



Proposal full title:

Algae and aquatic biomass for a sustainable production of 2nd generation biofuels

Proposal acronym:

AquaFUELS

Type of funding scheme:

Cooperation

Theme 5 - Energy

Deliverable 5.3 Dissemination Plan

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1 Communication and dissemination of the project

The purpose of the Deliverable 5.3 is to present the Dissemination Plan of the AquaFUELS project. In particular the D 5.3 includes all the activities for the dissemination of the project results to the widest possible academic and industrial audience. The project results concern the main achievements which have been accomplished until the 6 month (June 2010) of the project.

All actions necessary to raise awareness about the project and its objectives and results were taken, and all the partners have been encouraged to be involved in the dissemination activities.

Dissemination activities were structured in order to achieve the following main objectives:

- raising awareness at society level;
- consensus building at industrial and policy level;
- scientific and industrial dissemination.

In order to reach the particular awareness level intended, the partners have to work continuously in the field of dissemination and public relation.

The AquaFUELS communication and dissemination strategy is focusing on taking and implementing all the necessary actions to guarantee adequate exploitation of project results, and awareness of project.

The communication and dissemination approach is implemented at two different levels:

1. internal, and
2. external communication.

2 Internal communication

Constant, effective communication and dissemination among all project stakeholders ranks high among the factors leading to the success of a project. In addition, AquaFUELS involves top class EU scientists, making internal dissemination an essential part of the dissemination strategy as a whole.

Internal communication within the project teams is to meet the following four major communication needs:

- responsibility of each team member for different parts of the project;
- coordination information that enables team members to work together efficiently;
- status information tracking the progress, identifying problems and enabling team members to take corrective action;
- authorisation information - decisions made by beneficiaries, stakeholders, and target groups - that relates to the project and its scientific-technological, economical and social environment, and enables the team members to keep all project decisions synchronized.

Moreover, the purpose of the permanent communication is to achieve the planned objectives and the common approach in solving difficulties that might appear.

The internal communication within the project AquaFUELS was developed ensuring the involvement of all project partners in communication, and it is developed among project partners through electronic communication, the project website, partner meetings and visits.

For the successful advancement of the project, the communication and cooperation among partners is accomplished with the use of new communication technologies: e-mail, the website of the project, videoconference, work meetings, telephone, and fax:

- E-mails, telephone and fax are used to exchange information and material about the stages and the development of the project, to receive feed-back and to maintain contact, to assign new responsibilities to the partners.
- The website, especially the intranet area, is used to present and disseminate all the activities, informative materials and final products. Photo albums with pictures from work meetings and from project meetings will also be uploaded and shared, such as events related to dissemination and press releases.
- Work meetings and tele-conferences will ensure the face-to-face effectiveness of communication and cooperation among the European partners.

Moreover, the contacts between the members of the consortium of the project are maintained and facilitated by: **working groups, internet platforms, and mailing list.**

2.1 Working Groups

Internal project working groups can be used to manage project work and provide an effective mechanism for formative project evaluation. The work of these groups focus on specific practical issues, and the members of the groups work together for the fulfillment of a specific task.

Up to month six, three main different working groups are outlined as responsible for different activities, in line with the proposal. These three groups and the tasks for which they are responsible are listed below.

1. EBB, LM and UNIFI working on:

- Task 2.1 – the call for papers,
- Task 4.1 – creation of a network and joint communication platform of European flagship projects
- Task 2.2 – round table logistic and management
- Task 4.2 – barter agreement preparation and signature
- Task 2.3 – proceedings production
- Task 4.3 – exchanging services
- Task 4.4 – synergic meetings
- Task 5.1 – public awareness of the project and internal dissemination
- Task 5.3 – final conference
- Task 5.4 – establishment of the European association on algae (EABA)
- Task 6.2 – Day to day management and project communication
- Others activities: ABO interface, Expert group, interviews

2. UGENT, BGU and ISC working on:

- Task 1.4 – Taxonomy
- Task 1.5 – biology of algae and other aquatic biomass

3. WU, NE, BGU, UAL and IMIC working on:
 - Task 1.3 – R&D pathways
4. EEB, NE, UNIFI, ISC, BGU, WU working on:
 - Task 1.1 – the questionnaire
5. EEB, NE working on:
 - Task 1.2 – Major stakeholders and main R&D activities
6. BGU, UNIFI, UAL working on:
 - Task 1.6 – Biotechnology
7. WU, UNIFI, ISC, Networking on:
 - Task 1.7 – Criteria for strain selection
8. WU, UAL, DI, IMIC, EBB working on:
 - Task 1.8 – Biofuels production processes from micro, macro-algae and aquatic biomass
9. WU, NE working on:
 - Task3.1 – Research needs
10. EEB, DI, IMIC, WU, BGU, UAL, NE working on:
 - Task 3.2 – Technological assessment – Major bottlenecks
11. EEB, RF, UAL, UGENT working on:
 - Task 3.3 – Downstream by products – Value added algae biofuels byproducts
12. IMPERIAL, NE, UNIFI working on:
 - Task 3.4 – Life cycle assessment
13. EEB, UNIFI, IC, FAO working on:
 - Task 3.5 – Impacts on developing Countries – food security – social and labor implications
14. EEB, WU, ISC, IMPERIAL, NE working on:
 - Task 3.6 – Environmental, assessment
15. RF, NE, BGU, UAL, UNIFI, DI , IMPERIAL working on:
 - Task 3.7 – Economic Assessment
16. EEB, LM working on:
 - Task 6.1 – Management helpdesk
17. EEB, UNIFI working on:
 - Task 6.4 – Quality assessment
18. EACH PARTNER working on:
 - Task 1.3 –Status quo of major algae-to-biofuels R&D pathways

- Task 3.8 – Overall sustainability assessment
- Task 5.2 – External Dissemination
- Task 6.3 – Financial and contractual management of the consortium

These working groups are working together also for the preparation of the six month meeting, which will see the active participation of all the partners of the project, involved in the explanation of the state of the art of their contributions within the project, through power point presentations.

2.2 Internal mailing lists

Three mailing lists will be used for internal communications: the AquaFUELS partners, the Expert Group mailing list and the European Algae Biomass Association (EABA) mailing list. Although proper internal dissemination would only cover the AquaFUELS consortium, the AquaFUELS objective to support the development of the European Algae Biomass Association (EABA) and the advanced degree of openness to the Roundtable stakeholders also make these groups part of the internal dissemination.

The AquaFUELS consortium mailing list was developed in the early stages under the form of the mailing list in Annex I. This mailing list was progressively adapted to the distribution of responsibilities in the consortium, in order to include experts specialised in specific issues relevant to each AquaFUELS deliverable or the activities of a given working group. In addition, the mailing list including the consortium partners was extended to all the personnel actively working on the issues, allowing a practical internal dissemination of information and an overall increase in the efficiency of the consortium work.

All emails intended for internal communications within the project are based on a pre-defined layout:

EBB European Biodiesel Board

Boulevard Saint Michel, 34 - 1040 Bruxelles
Tel: +32 (0)2 763 24 77 - Fax: +32 (0)2 763 04 57
E-mail: info@ebb-eu.org - Website: www.ebb-eu.org



1285/AQU/10

Brussels, November 26th, 2010

TO: AquaFUELS partners

RE: **Final draft D1.3 Report on Main Stakeholders for consortium validation**

Dear all,

Please find attached the final draft deliverable D1.3 on main stakeholders. This final draft includes all comments made after the circulation of version 10 last November 17th, 2010 (EBB document 1206/AQU/10).

In order to make it easier for you to suggest adding or removing stakeholders from that list, you will also find a basic list of additional stakeholders potentially relevant to this deliverable. This list is only intended as food for thoughts for new additions and none of them will be included to the list of main stakeholders unless you suggest doing so. Please note that the formatting will be finalised after validation of the deliverable.

You are also welcome to send us database of list of stakeholders to compare with this list, which will be added later on as part of the further refining which will be carried out by EABA. Indeed, this AquaFUELS deliverable will also form an input to the EABA Who's Who of algae stakeholders, as this list is meant to be "*revised, updated and widened*" as indicated in the Technical Annex.

Please note that this circulation is intended for final validation by the AquaFUELS consortium. Following this validation, the report on main stakeholders will be forwarded to the Expert Group and to Roundtable participants for comments, after which the report will be considered final.

You are kindly requested to provide your input at your earliest convenience and in any event by Tuesday, **November 30th, 2010, close of business.**

In the meantime, please feel free to contact the EBB Secretariat,

Yours faithfully,

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Figure 1 – Email Template

The second component of the AquaFUELS mailings is the Expert Group, which will be extended to the Roundtable participants after the event. Following the Roundtable, the Roundtable participants will be included in the validation mechanism for AquaFUELS. This proves particularly relevant to the validation of the Roundtable proceedings, where it is essential that the speakers and the discussants themselves are able to check and confirm the message which they will be seen to convey in the Roundtable proceedings. As the Roundtable discusses the status of the project and the forthcoming sustainability assessment and coordination of research, one of the indirect benefits of the AquaFUELS Roundtable is to provide participants with the necessary background to assess the AquaFUELS deliverables. As many Roundtable participants had a high level of expertise in fields relevant to algae biofuels, it was decided that their comments would also be welcome on the AquaFUELS deliverables subsequent to the AquaFUELS Roundtable.

Thirdly, the mailing list used by AquaFUELS also includes the mailing list of the European Algae Biomass Association. This mailing list will be used specifically for joint AquaFUELS-EABA events, as a number of algae

experts are both AquaFUELS partners and active EABA members, but also to allow AquaFUELS to benefit from the interest attracted by EABA. The EABA mailing list will also be used to advertise AquaFUELS significant events among EABA members, including certain deliverables having a direct relevance to structuring the algae community and setting perspectives for the development of algae biofuels, whose promotion forms part of the EABA objectives. Finally, the EABA mailing list will also be used to transfer the tasks initially started by AquaFUELS and taken over by EABA on a permanent basis, such as the questionnaire to algae stakeholders, which became instrumental in establishing production statistics for the algae sector, or the AquaFUELS report on main stakeholders, which will form the basis for the development of the EABA Who's Who.

2.3 Internal newsletter

This newsletter serves as an internal communication tool, and it is used by the partners of the project mainly as a picture of the progress of the tasks of the project. It describes the actions made and it sets the future steps that have to be done. The structure of the internal newsletter is shown in Figure n°1.

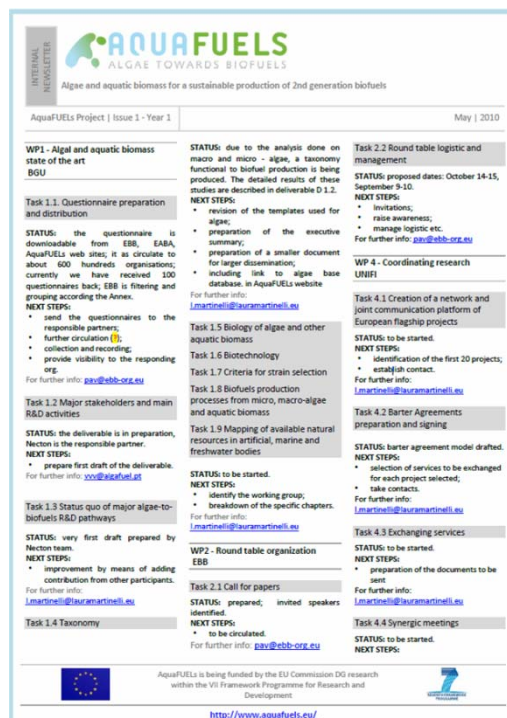


Figure 2 - Internal newsletter

2.4 Meetings and visits

Throughout the project timeframe, the consortium will meet to exchange information and knowledge, both pedagogical and technical online seminars and workshops will be conducted. Project meetings will be an opportunity to discuss the findings of AquaFUELS at every stage of the project's progress towards completion. Due to the involvement of high level researchers in the field of algae, meetings will represent an opportunity to submit the findings of the project to scientific authorities able to assess their value prior to their submission to the Expert Group. Prior to each meeting, a detailed agenda is circulated and minutes are drafted subsequently and circulated, with action points related to each of the due deliverables.

The first consortium meeting was the kick-off meeting, in which the division of tasks and the way to proceed were defined. The kick-off meeting took place in Brussels, on January 12th-13th, 2010, saw the participation of all the partners involved in the project. On this occasion, the website was presented and the strategy for the questionnaire was announced.

The second meeting took place in Montecatini Terme, Italy, on June 24th-25th, 2010. The meeting immediately followed the EABA General Assembly and other meetings, held on June 23rd-24th, 2010 in the same venue. This second meeting, held 6 months after the start of the project, allowed assessing the first steps of Work Package 1 (the State of the art of algae biofuels) progress towards completion of the reports on the status quo at the various steps of the algae biofuels production chain.

