PROMOTION OF RESIDUAL FORESTRY

BIOMASS IN THE MEDITERRANEAN BASIN

FINAL REPORT INDEX FOR PILOT ACTION 4.2 Creation of a

Web portal to support cluster and networking activities

Work package 5: Renewable energies as an opportunity for local and regional economies

(September 2014)

Acknowledgements

Executive summary

The P.A Creation of a Web portal to support cluster and networking activities had the main objective to develop a specific tool to promote communication, dissemination awareness and training activities that support the building up of the forestry biomass exploitation in the MED area. The portal will pursue several objectives. For biomass producers: High standards of product quality and forest use; "healthy competition" in the market; visibility and marketing.

For customers: Guaranteeing the quality of the product; possible choice between qualified companies; product availability regional/local guaranteed. This web portal is independent from the "standard" website of the project. It will focus on the development of networks and clusters and will support the visibility of stakeholders and their communication and engagement. It will be developed in different MED areas in a coordinated or joint way. Local stakeholders will participate in this action.

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1. Introduction

This WP aims to provide local and regional authorities with the strategy, tools and support to better exploit the economic potential represented by forestry biomass and to establish structures that allow the permanent dialogue between private and public actors. It is engaged with WP3 and WP4. The aim is to reach the involvement of the different key-stakeholders in each partner territory using participation strategies that enable the permanent dialogue between stakeholders and the development of strategic orientations to implement policies for the development of renewable energies in Mediterranean regions. It also has pilot experiences to support this.

2. Objectives

Pilot Action 3.3 aims to develop a new specific tool, a local web portal dedicated to local producers and users of biomass.

This local web portal's main objectives are:

- ❖ To create new links between the different actors of the bioenergy chain (users-producers)

- ❖ To facilitate the use of the biomass market through a web-system of buying and selling

- ❖ To give visibility to the best practices at EU level

- ❖ To create an archive with articles and news in the sector of biomass at the local and regional level

- ❖ To provide regular updates on events related to bioenergy

3. Partners involved

PARTNERS										
Country	Region	Organisation	Type of organisation	Position	Skills	Address	Name Contact Person	Post	Mail	Telephone
ITALY	LOMBARDY	Fondazione Lombardia per l'Ambiente (FLA)	Third sector organization	Partner	Research and management of natural resources	Largo 10 Luglio 1976, 1 20822 Seveso (MI) Italy	Antonio Ballarin Denti	Scientific Coordinator	antonio.ballarin@unicatt.it	+39 335 1387647
							Eleonora Fontanarosa	P.A. Coordinator	eleonora.fontanarosa@flanet.org	+39 02-806161.13
							Daniele Tessera	Technical Expert	daniele.tessera@gmail.com	+39 030-2406702
							Andrea Pollini	Technical Expert	pollini@dmf.unicatt.it	+39 030-2406702
GREECE	WESTERN GREECE	Patras Municipal Enterprise for Local Development (ADEP)	Public Equivalent	Partner	Environment & Sustainable Development	El. Venizelou 38 Patras, Greece	Harris Kaklamanos	Scientific Expert	info@yesinternet.gr	+30 6974 366042
							Ilias Karachalios	W.P. Coordinator	Ilias.karachalios@adep.gr	+30 6945 656263
Slovenia	LEA SP	Local Energy Agency Spodnje Podravje	Public entity	Partner	Energy agency	Prešernova ulica 18	Janez Petek Uros Majerič	P.A. Coordinator Technical Expert	janez.petek@lea-ptuj.si uros@lea-ptuj.si	+386 59 974 658

4. Description

The goal of the Web portal is to develop a tool that can enhance the consolidation, development and productivity of biomass management by facilitating the contact and communication between the market's stakeholders and promoting the diffusion of best practices, events and information on bioenergy topics.

The type of information included within the portal is heterogeneous, ranging from descriptions of the biomass producers to the publication of events and news. The web portal organizes the information published on it in a logical, straightforward way in order to ease browsing and accessibility. The portal was realized by taking into account the major well established design patterns about the usability and ease of browsing.

