

D6.3

“Implementation plans for legal, finance, governance as well as public participation measures developed to be implemented in model regions”

15.07.2016



About greenGain project

The greenGain project is looking for solutions to increase the energy use of biomass feedstock coming from landscape conservation and maintenance works (LCMW) carried out in the public interest. The main target groups are regional and local players, who are responsible for maintenance and conservation work and for the biomass residue management in their regions. Moreover, the focus will be on service providers - including farmers and forest owners, their associations, NGOs and energy providers and consumers.

The three year project which started on January 2015 is supported by the Horizon 2020, European program to foster research and innovative solutions in the EU. The project is gathering partners and researchers from Germany, Italy, Spain and Czech Republic. Researchers will map biomass potential coming from landscape conservation and maintenance work, various technological options to utilise it, identify possible obstacles and provide recommendations to a wide range of stakeholders in the EU 28.

Project coordinator



Project partners



About this document

This report corresponds to D6.3 “Implementation plans for legal, finance, governance as well as public participation measures developed to be implemented in model regions” of greenGain.

Due date of deliverable:	01-07-2016
Actual submission date:	15-07-2016
Start date of project:	01-01-2015
Duration:	36 months

Work package	WP6
Task	T6.3.1
Lead contractor for this deliverable	FNR – 1*
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Quality reviewer	Project Consortium

* According to the description of WP6 in the DoA FNR is task leader of task 6.3 and therefore responsible for the respective deliverable D6.3

Dissemination Level		
PU	Public	x
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services):	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Version	Date	Author(s)	Reason for modification	Status
0.1	29-04-2016	Marie Bergmann	Draft & request for review	done
0.2	17-06-2016	Consortium	Input from the partners	done
0.3	20-06-2016	Marie Bergmann	New version & request for review	done
0.4	15-07-2016	Marie Bergmann	Integration of feedback from partners & final version	done

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 646443.

The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein.



Summary

The deliverable D6.3 presents an individual set of measures for the seven greenGain model regions and the local players to improve the current situation of the use of biomass from landscape conservation and maintenance work (LCMW) in terms of legal regulations, finance tools, public participation and good governance (Task 6.3.1) and a specific plan for the implementation of these measures. These have been developed in co-operation with the model regions stakeholders.

The national project partners decided in cooperation with their regional partners which measures make sense, what is feasible and how the measures will be developed and implemented.

Starting point for the evaluation of these measures has been the identification of the current problems and obstacles regarding the utilisation of biomass from LCMW for electricity and heat production, which were detected in the model regions through the literature research in tasks 6.1.1 and 6.2.1 and during the performance of interviews in tasks 6.1.2 and 6.2.2.

The majority of recommended measures are workshops and round table discussions, which will be performed with regard to legal regulations and to propose possible improvements of the current situation.

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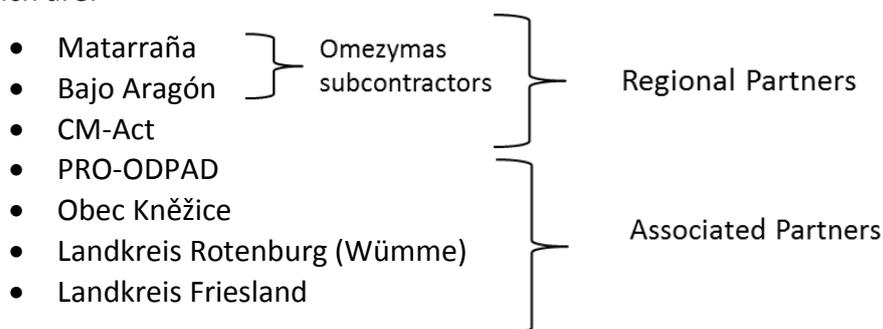
1 Task description

The overall task 6.3 “Policy Guidelines and local experiences implementation” is divided into two subtasks. With this deliverable 6.3 the results of task 6.3.1 “Elaboration of finance, legal public participation measures and good governance with focus on environmental services in the model regions” are described.

The seven greenGain model regions are Bajo Aragón and Matarraña in Spain, Friesland and Rotenburg (Wümme) in Germany, Kněžice and Týn nad Vltavou in Czech Republic and Trasimeno in Italy.

In Task 6.3.1 measures in the model regions for the themes legal regulations, finance tools, public participation and good governance have been elaborated and specific plans 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, which are:



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.

It is aspired to implement in each model region the appropriate tools, but at least one of the above mentioned measures.

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 Local Working Groups. Adequate financial issues for the implementation of these measures will be considered through the WP 4 and 5 implementation plans.

The national partners (CIRCE in cooperation with Omezyrna, 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.

2 Bajo Aragón

The region of Aragón is located between the Ebro valley and the Mediterranean coast. The region amounts a significant potential of forestry and agricultural biomass. Additionally herbaceous biomass is generated in the riverbanks and roads. The current procedure regarding the woody biomass obtained from the pruning from agricultural fields and from the cleaning of roads and riverbanks is, that the biomass is mulched and left in site, landfilled or burned. In Spain LCMW biomass is currently not used because there are neither legal regulations regarding the collection of this feedstock, nor are there subsidies which would contribute to promote the consumption of LCMW biomass.

One of the barriers is the low profitability of the LCMW biomass. Activities to combine this type of biomass with other biomass, which are more valuable, are intended in order to promote the use of LCMW biomass.

Regarding the public participation, meetings are carried out between public and private actors to work on the implementation of management plans for forests in the municipalities. The exploitation of forest resources that are included in the forest management plan of the region could be combined with the exploitation of LCMW which will contribute to establish the feedstock supply chain.

The expected improvement of the current situation of LCMW and the benefits for the model region can be developed through the application of following measures.