After the second meeting, the following meeting scheduled is the AquaFUELS Roundtable, grouping the project's mid-term meeting (October 20th-21st, 2010) and the proper Roundtable (October 21st-22nd, 2010). The mid-term meeting is scheduled to take place in Brussels, at the EBB premises. During the AquaFUELS mid-term meeting, the findings of the project's first phase were discussed and several reports forming the Work Package 1 (the State of the art of algae biofuels) deliverables were presented and discussed prior to the Roundtable discussions, to be held the following days. This way, the consortium secured internal communication before the Roundtable in order to coordinate on the messages to be conveyed during the external dissemination exercise represented by the Roundtable, which should be regarded as the project's major event after the final AquaFUELS conference in June 2011.

The internal communication relies also on a project team calendar, to keep project participants aware of key project dates and to help them manage their schedules. These project schedules are issued regularly by the AquaFUELS coordinator, jointly with EABA to ensure better coordination and avoid overlaps.

Below follows an agenda for such activities. Naturally this agenda will be revised and expanded continuously.

MONTH	Steering Board	Industrial Committee	Scientific Committee	General Assembly EABA conference	Aquafuels
May	Thursday 27 - 15h00 conference call (?)				
Jun	Wednesday 23 - 10h30	Thursday 3 - 10h00 conference call (?)	Thursday 3 - 15h00 conference call (?)	Wednesday 23 - 14h00 Florence - Italy	Thursday 24 - 10h30 to Friday 25 till 13h00 Florence - Italy
Jul					
Aug					
Sep		Tuesday 21 - 10h00 conference call (?)	Tuesday 21 - 15h00 conference call (?)		
Oct	Wed. 20 - 10h00			Wed. 20 - Thur. 21 with AquaFUELS Conference Round Table	Thur 21 & Fri. 22 with ROUND TABLE
Nov					
Dec	Wed. 15 - 10h00 conference call (?)				
Jan	Wed. 26 - 10h30				Wed. 26 - 14h30 to Thurs. 27 - 16h30
Feb					
Mar	Tue. xx - 10h00 conference call (?)	Wed. xx - 10h00 conference call (?)	Wed. xx - 14h00 conference call (?)		Tue.-Wed. xx - 14h00 conference call (?)
Apr					
May	Tue. 24 - 10h00 Florence			week 24- 25-26-27 FLORENCE with large expo conference & final AquaFUELS	week 24-25-26-27 Final conf AquaFuels Florence
Jun					

Figure 3—meeting schedule 2009-2010

3 External dissemination strategy

Much of the effort is aimed at ‘external communication’ in other words to promote the project, and disseminate results. The **major (external) communication objectives** are:

- diffuse information and raise awareness about the AquaFUELS project to the industrial and scientific communities;
- establish links and encourage synergies with similar projects and initiatives;
- establish links and encourage synergies with related EU Technology Platforms (TP);
- establish links and encourage synergies with related international initiatives;

External communication and information dissemination aimed at the target groups through various communication channels:

- via the project website;

- via the project brochures;
- through specialised press and publications
- via the project events;
- via the press.

The external communication includes also the communication between the project and the Programme, and it was developed in order to:

- provide one contact on matters related to communication;
- participate in Programme events;
- provide a link to Programme contacts and website on its own web page.

3.1 Responsibilities

All members of the consortium are contributing to the dissemination for instance by participating and giving presentations at conferences, publishing papers, holding press conferences, networking and similar activities. Since face to face information is highly effective it is important that everybody involved in the project has good general knowledge of all the aspects of AquaFUELS, in order to be a good “ambassador” for the project.

The consortium will also take part in external workshops and conferences. The first presentation of the AquaFUELS project started as soon as the proposal stage, as the successful application of the consortium partners was announced during the European Algae Biomass Association’s conference on June 3-4th, 2009, in Florence. This allowed AquaFUELS to be well known in the algae community from an early stage. Following this announcement, the AquaFUELS project was also presented at the landmark event of the biofuels community, World Biofuels Markets, in Amsterdam, on March 15th-17th, 2010. On this occasion, the presentation was made during the session “Algae Fuels”, in which other AquaFUELS partners also participated or presented their activities.

3.2 Strategy outline

The Dissemination plan is part of Work Package 5, *Dissemination and exploitation of project results*. This work package foresees the following tasks:

- increase public awareness of the project beyond the research community (task 5.1);
- external dissemination: promote the dissemination of the project results in the European industrial and scientific communities (task 5.2);
- establishment of the European Algae Biomass Association (task 5.4).

According to these tasks, the dissemination strategy of AquaFUELS is composed of three parallel actions:

- 1) the goal of the first action, **awareness raising** is to raise awareness within a qualified community about the project and its objectives;

- 2) the second action, **results dissemination**, aims to promote the results of the project, in order to allow potential interested parties to get to know the achievements and the related benefits of the AquaFUELS project ;
- 3) the third **exploitation-oriented** action will be undertaken to build on the results of the project and developed further activities and events intended to support the goals of the project and structure the algae community

All three actions require different methods and activities to be initiated in order to achieve the goals. The details of each of these actions will be outlined in the following paragraphs.

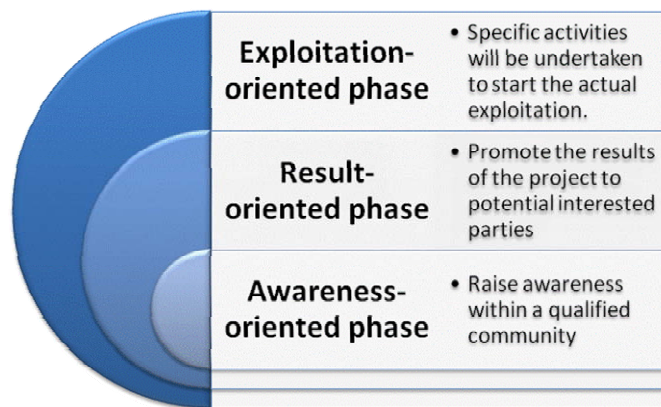


Figure 4 - Dissemination strategy

3.3 Awareness oriented phase

The dissemination strategy has started with an initial step of analysis, where the following key issues have been defined:

- the major goal;
- the major target audiences;
- the design of specific procedures, activities and materials to address the target audience;
- Follow-up and evaluation during the project execution.

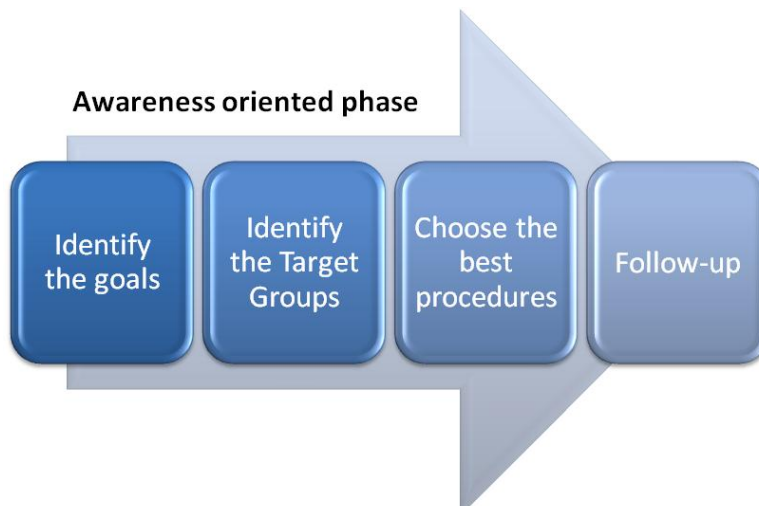


Figure 5 - Strategy of awareness oriented phase

The major goal of the AquaFUELS dissemination strategy is to raise awareness on the importance of the gathering of information carried out by AquaFUELS and invite the broadest possible participation. Indeed, AquaFUELS is intended **to address the proliferation of messages around algae in summarising the state of the art and the future perspectives under the authority of the top researchers**. In parallel, the direct involvement of major downstream industry players, e.g. Diester for biodiesel and Roquette for value-added co-products, reinforces the centrality of the project due to the direct impact on major industry players. In this context, the awareness-raising actions should be intended to highlight the centrality of AquaFUELS among the wide array of events, reports and statements on algae biofuels and their potential. The two major aspects of that centrality will be the decisive value of AquaFUELS as a reference for the future EU research agenda in the field of algae and as a clear and comprehensive overview of the relevance of downstream applications in fuels.

3.3.1 Target groups

According to the major target audience to be reached, the partners identified the need to update the list of the **Target Groups** during each Dissemination Plan as those were firstly introduced on the Technical Annex, because of the fact that the focus should not only be on the conferences, symposiums and workshops where the AquaFUELS consortium has participated or will participate until the end of the project but on institutions, associations, agencies, universities, companies and other kind of organizations which could be the targets of our dissemination activities. For that the partners have collected an additional number of possible consumers and users of AquaFUELS project results.

AquaFUELS main Target Groups are:

1. academy (Universities, public research centers and research organizations);
2. industry (biofuels industry, algae industry);
3. investors (oil companies, large industrial greenhouse gas emitters, airlines);
4. the general public (general press)
5. public authorities (European institutions, national energy authorities)

Raising awareness, the principal aim of the first task of the WP5 of AquaFUELS project, involves the setting up of the basic marketing materials and awareness-raising presentations at different related events. The goal of increasing awareness of the project beyond the research community was achieved mainly through the creation of the project web platform (portal), which, as the proposal of the project mentions, foresees a public area addressed to non specialist, in which the projects results are included with clear and comprehensible language.

In order to facilitate the dissemination of the project, it was necessary to plan the communication with target groups:

- assess the communication needs (contributions and uses) of the AquaFUELS project;
- identify the information and materials/resources necessary to maximize the use of and/or contribution to AquaFUELS activities;

- Evaluate where and into what AquaFUELS activities, input may be most appropriately solicited from the community's members.

For each target group, the following strategy will be developed:

Target group	Identified needs	AquaFUELS actions	Means of communication
academy (Universities, public research centers and research organizations);	Assess the state of the art Assess future needs for R&D	Coordination with relevant projects Give visibility to project scientific goals Give visibility to project scientific results	Website Roundtable Barter agreements Scientific Publications presentation at major scientific seminars Specific reports Final conference
industry (biofuels industry, algae industry);	Assess when algae biofuels will reach commercial scale Assess price and volumes Assess what production chain(s) will emerge	Identify key players Give visibility to overall sustainability assessment Promote EABA membership	Website Summary of findings Roundtable Presentation at industry fairs Specialised press Final conference EABA creation
investors (oil companies, large industrial greenhouse gas emitters, airlines);	Understand the long-term potential of algae biofuels Assess when algae biofuels will reach commercial scale	Give visibility to overall sustainability assessment Give visibility to project research needs Promote EABA membership	Website Roundtable Presentation at industry fairs Final conference Specialised press Final report EABA creation
Public authorities	Understand the long-term potential of algae biofuels Adapt research agenda to research needs Adapt legislation to developing algae biofuels	Give visibility to overall sustainability assessment Give visibility to project research needs Suggest options to address the above points	Website Summary of findings Roundtable Report on research needs Policy recommendations Final report EABA creation
the general public.	Understand the benefits of algae biomass Understand if algae biofuels can be an option for reducing CO2 emissions in a sustainable way	Give visibility to the project as a whole Give visibility to the project final results Promote EABA membership	Website Brochure Summary of findings General press EABA creation

Figure 6- Dissemination action for Target Group

A multi-dimensional dissemination approach with different communication tools adapted to the respective target groups was therefore needed to disseminate project concept and results and attract interest and necessary feedback/involvement from them.

3.3.2 External mailing list

An external list of contacts was used mainly to send the questionnaire to the organizations active in the biofuels sector all across the Europe. The list includes researchers and research institutes, algae producers and users, technology providers, biofuels producers, oil companies, airlines, car and aerospace industry, national public authorities, international organisations including the FAO, EU institutions, NGOs and industry associations. The EBB mailing list includes the AquaFUELS consortium and Expert Group, the EABA members and a mailing list specifically covering algae stakeholders, developed and regularly updated since in mid-2008 on the basis of databases from different networks in the algae community. In addition, the AquaFUELS partners forwarded the questionnaire to their own network, which implies that the questionnaire **effectively reached many more algae stakeholders than the intended mailing list**.

3.3.3 Graphic identity and project layouts

A common graphic identity in all dissemination tasks allows for better visibility and recognition as well as branding of the project.

All dissemination tools and activities must refer to the name of the project, to the project's website URL (see D) and to the graphic elements described in this deliverable.

A common/similar layout was needed for AquaFUELS Dissemination materials (including leaflets, posters and website and PowerPoint presentations).

The graphical identity and the common project layouts help to consistently communicate and disseminate the project in the external project communication. On the other side the templates will also help to save time and effort for the members of the consortium, since no further design work will be necessary. Templates for documents and presentations have been produced and made downloadable for all project members. The templates are important to ensure a united impression and a consistent visual appearance of the project.