Another goal is to make it simple for authorized users to add new content. The local web portal's structure is a compromise between using strict, well-defined data types that might discourage users to update the web portal information, and simple, looser data structures that might make the information harder to browse.

This web portal is independent from the "standard" web site of the project. It will focus on the development of networks and clusters and will support the visibility of stakeholders and their communication and engagement. The objective is for it to have an activity independent from the project's activities, even though it is supported by partners and the other activities of the project. It will be developed in different areas, in a coordinated or joint way depending on current data available in the different partner areas. Local stakeholders will participate in this project.

5. Conceptual analysis

The conceptual analysis of the project's web portal for ProForBiomed will take advantage of the "user stories" methodology. This emerging methodology is aimed at defining the actors involved in the creation of a "story", that is, a short path of actions allowing the actor that performs the story steps to obtain results, such as receiving access to existing objects or inserting new objects into the portal. The choice of focusing on user stories will allow a better integration of the portal's components within the framework of the Agile development process. The development of applications and websites using Agile methodology is one of the most successful trends in the current state of the art of web programming, as it has proved extremely fruitful and flexible. One of the major benefits of the Agile framework is the definition of the interactions between the web portal components in the early development phase, hence allowing the testing of incomplete prototypes of the web portal. The user feedback will in turn make the optimization during the development phase easier, and allow user stories to be adjusted to real user needs. Moreover, this methodology will allow to group similar user stories in order to define short development cycles to be tested by end users. In this report we have defined only major user stories that will be refined in the following development steps with the aim of better describing the real user needs. In what follows we will present these major stories and main actors.

5.1 Main Users

USERS	Description
Biomass Producers	The biomass producers are active users of the site. They have their own profile, from which they can propose the best practices and best available technologies.
Administrative users of the website	They manage the content offered by other manufacturers and may include additional content such as events, conferences and general

	news.
Website Visitors	They are all users of the web site that do not have special credentials and whose only type of interactions with the portal is passive, since they are only allowed access to the public resources of the web site.

In what follows we will describe the user stories associated with major web portal users.

5.2 User stories for "Biomass Producers"

| User stories	
Has a company profile	Each producer of biomass has a company profile, linked to their web site. The profile contains summary information about their business. In addition, the company's business profile will contain the tag 'manufacturer', selected among the elements of a taxonomy defined by site administrators. Each manufacturer will also belong to one or more categories, depending on the type of products offered by their company.
Edit business profile	Authenticated users can update the company profile by accessing the dedicated forms.
Login	Access to the login page, enter the credentials and access their personal page.
Propose best available technology	Each manufacturer may propose a best available technology, a hypertext document that describes its characteristics, with possible link to an external document (e.g., flyer, slides or white papers). Each best available technology is then validated by administrative users.
Receive notification of publication of best practices or best available technology	The user receives a private message that informs them of the publication of a resource they proposed.
Propose Best Practice	Each manufacturer may propose a best practice, a hypertext document that describes its characteristics, with possible link to an external document (flyer, slides, or white paper). Each proposed best practice has to be validated by administrative users.
Notification of publication of the proposed content as featured content	Private message informing the user that new content about a proposed resource has been published.

5.3 User stories for "Administrative Users"

| Moderate the Best Available Technologies	
Moderate the Best Practices	
Create the Case of the Month	In order to give greater visibility to the most virtuous producers, an administrative user of the site can select a case between the BP and BAT proposals from other users. This case will be high-lighted in the portal to give it better visibility. All these reports will be stored in a list of selected cases that will guarantee easy access in the future.
Manage Events (Seminars, Conferences, Events)	Administrative users manage a list of events, which will be reported in a separate section of the site.
News management	The news will be managed as hypertext documents, with the aim of reporting news and information about various areas of production of biomass. The news will be categorized in relation to a taxonomy defined by experts in this field. The newsletter will be a mailing list managed by the secretariat that will generate a summary document of new or noteworthy content.

6. The Local Web Portal's structure

The structure of the web portal is divided in several parts: The "Homepage" is the main section with the descriptions of PROFORBIOMED and partners. From this section, it is possible to access others: News, Articles, Events & Exhibitions, Biomass Producers, Best Practices, Marketplace, and Account.

