interested parties the SWG leaders keep the members of their SWG informed about next telephone conferences and new project results and they invite them to National Workshops and International Conferences.

Task 3.3 Attracting and supporting external stakeholders to achieve their commitments to implement project results fostering LCMW (FNR, M6-M36)

It is a main target of greenGain to transfer the gained and developed experiences and results from WP 4, 5 and 6, the steps achieved by the model regions and the adaptation of these to

other European regions, to an EU wide group of stakeholders. Therefore, the aim of this task is to receive a confirmed commitment from external stakeholders to implement project results also in other locations than the model regions and to monitor their outcomes. These outcomes can underline the project results and could make a real change to foster LCMW.

The commitment for implementing the project results should be gathered by all partners by attracting and supporting a selection of up to 10 external stakeholders. Following steps are planned by the task leader FNR to be performed by all partners:

1. Consultation of relevant stakeholders active in the field of LCMW
    - during interviews performed within the project
    - during internal and external conferences and workshops
    - during research work (digital and grey literature)
    - during meetings of Local Working Groups or Stakeholder Working Groups etc.
2. Activation of interest and dedicated contact with interested stakeholders
    - through purposive contacting
    - presenting greenGain and highlighting project outcomes and potential advantages of the implementation in his/her region
    - reference to our website with downloadable reports and to the Information Platform with the supply of all information and reports gained during the course of the project
3. Profound advanced information about national workshop, project results and recommendations
    - regularly send information like newsletters to already contacted and interested stakeholders to keep them informed
    - reference to information tailored to the needs of stakeholders - individual information
4. Active involvement into the national workshop(s)
    - as participant - payment of travel and hotel costs if Letter of Intent (see point 6 below) will be signed (please estimate it yourself) or is already signed
    - with a introductory presentation if appropriate
    - perhaps include discussion theme about his/her case in the course of the workshop, about the implementation and monitoring and about the potential outcomes and benefits (also to attract further stakeholders)
5. Working out of feasible measures of project results that can be implemented in their region/case/facility
    - adapt feasible proposals and highlight advantageous for stakeholder
    - discuss and work out the details with stakeholder
6. Ratification of Letter of Intent (LoI) to implement dedicated recommendations
    - by using LoI template
    - before the implementation/monitoring starts
7. Monitoring of implementation
    - will be gathered 6 and 12 months after a commitment has been obtained/LoI has been signed and/or the monitoring will be obtained at the end of the project
    - will be considered in the final recommendations and report

8. Consent declaration for publication

- signature of stakeholder on the provided consent declaration
- publication of monitoring results in final recommendations and report
- personal stakeholder data can be published on the Expert Database of the Information Platform

The task leader prepared the concept for attracting and supporting external stakeholders to achieve their commitments to implement project results fostering LCMW, which explains the steps to be performed by all partners, describes the results to be implemented, explains favourable attributes and conditions of regions of external stakeholders, where greenGain results can be implemented and monitored, provided the needed templates for the monitoring, for the consent declaration and for the letter of intent and prepared the time table for this task.

All partners contributed to the elaboration of the concept and by proposing potential stakeholders whose region/case is predestined for implementing greenGain results. These stakeholders are already interested in greenGain and the responsible project partners are performing the next steps to receive their commitment to implement project results in their region.

Because this Mid-term Report was elaborated before the pilot experiences (task 5.4) started, project results or recommendations, which could be implemented in other regions than the model regions, cannot be offered to stakeholders yet. Preparing feasible measures of project results for external stakeholders will start in the fourth quarter of the year 2016.

Task 3.4 Development of a web based information platform and other visualisation (CZ Biom, M5 - M36)

CZ Biom led the work on an online web based information platform which provides a unified source of information about biomass from LCMW and in particular about the potential of this biomass as a source of renewable energy. Based on the DoA and the ongoing tasks and cooperation within the greenGain project, CZ Biom prepared an outline of the platform (structure, design, etc.), gathered feedback from the partners and then together with the external web design company prepared the website. This outline has been submitted as a report in D2.3 in February 2016 (M14) and is continually updated for the Consortium to coordinate updates of the platform during the whole project period. The greenGain.eu Information Platform has been launched in February 2016 (M14). It is build using standard web technologies using a responsive design. The platform is being continually developed and updated both in its structure, functionality and content based on the experiences with the platform and emerging content from the various tasks being carried out within the greenGain project. Supported by FNR, CZ Biom worked with content provided by task leaders in WP4 and 6 (specifically D4.1, D6.1, D6.2) incorporating (uploading or in certain cases adjusting) the content for various sections of the website such as “greenGain Database”, which is divided in literature-, expert- and project database or “greenGain Knowledge”, which is divided in feedstock, exploitation, policy and finance (e.g. the interviews carried out within WP4 and 6 helped to populate the Experts Database, the literature survey in WP6 provided content for the Literature Database, etc.).

On the platform a restricted area (partner's area) is accessible for the greenGain Consortium to upload own content via templates prepared by CZ Biom. After content is uploaded, CZ Biom can authorize the text and the content is published. An option for third parties (outside greenGain Consortium) to become greenGain.eu Information Platform partners has been provided. Those can be granted access to the forms prepared for uploading new content. This option helps to make the platform more relevant and up-to-date and it can also attract subjects to cooperate to sustain (manage) the platform even after the end of the project.

