

Advanced Sustainable BIOfuels for Aviation

Deliverable D6.3: Preliminary Plan for Exploitation and Dissemination of Results

Consortium:

Acronym	Legal entity	Role
RE-CORD	CONSORZIO PER LA RICERCA E LA DIMOSTRAZIONE SULLE ENERGIE RINNOVABILI	CO
TRC	TOTAL RAFFINAGE CHIMIE SA	BEN
SKYNRG	SKYENERGY BV	BEN
CENER	FUNDACION CENER-CIEMAT	BEN
ETA	ETA – Energia, Trasporti, Agricoltura Srl	BEN
CCE	CAMELINA COMPANY ESPANA S.L.	BEN
JRC	JOINT RESEARCH CENTRE – EUROPEAN COMMISSION	BEN

CO...Coordinator, BEN...Beneficiary

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Document Type

PRO	Technical/economic progress report (internal work package reports indicating work status)	X
DEL	Technical reports identified as deliverables in the Description of Work	
MoM	Minutes of Meeting	
MAN	Procedures and user manuals	
WOR	Working document, issued as preparatory documents to a Technical report	
INF	Information and Notes	

Dissemination Level

PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	
CON	Confidential, only for members of the Consortium	

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6	Conclusions	Errore. Il segnalibro non è definito.
7	Bibliography/References	Errore. Il segnalibro non è definito.

1 Summary

The **Preliminary Plan for the Exploitation and Dissemination of Results (PEDR)** is a strategic document for setting the impact pathway of BIO4A since the project beginning. This preliminary PEDR is based on a **Dissemination Plan**, integrated by a **Communication Strategy**, describing which will be the most efficient dissemination measures to be implemented with reference to specific targeted audience and strategic project results. A preliminary reference to BIO4A Exploitation Plan, on making BIO4A results exploitable for commercial purposes (connection measures to WP5 on market analysis, business plan and commercialisation strategy) and public policymaking (inputs for public authorities and standardization bodies) is included.

2 Introduction

This report contains the BIO4A *Preliminary Plan for the Exploitation and Dissemination of Results & related annexes (PEDR, in short) (D6.3)*, which has been designed as a **practical guideline for efficiently implementing communication and dissemination activities at project level**. The goal of the document is twofold:

- supporting the achievement of the project objectives;
- facilitating and supporting the measures for the exploitation of project results.

As foreseen in *WP6 – Management, Dissemination, Exploitation & IP*, the final aim of this PEDR is to ensure the widest possible impact of the project in terms of activities delivering results which can be considered as a consistent basis for further R&D strategies in the near future.

The plan is the result of a **coordinated effort among partners**, considering stakeholders' categories and needs as well as partners' communication channels and tools. In this sense, it is a supporting tool for each partner in maximizing the impact of their own dissemination actions while providing means to ensure high visibility of activities and outcomes of the project as a whole.

The active involvement of stakeholders and target groups is one among the key success factors for BIO4A project. This plan proposes a list of suitable dissemination tools and activities for engaging the target groups in the project. To this end, a **multi-step and multi-channel dissemination strategy** is proposed in order to maximize the impact of the dissemination activities, adjusting the materials and tools to the specific needs, interests and potential for involvement of the target audience.

The consortium considers this plan as a **living document**, reflecting an open, ongoing dialogue with potential users and related networks during the project, in order to be inclusive and to ensure the best possible results.

3 Dissemination scopes and objectives

3.1 Strategy and scope

The BIO4A D6.3 PEDR is a plan designed according to strategies and activities aimed at Communication, Dissemination and Exploitation, which the EC defines as follows:

- **Communication** means taking strategic and targeted measures for promoting the action itself and its results to a multitude of audiences, including the media and the public, and possibly engaging in a two-way exchange. The aim is to reach out to society as a whole and in particular to some specific audiences while demonstrating how EU funding contributes to tackling societal challenges;
- **Dissemination** is the public disclosure of the results of the project in any medium. It is a process of promotion and awareness-raising right from the beginning of a project. It makes research results known to various stakeholder groups in a targeted way, to enable them to use the results in their own work;
- **Exploitation** is the use of results for commercial purposes, in public policymaking and in any other way in the society.

Communication, Dissemination and Exploitation are also strategic for supporting the project on *WP5 – Market scaling strategy*. Only a coordinated plan of the activities under these 3 areas can guarantee a significative impact of the project at national and European level. In this regard, it should be noted that **all partners** will play an active role in the project dissemination activities of the project, and that ETA will act as consortium facilitator of the activities time-plan, materials to be prepared and events planned.

Such activities will take place at 2 levels:

- **at regional/national level**, in the 5 Member States where BIO4A will carry out activities of research, development and innovation under WP1-WP5: Italy, France, The Netherlands, Spain, Belgium;
- **at EU level**, outreaching the whole of the scientific, technology, industry communities, final end-users and beneficiaries of BIO4A results. Outreach of these target groups will mainly take place through existing policy and technology platforms (e.g. ART Fuel Forum, ETIP Bioenergy, etc.), stakeholders events and by networking with other related projects and international initiatives (e.g. carried out by IRENA, IEA, ICAO) and/or decision makers.