The Logo - In order to immediately improve the visibility of the AquaFUELS project a logo was designed. A project logo was created when AquaFUELS was still at proposal stage. The logo was presented to and approved by the AquaFUELS partners as the official logo of the AquaFUELS Project at the kick-off meeting on 12th and 13th January 2010, in Brussels.

The logo includes the name of the project, its main concept, *Algae towards biofuels*, and its goal, *Algae and aquatic biomass for a sustainable production of 2nd generation biofuels*. Graphically, it is made with blue and green colors that evoke respectively the water and the nature.

The Logo is used in all the dissemination tools, ranking from the internal communication and reporting templates to external communication tools like web site, fact sheet and folder.



Figure 7 - AquaFUELS Logo

FP7 Logo - The AquaFUELS logo is always shown together with the **EU 7th Framework Programme** logo. The combination of both is used in all the events attended and documents produced by the project, thus showing the partners' commitment to the fulfillment of the project's objectives and the acknowledgement of the financial support from the European Commission.



3.3.4 Web site

The project **website** serves as the most versatile information and communication tool, because on the one side it gives the opportunity to provide information for a worldwide audience and, on the other side, enables a comprehensive provision of information as well as a platform for the project team. So the website's structure aims to provide both easily accessible basic information for external visitors and special information in more detail for registered users. Besides the website acts as a principal means of publication and frequent modifications, news and updates make the website informative and give interested people reasons for coming back. The project website is ready and visible on the web, and the official homepage of the Project is: www.aquafuels.eu.

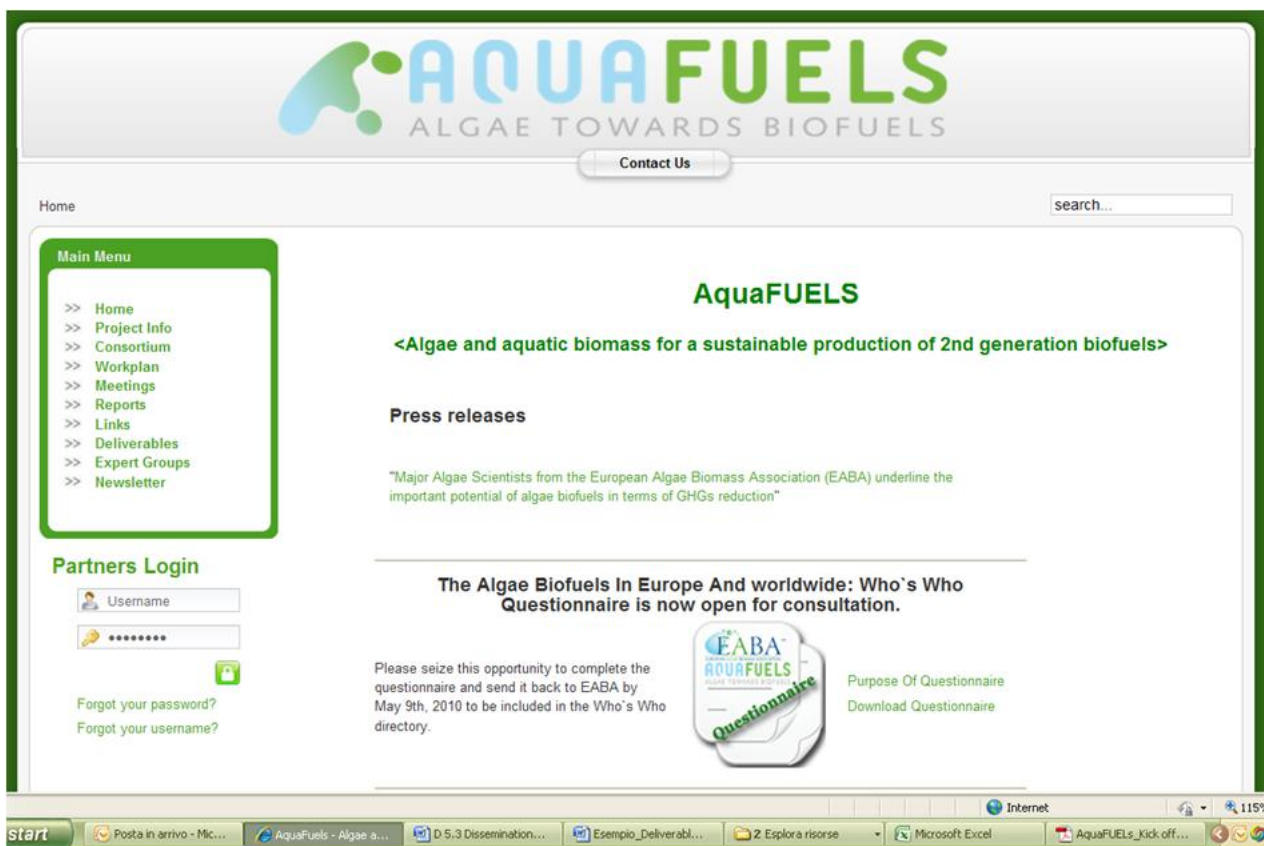


Figure 8 - Home page of AquaFUELS website

The layout and presentation of the webpage has been developed considering that there are few target audiences of interest for the project purposes. Simplicity and clarity are the basics to create, communicate and display the information.

It provides public access to general information of the project such as the project objectives, scope and publications. Moreover, it provides private access to the consortium for the exchange of confidential information between the partners.

The webpage provides visitors with general information on the AquaFUELS project, its activities and achievements as well as the background information to the project, the contact details of the consortium partners and the related events. It includes an information page presenting the respective organisations which project partners represent. By clicking on the name/logo of a partner, visitors can reach the homepage of the company, research center or other organisation represented.

The website also contains a page for downloads, eventually intended to present the project deliverables and other publications deemed of interest in the context of the project. As announced in the proposal, the links section provides useful links in relation to the project, including the EUROPA portal and the CORDIS FP7 web-page. Two websites of the United Nations authorities for Food and Agriculture (FAO) and for Trade and Development (UNCTAD) are also provided, along with the websites of the European Algae Biomass Association (EABA) and the European Biodiesel Board (EBB).

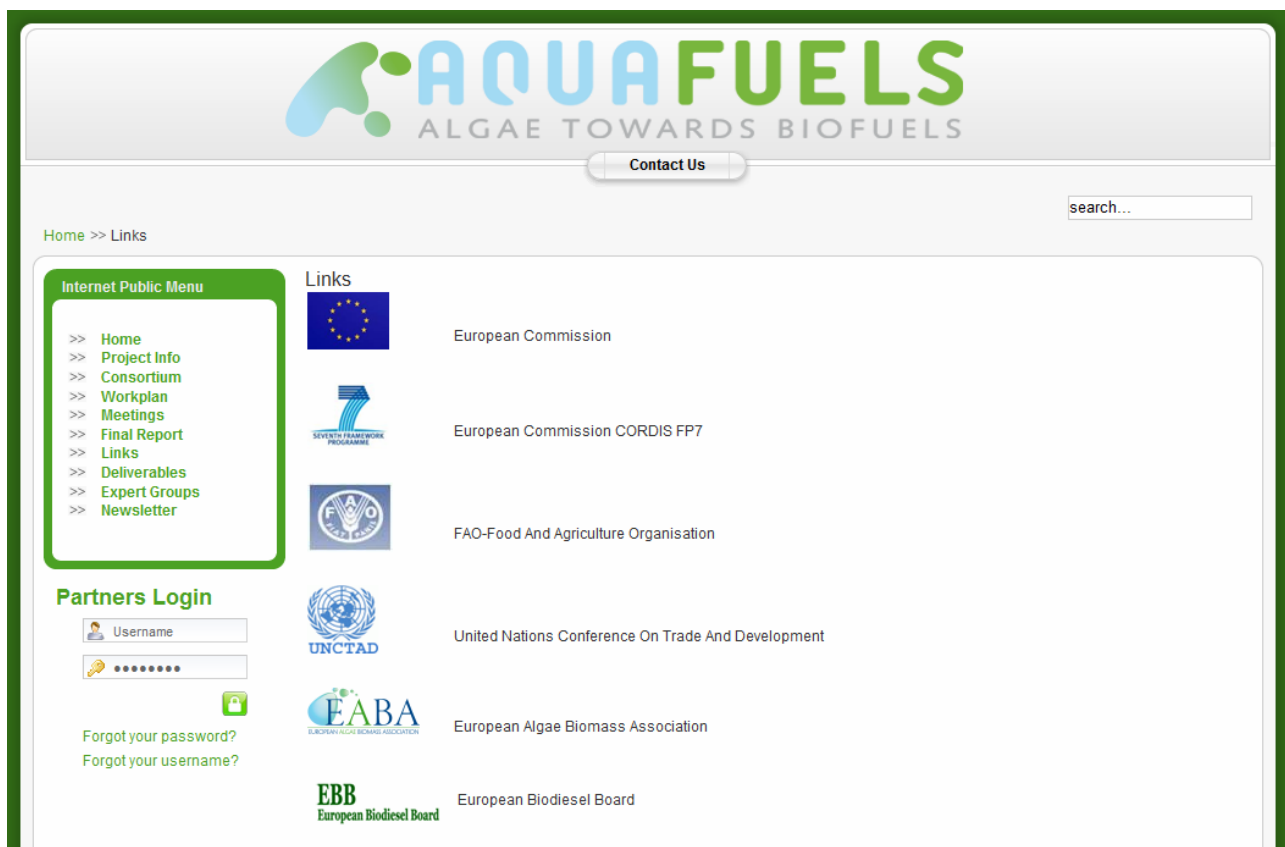


Figure 9—Links section of the AquaFUELS website

As indicated in the proposal, the home page contains a clear reference to the questionnaire, with a link to a page entirely dedicated to the purpose of the Questionnaire, and the invitation to participate at it, and it provides also a link to download the Questionnaire (see figure 5).

As a whole, the public section of the AquaFUELS website:

- Provides a brief project summary highlighting the objectives, the contents and the structure of the AquaFUELS project including the composition of its Consortium. It is available in English, the language used within the project.
- Provides a short profile of each of the AquaFUELS partners and a link to its websites.
- Provides access to the project Public Deliverables and abstracts of selected Non-Public Deliverables.
- Provides copies of publications and presentations done at external conferences in various formats (pdf, MSWord, etc.).
- Features a separate events section where events will be announced and highlighted. It will refer to AquaFUELS events such as workshops and conferences and external events where the project will have an active role (e.g. presentation of paper(s), organization of sessions, stands with demos, etc.).
- Contains both technical & scientific information (e.g. white papers) and user-oriented information.

Parallel to the general accessible area there is a special domain on the AquaFUELS website with password protected pages and thus made accessible to selected individuals and/or groups. Thanks to this the website also serves as a platform of the project (**INTRANET**) and may be used by the AquaFUELS members for internal communication. Only registered AquaFUELS partners with username and password can use this special user menu and can benefit from the three options offered in this area: This restricted area is divided into three parts:

- project management;
- work packages;
- reporting documents.

The project management area includes other three areas, such as:

- Basic Documents, containing the main documents to be shared within the members of the project.
- Meetings, containing the documents related to the meetings.
- Coordination, containing the documents and the communications necessary to the coordination of the project.

The area dedicated to each work package contains the description of the work packages forming the project consortium's work programme, broken down into the tasks intended to eventually produce the project deliverables.

As required by the proposal, the AquaFUELS **HELP DESK** was launched in order to allow project partners to ask questions on project-related issues. The helpdesk contains a section offering the possibility to contact the project coordinator and ask for guidance on the respective tasks. In addition, the helpdesk is associated with a Frequently Asked Questions page building on the requests submitted in order to save partners time and allow them finding immediately the answers for questions having already been asked. As shown in figure 7, the helpdesk is directly accessible from the left pane of the intranet menu in order to better serve its initial purpose: being a user-friendly interface for ad-hoc requests from partners, with a view to improve clarity and ultimately unblock situations.