Task 3.5 Synopsis, guidelines and handbook (CIRCE, M9 -M36)

In the course of the project diverse knowledge will be ready to create materials for the awareness raising in the projects' countries as well as for other EU 28 member states and to register the know-how gained in WP4, WP5 and WP6.

The first set of information consists of a compilation of experiences made and the development of general recommendation, and of "Good practice guidelines for regional players" from regional demonstration projects and conclusions from the EU-wide data assessment. The second output is the "Handbook for know-how on LCMW chains", which describes the logistics and operations of different LCMW chains. It is aiming to show alternatives for the harvest, handling and treatment of different biomass resources. The contents of both documents will be agreed by M20 by the Internal Coordination Group. Until the end of the first reporting period CIRCE, as task leader, prepared a strategy for solving this comprehensive task and the draft of the structure. A debate was held among all partners during the project meeting in M6. The technical partners have provided their view, in concrete FNR as project coordinator, and CZ Biom, SYNCOM, COALS, FNR and SOGESCA as task leaders, who are producing inputs to the document. CIRCE has carried a review of guidelines to better scope the presentation of contents.

Del. N°	*WP N°*	*Deliverable name*	*Month of completion*	*Submitted*	*Deliverable uploaded at website?*
D3.1	*3*	*Comprehensive Stakeholder Database*	*6*	*01-06-2015*	*no*
D3.2	*3*	*Launch of web-based information platform*	*14*	*10-02-2016*	*yes*
D3.3	*3*	*Interim reports on external stakeholder commitment*	*18*	*30-06-2016*	*yes*
D3.4	*3*	*Interim report of working group plenaries*	*18*	*30-06-2016*	*yes*

Exploitable result	*Way of Exploitation*	*Month of Exploitation*
D3.2	*Newsletter, articles in external media, Presentation on the project website, Promoting the website during other tasks of the greenGain project: key space for greenGain outcomes*	*14*
D3.3	*Publication on the project website*	*19*
D3.4	*Promotion via email to SWG participants, Publication on the project website*	*19*

1.2.4 Work Package 4 - LCMW feedstock potential and best usage in conversion routes to bioenergy

Task 4.1 Identify and review the status quo of the occurrence and use of LCMW material in the EU 28 (SYNCOM, M1- M12)

In task 4.1 SYNCOM assessed the potential of LCMW feedstock in the EU by literature and desk research. It was observed that the data from potentials in different studies and projects (e.g. BioBoost; Biomass Futures; EUwood) are hardly comparable as in most cases the assessed feedstock type differs in its specification and the assessed areas vary in size, this can be seen in the following table. Also the source area is often given in various units as well. For further investigations it is necessary to consider the type of estimated potential, the investigated area and the methodology in a more detailed and homogenous manner.

Structured interview guidelines were developed to collect available information and know-how on the occurrence and use of LCMW material. The structure and guidelines of the interviews were defined in cooperation with WP5 and WP6 and with partners FNR and CIRCE. Its general form and future output was discussed with WP2 partner CZ Biom to make the datasets compatible for the greenGain Information Platform. The interviews were conducted by all partners with European actors and experts along the LCMW biomass utilisation pathways. The results provide an interesting insight on the problematic from different European countries and from people with different experience.

Information was gained on feedstock types, collection and harvest, annual demand, logistic concept and suitable conversion routes and is accompanied by a literature review conducted by SYNCOM and a collection of best practice examples collected in cooperation by all partners offering valuable descriptions of concrete practices and experience. The results of the literature review and the elaboration of the interviews and best practice examples were summarized and validated in the deliverable D4.1 “Report on the state of the art of the occurrence and use of LCMW material for energy consumption in Europe and examples of best practice” by SYNCOM.

Potential of various LCMW feedstock types in EU according to different resources

Feedstock type	Specification	Area	Biomass Potential	Reference
Green urban area	Leaves, shrubs, grass from the conservation of green urban areas, port and leisure facilities	EU27+CHE	17 PJ 1.18 Mt	(Pudelko, et al., 2013)
Roadside vegetation	Cut grass, shrubs and trees grown by the roadside	EU27+CHE	47 PJ 3.17 Mt	(Pudelko, et al., 2013)
Verge grass	Roadside verges assuming grassland cover of 10 meters on either side	EU27	46 PJ (1097 ktoe)	(Elbersen, et al., 2012)
Woody biomass outside the forest	No specification	EU/ EFTA 29	113 PJ (13 Mm^3)	UNECE
Landscape care wood	Landscape care potentials outside agricultural permanent crop land	EU27	380 PJ (9073 ktoe)	(Elbersen, et al., 2012)

Landscape care wood	Maintenance operations, tree cutting and pruning activities in agriculture and horticulture industry; Other landscape care or arboricultural activity in parks, cemeteries, etc.; Maintenance along roadsides and boundary ridges, rail- and waterways, orchards; Gardens	EU27	756 PJ (86.7 Mm^3)	(Mantau, et al., 2010)

The report outlines the available estimates of the LCMW potential, the LCMW occurrence and challenges of the data collection, technologies applied for LCMW biomass treatment: from harvest to storage and feedstock types and suitable conversion technologies for bioenergy utilisation. The second part of the report is constituted by an information database. The database of further literature resources, related projects, actors and experts collected by the whole consortium completes the picture of the ongoing activities in the field. This database presented in the report will be extended continuously within the project duration and its actual version is presented on the greenGain Information Platform. In WP5 the regional partners identified possible utilisation pathway in the model regions. Research was performed in order to find out what LCMW biomass types are available for utilisation. Moreover, the conversion plants and facilities present in the region were listed to provide an idea of where the LCMW feedstock could be utilised. Out of many possible pathways including different processing steps and final products, three possible utilisation pathways were pre-identified in task 4.1 by partners COALS, SYNCOM, CIRCE, CZBIOM and SOGESCA, based on the experience from praxis, desk research and the interviews with local stakeholders. The three pre-identified utilisation pathways will be investigated more closely within the further project work in WP4 and served as starting point for WP5 when deciding about the possible pathways to be assessed in the model regions. The pre-identified pathways are depicted in following figure.