The active involvement of stakeholders and target groups is one among the main success factors of the BIO4A project and its market scale-up in the European market, already during the project implementation. Indeed, the project intends to reach a challenging but realistic objective, such as enabling the large-scale pre-commercial production of ASTM-certified aviation biofuel from sustainable feedstock in the EU. The wide scope of the project is to develop additional production capacity by 200-300kton biojet per year in the European Union and investigate long-term opportunities to supply sustainable no-food lipids for conversion in low- iLUC biofuels (as per REDII). Hence, BIO4A will demonstrate the full value chain, producing commercial-scale volumes of ASTM certified biojet (HEFA) at competitive prices, as the main way to establish a production capacity that can be further exploited after the end of the project.

The project specific objectives are summarised as follows:

#	Objectives
1	Developing EU additional production capacity of biojet by retrofitting the existing oil refinery (based in La Mède, Marseille, FR)
2	Producing at least 5kt of HEFA biojet within BIO4A , and use at high blend level compared to previous (FP7-ITAKA) projects, aiming at 50% blend
3	Addressing the full “fuel” value chain , from sustainable feedstock supply to conversion, distribution and end-use; fuel will be supplied through the airport’s standard

	infrastructures and commercial flights will be scheduled through a specific off-take agreement with multiple European airlines.
4	Supplying sustainable waste-streams (such as UCO and residual lipids) as feedstock for industrial biofuel production.
5	Performing an R&D work on deploying EU MED marginal land by soil improvement and new drought resistant no-food oil crop (Camelina) cultivation, complemented by an assessment of the potential in the EU MED region and internationally, as well as by a scenario development.
6	Delivering a full value chain Sustainability and LCA assessment. Significant GHG reductions will be achieved – in the <i>short term</i> - by using UCO for biojet production, as well as – in the <i>long term</i> – by exploiting the potential of EU MED marginal soils which resilience to Climate Change has been increased.
7	Development of a thorough business case analysis for the design of suitable, effective and attractive market strategies based on real trading experiences in the aviation industry.

The D6.3 – PEDR will support the consortium in the entire project-life, while being flexible to adapt to the requirements of the three interrelated and concurrent phases that will inform the dissemination and exploitation activities of the project:

- the **1st phase [M0-M12]** involves the design and production of BIO4A tools and instruments for dissemination, including the project website, social media and communication materials. The objective here is to **provide information on the existence of this novel project** among main target groups and **triggering interest while giving information** on the early activities, challenges and upcoming R&D results. Stakeholders will be kept informed about the state-of-play and the developments in the activities planned;
- the **2nd phase [M12-M24]** is dealing with **starting a two-way dialogue with stakeholders** (primary target groups, potential users and multipliers) and **establishing consistent connections** from that moment on and beyond the project's end;
- the **3rd phase [M25-M48]** involves **higher visibility BIO4A events**, in order to enable **stakeholders to participate**, and to **exchange experiences with their counterparts** from other organisations and the wider community involved in the domain. All communications will be under the project's guidance as to priorities and recommendations coming from BIO4A consortium in accordance with their respective stakeholders. These activities will be carried out during year 3 and 4, **paving the way for the project scale-up**. All tools and materials set up at the project outset will be kept updated during the second and third phases. Additional materials will be foreseen as well (e.g. technical factsheets for promoting the project at scientific conferences, technical workshops and market events across Europe; new videos with focus on specific processes; etc.). This is important to support technical and market stages of the project, underlining project results and implemented capabilities, with the most feasible tools (both digital and material ones).

3.2 The communication and dissemination process and responsibilities

The “getting started” stage at communication and dissemination level coincided with the set-up of the project coordination and decision-making structures, milestones and activities at plenary level and under the management of the Project Coordinator and the supervision of the Advisory Board (AB).

The process

Once the project implementation is fully started, the scientific and technological tasks have taken place along with first communication measures (visual identity) and preparation of preliminary dissemination materials (project roll-up, leaflet, poster; articles and newsletters; project presentations at national/EU events); here impact activities have been facilitated also by the launch and animation of several social media.

BIO4A consortium believes that only an integrated Communication and Dissemination strategy will provide project information and data accessible to the specific target groups and the wide audience, facilitate the impact of specific milestones, increase the total number of stakeholders following by physical and digital means the project events. Last but not least, a similar strategy represents a consistent support in building up a network of relevant contacts interested to the uptake and use of project knowledge at scientific and market level after the project closure.

The project strategy encompasses the following steps for guaranteeing the highest possible project impact:

- definition of the Communication and Dissemination objectives;
- identification of target groups;
- identification of the key messages according to each target group needs;
- means and tools to convey messages to the different target groups;
- activities, role and time plan;
- periodic monitoring of the performance.