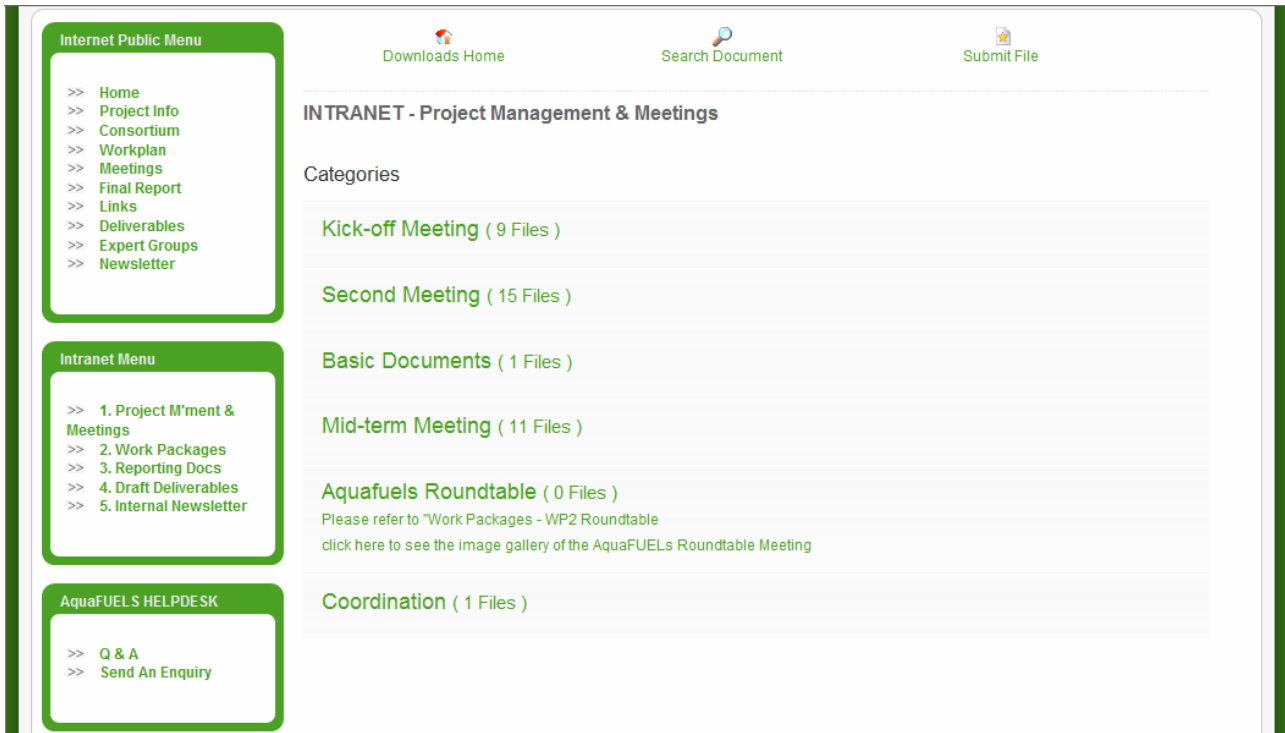


Figure 10–AquaFUELS Intranet section

Through the ‘Sending an enquiry’ section of the Helpdesk, it is possible to submit enquiries and get a response within 24 hours. For the sake of simplicity, visitors willing to submit an enquiry are only required to indicate their name and e-mail address. Similarly to emails, the ‘Sending an enquiry’ section of the Helpdesk include a title and writing space to submit questions, for which there is no limitation in character number.

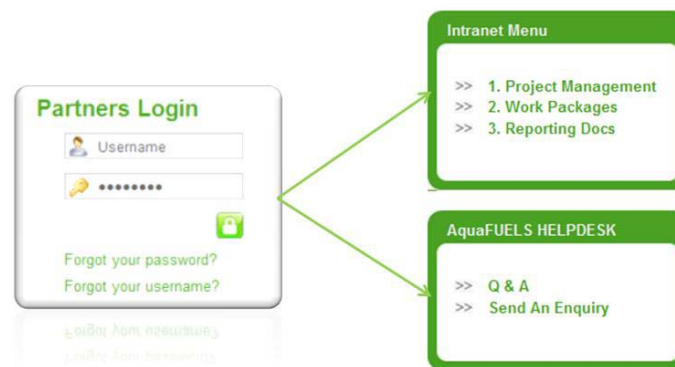


Figure 11 - INTRANET structure of AquaFUELS website

According to the **Management of the web site**, the content of the website will be managed by:

- Pierre Antoine Vernon (general)
- Stephanie Ho (web designer)

The Public Deliverables of the project are regularly uploaded on the website, which is also updated periodically information on major events relating to AquaFUELS, e.g. the Roundtable. The website is regularly updated in order to encourage active communication, to keep interested parties informed and to demonstrate project liveliness and progression.

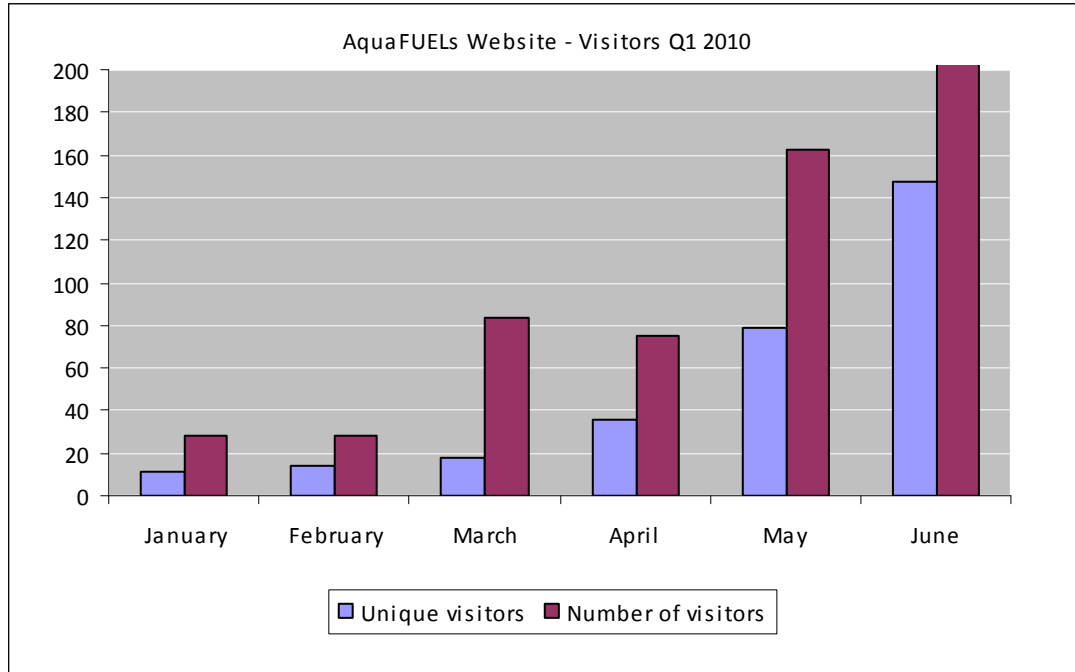


Figure 12–AquaFUELS website, first semester 2010

The increasing interest observed between January 2010 and July 2010 can be related to the website management. However, it is also important to note that AquaFUELS has invested much effort in ensuring that the AquaFUELS website is the first hit appearing in searches engines when entering “AquaFUELS” or “algae”. In this respect, the AquaFUELS coordinator submitted the AquaFUELS website to the following search engines:

- Acoon
- ASR
- Alexa
- Amfibi
- Amidalla
- Bimeon
- Boitho
- Burf
- ExactSeek
- Google
- Info Tiger
- Myahint
- ScrubTheWeb
- Search Sight
- Secret SELabs
- SonicRun
- Spiffy Search
- Tower Search

- Walhello

In order to increase the visibility of the project and in order to give the greatest possible impact of the AquaFUELS deliverables, the need to ensure a smooth takeover of AquaFUELS tasks by the new European Algae Biomass Association (EABA) was taken into account. Therefore, AquaFUELS also submitted the EABA website to the same search engines.

3.3.5 Questionnaire

The questionnaire, referred to as deliverable D1.1, has been instrumental in raising awareness about the project in its early stages. Indeed, the European Biodiesel Board (EBB) sent a questionnaire to the algae stakeholders all around the world, in order to establish the status quo of development of algae biomass and algae based biofuels at international level.

The direct aim of this questionnaire is to create a Who's Who Directory and Survey on algae stakeholders at European and international level. For the project AquaFUELS itself, the questionnaire (Task 1.1) will not only form the basis of the other deliverables of the State of the art of algae biofuels (WP1), because it will also be instrumental in the development of the European Algae Biomass Association (EABA) (Task 5.4/ Milestone 4.2). From a broader perspective, this survey aims to be a simple, clear and practical tool for algae stakeholders by putting together all members of the emerging algae community.

The questionnaire is divided into two parts, the first one with basic questions, while the following one has more detailed questions:

- The first part was designed to fit on one page and request only a few minutes of the respondents' time, while capturing the essential information about the organisation and its activities related to algae biomass sector; this degree of information corresponds to that of the intended Who's Who Directory, making its creation a straightforward operation provided that the first part of the questionnaire has been filled in.
- The second part goes into greater details regarding the activities of the organisations in the algae biomass sector, their technologies and futures projects. The detailed information from this section of the questionnaire will form the basis for the WP1 deliverables focused on algae biology, biotechnology, the strains used and/or researched upon, the potential final uses and the biofuels technologies considered. On the longer term, this information will also form the basic picture of the industry practices for the European Algae Biomass Association (EABA), taking stock of the evolution of the technological innovation from research to commercial production at large scale. A better picture of the industry practices also allows a better promotion of the algae sector.
- The final part of the questionnaire is dedicated to the EABA activities, and to the interest of the organisation in EABA membership and in taking part to AquaFUELS Expert Group (EG) created within the AquaFUELS, whose members have been and are being selected based on their expertise among internationally recognised organizations worldwide distributed (from EU, to US and Japan).

FIRST PART

- 1) General description of the organisation
- 2) Algae biomass core business: production and/or research, the final use of the products, the algae strains, and the technology employed.
- 3) Research project involvement

SECOND PART

- 4) Basic information about the organisation, such as name and contacts.
 - 5) How long has the organisation been active in the algae sector.
 - 6) Perspectives of interest in the algae biomass sector, with a reference to: animal feeding end uses, and the aquaculture end uses.
 - 7) Liquid biofuels production processes and end uses.
 - 8) Sustainability and energy balance of algae biofuels production with a reference to the Energy balance of algae to biofuels production chains.
 - 9) R&D pathways and research projects
 - 10) Biology of algae and algae strains
 - 11) Biotechnology
 - 12) The kind of technology that employed/researched on or plan to employ in terms of:
 - Culture media
 - Cultivation methods
 - Production systems
 - Harvesting methods
 - Biomass processing
- Inside this part, it also asked if the organisation plans or focuses algae genetic modifications GMOs or natural selection and reproduction.
- 13) Criteria for strain selection
 - 14) Mapping of available resources

In conclusion of the questionnaire, there is a reference to the Roundtable among the major stakeholders organized by AquaFUELS, on October 21st-22nd, 2010.

The objective of the Roundtable will be to promote critical thinking and reasoning on actual state of the art of research, development, and industrial initiatives in EU and outside with particular reference to technological and non barriers, economical, environmental and social implications of algae biofuels. Respondents were invited to express their interest in participating in the Roundtable.

This Directory aims to provide accurate and up-to-date information about the status quo of public and private initiatives in the field of algae biomass and their actual level of development.

It will include EU and global industrial and academic initiatives (in separate sections), as well as individuals and companies with activities and/or simple interest in this field (i.e. commercial airlines, engineering companies, etc.).

The working group active in creating the questionnaire, and in the elaboration of the results is composed by Raffaello Garofalo and Pierre-Antoine Vernon, from EBB, Mario Tredici from the University of Florence, Vitor Verdelho Vieira from Necton, and Laura Martinelli from Studio Martinelli.

The methodology of analysis was structured as follows:

- STEP1: a questionnaire structure was drafted by chapters according WP1 tasks.
- STEP2: the organizations receiving the questionnaire were selected in order to appropriately cover all aspects.
- STEP3: the questionnaires were sent and the feedbacks collected.
- STEP4: questionnaires chapters were grouped according to the argument
- STEP5: grouped chapters were sent to the reference partner
- STEP6: selected contribution were collected and used for the preparation of surveys and assessments.

Taking into account a well known trend in data collection for statistics, the division into two parts was decided as an incentive for organisation to respond to at least part of the survey in case they could not provide more in-depth information. Following this first step, contacts have kindly been invited to extend their input, and this brought to a high response rate.

The questionnaire, created with the objective of collecting useful information about the organizations active in the sector of the biofuels, became an efficient action of dissemination of the project, which gave visibility to AquaFUELS all around the world (622 contacts received the questionnaire).

To see the structure of the questionnaire please see Annex II.

3.3.6 The newsletter

This newsletter, visible from the website as the newsletter page, contains articles describing the state of the art of the project, and the most relevant news according the EABA association and the news and the events of the project itself. From the newsletter page of the website it is possible to download the .pdf format of all the articles published. The first draft of the external newsletter is shown in Figure n°6.