Pre-Identification of utilization pathways in the model regions

As the typical utilisation technologies of LCMW feedstock composting, anaerobic digestion and combustion were identified from the literature, the interviews and the best practice examples. The examples of LCMW feedstock usage in different technologies prove it to be a viable resource for bioenergy and energy carrier utilisation. The knowledge exchange, awareness raising, networking and the local dialog proved their importance during the research. The benefits of optimising the current treatment of the biomass have to be elucidated properly. Here, the know-how, best practice examples and practical experience from other regions can be used as instruments for explaining the advantages of the new actions. Task 4.1 was foreseen in the DoA to be finished in Month 12 (December 2015). Because of the Christmas holidays it was finished in January 2016 (Month 13) and the deliverable D4.1 uploaded to the system. In order to be able to work with the more accurate feedstock potential data assessed in WP5, the comparison of the regional LCMW feedstock potential with the potentials identified on the level of NUTS 3 in EU-28 in the BioBoost project was shifted from task 4.1 to task 4.2, as the detailed regional feedstock potentials of the model regions from WP5 were not foreseen to be available by Month 12. The potentials have been made available in month 18 and will now be investigated and compared. The comparison of the potentials will be described and submitted within deliverable D4.2. This delay has no effects on other task and resources of other partners as only SYNCOM is involved. Efforts of SYNCOM for this task remain as planned according to the DoA. No major deviation occurred in WP4.

Task 4.2 Transfer of regional results (WP 5) and European success stories into European solutions (SYNCOM, M13-M20)

In task 4.2 a pre-identification of LCMW pathways has been conducted jointly with WP 5 and the section of the most promising pathways is still ongoing in WP 5 together with the responsible partners in the model regions. Key success criteria were identified by SYNCOM to match the LCMW feedstock type with a suitable conversion technology and measure the pathway performance to model the most applicable conversion routes for biomass from LCMW in the model regions and their extend across Europe. The identified key success criteria of the LCMW pathways like the potential and availability of feedstock type, suitability for conversion technology, costs of the pathway, the environmental and socio-economic performance will be assessed and will support the evaluation of the performance of the LCMW pathways on regional and European scale. Regarding aspects of potential and the match to a certain conversion technology synergies with other ongoing and concluded projects are investigated by SYNCOM. This regards especially the LCMW identification and potential assessment, optimization modelling in the projects BioBoost and S2Biom, the feedstock matching system of S2Biom. The BioBoost optimization tool is used to investigate, if a regional pre-treatment step of the LCMW feedstock into an energy carrier, prior to the transport to a large scale conversion to final bioenergy commodities e.g. in refineries or synthetic biofuel plants is feasible under economic and environmental aspects.

In a first step the following pathways will be assessed in Germany, Czech Republic, Italy, Spain and will be investigated and optimized with the help of the BioBoost tool:

- *Feedstock*: Residuals of Prunnings / *Conversion technology*: Catlytic Pyrolysis
- *Feedstock*: Forestry Residues / *Conversion technology*: Catlytic Pyrolysis
- *Feedstock:* Roadside Vegetation / *Conversion technology:* Catalytic Pyrolysis

- *Feedstock:* Green Urban areas, hay and shrubs / *Conversion technology:* Hydrothermal Carbonisation

Del. N°	WP N°	Deliverable name	Month of completion	Submitted	Deliverable uploaded at website?
D4.1	*4*	*Report on the state of the art of the occurrence and use of LCMW material for energy consumption in Europe and examples of best practice.*	*13*	*15-01-2016*	*yes*

Milestone N°	WP N°	Milestone name	Month of completion	Means of verification
MS1	*WP4, 5*	*Local utilization pathways developed and ready for implementation in pilot experiences*	*18*	*Means of verification: D5.3 and minutes of meeting where the strategy has been selected.*

Exploitable result	Way of Exploitation	Month of Exploitation
Knowledge on the state of the art and several best practice examples	*Clients of SYNCOM are industrial enterprises engaged in innovation projects. The knowledge gained has been used to extend the consulting services and include LCMW as a potential feedstock in business plans of our clients.*	*13*

1.2.5 Work Package 5 - Pilot experiences for market supply of LCMW

Task 5.1 Methodology and steering of WP5 (CIRCE, M1 - M36)

In this task technical partners established for each model region Local Working Groups (LWG). The role of these LWG during the project is to identify priority areas of LCMW energy utilisation, make use of regional feedstock assessments inputs from WP4 and to carry out related LCMW pilot experiences. Additionally, they contribute to identify technical, legal, economic, environmental and societal constraints and needs, reveal options for further development and adaption, participate in the monitoring of pilot experiences and observation of sustainability, quality and financial issues and give input to the preparation of dissemination material.