6.1 Articles section
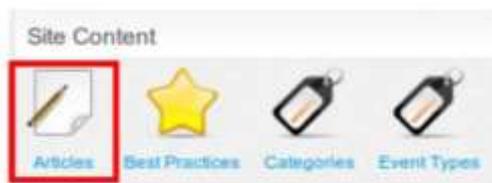
It is possible to upload a new article or edit an existing one. A news article presents current or recent news related to bioenergy and biomass. Each article is presented to the users by an abstract.

6.2 Events section
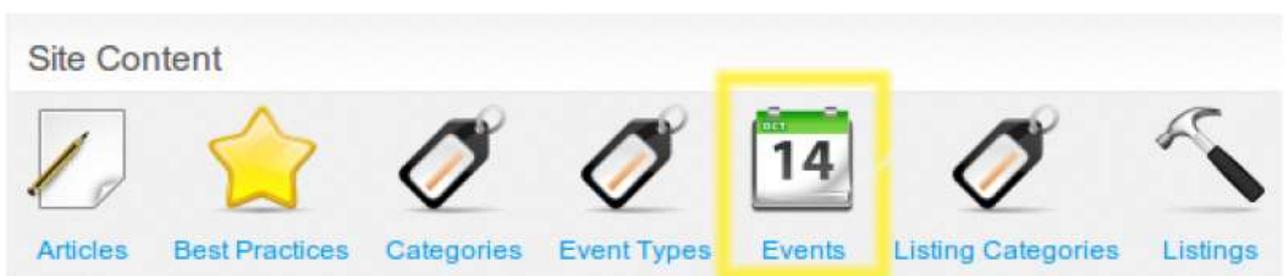
It is possible to upload a new event or edit an existing one. It is possible to search or filter the visible events (useful if you have many events in the website). It is also possible to add a link to the event's website.

6.3 Best Practices section
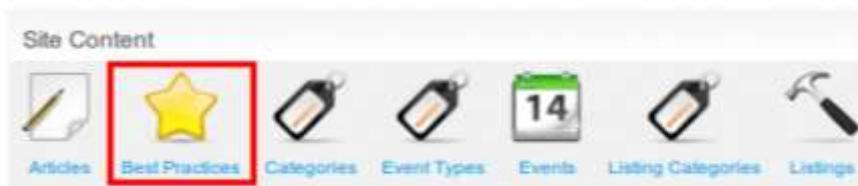
It is possible to upload and edit a Best Practices element, creating a list of best practices related to bioenergy.

The Best Practices selected in the *PILOT ACTION 2.2 "Good practice example"* implemented in the framework of the project could be inserted and valorized in the web site.

6.4 News section

It is possible to upload news and modify it. News are identified by the title, the publication date and the published flag. It is also possible to set a category, which makes the search for news related to a specific topic much easier.

6.5 Marketplace section

You can insert the product you want to sell (it will be the title of the listing) and the sell/want option. You can select the location of the listing (insert some of the starting letters of a city and wait for the autocomplete dropdown box, otherwise you will get an error). Select an expiry date, a description of the listing and the category.

7. Lombardy Foundation for the Environment

The FLA had the objective to create a Web Portal able to connect customers: users and suppliers of biomass at the local level to enhance and support the local biomass market. The companies located in a specific area will be able to use and register on the Web Portal. The portal will pursue several objectives:

- For biomass producers: To present and make evidence of the quality of biomass produced, the idea is to promote "healthy competition" within the market – visibility and marketing.

- For customers: To guarantee the quality of the product and to stimulate the choice towards qualified companies – product availability regional/local guaranteed.

The customers have the possibility to ask for specific kinds of biomass using the "Marketplace section" directly on-line, (for example, residential customers may require pellets for private stoves while small-medium plants will require virgin woodchips or other types of forest biomass). This

can be a pilot project replicable in other countries to stimulate the market of biomass in the different territories.

The FLA proposed, designed and built the **Local Web Portal** and it has made available to interested project's partners, the partners received the Web Portal in a single virtual machine file, named: proforbiomed.ova.