Tasks and responsibilities

At the project Kick-off meeting (17 May 2018, Copenhagen, DK), a series of rules for coordinating communication and dissemination activities has been stated, as follows:

1. All partners shall ensure dissemination and communication activities/actions in accordance with the related deliverables and results as foreseen in the Application Form and in this report;
2. All partners shall set up and implement dissemination and communication activities/actions in line with the present Plan in order to ensure effective communication and exploitation and a common approach to communication;
3. All partners shall follow the indications foreseen by the official EU Visibility and Communication rules with reference to action visibility (use of project logo, EU-emblem and acknowledge of EU funding)¹;
4. Partners shall monitor dissemination and communication activities, both the ones foreseen by the project and those made independently by each partner.

Monitoring

A **periodic monitoring** and the actions necessary to cope with upcoming project changes has been established to be done by partners (ETA and all involved partners) during **each project meeting (every 6 months)**, to be able to directly collect opinions among the consortium on actions to be taken for guaranteeing the highest possible impact for the project. In addition, the **revised versions** of the *D6.3 – PEDR* (*D6.7* in M36 and *D6.11* in M48) will **encompass this monitoring and evaluation activity** and provide periodic results for each activity foreseen by this first report.

¹Official links:

http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/grant-management/acknowledge-funding_en.htm; http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/grant-management/communication_en.htm

3.3 BIO4A Dissemination strategy

As an Innovation Action, BIO4A consortium has set a list of main objectives under impact performance. They comprise *WP6 – Management, Dissemination, Exploitation & IP* objectives and support to the activities under *WP5 – Market Scaling Strategy*.

3.3.1 Objectives

The WP6 objectives for having an impactful BIO4A are listed as follows:

#	Specific objectives
1	Increase knowledge and awareness on the project and the opportunities of producing advanced aviation biofuels from UCO, animal fats and residual oils to all target groups
2	Disseminate project results to relevant industries, policy makers' and the RTD/scientific community
3	Support technical WPs' activities on innovation management and exploitation of results , through a specific industrial engagement strategy
4	Develop an Exploitation Strategy specifically tailored to the most valuable Project's results, including business models and market & valorisation strategies
5	Consolidate relevant exploitation activities for future industrial research and business initiatives beyond the end of the project
6	Contribute , upon invitation by the INEA, to common information and dissemination activities to increase the visibility and synergies between H2020 supported actions

In addition, given the relevance of initiatives promoted by INEA (e.g. the 2nd Clustering meeting on H2020 projects in the area of Biofuels and Alternative Fuels, 7 June 2018, Brussels, B) on RTD and market uptake in the specific sector, BIO4A consortium believes in the chance to provide a **high-level contribution to common information and dissemination activities to increase visibility and synergies between H2020 supported actions**.

These objectives cover all the possible actions focused on delivering a strong communication and dissemination among specific target groups and multiplier audiences while paving the way to future exploitation of project results both at commercial, business, market level as well as at scientific one.

The geographic coverage of BIO4A is engaging primary target groups and multipliers at national/regional level of **5 countries** (thanks to leveraging on current networks of the consortium members), as well as **at European and (possibly) global level**. This is foreseen by the liaising with **other relevant European/global network and stakeholders at the policy level** on the areas addressed by the project (Waste, Renewable Fuels and Bioenergy, etc.), thus contributing to the further debate and scientific evidence allowing to scaling-up similar processes of energy (green energy carriers) production into the current and future policy agenda, specifically the EU Renewable fuels and Bioenergy strategies.

3.3.2 Target groups and expected impacts

Since BIO4A will represent a significant leap beyond the state of the art and will introduce significant innovations in the aviation biofuels sector, with this PEDR the consortium identified more specifically **the stakeholders** (grouped under **primary target groups** and **multipliers**) that will be informed and addressed by BIO4A communication and dissemination activities. The following table provides the actors of BIO4A community in relation to the expected impacts of the project:

Target groups	Specific stakeholders	Expected achievements by BIO4A
Primary target groups		
FEEDSTOCK PRODUCERS / SUPPLIERS	, UCO collectors and municipal waste managers, producers of no-food oil	<ul style="list-style-type: none"> A novel market for waste and residues management companies.