Local stakeholders were categorised into eight classes: LCMW biomass owners, LCMW service companies, logistic operators/conversion plants, final consumers, permitting authorities, government bodies, social groups and other key actors (engineering companies, R&D centres, etc.). A strategy was set-up to enter in contact, approach and engage the stakeholders. It was based on an excel tool with two diagrams to represent the current state of stakeholders readiness and the existing gaps. The aim was to guide greenGain partners when proceeding with the contacts. These stakeholders considered as relevant for the promotion of LCMW purposes were approached, and actions like meetings were carried out. Those being ready for collaborate, were included in the so called LWGs, which represent the local actors engaged to some extent with greenGain and pilot experiences.

Furthermore, for the execution of the operative tasks 5.2 to 5.4, this task prepared the needed templates and mapping instructions. This included approaches for a systematic description of LCMW resource. It also will develop materials for LCMW assessment. The task

leader CIRCE provided necessary material and finalised the documents after review of the ICG.

Task 5.2 Status quo in the model regions (COALS, M1 - M12)

In this task the current existing LCMW sources and the already performed LCMW work in the model regions were identified. For this, existing feedstocks, harvest techniques, and logistic and conversion techniques in the project partners´ model regions were analysed.

The work based on regional planning data and expert interviews was done with the members of the LWG or others. This task systematically categorised the relevant regional feedstock, technologies for harvest, transport and storage as well as conversion systems in the model regions that will build-up on results from WP4. Results from task 5.2 were the basis for the development of task 5.3.

Task 5.3 Pilot experience utilisation strategy, resources and sustainability (CIRCE, M12 - M18)

Prior to the start of assessments, the LCMW with interest for the stakeholders of each region were selected. It was stated during the execution of Task 5.2 and contacts with local players, that some LCMWs initially identified were not of interest or relevance. That was the case for:

- Spain: eradication of invasive species; cleaning of recreational forests and parks: low interest due to small areas (no biomass assessment carried out)
- Germany: maintenance of hedge- and treerows on agricultural fields (small interest); “Treibsel” eradication in Friesland (small interest, difficult valorisation)
- Italy: smaller interest in roadsides and vineyards; a simple biomass assessment was performed, as part of task 5.3).

After the selection of the LCMWs object of assessment, a three phase approach will be used: 1. utilisation pathway strategy, 2. sustainability assessment as well as 3. planning and implementation.

The work was performed based on three templates, and guided by task 5.3 leader CIRCE. Partners involved in the assessments carried out a consultation to multiple local stakeholders: to screen the most promising LCMW biomass, to obtain local data on which base the biomass assessments, to detect the facilities in the area that could be more eager to use LCMW biomass, and to involve local players in the planning and execution of diverse pilot experiences.

First the overall LCMW utilisation pathways for each resource have been defined driven by local biomass demands and build on existing consumer groups. This definition of utilisation pathways lead to suitable feedstock/harvesting/handling combinations for each LCMW type, identified for each specific model region. The most feasible strategy has been developed in close cooperation with the actors included in the LWGs. For that purpose a template derived from WP4 was utilised, and each partner designed the most logical supply chains, according to the capacities and interests of the future actors to be involved, and according to the final consumers’ needs.

Secondly, the assessment of the sustainable potentials of biomass was carried out leaded by CIRCE (SOGESCA, COALS, CZ-BIOM executed the work for their corresponding regions).

The methodology was conceptually based on the harmonised approach proposed by previous FP7 projects BEE and CEUBIOM. Through a comprehensive template and through bilateral meetings and guidance of CIRCE, the partners explored with the associated partners the potential sources of information relevant for the assessments. Creating or obtaining reliable data for the LCMW types was in general difficult, as the information was not always existing, e.g., inventory of moor areas accessible in Germany, or areas invaded with reed in water courses in the Spanish model regions. In some cases only a general figure was found for the region, but neither a map, nor a distribution of the targeted areas by municipality. Additional troublesome task was to obtain representative data of the biomass obtained per treatment. In general not measured before, it required site inspections, meaning a sampling, or the monitoring of the workers during their environmental or maintenance works, and the weighting of the material produced. Other aspects like interpretation of the values obtained, applicability to the whole territory, etc. were discussed prior elaboration of the potentials. Once the theoretical potentials were obtained, some reduction factors were applied to represent the limitations to access the biomass: technical, economic, implementation and sustainability constraints. The sustainable potentials were obtained, which refer to the biomass that could be exploitable on yearly basis once other limitations have been considered (legal competitiveness, access, environmental restrictions).

It was observed that in general, and differently to other sources of biomass (forestry wood, forestry residues, agrarian residues, e.g.) the biomass that can be exploited sustainably is usually about 70 to 90% of the theoretical potentials. That has been interpreted as the act that LCMW biomass works have to be carried out anyway. Therefore no technical, legal or environmental restrictions are severely constraining the potential. On the other hand, the fact that LCMW biomass is in most cases under-utilised, leads to the fact of a low or no competition for the residues. And in terms of economics, the only constraining case would be when the biomass to be obtained requires a high increase in the extraction costs. However, the supply chains detected, and discussed with local stakeholders were not a priori considered to cause such impact, as were based on their practical view point, based on local usual existing machinery and methods of service companies or environmental brigades.