2.1 Measures regarding legal regulations

The Spanish and the Aragón governments should develop legal regulations aiming to regulate the collection of LCMW biomass and to coordinate its combination with other types of biomass in order to achieve a profitable use and increase the value of the LCMW biomass. These regulations should be adapted to the different types of LCMW biomass.

The town councils should update the ordinances regarding the firewood utilization and new ordinances should be issued to promote the use of biomass from LCMW and to enable the procurement of the corresponding permits.

The obstacles to overcome are linked to the excessive bureaucracy and the low economic profitability in the short term.

Plan for the implementation of measures regarding legal regulation

The implementation of legal regulations by the Government of Aragón to enable the combination of LCMW biomass with other types of biomass could realise a profitable use and increase the value of the LCMW biomass. The support provided by greenGain partners could contribute to the elaboration and implementation of such regulations adapted to the requirements and existing biomass in each particular region.

GreenGain already contributed to raise municipalities' awareness. Municipalities like Calanda, Torrecilla de Alcaniz, or Valjunquera are currently considering to include the exploitation of woody biomass in their strategy and to implement new regulations that will



contribute to promote the use of LCMW biomass by facilitating the issue of permits. These permits allow the performance of LCMW tailored to the needs of the territory. For this aim, the municipalities collaborate with experts from the Directorate General of Forest Management, legal advisors of the municipalities, the Council of Teruel, the Aragón Federation of Municipalities and the greenGain partners.

2.2 Measures regarding finance tools

In the following existing finance tools focusing on the commercialization and conversion of biomass to energy and investments to increase the self-consumption are listed:

- FEADER (Aragón Rural Development Program 2014/2020 y Bajo Aragón-Matarraña Leader Local Development Strategy)
- FITE (Teruel Investment Fund)
- Exemption municipal taxes

The Government of Aragón should establish subsidies for the utilization of LCMW biomass and should define in a roadmap how to perform the LCMW properly, just like it is done for forestry biomass which is subsidized and regulated. With such subsidy and roadmap, LCMW can contribute on the one hand to e.g. prevent forest fires and on the other hand generate a renewable resource which can be used for energy purposes.

Plan for the implementation of measures regarding finance tools

One of the main barriers limiting the use of LCMW biomass are the high costs associated to the LCMW and the transport and collection of LCMW biomass. Therefore ways to improve the profitability and a plan to reduce the costs of harvesting have to be established in close collaboration with stakeholders along the supply chain in the region of Bajo Aragón and neighbouring regions (farmers, foresters DGA) with a wide knowledge of the region and the biomass. The government of Aragón would provide the technical and financial logistics to carry out an event at which all involved stakeholders can come together to discuss these issues. GreenGain partners can lead such an event organised as workshop and provide solutions of European Best Practice examples.

2.3 Measures regarding public participation

A strategy designed within greenGain mainly focuses on the harmonization of the interests of different stakeholders, which are involved in the future supply chain of the LCMW feedstock. One of the measures to achieve this objective is to use forestry machinery of the Government of Aragón for the extraction of LCMW biomass in the surrounding areas of the municipalities. This procedure could be implemented first in those municipalities with high agriculture/forest potential and LCMW biomass from riversides or roadsides, as it is the case in Calanda, Alcorisa, or Alcañiz municipalities and then it can be applied in other municipalities.

Plan for the implementation of measures regarding public participation

In order to prepare this coordination of works to be performed workshops and seminars with involved local stakeholders (municipal representatives, waste management companies,



company carrying out the cleaning of roadside and river banks, farmers and cooperatives) will be carried out. The aim of these events will be a comprehensive analysis of the existing regulatory burdens and obstacles limiting the use of LCMW biomass and to establish the necessary work procedures.

The workshops will be conducted in late 2016 with several sectors and actors that could be involved in the LCMW biomass supply chain. In these workshops i.a. a public consultation will be conducted through surveys to retrieve the opinion of the stakeholders regarding current barriers and solutions to improve the current situation of LCMW and the use of biomass for energy purposes.

If the regional project partner OMEZYMA considers it as necessary also the municipalities wishing to implement the project results could be invited to participate.

The participation process and results of the workshop will be ratified during the national greenGain Workshop in Italy in June 2017. The measures/conclusions related to the project results obtained in Aragón by OMEZYMA will be publicly disseminated in media and communication channels (press, press conferences, public meetings, etc.).

The Local Action Groups are associations or other nonprofit entities responsible for managing the Local Development Strategy of a particular rural territory, in accordance with the regulations of the European Union. The development plans for the management and use of biomass from LCMW have been discussed at a round table with the agents of the Directorate General of Forest Management, municipalities, counties and forestry companies. The aim is to promote the agreements discussed at the meeting prioritizing among the affected municipalities and to bring this topic as proposals to be accepted at the municipal plenary sessions. Through the municipalities and business associations involved in the process of decision making in the local action group, and the manager of the Leader program, the projects targeting the promotion of LCMW biomass use could be prioritized. Additionally awareness campaigns will be carried out and best practices will be transferred to other local action groups (transferring it to other regions of Aragón) who wish to participate in a new project of inter-regional cooperation. The obstacles to overcome are linked to the excessive bureaucracy and poor economic returns in the short term.

2.4 Measures regarding good governance

Different final users have been identified within the project work with this data the municipality can elaborate and provide a map of the Bajo Aragón region to establish distribution channels for the biomass extracted according to the specific circumstances of each case. This possibility to coordinate different operations that need to be performed by the Government of Aragón regarding forestry work, riverside cleaning or road side/paths cleaning can contribute to reduce the transportation costs of this feedstock.