	crops (e.g. Camelina, others, etc.), Chemical and bio-chemical industries	<ul style="list-style-type: none"> • Novelties from the BIO4A project and the global implementation of the value chain as input for aviation and energy stakeholders. • A full supply chain certified according to international standards, and the assessment of the potential indirect impacts generated as strategic input for airlines at certification level.
COMPANIES, MARKET OPERATORS, STANDARDISATION BODIES, CONSULTANCIES	Fuel and petrochemical companies; aviation companies; market operators and service providers in the aviation sector; engineering SMEs/start-ups focused on energy conversion of biomass, biofuel & bioproducts' production and processing technology; Leaders of Sustainable Biofuels Group; investors in Energy & Transport sector; standardisation bodies (CEN/CENELEC); consultancies dealing with renewable energy, environment and transport areas	
RTD / SCIENTIFIC COMMUNITY	Research organizations in the fields of agronomy, sustainable land use, carbon sequestrations, soil science, non-food energy crops, advanced biofuels, sustainability and life cycle assessment	<ul style="list-style-type: none"> • A methodology for assessing environmental performance, economic and social benefits with respect to current technologies. • A strategy to recover EU MED marginal lands by growing Camelina for biojet production • A strategy to store carbon into the soil with biochar
MEDIA, WIDE PUBLIC	National/international press, both generalist one - e.g. Euractiv, Horizon Magazine, national newspapers - and sector-related one - e.g. Biofuel Digest, GreenAir Online, etc.; citizens as taxpayers,	<ul style="list-style-type: none"> • A contribution to decarbonize the aviation sector. • A contribution to recover dry marginal lands while mitigating climate change.
Multipliers & high-level support		
POLICY & REGULATORY AUTHORITIES	EU institutions and related services; policy and regulatory authorities at national/EU level dealing with Energy, Fuels and Transport – Aviation	<ul style="list-style-type: none"> • Socio-economic (employment) & environmental benefits from the conversion of fossil refineries. • Contribution to the decarbonisation of the aviation sector.
INTERNATIONAL ORGANIZATIONS & PLATFORMS	: International Energy Agency (IEA); International Civil Aviation Organization (ICAO), Global Bioenergy Partnership (GBEP); Air Transport Action Group (ATAG); European Technology and Innovation Platform for Bioenergy (ETIP-Bioenergy); ART Fuel Forum; IEA Bioenergy Task 39 – Commercializing Liquid	<ul style="list-style-type: none"> • Valorisation of waste products, avoiding the economic impact of the waste management. • Contribution to meet COP21 and EU climate targets, both from cleaner fuels and carbon storage in soil. • Results from the biofuel's supply chain assessment as input to EU policies, as well as to the opportunities offered by marginal lands in EU-MED.

	Biofuels; UN Committee on Aviation Environmental Protection (CAEP) – Alternative Fuel Task Force (supporting ICAO on international Standards and Recommended Practices - SARPs);	<ul style="list-style-type: none"> • A full supply chain certified according to international standards, and the assessment of the potential indirect impacts generated as strategic input for airlines at certification level.
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Hence, the project will collect a **database of contacts** at EU and MS level for feeding project mailing lists at consortium level for project promotion and dissemination. Contacts will be provided by the following categories:

- project partners and referees of networks;
- subscribers to project newsletters (through the website online form) and via social media channels;
- people contacted during project events.

All data will be treated in compliance with the Regulation (EU) 2016/679 General Data Protection Regulation (**GDPR**) of 25 May 2018. Hence, the GDPR will be the reference for data collection, storage, protection, retention and destruction.

3.3.3 Messages

With the aim to deliver such inputs, the consortium has agreed on a **list of clear and consistent messages** tailored to one or more audiences to be conveyed during the project:

Main messages	Main target groups
BIO4A is the 1st demonstration of a market-based, large-scale supply of sustainable residual feedstock for bio-jet fuel	Companies and market operators, standardisation bodies, International Organizations, media, wider public
BIO4A will enable the large-scale production of HEFA sustainable aviation fuels produced from sustainable waste feedstock in the EU	Companies and market operators, standardisation bodies, International Organizations
BIO4A demonstrates an innovative feedstock pre-treatment and upgrading of raw material	Companies and market operators, RTD and Scientific community
BIO4A will contribute to the goal of the European Union for the decarbonization of the aviation sector.	Media and wider public, policy-makers
BIO4A will introduce a high blend rate in commercial flights	Companies and market operators, RTD and scientific community, regulatory authorities
BIO4A implements a novel contracting and pricing structure for bio-jet fuel	Companies and market operators
BIO4A develops a long-term strategy for sustainable feedstock supply from oil crops.	Feedstock producers, RTD scientific community, International organizations, policy-makers, wider public
BIO4A will test solutions to recover dry marginal lands in the EU.	Feedstock producers, RTD scientific community, International organizations, policy-makers, wider public
BIO4A will contribute to the goal of the European Union for the decarbonization of the aviation sector	Companies and market operators, RTD and scientific community, policy makers, media, wider public

3.4 Dissemination measures and tools

3.4.1 BIO4A visual identity

The concept at the basis of the BIO4A visual identity was to deliver in a clear and understandable way what the consortium considered strategic to convey to the project audience. Hence, after a thorough study, the consortium decided to go for the following logo:



Figure 1. Logo

The logo shows half a plane seen from the front, conveying the idea that the project will look forward into novel processes and technologies within the **aviation sector**. The plane is in dark blue colour, recalling pilot suits, sky, air.

Partially covering the plane, the project acronym (BIO4A) is written in Sans-Serif font, slightly modified to convey novelty and also a professional brand ready for the market (provided that BIO4A is an Innovation Action, with expected results at EU market level and society). The colour is a bottle green, to underline the project is operating in a **sustainable way** (both for bioenergy sector and the full-process performance and positive impacts for the environment). This message is provided also by the little leaf on top of the “i”.