The methodology for the techno-economic and sustainability assessment of the pilot experiences was prepared as part of the task 5.3 by SYNCOM in coordination with CIRCE. The sustainability and techno/economic assessment will be finalised with the data obtained through the pilot experiences, as part of Task 5.4.

Task 5.4 Implementation and monitoring of pilot experiences (CIRCE, M18-M30)

The plan for implementing the pilot experiences has been prepared with the contribution of the Technical Partners to demonstrate the existent capabilities in the regions regarding the LCMW biomass supply chains potentially interesting for energy purposes. Eight pilot experiences have been planned according to the main output of the in-depth analysis reported in D5.2. Partners have prepared a planning for each one of the pilot experiences. A close interaction with local stakeholders has been needed to plan with them the experiences reported in D5.3.

Summary of partners' participation in WP5

In summary it can be stated that in WP5 CIRCE has coordinated the actions and especially following several partners have contributed in the organisation and to the methodology:

- COALS has contributed to organise the status quo data collection with CIRCE: four templates co-designed, plus the data collection follow-up and wrap-up.
- SYNCOM has contributed to design the methodology on sustainability assessment, and the matching of LCMW biomass types with the existing local biomass consumption.
- CIRCE has participated with COALS and SYNCOM in organising and collecting the mentioned data. CIRCE took specific role in designing the stakeholders' strategy, providing the Excel tool, and preparing the methodology for screening the relevant LCMW, and to prepare templates, monitor and guide partners for carrying out the biomass assessments and also to retrieve data on these subjects.

In order to carry out the work in the model regions in contact with the local stakeholders (their involvement has been crucial) the local Associated Partners (as partners or as external linked parties) have worked in tandem with the country technical partners: OMEZYMA in Spain with CIRCE; CM-ACT in Italy with SOGESCA; Friesland and Rotenburg (Wümme) counties in Germany with COALS; PROD ODPAD citizen association and the Energetica Knezice public energy company in Czech Republic with CZ Biom.

Partners in each model region have participated in following the guidelines and filling the templates provided by COALS, SYNCOM and CIRCE (as described above). Associated Partners have been more in close contact with the local stakeholders, and have been an intermediate link also for the Technical Partner when a direct interaction was necessary. Technical Partners have been responsible for the involvement with other regional or national parties (higher hierarchical level). Associated Partners have collected data, and Technical Partners have reviewed and reported it in a proper form. CIRCE has monitored the data collection process.

CIRCE has organised the scope, structure and contents for the deliverables. COALS organised the status quo data and included the data in the deliverable D5.1. CIRCE has contributed in filling the main ideas on stakeholders' analysis and existing consumers. Technical and Associated Partners have contributed afterwards with their visions from the point of view of the territory. D5.1 has been edited by COALS. CIRCE has scoped and edited the deliverables D5.2 and D5.3. Technical and Associated Partners have contributed to the contents of the templates. Technical Partners have transformed the templates into the text of each section. CIRCE has reviewed these sections and integrated them into the deliverables D5.2 and D5.3. The final review has been done by the Technical and Associated Partners. FNR, as project coordinator, advised the task leaders of WP5 regarding the implementation of the tasks, coordinated the responsibilities, supported in the evaluation of pathways and the assessment, in the evaluation of pilot experiences and reviewed all final documents.

Del. N°	**WP N°**	**Deliverable name**	**Month of completion**	**Submitted**	**Deliverable uploaded at website?**
D5.1	*5*	*Interim LCMW material assessment and utilisation pathways: templates, models and*	*M18*	*30-06-2016*	*yes*

		status quo			
D5.2	*5*	*Report on resource and sustainability assessment and description of pilot experiences utilisation pathways for model regions (categorisation of resources, strategy, sustainability and utilisation pathway strategies)*	*M18*	*30-06-2016*	*yes*
D5.3	*5*	*Planning of the pilot experiences*	*M18*	*30-06-2016*	*yes*

Milestone N°	**WP N°**	**Milestone name**	**Month of completion**	**Means of verification**
1	*5*	*Local utilisation pathways developed and ready for implementation in pilot experiences*	*18*	*D5.3 and minutes of meeting where the strategy has been selected.*
2	*6*	*Means of active and supportive citizenship assessed and recommendations ready for policy and for implementation to pilot experiences*	*19*	*One combined plan; documents on regional technical meetings; D 6.3*
3	*6*	*Legal, financial, governance and public participation framework assessed and prepared for local utilisation pathway ready for implementation in pilot experiences*	*19*	*D 6.1 and 6.2 finalised and assessment for model regions terminated as well as plan delivered to Task 5.4 to be implemented into local experiences.*

1.2.6 Work Package 6 - Policies, Finance, Governance and Public acceptance

Until the end of the first reporting period, broad literature research and expert interviews about policy, finance, legal topics, social support and criteria for good governance have been conducted and implementation plans for measures to improve the current situation of above mentioned topics in the model regions have been elaborated.

Task 6.1 - Mapping and assessment of policies and finance tools and legal regulations (EU 28 overview and model regions focus) (FNR, M1 - M24)

In task 6.1 a broad literature research (subtask 6.1.1) and expert interviews (subtask 6.1.2) on policies, finance tools and legal regulations on a Europe wide basis to identify potential drivers and barriers for implementing the supply chains for the corresponding biomass from LCMW have been performed.