Another measure regarding good governance is the development and the implementation of a management plan at municipal level, for example to be carried out in municipalities as Calanda or Torrecilla de Alcaniz, to manage and to use all types of residual biomass (remains of agricultural and forestry pruning, olive pits, almond shells) and LCMW biomass as resource for heat and energy production. Following steps will lead to these results:



- Urging the DGA (General Directorate of Aagon), which is in charge of developing a management plan, to include the biomass from LCMW for energy production,
- Through private actors (eg. Monroyo Industrial s.l. performs the management plan for municipalities of the region)
 - In case the management plan is already in place, the aim would be to transfer the benefits of including the LCMW feedstock into the forest management plan.
 - When new plans will be developed, implement the conditions required for the use of LCMW biomass.
- Omezyna, as local action group and manager of the Leader program in the region could enhance the use of LCMW biomass through the support program for promoters, which includes the promotion of new private initiatives for managing biomass LCMW. For example by financing a new company to carry out the collection of biomass from LCMW.
- Omezyna as local action group and manager of the Leader program in the region can support the use of LCMW biomass through the local authorities program which aims to promote biomass boilers, by including other biomass than the DIN plus pellet. So projects using different biomass from LCMW could be promoted.

Plan for the implementation of measures regarding good governance

The development plans for the management and use of biomass from LCMW will be discussed at a round table with the agents of the Directorate General of Forest Management, municipalities, counties and forestry companies. The aim is to promote the agreements discussed at the meeting prioritizing among the affected municipalities and to bring this topic as proposals to be accepted at the municipal plenary sessions. Through the municipalities and business associations involved in the process of decision making in the Local Action Groups (managing the Local Development Strategy), and the manager of the Leader program, the promotion of LCMW biomass use could be prioritized.

Cooperation administrative arrangements could be developed during meetings that will take place from September to October 2016 supported by greenGain partners.

3 Matarraña

Matarraña is characterized by the river network formed by the Matarraña River and its tributaries Tastavins, Peña, Ulldemó and Algars. In this region the mountain massif "Ports of Beceite" is located with its rivers and ravines, partly declared as nature conservation area and bird sanctuary.

Matarraña region has launched the initiative "Land Bank" which aims to recover abandoned farmland for the agricultural production. Therefore the work carried out involves the removal of existing biomass, which could be used for energy purposes.

The region has a high quantity of forestry biomass, agricultural biomass and biomass from riverbanks and roads similar to the Bajo Aragón region.

The current procedure regarding the LCMW biomass is the same as in Bajo Aragón too and will not be repeated here again. Also the situation of legal regulations, finance tools and public participation are identical and because of that the measures proposed for Bajo Aragón are proposed for Matarraña as well and will not be repeated here.

The expected improvement of the current situation of LCMW and the benefits for the model region can be developed through the application of the following measures described below.

3.1 Measures regarding good governance

In Matarraña some actions have been initiated regarding the cleaning operations that involve LCMW biomass, but currently this biomass is still burned or transferred to landfill.

An investment was done to install 38 biomass boilers in municipal buildings, some of these biomass boilers could use LCMW biomass, for example the one installed in the public school of Peñarroya.

The measures regarding the good governance to be implemented in the region in order to increase the use of LCMW biomass are to develop a cooperation agreement between the Government of Aragón, Matarraña and municipalities targeting the extraction of LCMW biomass and its use in biomass boilers and to calculate the economic and environmental benefits derived from this action.

A meeting has been held with the Directorate General of Forest Management, municipalities, counties and forestry companies to discuss the possibility to carry out a joint exploitation of LCMW biomass with forest biomass based on the Forest management plan of the region. The work to be carried out to foster this development will focus on adequately information regarding the possible advantages of the use of LCMW biomass.

Plan for the implementation of measures regarding good governance

The measures will be a next meeting with the focus on good practice and know-how elaborated within greenGain to present possibilities for and the economic and ecologic advantages of a combined exploitation of LCMW biomass and forest biomass.



3.2 Measures regarding public participation

Measures to be implemented:

1. The deadlines for information events.
2. Write and publish newspapers internet promotional materials and organize events.
4. Attend events and make a contribution if necessary.
5. Present results in the events to participants and other stakeholders when possible or required.

Plan for the implementation of measures regarding public participation

OMEZYMA and Matarraña region would be responsible for the organization of the events and carrying out information campaigns and report accordingly. In addition, a presentation will be carried out during the national workshop taking place in December 2016 in Fuentespalda which is a municipality of Matarraña region where a fair is organized targeting the energy in rural areas.

OMEZYMA will carry out some publications and promotional materials, will attend events and make a contribution (eg PowerPoint presentation) if necessary.

Moreover, together with CIRCE, OMEZYMA will present during the planned events the results and knowledge gained that will be available to all stakeholders affected (email, website).

GreenGain will support the effort carried out to promote LCMW (2016-2017) by contributing to increase the knowledge.

This will include:

- Contribute to achieve a commitment from the owners of abandoned fields/farms to recover these fields and promote the partnership.
- Writing and publishing articles in newspapers to promote (local media and specialized communication).
- Support during the events.
- Disseminate the results of the meeting among the parties concerned carrying out individual contacts.

3.4 Measures regarding legal regulation and plan for the implementation

Development and implementation of a management plan at municipal level, for example to be carried out in the municipalities as Valjunquera, Peñarroya de Tastavins or Fuentespalda, to manage and to use all types of biomass, like remains of agricultural and forestry pruning, olive pits, almond shells and LCMW biomass as resource for heat and energy production.

The stakeholders involved along the supply chain and the development of legal regulation in Matarraña region are in many cases the same as for Bajo Aragón region, in this case for legal



regulation DGA (General Directorate of Aragón), private actors which carry out the performance of the work included in the resource management plan and Omezyna.

Due to the proximity of both Spanish model regions and since the LCMW biomass and regional structure are quite similar in both regions (Matarraña and Bajo Aragón) the measures that could be implemented are the same. So the measure and implementation plan description has already been provided in section 2.1.