The FLA produced a "LOCAL WEB PORTAL User Manual" (see Annex I for the entire ENG version) available for the project's partners that contains instructions on how to install and manage the website. In particular, the instructions were focused on Installation, Network setup, Startup of the Proforbiomed appliance, Access to the appliance, Administration Dashboard, Managing Portal Settings, Domain name settings, Managing Translations, Page Management, Editing a page, Selecting the language, Title & visibility settings, Content Sections, Managing content, Article Management, Event Management, and Best Practices Management.

8. LEA

The Slovenian partner (LEA Spodnje Podravje) was in charge of the implementation of the Proforbiomed appliance for the Slovenian site. The link to the appliance is www.medbiomass.si.

We implemented the appliance on the server and provided the Slovenian language translations. We are responsible for providing and uploading professional content to the appliance, promoting the use of the appliance to stakeholders in the biomass chain and providing assistance to producers and costumers at the local level.

9. ADEP

ADEP's goal was to create a Web Portal in order to promote all the activities done within the PROFORBIOMED Project in the area and at the same time to be able to connect customers, users, and suppliers of biomass at the local level to enhance and support the local biomass market. Companies located in Greece Will be able to use and register on the Web Portal. The portal will pursue several objectives:

- For biomass producers: To present and make evidence of the quality of biomass produced. The idea is to stimulate "healthy competition" in the market-visibility and marketing.

- For customers: To guarantee the quality of the product and to stimulate the choice towards qualified companies - product availability regional/local guaranteed.

The customers have the possibility to ask for specific kinds of biomass using the "Marketplace section" directly on-line, (for example, residential customers may require pellets for private stoves while small-medium plants will require virgin woodchips or other types of forest biomass). This can be a pilot project replicable in other countries to stimulate the market of biomass in the different territories.

ADEP used the Local Web Portal platform made by FLA in order to build the Greek edition. ADEP received the Web Portal in a single virtual machine file, named: proforbiomed.ova and uploaded the translated version (in greek) on www.medbiomass.gr.

10. Conclusion and Recommendation

The development of a de-centralized system of renewable energy production based on criteria of environmental sustainability is one of the major challenges of the near future for all the EU countries. In a 2006 study, the European Environmental Agency (EEA) estimated EU primary energy requirement at 1.8 billion tonnes oil equivalent (toe) in 2020, and projected biomass to be able to contribute with 13% or 236 million toe, compared to 69 million toe actually provided in 2003. Based on current knowledge it is thus reasonable to assume that biomass could account for two-thirds of the renewable energy target in 2020. For this to become reality, biomass use will roughly have to double.

The European Environmental Agency (EEA) estimated that wood accounts for approximately 80% of the biomass used for renewable energy. There is a clear potential to intensify forest utilisation for energy in the EU: Only 60-70% of the annual increment of EU forests is harvested. At present, about 42% of the harvest is eventually used for energy, residues from higher value processing have a significant share. Significant expansion potentials locate in smaller private forest holdings and are related to forest residues and complementary fellings, such as first thinnings. Several key issues influence the entire biomass supply chain: existence of biomass markets, establishing connections to markets, and supply logistics.

The new local web portal has the main objective to support the better exploit of the economic potential represented by forestry biomass at the local level and to establish structures that allow the permanent dialogue between local producers and users of biomass.

There are some important considerations about the importance of developing this kind of tools together and directly involving key strategic actors such as business associations, mountain communities and local enterprises in order to understand their real needs and to involve them

from the beginning of the activities. The tools produced by a European project must be transferable to other European areas and must be genuinely effective tools for the improvement of the conditions of local stakeholders. This tool has been conceived as an instrument transferable and adaptable to different local contexts, providing for the use by local actors (so it was produced in three different versions: Italian, Slovenian and Greek). The creation of the local web-portal should be the starting point for new activities, but it will require a certain amount of effort to involve the local actors of the biomass market and have them use this tool effectively. It may well be a good starting point for new projects.

Annexes

WP 5-LOCAL WEB PORTAL User Manual

Authors

Eleonora Fontanarosa, Fondazione Lombardia per l'Ambiente (FLA)

Karachalios Ilias, Municipal Enterprise For Planning & Development of Patras (ADEP)

Janez Petek, Local Energy Agency Spodnje Podravje (LEA)