In the first place the WP- and task leader, namely FNR, provided a methodology and the table as guidance for the project partners for the data collection activities as well as templates for the excerpts. The national project partners assessed their national sources and were asked to further research in selected other EU countries. Therefor the EU countries were distributed among the project partners for the research (see table below). For each country the most significant policies, laws, supporting schemes as well as governance structures and public acceptance, best practices for the energy exploitation of LMCW biomass were researched and displayed in the Literature Database of the Information Platform. These entries were tagged accordingly to their specific focus and a selection of most relevant publications were additionally described in excerpts in English language and presented on the web portal. According to the DoA each technical partner should review up to five sources and prepare excerpts accordingly and the WP leader focused just on EU regulations, policies and support schemes. In some countries the development of policies

and financial schemes related to biomass has progressed very differently among all European countries. Therefore and to secure a broad and comprehensive research all partners reviewed available documents in all EU countries and prepared more excerpts than required in the DoA.

The results are 308 entries and 174 excerpts describing the current frameworks of legal, policy and financial regulations on a Europe wide basis.

Partner	Country (Number of research results/number of excerpts)	Σ (Number of research results/number of excerpts)
FNR	EU (11/4), Finland (5/2), Sweden (4/4), Ireland (9/3), United Kingdom (18/4), Belgium (10/4)	57/21
COALS	Germany (17/1), Switzerland (12/1), Netherlands (11/1), Luxembourg (18/1)	58/4
SYNCOM	Denmark (8/5), Estonia (7/3), Latvia (14/6), Lithuania (4/1)	33/15
CZ Biom	Czech Republic (8/8), Hungary (3/3), Slovakia (3/3), Poland (5/5)	19/19
SOGESCA	Italy (9/9), Romania (3/3), Croatia (4/2), Slovenia (5/5), Greece (4/4), Cyprus (4/4), Austria (5/2)	34/29
CM-ACT	Italy (6/6)	6/6
CIRCE	Bulgaria (6/6), France (31/31), Portugal (29/29), Malta (7/7)	73/73
OMEZYMA	Spain (28/7)	28/7

To receive theoretical and practical information on policies, finance tools and legal regulations 22 expert interviews have been conducted and the interview summaries are publicly available in the Expert Database of the Information Platform.

For the expert interviews a standardised questionnaire on policy, finance tool and legal regulations, a template for the consent declaration and for the interview summary was provided by FNR. Each technical partner was asked to conduct a minimum of three interviews (see table below) for subtask 6.1.1. OMEZYMA, which is, like CM-ACT, not a Technical Partner, agreed to conduct interviews in Spain as well as in the model region, and to contribute to the current state of policies, finance tools and legal regulations as well as information about public participation and good governance. With the consent of the interview partners, an extract from the interviews were elaborated and published.

Partner	Country (Number of interview for task 6.1.2/Number of interview for task 6.2.2)	Σ (Number of interview for task 6.1.2/Number of interview for task 6.2.2)
FNR	Germany (3/2), United Kingdom (2/2)	5/4
COALS	Switzerland (0/1), Germany (3/3)	3/4
SYNCOM	Germany (1/2), Switzerland (1/1)	2/3
CZ Biom	Hungary (0/1), Poland (1/0)	1/1
SOGESCA	Italy (2/2), Croatia (1/1)	3/3

CM-ACT	-	0/0
CIRCE	Spain (1/1), Greece (1/1), Germany (1/1)	3/3
OMEZYMA	Spain (5/5)	5/5

Task 6.2 - Assessment of needed capacities, procedures and structures for public support and good governance (SOGESCA, M1 – M24)

Task 6.2 is led by SOGESCA who collected information about the needed public and/or private capacities, the available procedures and structures to involve the civil society and the required means of good governance for biomass related projects. The aim of the task was to present on the Information Platform means of good risk analysis and conflict management methods for preventing and/or helping to mitigate a public or administrative refusal. As proposed by the task leader SOGESCA and agreed by all partners, the search for good practices and information was not restricted to projects covering LCMW biomass only but was enlarged to any kind of biomass-related project. It was considered that best practices from LCMW projects are rare and that the interesting elements for all biomasses would, in most cases, be suitable also for LCMW projects which are actually a subset of most biomass projects. The results and the implementation of the task are in line with the DoA. The only deviation is a delay in issuing D6.1 (which is interested by subtask 6.2.1) due to the fact that:

- Task 6.2 has a high innovative content and a long elaboration was needed to determine the appropriate methodology to be applied, which were the right projects and best practices to be searched for and which would be the eligible biomasses.
- Consequently to the previous point, a supplementary work was for finding the adequate display for the results of subtasks 6.1.1 (literature and desk research about policies, finance tools and legal regulations) and for the results of subtask 6.2.1 (literature evaluation about needed capacities, procedures and structures for public support and good governance). The data for the Information Platform needed to be shaped and categories and tags needed to be defined and explained for all the treated topics. FNR, SYNCOM, SOGESCA and CZ Biom collaborated in the definition of this information and came up with final results.
- There was an initial delay in provision of information by partners, probably due to the overlapping of delivery time with other deliverables (especially D4.1).