4 Friesland

In the German project region Friesland three LCMW types are worked with in the course of greenGain: maintenance of roadsides, moor areas and hedgerows on banks. The focus of the work lies in this case of the last type. These hedgerows are characteristic for the region and their maintenance and conservation is supported with two legal programs, one on the regional¹ and the other on the state² level. From both (participation only in one possible) the owners receive financial support for the LCMW and in turn make sure, that the typical character of the hedgerows on banks (from ecological to historical aspects) is preserved.

In April 2014 a new regulation was implemented, which now additionally influences this LCMW. Every year on Easter so called “easter fires” take place at which people burn residues from their gardens and fields, and with that also the biomass from the LCMW of hedgerows on banks. These fires have a long historical tradition and the new regulation does not forbid them, but rather since 2014 every single fire needs a permit from the nature protection agency. With that the bigger fires organised by municipalities can still take place, the smaller ones on the other hand, can be better controlled, surveyed and if necessary be forbidden if no traditional reason for the fire is given and it is just mean of disposing of residues³.

In the first year of the regulation people did not realize/ were not informed yet about its content. Until the second and third year (2015/2016) basic information work could be done and according to the lower nature protection agency a big number of permission requests were entered. In the long run the goal of this regulation is to reduce the burning of illegal materials - often also residues from households (furniture, even car tires) are being disposed of within these days - and to foster an organised gathering of the biomass from LCMW for energy production or compost in cooperation with local LCMW and logistic companies.

At this stage people are aware that they may not be allowed to burn their LCMW biomass, however for many owners it is not clear what to do with it instead, especially for private hedgerow owners. Here the lower nature protection agency wants to implement a strategy by which the local waste management companies get the biomass from the private persons and gather it in a central place to then further utilize it.

In order to support the lower nature protection agency of the county Friesland in reaching this goal, the greenGain partner COALS will contribute to following measures.

4.1 Measures regarding good governance

Inform hedgerow owners (especially private owners) about the options to dispose of the biomass from LCMW from hedgerows on banks on the base of the new regulation on Easter fires. Information days and campaigns will be organised by and with the lower nature protection agency of the county Friesland (including a presentation at the next greenGain workshop in Soltau in October 2016) and local companies.

¹ Wallheckenförderung Landkreis Friesland:

<https://www.friesland.de/buergerservice/dienstleistungen/wallhecken-901001656-20800.html?myMedium=1>

²Wallheckenprogramm Oldenburger Land:

http://www.nlwkn.niedersachsen.de/startseite/naturschutz/wallheckenprogramm_oldenburger_land/das-wallhecken-programm-oldenburger-land-118365.html

³ <https://www.friesland.de/portal/meldungen/detail-901001774-20800.html>



Plan for the implementation of measures regarding good governance

It can be expected that with the good governance measures in Friesland the hedgerow owners, especially the private ones, learn about and use alternatives proposed by the county on how to dispose of the biomass from maintaining hedgerows. With that, a more coordinated gathering of the biomass can be achieved. This in turn makes further use for energy production easier. Thus, the county administration benefits from this measure by having the possibility to steer the biomass flow and with that its further utilisation. The material is reasonably removed in the whole region and from the potential energy production the community can directly profit.

Implementation and promotion

Since the implementation of the new regulation on Easter Fires in 2014, the lower nature protection agency (LNPA) of the county Friesland organised different information events for affected citizens. greenGain is going to support this effort for the harvesting seasons 2016 and 2017 by contributing knowledge and man power to upcoming information days and campaigns which will be organised by the county. This will include:

- writing and publishing of promoting articles in newspapers (local and specialised media)
- representative support during the events → COALS as a state administration supports the county's efforts
- contribute to efforts of receiving commitment of hedgerow owners after the events → disseminate results of meetings, contact single stakeholders, provide further knowledge

Additionally, a representative of the LNPA gets the possibility to talk about and discuss the issue during the greenGain national workshop in October 2016 in Soltau. The event program, including the title and name of this talk, is already promoted on the greenGain homepage and the third project newsletter (June 2016), and will be further advertised in newspapers and the homepage of COALS.

Responsibilities

The LNPA will be responsible for the organisation of the information events and campaigns and will inform COALS accordingly. Additionally, the presentation for the national greenGain workshop at the 21th October will be contributed by the agency.

COALS will be responsible for the punctual publication of promotional articles, will attend the events and make a contribution (e.g. power point presentation) if necessary and wished by the LPNA.

Furthermore, the LPNA and COALS will both secure that results and knowledge achieved during the planned events will be available to all affected stakeholders (mails, homepage).

Procedure of the measure

1. Set dates for information events (LPNA)
2. Write and publish promoting newspaper and internet articles (COALS)
3. Organise the events (venue, invitations,...) (LPNA)
4. Attend to the events and make contribution if necessary (LPNA + COALS)



5. Provide results of events to participants and other stakeholders (LPNA + COALS)

Costs

Because the information events and campaigns on the new regulation of Easter Fires are already organised by the county and no additional costs result with the presentation during the greenGain workshop, no direct expenses for greenGain are expected. The man power necessary for attending meetings, providing data, preparing documents and writing articles will be charged on the greenGain WPs 2, 4 and 5.

Possible obstacles and their solutions

No greater obstacles are to be expected.

If not all affected citizens can be reached and motivated by the above measures in the timeframe of the greenGain project, the LPNA will continue the work until all stakeholders are adequately informed about the new regulation and the possible alternatives to dispose the LCMW biomass from hedgerows.