This logo is part of a **logo set**, which has been created for making it available in several formats (digital, print and vector ones). This will permit the consortium to use it in several project communication and dissemination materials (on paper and digital means, on white, transparent or a black background).

All project communication and dissemination materials (included digital channels, such as the website, etc.) will have to showcase:

- the **BIO4A logo**: to facilitate recognition of the project
- the **EU emblem**²: as foreseen by the EC, this is needed for attesting the origin of co-funding;
- the **official EC statement** that the project has received funding from the Horizon 2020 research and innovation programme, through the following text:

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No. 789562.

Such indications are mandatory for the consortium, in compliance with EC and INEA guidelines³. In addition, all partners are expected to follow the indications contained in the BIO4A User Manual, prepared by ETA and shared at consortium level on 04 June 2018. All such rules will guarantee: **a.** compliance with EU requirements; **b.** recognition of the project by all target groups; hence **c.** a higher impact of project activities and results.

In addition to the BIO4A logo set, the visual identity includes also the following materials:

1. a Word template for deliverable/reports;
2. a PowerPoint template for poster in A0 format for presentations at scientific events;

² Source: https://ec.europa.eu/info/sites/info/files/use-emblem_en.pdf

³ Source:

http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/grant-management/dissemination-of-results_en.htm ; <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-energy/beneficiaries-info-point/publicity-guidelines-logos>

3. PowerPoint templates in 4:3 and 16:9 format for presentations to be delivered at technical meetings, dissemination events, etc.

Also the font Josefin-Sans, specifically chosen for PowerPoint materials, has been included in the materials shared among partners.



Figure 2: samples of project templates

In addition to such materials, during the project ETA will prepare a **slideshow presentation** on the project, a **poster** and a **roll-up** to be used at BIO4A workshops, conferences and events organized or co-organized by the consortium.

All partners will be provided with these materials and asked to make use and distribute them at external workshops, conferences and other initiatives organized for raising awareness and guarantee project knowledge.

3.4.2 BIO4A website

BIO4A website (<http://www.bio4a.eu/>) is one among the most strategic communication and dissemination means of the project.



Figure 3: Website homepage

It is the **main entry point and reference** for all the project activities implemented, results, news and information disseminated by the consortium for its target groups.

Hence, the website **public area** provides the project flow and outputs in a clear and catchy way. The Home page will provide the most important information on the project:

- the BIO4A process flow (from feedstock to final market) and the way the project will contribute to several current challenges in the aviation sector;
- the expected inputs by BIO4A on 4 macro-areas (coincident with the 4 pillars of the BIO4A Implementation Plan - sec3.1). These areas will also made available data on the framework context in which BIO4A will be operative (e.g. the state-of-the-art of biofuels in the aviation sector; current challenges on technical feasibility of aviation biofuel; policy and regulatory levels, etc.). The connection will be the following:

BIO4A Implementation Plan (sec3.1, GA)	Impact macro-areas on project website
Strategic demonstration of a market-based, large-scale supply of sustainable feedstock for bio-jet fuel	FEEDSTOCK
Innovative fuel upgrading and refining process	PROCESS
Novel contracting structure and measures for guarantee market competitiveness	MARKET UPTAKE
Beneficial environmental, socio-economic sustainability effects	SUSTAINABILITY

- partners' logos; news and inputs from project videos and social media.

Beyond the Home page, the website will also cover the following points:

- project-related networks and initiatives that the consortium considers relevant for clustering activities (in terms of RTD work, best-practices exchanges and open dialogue on similar tasks) as well as for supporting the overall project impact. Here links will be provided to other projects on bio-jet fuels funded by the EU and international organizations (UN, WB, IRENA, etc.) or supporting the commercialisation of alternative aviation fuels (e.g Nordic Initiative for Sustainable Aviation; Aviation Initiative for Renewable Energy in Germany; Commercial Aviation Alternative Fuels Initiative, etc.);
- all main project documents (relevant materials at technical, dissemination and exploitation level) and public deliverables;
- a section where users can directly register for receiving periodic newsletters, news alerts on specific events, etc via email;
- consortium references.

The BIO4A website will be regularly updated with news, project videos (included webinars, once performed) and external initiatives related to the project (with the collaboration of all partners). Users will have direct access to project social media profiles (Twitter, LinkedIn and YouTube) from the website Home page. Partners will ensure (anytime it's feasible and appropriate) good cross-linking between the webpage and their own websites and social media.

ETA will be responsible for the website working and maintenance. At technical level, it will be managed with a Content Management System (Wordpress); tools provided by Google Analytics will be strategic for traffic monitoring and eventual needed actions for improving the website impact and usability.