Task 6.2 was composed of the literature review (subtask 6.2.1) and interviews with stakeholders and local authorities (subtask 6.2.2). All partners searched for good practices of involvement of the civil society and the participation of public administration in the aspect of good governance of bioenergy projects. A screening of available literature and of European projects (e.g. IEE, FP7, INTERREG, etc.) was conducted to find good practices that enabled an appropriate level of acceptance in the local community. A methodology for the search was provided by SOGESCA. Practically, all partners were requested to:

- Search the web for good practices at national, regional and local level
- Search within their own archives for useful projects and experiences
- Look into the several web databases of projects
    - international projects

        - IEE / FP7 / Horizon 2020
        - Interreg (Central Europe, Alpine Space, Interreg IVc, etc.)
    - Interreg cross border, national and regional projects
    - LIFE projects
- Shortlist up to 5 good practices or experiences that could be useful for providing general recommendations for good governance and smooth implementation of bioenergy projects.

A format for reporting the excerpts of the interviews was provided by SOGESCA. As a result, a set of 36 initiatives were collected by partners (10 by CIRCE, 5 by COALS, 6 by SYNCOM, 7 by FNR, 4 by SOGESCA, 2 by CM-ACT, 4 by CZ Biom), summarised and listed by SOGESCA for the Information Platform. The form of presentation for the Information Platform and for the deliverable D6.1 “Online literature database Policies, finance tools, legal regulations, public support and good governance” was the same, therefore 2 tables with 8 literature articles and 26 projects (2 initiatives were discarded) were prepared. The interviews conducted in task 6.2 were aimed at consulting experts from NGOs, public administration, private mediation business, politicians and other relevant stakeholders along the supply chain in order to detect barriers and good practices regarding biomass projects. A set of questions was presented by SOGESCA and a format for the summary was prepared by FNR. As a result, 23 interviews were conducted by partners about governance and public acceptance of biomass projects and published on the Expert Database of the Information Platform.

Task 6.3 Policy Guidelines and local experiences implementation (FNR, M18 - 34)

In task 6.3.1 measures with focus on environmental services in the model regions for the topics legal regulations, finance tools, public participation and good governance have been elaborated and a specific plan for the implementation of these measures has been developed for the model regions. On basis of the regional framework and the specific case studies the project partners evaluated, proposed and will implement measures regarding legal, finance, public participation and good governance themes in cooperation with model region partners. These participative measures can be e.g. regional information campaigns, information days, training workshops (e.g. aligned with workshops performed under task 2.5), public consultations or study tours (e.g. knowledge transferring meetings/events), which refer to current problems or barriers of the current situation of the use of LCMW biomass for energy purposes and provide knowledge and approaches to solve them. All measures will be performed in close collaboration with WP5 in subsequent project stages, because of the structures established during the work of WP5 in the model regions by e.g. the LWG. Adequate financial issues for the implementation of these measures will be considered through the WP 4 and 5 implementation plans. FNR, as task leader, prepared the methodology for this task, the template for the monitoring and the final version of the plan for the implementation of measures, which will be part of the pilot experiences within WP5. All national partners (CIRCE in cooperation with Omezyma, SOGESCA in cooperation with CM-ACT, COALS and CZ Biom in cooperation with their Associated Partners) developed measures to improve the current situation of the model regions in terms of legal regulations, finance tools, public participation and good governance. Starting points for evaluating measures were the problems and obstacles, which have been identified in the literature research and during the interviews conducted within this WP. The monitoring results of the

implementation will be used in the second reporting period to formulate concrete recommendations for the model regions and for other European regions included in deliverable 3.6 “Good practice guidelines for regional players”. The recommendations will be generalized in the deliverable D6.4 “Strategy paper for EU policy makers” and will be combined in deliverable D3.7 “Handbook for know-how on LCMW chains”.

Model Region	Area	Measure
Bajo Aragón	Legal Regulations	Support of the municipalities Calanda, Torrecilla de Alcaniz, or Valjunquera to implement new regulations that will contribute to promote the use of LCMW biomass by facilitating the issue of permits
	Finance Tools	Workshop to establish ways to improve the profitability and a plan to reduce the costs of harvesting in close collaboration with stakeholders along the supply chain in the region of Bajo Aragón and neighbouring regions
	Public Participation	Workshops and seminars to harmonize the interests of local stakeholders involved in the potential supply chain of the LCMW biomass and to establish the necessary work procedures for the shared use of forestry machinery for LCMW
	Good Governance	Round table with the agents of the Directorate General of Forest Management, municipalities, counties and forestry companies regarding development plans for the management and use of biomass from LCMW
Matarraña	Legal Regulations	Support of the municipalities Valjunquera, Peñarroya de Tastavins or Fuentespalda to implement new regulations that will contribute to promote the use of LCMW biomass by facilitating the issue of permits
	Public Participation	Information campaigns and publications and promotional materials about the results and knowledge gained Presentation during the national workshop taking place in December 2016 in Fuentespalda
	Good Governance	Round table with the Directorate General of Forest Management, municipalities, counties and forestry companies with the focus on good practice and know-how elaborated within greenGain to present posibilities for and the economic and ecologic advatages of a combined exploitation of LCMW biomass and forest biomass
Friesland	Good Governance	Information days and campaigns to inform about the options to dispose of the biomass from LCMW from hedgerows on banks on the base of the new regulation on Easter fires
Rotenburg (Wümme)	Legal Regulations	Workshops or round table discussions to develop a strategy for the recovery of falsely ploughed wayside strips near farm land in the municipalities
Kněžice	Legal Regulations, Finance Tools & Good Governance	Workshop or seminar dedicated to a thorough analysis of the legislative burdens and obstacles which limit the utilization of LCMW feedstock
Týn nad Vltavou	Legal Regulations, Finance Tools & Good Governance	Workshop or seminar dedicated to a thorough analysis of the legislative burdens and obstacles which limit the utilization of LCMW feedstock
Trasimeno	Legal Regulations & Good Governance	National workshop and round tables to discuss solution for a LCMW biomass management focused on the exploitation of logistic platforms; Support for municipalities in elaborating ordinances regarding the harvesting, collection and use of biomass
	Finance Tools	Round tables to support for accessing grants and to receive tax exemptions
	Public Participation	Public consultation events regarding the logistical platform
	Good Governance	“Conference of Services” for the permitting procedure or for the eventual Environmental Impact Evaluation of the logistic platform