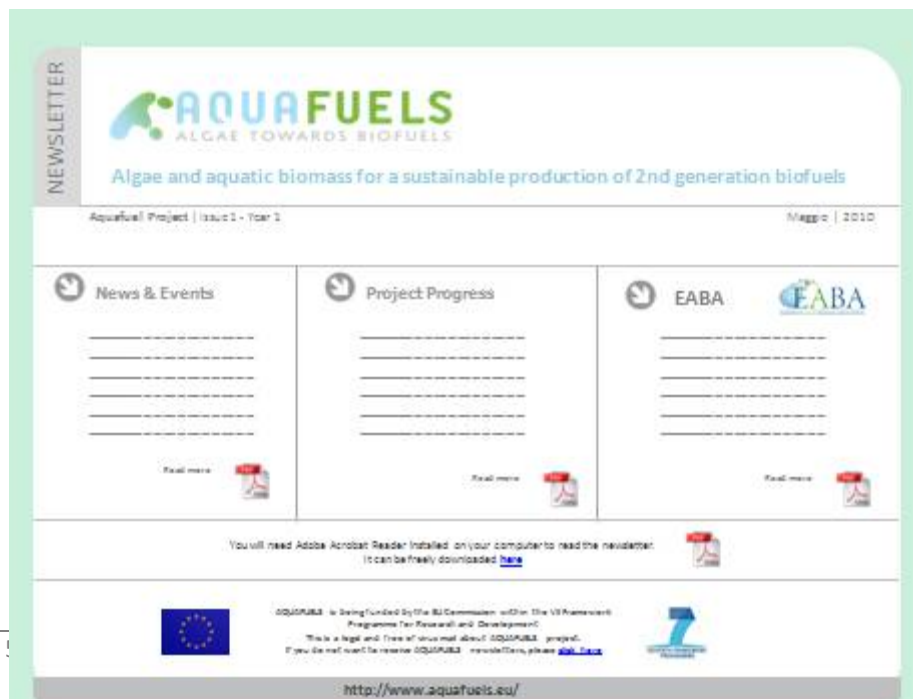


Figure 13 - First draft of the external newsletter

3.3.7 The brochure and the poster

In month 5, a first draft of the project brochure was issued. Thanks to the collaboration of the all the partners of the project, the contents and the thematic areas of the brochure have been defined, and a first draft of it has been designed, as shown in the picture below.



Figure 14 - Front page of the draft of the brochure



Figure 15- Back page of the draft of the brochure

The project brochure will be available for download on the public of the project website.

From the public area of the website of the project, will be also possible to download the poster of the project, which has been developed to let people know about the aims of the project, about its innovation and the expected results.

3.3.8 Roundtable

On October 20th-21st, 2010, a meeting, referred to as the “Roundtable”, will be held among the major stakeholders, on the basis of a call for papers inviting major stakeholders to prepare an abstract, a full paper, and .ppt presentation on their specific expertise and views on the needs and future impact of Algae and aquatic biomass on renewable biofuels. The objective of the roundtable will be to promote critical thinking and reasoning on actual state of the art of research, development, and industrial initiatives in EU and outside with particular reference to technological and non barriers, economical, environmental and social implications of algae biofuels. The roundtable will be also useful from the dissemination point of view; in particular it will be useful to:

- raise awareness about AquaFUELS activities, resources, etc.;
- act as training venues e.g. for disseminating instructional material as required by a particular stake holding community or communities;
- act as for a more public discussion of research, development, collections, standards, or other strategic and substantive issues of interest to AquaFUELS and the wider community;
- stimulate discussion and feedback.

The Roundtable, a milestone in the AquaFUELS project, will provide the selected panel of experts with the opportunity to identify future research needs and potential industrial developments, with a careful eye to sustainability and social implications. The panel of 40 experts invited to contribute to the presentations and following discussions of the Roundtable should be composed of the leading experts in the field of algae biomass as well as from the biofuels community, while the chair will be the Secretary-General of the European Biodiesel Board and Executive Director of the European Algae Biomass Association, Mr. Raffaello Garofalo. The outcome of the Roundtable should be a realistic perspective on algae use for biofuels production – a necessary step towards future developments.

In addition to the scientific significance of gathering international experts to assess the state of the art of algae technologies for biofuels production, the objective of the Roundtable is to analyse the findings of the first half of the AquaFUELS project and to define the great orientations for the further activities until June 2011. Indeed, the state of the art identified during the first half of the project will be instrumental in assessing the sustainability of algae-to-biofuels pathways and identifying the need for further scientific and industrial developments, which will constitute the second half of the project.

3.3.9 Final conference

As mentioned in the proposal, EBB and UNIFI will coordinate together a final conference in Brussels, in order to share the main goals of the project, its results and the future actions that have to be taken within

the biofuels sector. The final conference will be important not only due to its aims according the collaboration between the organizations involved in it, but also from the dissemination point of view. In fact, it is expected that up to 200 participants will attend, giving visibility to the project.

3.3.10 Conferences, presentations, workshops, seminars and other means

The partners of the project will give presentations at conferences and workshops about the challenges and goals of AquaFUELS. The full list of presentations foreseen is:

- Project presentation via Cordis and other web based platforms (permission will be asked also to FAO and UNCTAD and other organisations participating to the External Expert Group)
- Project presentation via National Contact Points network in EU and worldwide (already contacted and alerted)
- Project presentation to the network created (more than 300 organisations will be reached)
- Project presentation to Technology Platforms related
- Project presentation to the industrial network with whom the partners are already collaborating
- Scientific publications such as Journal of Applied Phycology, European Journal of Phycology, Hydrobiologia, Marine Biology, Marine Biotechnology, Biomass & Bioenergy, Energy from Biomass, Biotechnology & Bioengineering, J ApplMicrob, Aquaculture, Appl Environ Microbiol, J Biotechnology, ApplMicrobiolBiotechnology, (50 papers are foreseen, it is worth mentioning that the Consortium hold hundreds of publication over the last 10 years in the field);
- participation to national and international scientific conferences, such as:
 - The 9th Int Marine Biotechnology Conference;
 - The 7th Asia-Pacific Conference on Algal Biotechnology presenting project results;
 - The Algae Biomass Summit- this year in California (USA);
 - The 8th Europe Workshop “Biotechnology of Microalgae”;
 - The Symp. on Microalgae and Seaweed Products in Agriculture to be held in Hungary in 2010;
 - CLABA III (III° Congress Latino-Americano de Biotecnologia Algal) to be held in Chile in 2011;
 - The 12th meeting of the Int. Society for Applied Phycology to be held in Canada in 2011; ;

3.3.11 The press

Publications is one of the main ways that the project communicates results and conclusion to the outside world. The objectives of publications are to:

- communicate project results widely, and
- reach specific audience that will benefit from the results (researchers, software, developers, and docking users).

Among the AquaFUELS project, it was really important to develop a publications programmed (see target groups).

In the home page of the website there is a link to the press release of February 23rd, 2010, through which the Scientific Committee of the European Algae Biomass Association discussed and confirmed once again the positive potential of algae-based biofuels in terms of reduction of Green House Gases (GHGs), underling

the main progress in this regard is linked to prior and ongoing technology developments in algae biomass production.

3.4 Establishment of the European Association on Algae

Within the AquaFUELS project, the EU Scientific and Industrial Association on algae and other aquatic biomass was created, opened to all stakeholders interested to join and contribute, starting from a core group represented by project partners.

The Association has been presented and launched during the first session of the World Biofuels Market Annual Conference from 16 - 18 in Brussels, March 2009 (850 participants, including all major European and International stakeholders on biofuels sector). A web platform, which was already prepared at the beginning of the project, is now available at the URL: www.eaba-association.eu.

3.4.1 Main objectives of EABA

The general objective of the European Algae Biomass Association (EABA) is to promote mutual interchange and cooperation in the field of algae biomass production and use, including biofuels uses and all other utilizations. It aims at creating, developing and maintaining solidarity and links between its Members and at defending their interests at European and international level. Its main target is to act as a catalyst for fostering synergies among scientists, industrialists and decision makers in order to promote the development of research, technology and industrial capacities in the field of algae.

In this perspective EABA intends to constitute a basis for:

- establishing a permanent liaison with EU and EU Member States' Institutions;
- defining and expressing a common position on EU issues (legislation, product specifications, trade and sustainability standards, etc.), acting as a technology neutral platform;
- representing the European algae biomass industry and scientific community at international level;
- spreading scientific information and knowledge about algae biomass and biofuels production;
- making algae research and industry alive in public debate;
- promoting investment and financial support in the field of algae;
- helping the structuring and planning of research and industrial development on algae;
- fostering scientific freedom as well as responsibility;
- studying all economic and technical problems which may impact the algae sector in the European Union and related countries and studying all the direct and indirect environmental, social and economic effects of algae production and use;
- breaking scientific boundaries on algae;
- promoting the exchange of scientific information and the publication of sound articles.

Establishing a permanent liaison with EU and Member States' Institutions- One of the main tasks of the EABA is to maintain permanent liaison with the institutions of the European Union, in particular the European Commission, the Council and the European Parliament.

Equivalent links will be kept with national governments in EU Member States, including those of countries neighboring the EU. Such national liaisons will be ensured directly and in support of the national members.

The Association aims to raise the attention of EU and Member States' authorities on the potential of algae biomass as biofuels and bioenergy source and to promote policies and norm favoring the industrial development of the algae sector. In particular EABA will focus on the national implementation of the new EU Directive on Renewable Energies, which contains, among others, indications on "biofuels produced from waste, lignocellulosic biomass, (...) and algae", together with present biofuels technologies.

The Association will also monitor existing and future EU and national legislations, call for tenders, research and technology platforms initiatives which may impact the algae sector and its various production chains. Funding Members of the Association have already proposed a project and requested funding through a specific call for proposal of the EU VII Framework Programme which has been submitted end of November 2008, and which may be of support of the activities of the Association.

Defining and expressing a common position on EU issues (legislation, product specifications, trade and sustainability standards, etc.), acting as a technology neutral platform- EABA promotes the mutual understanding among the various components of the Association and the definition of common positions of the EU algae industry and scientific community to be expressed at EU and international level. The Association is technology neutral and does not aim at favoring a particular kind of processing or of final use of algae biomass. This approach reflects the fact that all the algae production technologies and all the final uses of algae biomass are interdependent (the economic viability of a nutritional or cosmetic outlet depending on the added value coming from a bioenergy use of its residues and vice versa, for instance) and need to be considered in this context.

One of the main targets in this context is to perform all those activities (meetings, conference calls, exchange of information, creation of Ad Hoc groups, etc.) necessary to elaborate a common stance of the EU algae sector, across all various kind of algae raw materials, technologies and final uses in order to try to speak with a common voice at EU and international level on all issues impacting the sector.

Representing the European algae biomass industry and scientific community at international level- The Association aims as well at representing the EU industry and research community beyond EU boundaries, at international level and vis-à-vis various international bodies, obviously without preventing any individual initiative of its members but rather trying to co-ordinate such initiatives in order to amplify and increase the impact of the overall action of the EU algae sector.

EABA has established permanent contacts also with some international organizations such as the FAO (the UN Food and Agriculture Organisation) and the UNCTAD (the UN Conference on Trade and Development) which are directly involved in the algae biomass sector. EABA aims at creating cooperative links also with other national, European and international organizations involved in domains relevant to algae, including the US Algal Biomass Organisation (ABO) with which EABA has already established communication. The Association will represent EU research and act as its flag in the international arena and towards sister Associations in the US, Brazil, Argentina and in other parts of the world.

Spreading scientific information and knowledge about algae biomass production- One of the main goals of EABA is to spread scientific information and knowledge about algae biomass and biofuels production in public organizations and in companies, in university laboratories and in research and development institutes as well as among decision makers. The main idea is to serve the needs of the EU and global algae

scientific and industrial communities by delivering reliable information and networking tools to researchers, scientists, industrialists and investors in the EU and worldwide.

Making algae research and industry alive in public debate- EABA intends to make the public opinion and decision makers more aware about the opportunities provided by the development of algae technology. In particular, the Association will try to encourage the spreading of reliable scientific information to the public and to decision makers in a move as to make algae research and industry alive in public debate and in the press relying a positive image based on correct and verified scientific realities.

EABA will create a logistic and Internet platform for:

- the publication of an information bulletin
- the development of permanently updated "Web" database of all public existing studies pilots and trials on algae accessible to the members

Promoting investment and financial support in the field of algae- Increasing public understanding and appreciation of the importance and promise of algae biomass for the production of bioenergy, biodiesel and all other outlet represents the main step necessary in order to promote investment and financial support in the field of algae.

EABA aims to create a permanent interaction with all the bodies and organizations promoting and coordinating research and development funds in the field of algae. Link has been already established with the European Commission Directorate General for Research and Development, with Commission DG TREN and with the EU Biofuels Technology Platform. The Association also aims to play a catalyst role with private organizations and funds in order to promote investment in algae technologies.

Helping the structuring and planning of research and industrial development on algae- In general EABA intends to promote the link between Industry and Research institutes and universities active in the field with parallel industrial initiatives and demonstration activities such as industrial pilots laying down bridges from fundamental research to industrial development.

The goal of the Association is also to help the structuring and planning of research and industrial development on algae, in a technology neutral approach, i.e. respecting the different approaches and the various research pathways undertaken by its members and by the scientific community in general.