5 Rotenburg (Wümme)

In the German project region Rotenburg (Wümme) (ROW) two LCMW types are worked with in the course of greenGain: maintenance of roadsides and moor areas. The focus of the work for this task lies on the first type. Beside the LCMW on county roads, which is performed by a specialised roadside maintenance agency, the recovery of illegally ploughed wayside strips near farm land in the municipalities is an interest of the county ROW.

The paths, where beside the lane also the verges on both sides belong to, are mostly owned by the cities and municipalities and are thus a public good. Of course, farmers use these ways in order to reach and manage their areas. But it happens that they plough through the boundaries of their fields and on the wayside strips. With that not only foreign land is ploughed, but also the development of valuable habitats for plants and animals are prevented.

In collaboration with the affected farmers these wayside strips are to be returned to their intended shape. In three municipalities of a ILE region (integrated rural development) a project to solve the issue was already successfully performed and the section county development of the administration in ROW wanted to use this example for other municipalities in the LEADER region “Hohe Heide” as well. However, especially nature protection organisations and green parties do not agree with the used approach that the farmers maintain wayside strips as tenants and can account this as greening measure. A political discussion about the role of the farmers in this issue was started and further implementation of solutions stopped.

In order to support the administration of the county ROW in finding for all the best fitting solution and raise awareness on the issue, the greenGain partner COALS will contribute to following measure:

5.1 Measures regarding legal regulations

Workshops or round table discussions should be organised to develop a strategy which is accepted by all stakeholders and parties (based on the already proposed solution).

Plan for the implementation of measures regarding legal regulation

It can be expected that with the measures regarding legal regulations described in section 1.1, consent between the opposing groups can be found and a need for action created.

The project region ROW would benefit by being able to implement a legal framework with the collaboration and consent of all involved stakeholders. Additionally, the general public would be informed about the process and public acceptance can be increased.

Implementation and promotion

The county ROW already started different attempts of recovering the falsely ploughed wayside strips near farm land in its municipalities. However, as described above, the administration encountered resistance which now has to be resolved. The dialogue between the opposing stakeholders is already planned in the form of round table(s) and workshop(s)



and will be promoted and organised by the section county development (SCD) in September 2016 (after municipal elections). COALS will support the county ROW as follows:

- In the organisation: → provide presentations, prepare data, disseminate results of meetings
- Provide available information from the work in the project greenGain to realise a fitting strategy for the issue of wayside strips
- Representative as state administration: → COALS supports the county's efforts
- Inform public and other stakeholders of the sector: → disseminate results of meetings, raise awareness and public acceptance

Because the involved stakeholders are already known to the administration no extended promotion of the meetings are necessary and thus the single person can directly be contacted. On the other hand, the promotion of the gained results to the general public would be done over media and other channels available to the involved actors.

Responsibilities

The SCD will be responsible for the organisation of the round table(s) and workshop(s) and will inform COALS accordingly.

COALS will be responsible for contributing information material for the discussion and prepare datasets and presentations if necessary and wished by the SCD.

Furthermore, COALS and the SCD will secure that results and knowledge achieved during the planned events will be available to all affected stakeholders (mails, homepage) and the general public (newspapers, homepages).

Procedure of the measure

1. Set dates and organise round table(s) and workshop(s) (venue, invitations, logistics) (SCD)
2. Provide relevant data and knowledge to work with during the meetings (COALS)
3. Attend to the events and make contribution if necessary (SCD + COALS)
4. Provide results of events to participants and other stakeholders (SCD + COALS)

Costs

Because the round tables and workshops are already foreseen by the county no direct expenses for greenGain are expected. The man power necessary for attending meetings, providing data, preparing documents and writing articles will be charged on the greenGain WPs 2, 4 and 5.

Possible obstacles and their solutions

If no consent can be found through this measure, different solutions to regain the wayside strips lost to the false ploughing have to be searched for. greenGain may be able to support the development and implementation of these in a similar way as described above (depending on the timing), however, due to the political character of the discussion the leading agent for this task would be the county ROW.



6 Kněžice

The model region Kněžice is a municipality situated in the Central Bohemia Region approximately 70 km from the Prague capital of the Czech Republic. The region is characterized by plain landscape, with altitude around 223 m, and with intensive agricultural activity and high share of arable land. The municipality consist of three villages Kněžice, Osek and Dubečno. The whole area is 1 958 ha.

Within Czechia, the most promising biomass sources from landscape conservation and maintenance work (LCMW) were identified based on the types of feedstock which are already maintained but not necessarily utilized for energy production, namely herbaceous biomass (grass) and woody biomass (branches, shrubs, trees) from public parks and other green spaces within residential areas and herbaceous biomass (grass) and woody biomass (branches, shrubs, trees) which originate during maintenance of roadsides. Herbaceous and woody biomass is assessed separately.

6.1 Measures regarding legal regulations

The municipality itself does not have specific regulations regarding the maintenance of public green spaces. Relevant can be municipal ordinances related to waste treatment and collection of biodegradable waste, but these are more targeted towards citizen's private plots and not public areas. Legal context of the maintenance (treatment) or utilization of the feedstock is defined by national legislation (waste, urban/city planning, environmental protection, etc.). The most important aspect is the stability of the renewable energy sector overall. It is currently threatened by retroactive proposals related to public support of the industry in Czech Republic and a notification process of this support (DG COMP) for facilities which started their operation between 2006 and 2012.

A need for a separate municipal regulation (which would overweight the general conditions) of this topic has not been identified at this moment. Still, interesting option would be to organise a workshop or seminar with local stakeholders (municipality representatives, bioenergy operator, Central Bohemia Region office, waste companies, roadside management operator, etc.) dedicated to thorough analysis of the legislative burdens and obstacles which limit utilization of LCMW feedstock.