Del. N°	WP N°	Deliverable name	Month of completion	Submitted	Deliverable uploaded at website?
D6.1	*6*	*Online literature database policies, finance tools, legal regulations, public support and good governance*	*16*	*15-04-2016*	*yes*
D6.2	*6*	*Online expert interview database policies, finance tools, legal regulations, public support and good governance*	*18*	*30-06-2016*	*yes*
D6.3	*6*	*Implementation plans for legal, finance, governance as well as public participation measures developed to be*	*19*	*15-07-2016*	*yes*

Milestone N°	WP N°	Milestone name	Month of completion	Means of verification
2	*6*	*Means of active and supportive citizenship assessed and recommendations ready for policy and for implementation to pilot experiences*	*19*	*One combined plan; documents on regional technical meetings; D 6.3*
3	*6*	*Legal, financial, governance and public participation framework assessed and prepared for local utilisation pathway ready for implementation in pilot experiences*	*19*	*D 6.1 and 6.2 finalised and assessment for model regions terminated as well as plan delivered to Task 5.4 to be implemented into local experiences.*

Exploitable result	Way of Exploitation	Month of Exploitation
D6.1	*Integration into Literature Database of the greenGain Information Platform; Publication on the project website*	*16*
D6.2	*Integration into Expert Database of the greenGain Information Platform; Publication on the project website*	*19*
D6.3	*Publication on the project website*	*19*

2. Update of the plan for exploitation and dissemination of result

The plan for exploitation and dissemination of results (D2.4) was submitted in April 2016 (M16). It will be updated in December 2016 (M24). The greenGain Plan for the Exploitation and Dissemination of Results (PEDR), summarizes strategies and activities related to the knowledge management, protection, dissemination and exploitation of the greenGain project results. The document is serving for quick orientation for the Consortium in the various tools partners use for dissemination and exploitation. It provides an overview of expected results and plans to facilitate dissemination and exploitation of project results and maximize the impact of the greenGain project. The main activities and tools in this respect are the project website, the greenGain.eu Information Platform, regular newsletters, workshops, conferences, handbooks and guidelines, scientific publications and the Stakeholder Working Groups. From these tools, the project website, newsletters, Information Platform, workshop and the three SWGs are already being used.

Events

Date	Title (original)	Description (English)	Place	No. of participants
24. 2. 2015	Le Bioenergie e agricoltura al servizio del territorio	Bioenergy and agriculture as service provider for the territory	Santorso Italy	21
22. 9. 2015	Expobiomasa 2015	Biomass exhibition 2015	Valladolid Spain	x
24. 9. 2015	Konference Biologicky rozložitelné odpady 2015	Biodegradable Waste conference	Náměšť nad Oslavou Czech Republic	200
8. 3. 2016	Biomasse aus Naturparken	Biomass from Nature Parks workshop	Gummersbach Germany	60
24. 5. 2016	Bioplyn a legislativa 2016	Biogas and Legislation 2016 workshop	Zdár nad Sázavou Czech Republic	140
1. 6. 2016	Biomass to Power and Heat 2016	Biomass to Power and Heat 2016 conference	Zittau Germany	x
6. – 9. 6. 2016	EUBCE 2016	EUBCE 2016	Amsterdam Netherlands	x

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Other dissemination activities

Date	Type of activity	Title (original language)	Title (in English)	Media Country	Size of audience
01.04.15	**Article (printed media)**	Skrytý potenciál biomasy z údržby veřejné zeleně	Hidden potential of biomass from landscape conservation	Odpady 6/2015 Czech Republic	4 200
16.07.15	**Article (printed media)**	Brennmaterial Landschaftspflegeholz	Burning material wood from LCMW	Land & Forst Germany	220 000
27.07.15	**Article (printed media)**	Skrytý potenciál energetického využití biomasy z údržby veřejné zeleně. Projekt greenGain	Project greenGain and utilisation of biomass from landscape conservation	Biom 2/2015 Czech Republic	1 000
16.10.15	**Press release**	Omezyma se incorpora a un proyecto para usar la biomasa como fuente de energía	OMEZYMA participates in a project to use the biomass as energy source	Diario de Teruel Spain	X
05.06.15	**Interview (Video)**	Greengain intervista Prof. Cotana - DirecTor CRB Italy - Montagnoli and De Filippi and Klaus Lenz	Greengain interview Prof. Cotana - DirecTor CRB Italy - Montagnoli and De Filippi and Klaus Lenz	Youtube greenGain Channel	136
05.11.15	**Radio/TV**	greenGain como iniciativa pionera en el uso de biomasa con fines energéticos en las comarcas de Bajo Aragón y Matarraña	greenGain project as initiative in the use of biomass for energy purposes in the regions of Bajo Aragón - Matarraña	Aragón Radio Spain	45 000