Fostering scientific freedom as well as responsibility- EABA aims at encouraging sound and correct communication on algae acting as a scientific and industrial reference at EU level. An important objective of the Association is to contribute to the progress and application of science in the field of algae biomass by creating a solid platform for delivering reference information and tools that build insights and can enable advancement in research and in industrial development. The aim is to foster scientific and industrial activities and to uphold the freedom of research, the interest of scientists, and the need for support of research and pilots. In parallel the Association will assist in the establishment, and the subsequent maintenance, of internationally acceptable academic standards in science and technology in the field of algae, among others in order to avoid that unverified or unverifiable data are disseminated in the EU scientific and industrial community.

Studying all economic and technical problems which may impact the algae sector in the European Union and related countries- The Association intends to play an essential role in order to contribute to study all

economic and technical problems which may impact the algae sector in the European Union and related countries.

The advancement of research in critical fields and in the most problematic steps of the production chains requires scientific co-ordination and mutual exchange of information, investment, coordination and of different expertise: EABA's goal is to create a solid basis in order to promote the advancement of innovative algae based technologies necessary to solve all technical and eventual economic problems within a technology neutral approach. Particular attention will be paid to the environmental impact of algae biomass growth (including also toxicity aspects) and generally to all sustainability aspects of algae biomass production. Another field of action concerns the follow up and actions to be taken in the elaboration of standards and norms (CEN norms, EU guidance and Directives, Novel Foods, etc.) for food and feed uses of algae as well as for their final bioenergy and biofuels uses. EABA will also study all the direct and indirect environmental, social and economic effects of algae production and use, i.e. their impact in terms of sustainability, to avoid or minimize potential negative side effects.

Breaking scientific boundaries on algae, EABA emphasizes the role of exchange and dialogue as a generator of industrial and scientific progress- the Association will welcome and push change and innovation, challenging the status quo. It will encourage entrepreneurial spirit, learn-from-mistakes exchange and promote solution oriented positive approaches. It will act as a reference organization for reliable industrial and scientific information in the field of algae biomass and bioenergy, at same time it will also constantly look for new ideas, and value “out-of-the-box” thinking. The Association will be open to all the different algae biomass, bioenergy and biofuels research and production pathways within an approach that gives value to all of the players of the team in order to contribute breaking scientific boundaries.

EABA intends to establish a boundary-less European and international forum for exchange and confrontation encouraging people to work collaboratively across businesses, research sectors, hierarchy and functions. It will constantly seek to break down barriers between organizations, making its members supportive of each other, seeking partnerships among scientists and entrepreneurs.

One of the main goals of EABA will be to act as a networking platform for the EU algae sector so to increase communication and transfers of information between specialists of different scientific aspects of algae biomass, for example stimulating common projects and networks. EABA will also encourage the establishment of links between Industry and research laboratories for further applications, new processes and advanced materials. In this perspective EABA will co-ordinate and support:

- the organization of workshops or conferences,
- the holding of courses or of tutorial seminars,
- the organisation of mutual exchanges of scientists and engineers,
- the organization of an annual meeting in the form of a scientific symposium,
- the eventual creation of scientific prizes

Promoting the exchange of scientific information and publication of sound articles-EABA aims at establishing a Committee of Publications in order to issue a periodical bulletin with the most recent developments of research on algae biomass and related applications.

3.4.2 EABA main structure

The Association is set to act as a platform for exchange and dialogue and as a generator of industrial and scientific progress on the basis of the initiatives of its members, but it also needs to be able to make bold moves and take influential positions at political level once algae biomass is discussed in EU or national fora. Its organizational aim is to be efficient, keep things simple and minimize bureaucracy.

EABA should be governed by the following organizational bodies:

- General Assembly
- President and Vice-President(s)
- Honorary President (an outstanding personality to be eventually identified also at a later stage)
- Steering Board
- Scientific Committee
- Industry Committee
- Secretariat

General Assembly - That should meet at least once a year, gathering all the members of the Association. Only industrial EABA full members (not observers) can vote. The General Assembly:

- defines EABA's general strategies,
- elects the President, and the Vice President(s),
- elects and, if need be, revokes the Members of the Steering Board, and their substitutes,
- elects and, if need be, revokes the Members of the Scientific and of the Industry Committees,
- approves the balance sheet of the previous year,
- approves the budget proposal for the following year, which will constitute the basis for the calculation of members' contributions

Furthermore, the General Assembly, on proposals from the Steering Board, approves:

- any amendments to the Statutes of the EABA,
- the exclusion of Members

President and Vice-President -The President shall be a person who disposes of sufficient knowledge and experience of the algae biomass research and industrial development sector. The President of EABA shall only defend the global interests of the Association. The President of EABA shall chair the Steering Board and the General Assembly in a neutral and objective manner. The President is responsible for the implementation of the decisions of the Steering Board.

Honorary President - An honorary President can be eventually appointed on the basis of a voluntary demand formulated by a well-known international personality which may campaign in favor of the development of the algae biomass sector.

Steering Board - The Steering Board is composed of a minimum of five and a maximum of nine Board Members, appointed by the General Assembly. The Steering Board, among others:

- can submit any proposal to the General Assembly of EABA,

- implements the general strategies defined by EABA General Assembly,
- decides on the admission of new members, after having informed the General Assembly,
- formulates positions,
- decides on strategies, actions and representations,
- delegates responsibilities to the President, Vice-President or to the Executive Director,
- submits all proposals about the Statutes that need to be approved by the General Assembly,
- fixes the level of the annual Membership subscriptions on the basis of the following year's budget proposal adopted by the General Assembly.
- creates and dissolves Working Groups.

Scientific Committee - It shall be appointed directly by the General Assembly, and represent the forum of exchange, discussion and decision of the scientists involved in algae related research. It should also act as Publication Committee independently validating scientific articles and studies about algae biomass. Its decisions should be validated by the Steering Committee, with the exception of its actions as Publication Committee, and implemented by the Secretariat. It is composed by at least 75% of Scientific Members of the EABA.

Industry Committee - It shall be appointed directly by the General Assembly, and represent the forum of exchange, discussion and decision of the representatives of algae related industries. Its decisions should be validated by the Steering Committee and implemented by the Secretariat. It is composed by at least 75% of Industrial Members of the EABA.

Secretariat - The Secretariat is lead by an Executive Director who is in charge of the administration of the EABA and of the implementation of the day-to-day actions of the Association and of the management of the EABA budget.

The Executive Director is responsible to the President and to the Executive Board and assists him/her in the implementation of his/her mission carrying out the tasks he is entrusted with by the President and the Executive Board.

Membership - EABA membership is subdivided in three levels: Full Members (i.e. Industrial Members, Scientific Members and Individual Members). Also observers - previously defined as Associate Members – can participate to the work of the Association without voting rights.

All the full members of the EABA are located or have relevant activities in Europe, i.e. in the European Union, or in a country candidate to become a part of the European Union, including the EEE and Israel.

1) Scientific Members

The Scientific Members of EABA are non-profit research institutes, universities, research and academic centres active in the geographical areas defined above, with proven scientific activities, interest and/or publications in the field of algae biomass. Similar scientific legal entities coming from countries outside Europe –as defined above – can become Scientific Observers within the Association.

2) Industrial Members

The Industrial Members of EABA are companies, pilot projects, algae-biomass technology providers, research groups and final users as the case may be, that are able to produce or contribute to produce,

transform or use algae biomass in Europe – as defined above. European companies or legal entities that have already established precise plans of investment in view of producing or transforming or using algae biomass at industrial level can also become Industrial Members.

Similar industrial legal entities coming from countries outside Europe –as defined above – can become Industrial Observers within the Association.

3) Individual Members

Individuals (e.g. individual research fellows) with proven interest in the development of the algae biomass research and industry can become individual members.

4) Observers

Can become EABA Observers sectoral associations, consultancies, traders, trade associations, investors that are active in the field of algae biomass in general can become Observers all the legal entities or individuals that because of their geographical situation outside Europe cannot become full Members of the Association.

5) Sponsors

Any EABA Member or observer can become Sponsor of the Association. Sponsor status is reserved to Members which voluntarily support an extraordinary contribution whose minimum level is fixed by the Steering Committee every year.

New Members - Only those legal entities or individual companies satisfying all the criteria specified above can become a new member of the EABA. The Steering Board analyses and decides on new membership of EABA.

Up to June 2010, the list of the members includes 33 industrial organizations, 24 scientific ones, 11 individuals, 1 observer and 6 candidate members.

<u>INDUSTRIAL</u>		<u>SCIENTIFIC</u>	
ORGANIZATION	NATION	ORGANIZATION	NATION
3Biofuels	Germany	A&FB.V.(Wageningen UR)	The Netherlands
A4F Algafuelsa	Portugal	Ben – GurionUniversity	Israel
AlgaeLink N.V.	The Netherlands	BirminghamCityUniversity	UK
Algasol Renewables	Spain	CREAR – University of Florence	Italy
AlgoSource Technologies	France	CEA/CNRS	France
ArchimedeRicerche	Italy	CIRAD	France
BDI – Biodiesel International AG	Austria	DIBA – Universityt of Florence	Italy
BIOBAS – Biocarburantes Bahia de Santander	Spain	ECN – Energy Center Netherlands	The Netherlands
Bio-OilsEnergy	Spain	Fundacion Leia C.D.T.	Spain
Biovalue	The Netherlands	IFREMER	France
Deutsche Lufthansa	Germany	INASMET – Tecnalia	Spain
Ecoduna	Austria	Instituto de Bioquimica Vegetal y Fontosintesis	spain
ECO- Solution	France	IRI UL	Slovenia
ElinBiofuels	Greece	ISE – CNR	Italy

ENEL	Italy	Jacobs University Bremen	Germany
EBB	Belgium	Marche Polytechnic University	Italy
Fermentalg sa	France	Norwegian University of Life Sciences	Norway
Fotosintetica&Microbiologica	Italy	Scottish Association For Marine Science	UK
Greensea SAS	France	University of Almeria	Spain
Horvath Mr., György	Belgium	University of Ghent	Belgium
Infinita Renovables	Spain	University of Greenwich	UK
Microlife Srl	Italy	University of Padova	Italy
Microphyt	France	VITO	Belgium
Necton	Portugal	Wageningen UR	The Netherlands
Neste Oil Corporation	Finland	<u>INDIVIDUAL</u>	
Oceana	Ireland	Dr. Barbato Fabio	Italy
Oxem SPA	Italy	Dr. Benemann John	USA
PetroAlgae	USA	Mr. Best Gustavo	Italy/Mexico
Proviron Holding NV	Belgium	Mr. Bonapace Ian Marco	Italy
Respol	Spain	Dr. Carvalho Renato	Portugal
Roquette Frères	France	Dra. De Palol Asuncion	Portugal
SBAE – Industries	Belgium	Mr. Fornasari Franco	USA
Varicon Aqua Solutions Ltd	UK	Dr. Mingazzini Marina	Italy
<u>OBSERVER</u>		Dr. Plank Josef	Austria
James Cook University	Austria	Mr. Rein	Slovenia
		Dr. Vannozzi Gian Paolo	Italy

Figure 16 - Members of EABA

3.4.3 Raising awareness on EABA

Due to the nature of EABA, which is an association which would include the main organizations working in the sector of the biofuels, the dissemination activities are really relevant. For that reason the dissemination strategy developed since the beginning different tools of external communication, which includes:

- a logo,
- the website,
- the brochure,
- participations at European and world wide events, and
- press releases.

The Logo - Since the beginning it was necessary to design a Logo which could make recognizable the association and which could give to it visibility. It was choose a Logo which is composed by the acronym written in capital letters, in order to make the name of the association more memorable, with below the full name of the association. Background to the written some green and blue spots recall the substance of a lipid fluid. The colours chosen for that Logo recalls the colours of AquaFUELS, giving a kind of continuity between the works of the two organizations.



Figure17 - EABA Logo

The website - The website <http://eaba-association.eu> presents the association in a very clear and detailed way.



Figure 18 - Home page of the EABA website

The Home page contains a brief description of the Associations and a list of its objectives. There are also links to the Questionnaire and to the purpose of the questionnaire itself.

From the home page is it possible to access to a page containing the list of all the members of the association, and to a page listing the events at which the EABA participated giving presentations about the activities of the association. Moreover, the home page contains the links to a press release page, and to the main studies in which the association is involved through its activists of research.

The website contains also a page with the legislation, in which it is possible to download the directive of the European Parliament and of the Council, and a page with the links to the main organizations involved in the association.