Plan for the implementation of measures regarding legal regulation

A regional workshop or round table will be organised to assess in detail the existing legal regulations and financial gains of the energy utilization of LCMW biomass in the model region of Kněžice. The workshop would analyse legal regulations already at place and necessary permits for the LCMW maintenance companies and final consumers (biogas plants, composting plants, heating plants, etc.). The workshop would also focus on analysing the potential to extent the cooperation to other municipalities in the region (Nymburk district, Poděbrady municipality with extended competencies). The workshop will be organized in the fourth quarter (Q4) of the year 2016 in cooperation with Kněžice municipality and MAS (Local Action Group) Mezilesí. The outcomes can be used to facilitate the energy utilization of LCMW biomass in winter period (woody biomass) and in spring period (grass) of 2017.



6.2 Measures regarding finance tools

Costs related to the maintenance of public green areas are one of the major barriers of (potential) increased utilization of LCMW feedstock for bioenergy production. Similarly, as with legal regulations, policies which would help in this regard are related to general market conditions of renewable energy policies and overall conditions for subjects operating in this field.

Current policies or realities on the ground do not sufficiently facilitate separation of biodegradable material and its utilization in biogas plants, composting plants and similar facilities. At the same time there are many incentives to channel biodegradable waste to waste dumps or into incineration plants. Any measures which would relieve this situation are positive.

Need for separate municipal regulation (which would overweight the general conditions) of this topic has not been identified at this moment (besides seminar/workshop related to the economy of LCMW bioenergy utilization, see above).

Plan for the implementation of measures regarding finance tools

The workshop mentioned above would cover also economics of the LCMW biomass maintenance and utilization for renewable energy production. The participants would look for possible ways to provide viable economic model for higher uptake of LCMW biomass in the Kněžice and neighbouring municipalities.

6.3 Measures regarding good governance

The municipality is treating roadsides and the local bioenergy operator in cooperation with the municipality would like to extend its maintenance and generate feedstock (grass) for the biogas plant in Kněžice. One of the common issues is the fact that the roadsides (stripes of greenery) are being narrowed by broadening of the fields by farmers (during ploughing). Possibly a seminar or workshop could be dedicated solely to the question of maintenance of roadsides and small scale “campaign” among the farmers to describe negative consequences of this pressures to roadsides.

Plan for the implementation of measures regarding good governance

One segment of the workshop will be dedicated also to the drivers of reducing the strips of greenery along roadsides as a pressure from agricultural activities in the region. Need for additional measure regarding good governance has not been identified at this moment. It may emerge from the topics discussed at this event.

7 Týn nad Vltavou

The Týn nad Vltavou model region is located in the South Bohemia Region approximately 100 km south from Prague. The region is named after its administrative centre Týn nad Vltavou with 8 089 inhabitants which serves as a municipality with extended competences. The whole area is 26 243 ha and consists of 14 municipalities. The region has significant share of small and medium entrepreneurs, agricultural activity and tourism. Largest Czech nuclear power plant Temelín is situated nearby Týn nad Vltavou. Major Czech rivers, Vltava and Lužnice pass through the region.

As mentioned above in Czechia, the most promising biomass sources from landscape conservation and maintenance work (LCMW) were identified based on the types of feedstock which are already maintained, namely herbaceous biomass (grass) and woody biomass (branches, shrubs, trees) from public parks and other green spaces within residential areas and herbaceous biomass (grass) and woody biomass (branches, shrubs, trees) which originate during maintenance of roadsides.

7.1 Measures regarding legal regulations

The municipality itself does not have specific regulations regarding the maintenance of public green spaces. Relevant can be municipal ordinances related to waste treatment and collection of biodegradable materials, but these are targeted more towards citizen's private properties and not public areas. Legal context of the maintenance, treatment or utilization of the feedstock is defined by national legislation (waste, urban/city planning, environmental protection, etc.). Most important aspect is stability of the renewable energy sector. It is currently threatened by retroactive proposals related to public support of the industry in Czech Republic and notification process of this support (by DG COMP) for facilities which started their operation between 2006 – 2012.

Need for separate municipal regulation (which would overweight the general conditions) of this topic has not been identified at this moment. Option would be to organise a workshop or seminar with local stakeholders (municipality representatives, bioenergy operator, South Bohemia Region office, waste companies, roadside management operator, etc.) dedicated to thorough analysis of the legislative burdens and obstacles which limit utilization of LCMW feedstock (this could also cover the topic of possible financial tools or incentives).

Plans for implementation of measures regarding legal regulation

Also in the model region of Týn nad Vltavou a regional workshop or round table will be organised to assess with local stakeholders (municipality representatives, bioenergy operators, South Bohemia Region office, waste companies, roadside management operator, etc.) in detail the existing legal regulations and financial gains of the energy utilization of LCMW biomass. The event will be as well dedicated to thorough analysis of the legislative requirements and any obstacles which limit energy utilization of LCMW feedstock (this could also cover the topic of possible financial tools or incentives). The workshop will analyse the legal regulations already at place and necessary permits for the LCMW maintenance companies and final consumers (biogas plants, composting plants, heating plants, etc.). The workshop would also focus on analysing potential to extent the cooperation to other



municipalities in the region (South Bohemia Region). The workshop will be organized in Q1 of 2017 in cooperation with Týn nad Vltavou municipality and PRO-ODPAD and MAS (Local Action Group) Vltava. The outcomes can be used to facilitate the energy utilization of LCMW biomass in winter period (woody biomass) and in spring period (grass) of 2017.

7.2 Measures regarding finance tools

In the Týn nad Vltavou model region the situation regarding finance tools for LCMW and the energy production from LCMW biomass is the same as in the model region Kněžice. A need for separate regional regulation (which would overweight the general conditions) of this topic has not been identified at this moment.

Plans for the implementations of measures regarding finance tools

The workshop mentioned above would cover also economics of the LCMW biomass maintenance and utilization for renewable energy production. The participants would look for possible ways to provide viable economic model for higher uptake of LCMW biomass in the Týn nad Vltavou region.