3.4.3 BIO4A digital newsletters and press releases

During the project, **8 digital newsletters** will be prepared and distributed. Subscription to the newsletter is voluntary via the website. Mass mailing system software is used for management and distribution of the digital newsletters, ensuring the accurate monitoring of the impact of the

newsletters. Each newsletter will cover periodic news, events and information; content will be based upon posts on website, as well as contributions by partners, key updates on the project development, presentations at workshops, reports and publications. The planned timetable for sharing the newsletters (**1 every 6 months**), which will provide a consistent coverage of the activities implemented within the project.

In addition, **at least 3 press releases** will be published during the project implementation one at the project Kick-off meeting (available on the project website), one at mid-term (M24) and one before the final event, for promoting it while recalling most relevant results and benefits of the project (M47). They will be conceived for the general press (e.g. Horizon Magazine, online newspapers on EU policy & market affairs, etc.) and the specialized media (e.g. GreenAirOnline, Aviation and Environment News, Aviation News, Aviation Week, Airport News, Airwise, Air Transport World, ATC Network, Flight International), and other magazines on sectors like renewable energy, environmental sustainability, aviation. ETA will prepare a press review, to keep track of the media coverage of all published press releases. It will be integrated in the final Communication and Dissemination Report.

3.4.4 BIO4A social media

BIO4A will exploit the potential of social media with the following goals:

1. provide information for raising awareness about technologies and processes dealing with conversion of organic waste biomass into biofuels;
2. providing latest news, trends and related events.
3. disseminate the project outputs and events, as well as other events related to the same sector;
4. attract users to the audience community.

BIO4A consortium agreed on creating profiles and pages on the following **3 social media**:



Twitter. The account will be used as one of the primary tools in spreading the project news and announcements to the wide public. Project tweets will be uploaded on a regular basis, referring to activities, (as soon as available) results and news about the project, beyond to any important information relevant for the field. The Twitter account **@bio4a** will be a useful channel to immediately disseminate project activities and news to a wide audience (both primary target groups and multiplicators), as well as to raise awareness about the latest news and trends in the aviation, biofuels and related market sectors. Specific hashtags will be chosen when sharing BIO4A news. The account will follow not only main corporate and institutional players from academia, industry and national and EC. The profile will be linked with partners' social media profiles, as well as those from the EC, Thematic Networks, and scientific and industrial key players at a worldwide level for achieving a relevant positioning and number of followers. Partners' social media will also echo the project posts and the other way round, further increasing the combined impact and outreach of the project.



LinkedIn. An official BIO4A group will be opened for hosting ideas' exchanges and suggestions directly promoted by project members and stakeholders. Publications on this social media will be of scientific/technical nature. Since it is a social platform dedicated for professionals of RTD, industry and market to join the BIO4A community willing to get informed with more depth about the findings of the project. Also for LinkedIn, partners' social media will echo the project posts and the other way round, further increasing the combined impact and outreach of the project.



YouTube. A specific BIO4A project channel will be opened on YouTube, as soon as videos on project, interviews to testimonials at national/Eu events, project members and

experts, etc. will be ready and sharable. Short and long videos will be shown also in occasion of project booths at events and during demonstrative sessions, for attracting stakeholders of primary target groups and increase their curiosity on state-of-the-art of project activities, therefore their impact.

3.4.5 BIO4A publicity materials

A number of communication materials will be elaborated and distributed, primarily in digital version, but also in printed version (according to project events). Partners will be in charge of printing the documents according to their needs. In special occasions, materials will be translated in (some) national languages. In BIO4A we foresee to produce:

- **Project leaflet:** under elaboration by ETA, it will be designed in order to present general information of the project. It will support the dissemination and promotion activities linked to the national and EU stakeholders in events, workshops, etc.;
- **Project roll-up:** it will be conceived for presentations at project's events as well as for external conferences and workshops. The poster (under elaboration by ETA) will allow partners to present results related to BIO4A at conferences and workshops, tailoring the content to the target audience.

3.4.6 BIO4A publications

BIO4A **Scientific publications** (available in Open Access) will target mainly academia, universities and research centres. **Outreach articles** on most relevant project results will be published on bioenergy, environmental, aviation and trade magazines, targeted to a wider audience, (at least 4,).

A preliminary list of journals and magazines, divided per focus area and sectors, is the following:

- aviation trade & market: Aviation News, Aviation Week, Airport News, Airwise, Air Transport World, ATC Network, Flight International;
- airports and airline companies: mostly SkyTeam blogs and Social Media and Star Alliance media resources;
- research on renewable energy and environmental sustainability: Horizon-magazine.eu, BE-Sustainable (the online and printed magazine dealing with bioenergy and bio-economy at EU and global level, edited and published by ETA since 2012), GreenAirOnline, Aviation and Environment News, Bioenergy International, Bioenergy Insight, Biofuels International, Insight Publishers, Biomass Magazine, European Energy Innovation, Renewable Matter, Renewable Energy Focus, Revolve, etc.