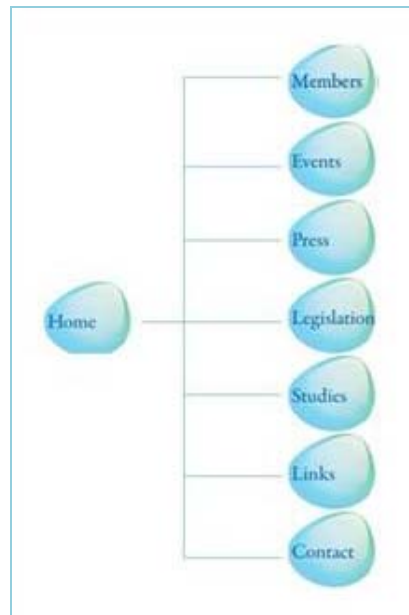


Figure 19 - Structure of EABA website

The home page contains also a link to the applications from both for companies and universities and for individuals.

The EABA website contains also a **restricted area**, in which only registered users can log in through a password.

The brochure – Thanks to the importance given to dissemination by EABA, a brochure was design in order to give visibility to the association. The brochure contains a clear description of the association and its aims, focusing on its scope and objectives, on the members of the association and describing the importance of algae biomass in the production of biofuels.

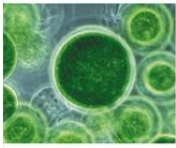
The brochure can be downloaded from the home page of the website.



Figure 20 - Front page of EABA brochure

ALGAE BIOMASS : TOWARDS A SUSTAINABLE FUTURE

EABA SCOPE AND OBJECTIVES



The main target of EABA will be to act as a catalyst for fostering synergies among scientists, industrialists and decision makers in order to promote the development of research, technology and industrial capacities in the field of algae.

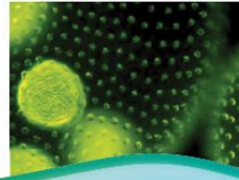
In this perspective the Association intends to create a basis for:

- Establishing a permanent liaison with EU and EU Member States' Institutions
- Defining and expressing a common position on EU and international issues (legislation, product specifications, trade and sustainability standards, etc.), acting as a technology neutral platform
- Supporting the structuring and planning of research and industrial development on algae, fostering scientific and industrial interchange as well as responsibility
- Promoting investment in algae based technologies and making algae research and industry alive in the public debate
- Spreading responsible and sound information and verified scientific data
- Studying together the solution to problems (technical, economic, environmental) that limit algae exploitation

WHY ALGAE BIOMASS ?

Algae and aquatic biomass have the potential to contribute to outstanding progresses towards a world-wide sustainable and low impact economy in developing a new range of third generation applications as bioenergy, biofuels (including jet fuels), animal feeding-stuff, various kinds of bio-based products (bio-plastics, bio-cosmetics, bio-solvents, etc.) and also human nutrition. Algae and aquatic biomass are one of the most promising renewable sources for a wide range of final low-carbon applications, representing an important potential asset in order to:

- Further reduce GHGs emissions from transport and fuels and improve production sustainability (building on the experience of present biofuels technologies)
- Improve the sustainability of the bioenergy production chain
- Strengthen the EU independence and security of energy supply
- Promote and exploit technological excellence (bio-refinery concept)
- Reduce the European vegetable protein deficit



EABA MEMBERSHIPS

The EABA gathers today 70 members among companies, universities, research centres and associations, which are associated as industrial, scientific and individual members: the companies BDI-Biodiesel International AG and Ecoduna in Austria, the companies SBAE Industries and Proviton, the Association EBB-European Biodiesel Board, and the University of Ghent in Belgium, the company Neste Oil in Finland, the companies AlgoSource Technologies, ECO-Solution, Fermentalg, Roquette, the research centres IFREMER and CEA-CNRS in France, the companies 3B Biofuels and Deutsche Lufthansa in Germany, the company Oceana Ltd. in Ireland, the Ben-Gurion University, Microalgal Biotechnology Laboratory (Prof. Bousiba), in Israel, the University of Florence, Dipartimento di Biotecnologie Agrarie (Prof. Tredici), the University of Padova and the Marche Polytechnic University, the research centre CNR-ISE, the companies Archimede Ricerche, MicroLife Srl and Ozem in Italy, the Wageningen University (Prof. De:it RH Wijffels), the research centre ECN and the company AlgaeLink N.V. in the Netherlands, the companies Necton SA and AlgaFuel in Portugal, the University of Almeria (Prof. Molina Grima), the University of Seville, the research centre Inasmet-Tecnalia, the companies Algasol Renewables, Biocarburantes de Santander, Bio-Oils Energy and Infinita Renovables in Spain, the University of Greenwich and the Scottish Association for Marine Science, the company Varicon Aqua Solutions Ltd. In the UK, the company Petroalgae in the US, the James Cook University in Australia, among others.

WWW.EABA-ASSOCIATION.EU

Figure23- Back page of EABA brochure

Participations at European and world wide events –In order to promote its activities, the EABA association was presents at some conference and events all across the Europe and even all across the world. Such events are listed in the table below.

DATE	EUROPEAN EVENT
January 26-27, 2010	Energy from Biomass and Waste London, UK
February 9-11, 2010	Energy from Biomass and Waste London, UK
March 3-5, 2010	FO Licht's 3rd Annual Developing and Commercialising NEXT GENERATION BIOFUELS (DEVELOPING ALGAL BIOFUELS , Pre-Conference Seminar) London, UK
March 12-13, 2010	World Sustainable Energy Days 2010 Wels, Austria
March 15-17, 2010	Biomass Power & Trade Rotterdam, The Netherlands
April. 20-22, 2010	World Biofuels Markets (Algae Fuels Forum) Amsterdam, The Netherlands
May 3-7, 2010	International Biomass Valorisation Congress Amsterdam, The Netherlands

DATE	WORLD EVENT
May 5-6, 2010	18th European Biomass Conference and exhibition: “From Research to industry and Markets” Lyon, France
May 13-14, 2010	Forestry, Biomass and Sustainability London, UK
May 19-20, 2010	World Biofuels 2010 Seville, Spain
October 26-28	Biotech 2010 Milan, Italy
January 18-20, 2010	New Frontiers in Biofuels New Delhi, India
January 26-27, 2010	Energy from Biomass and Waste London, UK
Apr. 12-13, 2010	Algae Biofuel Workshop New Delhi, India
May 4-6, 2010	International Biomass Conference & Expo Minneapolis, US
Jun. 14, 2010	Advanced Biofuels Workshops Saint-Louis, Missouri, USA

Figure 22 - Events at which EABA was present

Press release – The dissemination strategy of EABA provided to develop the external communication also via press. This activity was really effective and highly developed, and is it possible to see from the page dedicate to the press release in the web site, which lists all the publications since May 2008. All the publications are listed in the table below.

The more recent publications are directly related to EABA, while the most of them are related to the world of the biofuels and algae sector.

DATE	PRESS RELEASE
2010 February 23	Putting In A Good Word For Algae (NYT)
2010 February 23	Algae Biofuels' Positive Carbon Footprint (EABA) ★
2009 June 15	European Body Sees Reasonable Chance For Algae Power (Reuters)
2009 June 10	European Algae Biomass Association launched (Renewable Energy News)
2009 June 9	ECO - ENERGIA - NATA LOBBY ALGHE PER FARE RINNOVABILI (ANSA)
2009 June 5	The Creation Of EABA - The European Algae Biomass Association (EABA) ★
2009 June	Las Algas Cuentan Ya Con Una Asociación Europea Para Fomentar Su Uso Energético (EnergiasRenovable)
2009 June	EU Forms Algae group, Plans First Conference (Biodiesel Magazine)
2009 May 19	PetroAlgae Opens D.C. Office (Washington Business Journal)

2009 May 15	Algae Biomass Producers Organise	<i>(Europolitics)</i>
2009 May 14	EU And Scientists To Meet For First Algae Bbiomass Conference	<i>(DEA Direct)</i>
2009 May 14	EU To launch European Algae Biomass Association	<i>(Check Biotech)</i>
2009 May 4	Greenpeace: Biodiesel Not Seen As Significant Driver In Amazon Deforestation	<i>(Biodiesel Magazine)</i>
2009 April 28	Saline Waste Water Found Perfect For Algae	<i>(Biodiesel Magazine)</i>
2009 April 28	Interview On Algae By BioFPR With EBB Secretary General <i>(Right click to download the .mp3 file)</i>	<i>(BioFPR)</i>
2009 April 23	PetroAlgae To Build Plants In China, Taiwan And Japan	<i>(F.O.Licht)</i>
2009 April 8	EU finances BioMara: biofuel produced from algae	<i>(BioMara)</i>
2009 March 16	PetroAlgae Présentera Sa Vision De Commercialisation Des Biocarburants De Prochaine Génération Au World BiofuelsMarkets 09	<i>(PR Newswire)</i>
2009 February 26	Algae A Credible Frontrunner As Source For Biofuels	<i>(MidWestAGNet)</i>
2009 February 25	New Growing Technology Set To Increase Algae Yields	<i>(Biofuel Review)</i>
2009 February 24	Dans Le Noir, Les Micro-algues Mangent Du Sucre	<i>(UsineNouvelle)</i>
2008 December	Production, Infrastructure, Usage Grow Worldwide	<i>(Biodiesel Magazine)</i>
2008 December	Biofuel From Algae Market Potentia	<i>(Energy Business Report)</i>
2008 November	UK To Fund Commercialization Of Algae Oil Production	<i>(Biodiesel Magazine)</i>
2008 November	Various International Biodiesel Projects Underway	<i>(Biodiesel Magazine)</i>
2008 October 23	UK Announces World's Largest Algal Biofuel Project	<i>(The Guardian)</i>
2008 October 23	Des Microalgues Pour Les Biocarburants Du Futur	<i>(Le Monde)</i>
2008 August	Algae: Biofuel Of The Future?	<i>(Science Daily)</i>
2008 July 16	Airline Crisis Boosts Biofuel Drive	<i>(Reuters)</i>
2008 July 13	Aviation Industry Examines Alternative Fuels	<i>(International Herald Tribune)</i>
2008 June 31	Algae Grows Around The Globe	<i>(Biodiesel Magazine)</i>
2008 June 30	New Wave In Energy: Turning Algae To Oil	<i>(International Herald Tribune)</i>
2008 June 23	Japan Airlines Plans Asia's First Biofuel Flight	<i>(Reuters)</i>
2008 June 23	Irish Scientists Probe Seaweed Power	<i>(AFP)</i>

Figure 23 - List of publications

Annex I: The internal mailing list

The internal mailing list

Beneficiary name	Contact Person	Telephone	Email
European Biodiesel Board (EBB)	Mr. Raffaello Garofalo Mr. Pierre-Antoine Vernon	+32 2 763 24 77 +32 2 763 24 77	ebb@ebb-eu.org pav@ebb-eu.org
Università degli Studi di Firenze (UNIFI)	Prof. Mario Tredici Dr. Natascia Biondi Dr. Liliana Rodolfi	+39 055 32 88 306 +39 055 32 88 480 +39 339 57 84 069	mario.tredici@unifi.it natascia.biondi@unifi.it liliana.rodolfi@unifi.it
Diester Industrie International (DI)	Mr. Jean-François Rous Mrs. Kristell Guizouarn	+33 1 40 69 48 00 +33 1 40 69 48 83	j.rous@prolea.com k.guizouarn@prolea.com
Wageningen Universiteit (WU)	Prof. René Wijffels Dr. René Streefland Ms. Marjon Van Es	+31 317 48 29 54 +31 317 48 12 08	rene.wijffels@wur.nl mathieu.streefland@wur.nl marjon.vanes@wur.nl
Ben-Gurion University (BGU)	Prof. Sammy Boussiba Dr. Stefan Leu	+972 8 659 67 95 +972 5 2306 76 85	sammy@bgu.ac.il stefanleu3@gmail.com
Almeria University (UAL)	Prof. Emilio Molina-Grima Prof. F. Gabriel Acien	+34 950 015 032 +34 950 015 443	emolina@ual.es facien@ual.es
Roquette Frères (RF)	Dr. Frédéric Bouvier	+ 33 3 21 63 37 15	frederic.bouvier@roquette.com
Irish Seaweed Center (ISC)	Dr. Benoît Queguineur	+353 91 49 39 64	benoit.queguineur@nuigalway.ie
University of Gent (UGENT)	Prof. Patrick Sorgeloos Dr. Annick Verween Dr. Griet Casteleyn	+32 9 264 37 54 +32 9 264 85 42 +32 9 264 85 42	patrick.sorgeloos@ugent.be annick.verween@ugent.be griet.casteleyn@ugent.be
Necton – Algafuel (NE)	Dr. Vitor Verdleho Vieira Dr. Nuno Coelho	+351 937 300 700 +351 289 703 961	vvv@algafuel.pt nuno.coelho@algafuel.pt
Imperial College (IMPERIAL)	Dr. Raphael Slade Mr. Dongxu Xu	+ 44 20 7594 7306	raphael.slade@imperial.ac.uk dong.xu09@imperial.ac.uk
Institute of Microbiology, ASCRe (IMIC)	Dr. VilemZachleder Dr. KateřinaBišova Dr. TomášBrányik	+420 384 340 480 +420 384 340 485 + 420 220 444 126	zachleder@alga.cz bisova@alga.cz tomas.branyik@vscht.cz
Laura Martinelli (LM)	Mrs. Laura Martinelli Mrs. Roberta Modolo	+39 0432 575 227 +39 0432 575 227	l.martinelli@lauramartinelli.eu r.modolo@lauramartinelli.eu

Annex II: The questionnaire structure

EBB
European Biodiesel Board

Boulevard Saint Michel, 34 - 1040 Bruxelles
Tel: +32 (0)2 763 24 77 - Fax: +32 (0)2 763 04 57
E-mail: info@ebb-eu.org - Website: www.ebb-eu.org



Ref: 92/MIS/10

17/4/2010

WHO'S WHO SURVEY QUESTIONNAIRE – Part 1

Please fill in the blanks (preferably using "insert" Word format)
where and if appropriate (your answer can exceed one page)

Pls insert here your
LOGO

then please SEND IT BACK TO: eba@eaba-association.eu or to fax +32 2 7630457

NAME

(name of your company, institution or personal name in case of individuals)

ADDRESS: City and Postcode Country
.....