8 Trasimeno

Trasimeno is a very interesting and beautiful area in the Umbria Region near Perugia composed by 13 municipalities, enclosing the fourth Italian lake for size (Trasimeno) and very important natural sites such as the protected territory named Parco del Trasimeno (with ZPS and SIC sites according to NATURA 2000 European Law). The area has over 1500 hosting agritourist structures and a very important landscape value.

The principal crops cultivated in the area are olives, vineyards and cereals, combined with cattle and sheep breeding. In the territory about 40% of olives trees are abandoned and greenGain aims at launching a recovering system for the unused biomass from these abandoned fields for the sake of safety in terms of environmental services and for landscape maintenance. A complex net of waterways and rivers characterises the area, and the maintenance of the green growing along these waterways, in combination with the woody and herbaceous residues from public parks and gardens, is the object of interest of the greenGain project.

Actually about 80% of biomass residues are not used for energy production. In fact currently LCMW biomass obtained from the clearing or pruning of fields and maintenance of waterways and public parks, is mulched and left in site, composted, landfilled or burnt. Until last year the woody and herbaceous material harvested from public areas was to be considered as a urban waste. On 27th May 2015 the General Director for Waste and Pollution of the Ministry of Environment has issued a communication in which it states that such materials can be considered as a by-product when they satisfy certain harvesting and supply chain conditions. Renewable energy sources are not so much diffused but growing every year with an increasing number of little plants for biogas and electricity production (medium 50-100 Kwh).

The aim of the greenGain project in Trasimeno is therefore to support the community in elaborating profitable pathways for energy production from such LCMW biomass (maintenance of abandoned olive groves, waterways and parks/gardens) without creating conflicts within the community.

The greenGain project has enabled Italian greenGain partners CM-ACT and SOGESCA to conduct a series of studies and of round tables with stakeholders which has resulted in the formulation of a strategy and different possible actions for the optimisation of LCMW biomass management. The main strategy elaborated will pursue the creation of a logistic platform in the Trasimeno area, as a focal point of the development of the LCMW biomass value chain. This infrastructure will enable the collection, storage, pre-treatment and selection of LCMW biomasses, and later on also other biomasses coming from agriculture and forest production. One of the clear results of the first part of the project researches is that the lack of quality is one of the main problems for placing LCMW biomass in the market. A logistic platform can represent an interesting business model and could enable owners of LCMW biomass to improve the quality of their material and add value to their goods, including these materials in the mainstream market of forest products. A logistic platform will not entail major environmental impacts, but will create some disturbance especially regarding noise pollution, production of dust from pre-treatment and an increase of



transports around the platform. Other phases of the supply chain do not appear to create acceptance and governance problems:

LCMW biomass harvesting is an ordinary activity which is carried out by public bodies or private companies on their behalf, without disturbance to the population (apart from cutting aged trees, which is an activity that always creates problems, but is not the theme of this research). The biomass energy conversion will be carried out in other locations, which are not identifiable at the current time and can be very different in terms of environmental impact (i.e. from the domestic boilers to the 20 MW power stations). Therefore this part will not be treated hereafter.

Measures for the promotion of the supply chain development and for the mitigation of conflict are identified in the following paragraphs.

8.1 Measures regarding legal regulations

Regarding the production and harvesting of LCMW biomass, the principal legal regulations to be treated during the project are those depending on Municipalities and Provincial/Regional authorities (Land Use Plans, Urban and Landscape plans, Provincial/Regional Coordination Plans, Park Management Plans, ecc.). These plans will be analysed and discussed, together with the permitting procedures for the construction of the platform. A series of personalised visits, aimed at discussing the current and potential regional and municipal legal regulations will be conducted with the main stakeholders (municipalities, regional authorities, river basin authorities, NGOs, field operators such as cooperatives and companies conducting landscape maintenance) involved in LCMW biomass supply chain development.

A national workshop and round discussion tables will be organised with all stakeholders in order to discuss together solution for an enabling environment for LCMW biomass management and will be particularly focused on the exploitation of logistic platforms. Municipalities could also work on ordinances regarding the harvesting, collection and use of green and firewood supported by the greenGain project.

Plans for implementation of measures regarding legal regulation

A first round of consultations with the institutional members of the greenGain local working group (LWG), which are the Regional Service for Renewable energy, Regional Service for Forest Management, municipalities and the regional agency for Environment Protection – ARPA, was conducted during the first half of the project. A second round table will be organised in the 2nd half of September 2016, with the municipalities of Tuoro, Magione, Passignano e Castiglione first, then with the municipalities of Panicale, Piegaro, Città della Pieve, Paciano plus Perugia and the Medio Tevere Association. The main topic will be the detailed assessment of potential legal barriers and solutions for the development of the LCMW biomass value chain, with a special focus on the contribution of municipal regulations to the harvesting of LCMW biomasses, to the emission-related air pollution and to the permitting procedures for the installation of a logistic platform.

8.2 Measures regarding finance tools

The main public financial resources are the Rural Development Fund (PSR) and the Regional Operative Fund (POR) Umbria 2014-2020. Support for accessing such measures will be provided by greenGain partners to the private and public actors of the LCMW supply chain. PSR measures are financial contribution, usually for farmers, with different purposes: increase of renewable energy use, reduction of production costs, introduction of new techniques, introduction of process innovations. POR funds are very often finalised to the improvement of energy performance of public assets such as building, transport, etc. These measures can include the use of biomass for heating public buildings or for power production.

Possibilities for innovative funding instruments such as the Community-funded Projects will be assessed for the logistic platform.