The project will also prepare also **final publication** (with provisional title: *BIO4A: making the most of aviation biofuel in the European market*), at year 4, in paperback version with ISBN. The publication will summarize the project activities and results, in a fact-based and public oriented document. The goal is to have a book to ensure impact generation after the end of the project. The publication will clearly highlight the results of the BIO4A synergies developed at consortium level and the beneficial paths for the aviation and bioenergy sectors launched by BIO4A. An online version will also be available on the project's website (Public area) and a specific press release and Social Media coverage will be realized for increasing its visibility.

4 Dissemination and support to exploitation activities

The information about activities related to dissemination and support to exploitation, tailored to reach specific target groups, by transmitting messages, modalities and expected results are listed in the following table:

#	Activity/Leader	Target	Place	Description	Indicators	Month
1	Preparation and promotion of the project press release at the project launch (via mailing lists) <i>by ETA / support of all (review provider)</i>	All (primary target groups and multipliers)	Online	Information on the start of a new project; activities and expected results; partners; funding. People aware of the project existence.	No. 1 press release at the project kick-start	By M1
2	Design of the visual identity and production of project branding materials (brochure; roll-up, etc) <i>by ETA / support of all (data providers)</i>	All (primary target groups and multipliers)	Online	Basic informative descriptions & access channels to more complete resources (i.e. website, etc.) for engaging people in the long-term. People is aware of the project logo, project scope and existence of social media.	No. 3 templates; No. 3 basic materials (slideshow presentation, poster and roll-up) for C&D activities (note: available on the project website for download once the section area will be ready)	By M3
3	Design and set-up of the project website; establishment of social media presence <i>by ETA / support of all (data providers)</i>	All (primary target groups and multipliers)	Online	Provision of a complete overview on the project, the partners and related links; access to project updates. People is aware of all the detailed information regarding the project; engagement of research & market experts as well as the large public.	No. 1 basic project website (with a public section and a private area); no. 3 project social media groups/pages.	By M3
4	Digital newsletters, press releases and press review <i>by ETA / support by all (data providers)</i>	All (primary target groups and multipliers)	Online	News and updates on activity implementation; information on initiatives on the same project topic. People follow the activities performed and know the state-of-the-art of the project implementation.	No. 8 digital newsletters promoted through all the physical and digital channels; at least no. 3 press releases (sent to general and specialized media); no.1 press review available at the project end	By M48
5	Events and conferences (organization of own events and participation to external ones) <i>by ETA / support by all (participation and promotion)</i>	All (primary target groups and multipliers), depending on the event. Specific target groups	At EUBCE and Amsterdam (NL)	The side event at EUBCE will target project partners, prominent representatives of infrastructure operators (Airports), airlines, airframe and engine manufacturers	No.2 big conferences: no.1 as a side at the annual EUBCE (www.eubce.com) event; no. 1-full day final project	By M24 by M47

		(research/academia; feedstock suppliers; technology developers; technical advisory & authorities) with interest in technical WPs results; international community of bioenergy engineers/researchers, industry		and regulatory entities (ICAO, ECAC, IATA). The final conference, as a comprehensive event, will show novel scientific and technological outcomes of biojet production in the aviation sector; drivers for its integration in the EU market as well as exploitation paths; environmental, social and economic benefits for the wide public (passengers, taxpayers).	<p>conference organized (with a special event targeted to market operators, tbd at consortium level). Both events will include: ad-hoc panels and open session debates with the audience.</p> <p>In addition, participation by partners at leading events at EU/national level (i.e. conferences, fairs and other events, etc.) on technology and market topics in the aviation sector as well as to specific INEA CD&E initiatives.</p>	
6	Webinars and videos with interviews to project partners/experts <i>by ETA / support of all (topics and directly involved in the videos)</i>	All (primary target groups and multipliers)	Online	<p>Topics focused on 4 project areas: 1. Multi-supply chain; 2. Processing technologies; 3. Market strategy and exploitation; 4. Sustainability.</p> <p>The project video: overview on the entire process, novelty and final result; interviews to experts: detailed information and reasonings on specific steps provided according to specific expertise and role in the project. People understand how the process works and challenges overcome.</p>	<p>No.1 webinar series organized with online interactive tool; once performed, videos available on project YouTube channel for further uses; at least no. 1 project video and several short videos on interviews to experts prepared and promoted through all the physical and digital channels.</p>	By M48
7	Publications <i>by ETA / support by all (data providers)</i>	Both general and specialized audience (research/academia; technology developers & chemical/physical experts)	General press and specialized scientific journals and magazines	High-level, relevant scientific information on the project activities and results; basis for further R&D&I activities. Researchers and experts have access to relevant, consistent information and data on the project.	<p>At least no. 4 articles published in general and trade magazines; no. 1 final project publication (with prominent activities, results and steps to be developed in the future) available in digital and printed version and promoted by a specific press release and Social Media activity</p>	M12-M48

5 Preliminary Exploitation Strategy



The exploitation strategy will be aimed at ensuring that key findings and lessons learned in this project can help scale up the EU biojet industry in the years to come. At the moment of publication of this deliverable (M3), the project is still in its initial phase, while the main exploitable results are expected in the second part of the project (years 3 and 4). For this reason, this deliverable provides only a preliminary description of the the project's exploitation strategy, which will be developed into a more detailed **exploitation plan** with the contribution of all partners during year 1. The plan will be included in the first update of the PEDR (M12) and periodically updated during the project.