Phone Fax

email.....Website.....

**Facultative line: n. of employees- active people in algae activity: Tot company-institution annual turnover(€):

Contact person1: position:

email.....phone:.....

Contact person2: position: email.....phone:

Please qualify yourself- for companies-institutions - (cross one of the two options): profit non-profit

Please further qualify yourself (cross): industry academia and/or research individual technology provider

General description: (please provide a general description of your activities and/or your interest on algae biomass):

.....
.....
.....
.....
.....

Main interests: 1.

(or **main** **focus**2.

ALGAE BIOMASS PRODUCTION and/or RESEARCH

- if production: *pls specify - installed production capacity (tonnes/year) as from (month, year).....*

- if project: *pls specify - projected production capacity (tonnes/y) project to start (month, year).....*

- if laboratory or pilot(s) *pls describe:*

pilot1

pilot 2 pilot 3:

Final use of the products (specify kind of -intended?-feeding, aquaculture, energy, cosmetics, nutraceuticals, others...)

1.

2.

3.....

4.....

5..... 6.....

ALGAE STRAINS produced and/or researched upon – including micro and macro and seaweeds *please list the main ones:*

1. 2. 3. 4. 5.
6. 7. 8. 9. 10.

Eventual work on metabolism and/or on genes *pls describe:*
.....
.....

TECHNOLOGY employed, researched or provided – in case of technology providers

Kind of technology and/or processing *cross:* Bioreactors Open ponds: Others

additional information:

Other processing and/or technology and/or materials specialisation: *pls describe*
.....
.....
.....

RESEARCH PROJECT INVOLVEMENT (International, EU, national) *pls specify project name and website:*

1. 2.
3. 4.
5. 6.

I hereby accept and acknowledge that the attached information can be used for public and publication purposes.

Name: *Date:* *Signature:*

EBB
European Biodiesel Board
Boulevard Saint Michel, 34 - 1040 Bruxelles
Tel: +32 (0)2 763 24 77 - Fax: +32 (0)2 763 04 57
E-mail: info@ebb-eu.org - Website: www.ebb-eu.org



EABA
EUROPEAN ALGAE BIOMASS ASSOCIATION



AQUAFUELS
ALGAE TOWARDS BIOFUELS

Ref: /MIS/09

17/4/2010

WHO'S WHO SURVEY QUESTIONNAIRE

Part 2 – DETAILED QUESTIONNAIRE PAGES

If your time schedule is tight you can limit your answers to the questions of part 1 (only page 1) of this questionnaire. However should you have more time, your answers to the question detailed in the next pages will be extremely helpful. If you prefer you can eventually send your answers to part 2 at a later stage. Contrary to part 1 you can ask that information provided by you remains confidential. You can skip parts for which you do not have an answer, please note however that asterisked (**) parties are MANDATORY.

**THE TERMS ALGAE BELOW REFERS TO ALL KIND OF MICRO, MACRO ALGAE AND SEAWEEDES
AND AQUATIC BIOMASS (rivers, lakes, etc.)**

*Please fill in the blanks (preferably using "insert" Word format)
where and if appropriate*

then pls SEND IT BACK TO: eaba@eaba-association.eu or by fax to +32 2 7630457

NAME

(name of your company, institution or personal name in case of individuals)

*Contact person: position:
email.....phone:.....*

**** HOW LONG HAVE YOU BEEN ACTIVE IN THE ALGAE SECTOR?**

Number of years:

Field of activity: *(research, industrial develop., food related issues, aquaculture, feed, investment, technology provider, etc. etc.)*

Area(s) of your activities

(cross): Europe US-Canada Asia Africa Middle-East South America Oceania

YOUR PERSPECTIVES OF INTEREST IN THE ALGAE BIOMASS SECTOR

Are you broadly interested to the algae sector or your interest related to one or two specific areas?

Pls cross: Broad interest Specific interest in one or two areas

Please state in a few words what is your perspective of interest in algae biomass:

Are you *(pls cross)* AN END USER (eventually also a potential one) OF ALGAL PRODUCTS

A PRODUCER AN INTERMEDIARY PROCESSOR a RESEACHER

In the above perspective **which kind of end uses** are you targeting?: *(biofuels, aviation biofuels, feed, algae oil, aquaculture, food, pharma, nutraceuticals, CCS, water management, electricity generation, fertiliser, etc. ..)*

Pls specify and rank them:

1.

- 2.
- 3.
- 4.
- ...

Animal feeding end uses:

please provide here a detailed list of the major species of algae that you employ (or plan to employ) for the production of animal feeding – this answer is very important for feed since the overall results will be used to indicate in the next weeks to the EC Commission the major (micro and macro)algae species to be listed in the Community Catalogue of Feed Materials (implementing art. 24 of EC Regulation 767/2009):

-
-
-
-
- ...

Aquaculture end uses:

please provide here a detailed list of the major species of algae that you use (or plan to) use for aquaculture pls also detail the specific use:

-
-
-
-

LIQUID BIOFUELS PRODUCTION PROCESSES and END USES

Targeted biofuel: (*biodiesel, hydro-treated diesel, BTL, bioethanol, biogas, others, ...*)

Pls specify:

-Biofuel:	Production	process:
.....		
-Biofuel:	Production	process:
.....		
-Biofuel:	Production	process:
.....		
-Biofuel:	Production	process:
.....		

Reason(s) for which the above biofuel(s) has(ve) been targeted (*pls specify*):

Main co-product foreseen and targeted use(s):

<u>Co-product:</u>	<u>% of dry biomass:</u> ...	<u>Targeted use(s)</u>
.....		
<u>Co-product:</u>	<u>% of dry biomass:</u> ...	<u>Targeted use(s)</u>
.....		
<u>Co-product:</u>	<u>% of dry biomass:</u> ...	<u>Targeted use(s)</u>
.....		
<u>Co-product:</u>	<u>% of dry biomass:</u> ...	<u>Targeted use(s)</u>
.....		

SUSTAINABILITY AND ENERGY BALANCE OF ALGAE BIOFUELS PRODUCTION

Please provide eventual reference of known works already performed on algae biomass and biofuels sustainability

.....

Please provide eventual of individuals/ institutions working on algae biofuels LCA and sustainability

.....

Energy balance of algae to biofuels production chains:

Have you ever measured what is the algae energy balance of the algae you are eventually producing?

.....

If yes what was the result?

.....

**** STAKEHOLDERS: please SEND US YOUR LIST OF CONTACTS – MAJOR STAKEHOLDERS IN YOUR REGION**

In order to make this survey as complete as possible your contribution is very welcome, thanks in advance to forward this questionnaire to your main and regional contacts and also **thanks to indicate us:**

1. the main stakeholders you are in touch with (at international level) in the algae sector
2. the stakeholders directly or indirectly involved in algae (also minor) present in your region

You can send such a list by separate mail or you can also send us an email with eventually your ready made contact lists or surveys (you do not need to change their format) which you may have available in your computer to the following address:

eaba@eaba-association.eu

Alternatively, if they are only a few you can list them here:

-
-
-
-
- ...

R&D PATWAYS AND RESEARCH PROJECTS

What is your investment level per year over the next 10 years on algae? (*also approxin €*):

Main technology challenges for algae development: pls list and rank them:

- 1.
- 2.
- 3.
- 4.
- 5.
- ...

Research project in which you/ your company–institution is/was involved

Please list them also adding the name and reference web–site (only eventually a comment)

- 1.
- 2.
- 3.
- 4.
- 5.

...

BIOLOGY OF ALGAE and ALGAE STRAINS (facultative)

General description of major divisions and classes.

Please select and rank main classes and families of algae that you research on and please also detail (if info available) what could be the realistic productivity per ha on large scale production pr each strain:

1. expected productivity of dry biomass tonnes/ha: ...
2. expected productivity of dry biomass tonnes/ha: ...
3. expected productivity of dry biomass tonnes/ha: ...
4. expected productivity of dry biomass tonnes/ha: ...
5. expected productivity of dry biomass tonnes/ha: ...

...

Please describe (eventually) multiplication and reproduction strategies:

BIOTECHNOLOGY

Please indicate the kind of technology that you employ/research on or plan to employ in terms of:

Culture media: *examples – main artificial (synthetic media for marine, saline or freshwater species); natural (media based on (freshwater, seawater or wastewaters); complex (media of non fully known composition for specific algae species), others ...*

-
-
...

Cultivation methods:*examples –batch, semicontinuous and continuous cultivation methods,others ...*

-
-
...

Production systems:*examples – a) laboratory, b) pilot c) demonstration, and industrial systems; a) photobioreactors, b) ponds, c) tanks, d) lagoons,others ...*

-
-
...

Harvesting methods *examples – (i) Centrifugation, Filtration, Flocculation, Sedimentation (microalgae) (ii) manual or mechanical,others ...*

-
-
...

Biomass processing*examples – (i) dewatering (ii) extraction (oil, carbohydrates, proteins),others ...*

-
-
...

Do you plan or focus algae genetic modifications GMOs or natural selection and reproduction?

.....

Please detail eventual scaling up problems or limitations for any of the above specific steps:

-
-
- ...

CRITERIA FOR STRAIN SELECTION

Please select the criteria for strain selection according to the order of importance:

- *Robustness*
- *Productivity under natural conditions*
- *Chemical composition*
- *Harvestability*
- *Growth on wastewaters and flue gases*
- *Biofuels yields*
- *High growth rate, high temperature and CO2 concentration tolerance*
- *Starch, oil or protein content*
- *Others*

MAPPING OF AVAILABLE RESOURCES

What is the number of available production sites for algae biomass production?

- *In Europe:*
- *In Northern Africa:*
- *Worldwide:*
- *Other regions:*

What is in your view their potential cumulate extension?

ha

What is the biomass volume potential of natural blooms in your region?

.....

Other comments on available resources, their opportunities and limitations:

.....

Is there an estimate of marine surfaces in which macro-algae are grown? If yes pls provide reference studies also on the potential of such marine surfaces:

.....

Is the interaction with off-shore wind farms possible?

.....

**** EABA (EUROPEAN ALGAE BIOMASS ASSOCIATION) STRATEGIES AND ACTIVITIES**

(For more info visit www.eaba-association.eu)

What do you expect from EABA, what should be its role and its focuses? *pls describe:*

.....

Interest in participation to EABA activities/ membership:

- yes, general interest
- yes, please contact me detailing membership conditions

**** PARTICIPATION TO AQUAFUELS Project ACTIVITIES (18 months)**

(For more info visit www.aquafuels.eu)

Next Autumn an **AquaFUELS Round Table** among major stakeholders will be organised the objective of the roundtable will be to promote critical thinking and reasoning on actual state of the art of research, development, and industrial initiatives in EU and outside with particular reference to technological and non barriers, economical, environmental and social implications of algae biofuels.

Are you interested in taking part to this Round Table? *yes, as auditor* *yes, as speaker* *no*

Within the AquaFUELS project an Expert Group (EG) is being selected, its members have been and are being selected based on their expertise among internationally recognized organizations worldwide distributed (from EU, to US and Japan). They will actively participate to the validation of AquaFUELS conclusions and documents

Do you intend to express a qualified interest in taking part to AquaFUELS Expert Group? *yes* *no*

PUBLICITY OF YOUR ANSWERS to PART 2 of this Questionnaire: PLEASE CHOSE AN OPTION AND SIGN:

OPTION 1

I hereby accept and acknowledge that the attached information can be used for public and publication purposes.

OPTION 2

I prefer that my answers to part 2 of this questionnaire remain confidential (Internal AquaFUELS project use), they can only be used in order to feed general statistics where the name of my company/institution will not figure information can be used for public and publication purposes. Part 1 is public.

Company/Institution:

Name: ***Date:*** ***Signature:***