Measures at municipal level will be explored, i.e. the support to receive:

- tax exemptions for private citizens and companies which install biomass plants or support in different ways LCMW biomass supply chains
- the so called “administrative barter” (baratto amministrativo) which is an instrument of tax exemption for companies that provide services to the community such as landscape maintenance.

Plans for the implementations of measures regarding finance tools

During the meeting of September 2016, possible financial measures for citizen and companies (i.e. tax exemption for installation of biomass boilers, administrative barter for companies) will be proposed to municipalities which will attempt to adopt them before the end of the project. Potential POR-FESR measures (Regional Operative Program – European Regional Development Fund) will be identified for the improvement of public buildings energy performance.

Currently is not possible to schedule the timing of the call for proposal for EU Structural Funds (ERDF – POR FESR) and rural development funds (PSR), therefore it is difficult to settle a timing for a joint action for accessing to development funds. A meeting with farmer organizations (CIA, Coldiretti, Confagricoltura) and (possibly) representative of the Umbria Region is organised before the end of 2016 for the identification of potential funding sources for the development of the value chain, especially regarding harvesting and pre-treatment machineries and financial support for the logistic platform. Support to the appropriated stakeholder will be provided as soon as the right financial measure is identified for the installation of the logistic platform.

The possibility of community funding for the logistic platform will be assessed in the second half of 2017.

8.3 Measures regarding public participation

The Umbria Region has adopted the Regional Law No 14 on 16th February 2010 to stabilize the procedures of participation of public initiatives with regional competence in decision making pathways. Four kinds of possible measures are foreseen for this kind of decisions:



- Legislative initiative,
- Referendum,
- Rights of petition and
- Consultation.

In Trasimeno the most appropriate measure, possible according to the Regional Law No 14, is going to be chosen and used for initiatives related to greenGain (i.e. the instalment of a logistic platform, a new CHP plant).

Public consultation will be the first measure to be taken into consideration. Every year the Umbria Region and local governments invite people to public meetings to discuss topics about environment and agriculture, thus providing several opportunities for consultation.

A conference related to greenGain, especially to the presentation of business models for biomass from LCMW, will be organised by the Italian regional partner in the framework of the international environment film festival in Torino (IT) – (Cinemambiente 2017). CM-ACT already established the contact with the direction of the festival. Within September – October 2016 the actual realisation of the activity will be promoted.

Regarding the logistic platform, it will be important to conduct with the community a participatory process for the decision of where to locate the platform. The participatory measure, which will be a public meeting for the presentation of the idea, will determine if the idea of the community is the same as the one of the proposing stakeholders, which are the municipalities together with agricultural entrepreneurs and their associations.

Further measures regarding the public dissemination of project goals in Trasimeno could be the following:

1. Meetings with the local population,
2. Meetings with farmers; inviting the main rural organizations for the development of agriculture and extension services,
3. Meetings with public agencies and research institutes,
4. Press releases, audio conferences and video programs for public information,
5. Distribution of technical pamphlets,
6. Distribution of flyers explaining the principal renewable energy sources and the energetic power of vegetables residues according to the greenGain goals.

Plans for the implementations of measures regarding public participation

A public consultation – as foreseen by the Regional Law No 14 of February 16th, 2010, will be organised before the greenGain workshop in Italy in June 2017 in the municipality that will provide availability for hosting the logistic platform. If the assembly will consider it necessary and if the municipality will approve the method, a commission for the assessment of the most proper site for the platform will be nominated. The participatory process and its results will be ratified during the greenGain Workshop in Italy (provisional location: Perugia).



Measures regarding the public dissemination of project results obtained in the Trasimeno will be occasionally applied by CM-ACT with its ordinary means and channels of communication (press release, press conferences, public meetings, etc).

8.4 Measures regarding good governance

The Local Working Group (LWG) instituted by the greenGain project in Task 5.1 will be the main target group for measures for good governance regarding LCMW biomass. The composition of the Italian LWG, which includes all kind of stakeholders – regional and local institutions, entrepreneurs, farmers’ associations, environmental monitoring and control bodies, NGOs, etc. – guarantees the effectivity of the governance and conflict management. Obviously not all LWG members will participate in the initiatives and business cases promoted by greenGain, but they all will be properly informed and consulted.

Furthermore a newly instituted governance arrangement could be tested. The so-called “Collaboration Pacts” which are new arrangements similar to the administrative barter. In case the municipality is no longer able to pay certain services or to take care of common goods, groups of active citizens can take over the management of those goods. This can happen for example in parks and gardens.

Another – more formal - measure is the “Conference of Services” which is a common instrument to discuss and decide about new laws and decisions for the good maintenance and development of the territory in Italy. Its most common use in formal ways is for providing advisory service for the Environmental Impact Assessment and authorization of big projects such as new waste treatment plants or large RES plants. The “Conference of Services” is a powerful instrument, because all the actors which are legally interested by a project, such as public authorities, police, fire brigade, etc. can join. It could be used in case of major initiatives (i.e. logistic platform, large CHP plant, proposed changes in planning instruments) within the greenGain project.

Plans for implementation of measures regarding good governance

The “Collaboration pacts” and “Administrative barter” measures will be proposed to the municipalities during the meetings in September 2016. Possible applications and eventual experiences conducted meanwhile will be discussed during the greenGain Workshop in June 2017.

The Conference of Services will be conducted, if appropriate, for the permitting procedure or for the eventual Environmental Impact Evaluation of the logistic platform in the first half of 2017.

9 Overview of planned measures and outlook

The following table shows briefly all measures, which will be performed in the greenGain model regions to improve the legal, financial, public and governmental situation of the utilisation of LCMW biomass.

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 possibilities for and the economic and ecologic advantages 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 PSR or POR 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

The implementation of these measures will be performed in close cooperation with WP5 and with the model region partners and in combination with the pilot experience.

The results will be used 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”.