The exploitation plan will focus also on defining the project approach, the scenarios at business level encompassing the key innovations made by BIO4A partners in their respective WPs. An important objective of the exploitation plan is to support the achievement of two main impacts expected by the project: a concrete strategy for the deployment of the BIO4A technology by related partners, and the development of potential revenues.

The exploitation of BIO4A results will be pursued done at different levels:

1. **commercial level**, mainly targeting the industrial stakeholders and the market community, with the outcomes of the industrial activities for waste feedstock supply, the downstream logistics and the contracting system
2. **policy level**, targeting policy makers at national level, European institutions and associations, interest groups, mainly with the outcomes of the full-chain sustainability assessment;
3. **scientific level**, targeting mainly the scientific and RTD community with particular regard to the outcomes of the R&D activities on the recovery of marginal land in dry EU MED areas.

At commercial level, the BIO4A exploitation strategy will highlight technology innovation, supply chain optimization, sustainability performance and business opportunity. By addressing these stakeholders with targeted information and giving them insight in how to exploit some of the key BIO4A results, the consortium partners will accelerate the exploitation of the project results and leverage market stakeholders to create even broader market awareness in the relevant setting. An in-depth analysis of the potential revenues deriving from the exploitation of BIO4A results and tools will be carried out during the project. The market analysis will coherently feed the exploitation plan for the definition of the exploitation possibilities, the target users and marketing actions results in terms of exploitation and to better suit the market. The aim will be to develop a business plan (WP5) to fund the further development of the BIO4A system and related market actions.

A preliminary list of project activities which will generate potentially exploitable results is described below:

Waste oil availability - Availability of waste streams as feedstock for biojet production has a significant potential, but still market fragmentation, collection, lack of quality, and other shortcomings exist. BIO4A aims at creating a robust supply chain, based on UCO and other residual lipids, by further strenghtening business relations with main players of UCO collection, in a win-win collaboration with the aviation sector players. Once the industrial-scale supply chain will be contractualised, these results will represent a model that BIO4A will spread to the EU aviation sector.

Technology upgrade and optimisation - BIO4A will work at enabling and optimizing HEFA production at full industrial scale and the results will represent the first example of full industrial-scale production of biojet in the EU. This is a relevant exploitable result for refining companies and aviation fuels companies.

Long-term R&D strategy - The need for flexibility with respect to feedstock is a key issue for creating a sound value chain for long-term biojet production. BIO4A will tackle this issue through R&D activities on innovative pre-treatments and through the experimental investigation and scenario simulation for the exploitation of marginal land in EU MED area. The outcome of this

investigation will be disseminated both at the scientific community as well as to the industrial communities.

Market scaling- Scaling the biojet market comes down to creating a business case to build production capacity. For achieving this objective, feedstock needs to be secured, product needs to have a market and technology should be de-risked. BIO4A aims to ensure that key findings and lessons learned on this specific point in this project can help scale the European biojet industry in the years to come. Partners intend to exploit these results throughout a market scaling strategy. This plan will address all key components needed in other settings to scale production capacity.

Standardization of novel contracts - An innovative contracting structure of aviation fuels has been designed for BIO4A, whose implementation is expected to provide valuable data about the dynamics of the market and overall market acceptance.

At **policy level**, the emphasis will lie on raising awareness on the key challenges, policy opportunities and environmental value of developing advanced biofuels for aviation and related markets. The results of the full chain sustainability analysis and socio-economic analysis (WP5) will be relevant for this scope. The policy framework drives R&D and investments in sustainable technologies, but also hardly follows the fast technological and industrial evolution of the sector, as these were initially developed in a scenario still dominated by the conventional 1st - generation industry.

IPR Strategy

Finally, an IPR strategy will deal with the potentially patentable results and related issues of BIO4A in order to define a proper and commonly agreed management of intellectual property rights. This will complete the commercial and industrial exploitation of BIO4A achievements. The IPR strategy will consider any foreground capable of having a commercial interest or economic value in the market, which will be compiled by partners in an Assets matrix. This will define the required access rights to background and/or foreground owned by project partners for the generation of any knowledge, result or assets arising as a result of the project development.

6 Conclusions

At M3, project activities on Communication, Dissemination and support to Exploitation are in line with the activities foreseen under *WP6 - Management, Dissemination, Exploitation & IP*, both in terms of deliverables' quality and timeline.

For preparing this report, the following deliverables have been taken into consideration:

D#	Deliverable title	Lead beneficiary	Type	Dissemination level	Due date (in mm)
D6.1	Preliminary Project Management Plan	1 - REC	Report	CO	M2
D6.2	Project Quality Plan	1 - REC	Report	CO	M3