

# Advanced Sustainable BIOfuels for Aviation

## Deliverable D6.6: Mid-Term Project Management Plan

### Consortium:

Acronym	Legal entity	Role
RE-CORD	CONSORZIO PER LA RICERCA E LA DIMOSTRAZIONE SULLE ENERGIE RINNOVABILI	CO
TRC	TOTAL RAFFINAGE CHIMIE SA	BEN
TRF	TOTAL RAFFINAGE FRANCE	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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## General Information

Call identifier: H2020-LCE-2017-RES-IA  
 GA Number: 789562  
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 Start date of project: 01/05/2018  
 Duration: 4 years (30/04/2022)  
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Prepared by: RE-CORD (Lead), all partners  
 Responsible Person: Tommaso Barsali  
 Dissemination Level: Public

INTERNAL MONITORING & REVISION TABLE					
REV.	DATE	DESCRIPTION	PAGES	CHECKED	APPROVED
1	29-08-2019	Original	n.a.	REC	REC
1.1	15-10-2019	Input from partners	13	REC, ALL	REC

Document Type		
PRO	Technical/economic progress report (internal work package reports indicating work status)	
DEL	Technical reports identified as deliverables in the Description of Work	x
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	

## 1 Summary

The **Project Management Plan** constitutes the workplan for the technical and scientific activities of the BIO4A project from M18 to M36.

It is intended as a tool to facilitate collaboration between partners, management for WP Leaders and Coordinator and follow-up for the Project Officer.

Along with a medium-term **Management Plan** on all the concerned Work Packages, it focuses on the specific Tasks, Deliverables and Milestones due by M36.

Changes in the management composition of the Consortium have included:

- Ceasing of Total Raffinage France (TRF) as Linked Third Party to Total Raffinage Chimie (TRC)
- Inclusion of Total Raffinage France (TRF) as full partner to the Grant Agreement as amended in AMD-789562-2 on January 14<sup>th</sup>, 2019
- Inclusion of Total Raffinage France (TRF) as a full partner in the Consortium Agreement

No particular delay has been experienced for the period M1-M18, and **no delay is foreseen for the period M18-M36**.

The risks evaluated for the tasks appear to have a low probability of occurrence at the moment of issue of this Medium-Term Project Management Plan; however, mitigation measures have been discussed.

The Project Management Plan will be updated as needed following the course of activities, and will be issued as a new revision at **M35**, with the D6.9 – Final Project Management Plan.

## 2 Introduction

The Mid-Term Project Management Plan constitutes the workplan for the technical and scientific activities of the BIO4A project from M18 to M36.

It is intended as a tool to facilitate collaboration between partners, management for WP Leaders and Coordinator and follow-up for the Project Officer.

It focuses on the specific Tasks, Deliverables and Milestones due by M36.

The main activities during period M18-M36 are:

**WP1.** All tasks are fully operation in WP1, as feedstock supply assessment, production of HEFA, quality assessment and operation optimization (Tasks 1.4 and 1.5) of HEFA production.

In **WP2**, after the first year of agronomic experimentation with Camelina that are under analysis and validation, a second year of experimentation will start. The modified biochar pilot plant has been started-up at Re-Cord premises. Lysimeter experiment will start before the end of 2019. The assessment of potential for drought-resistant oil crop in marginal land of Southern Europe and abroad (Task 2.2) has been initiated.

In **WP3**, Task 3.3 will continue the effort on implementing voluntary RED-opt in, and focus on the evolution of the negotiation and adoption of RED-II Directive. Task 3.1 and Task 3.2 will start at Month 19 and 25, respectively.

**WP4** has started collecting data from other WPs in relation to the Key Performance Indicators and the process comparison with other technological pathways (Tasks 4.1 and 4.2). Sustainability assessment will start at Month 20.

**WP5** will produce deliverables D5.1 and D5.2 on the Business Case and Market Dynamics at M18 (Tasks 5.1, 5.2) at M18. The Waste feedstock market analysis (Task 5.3), while the Proposal for updating the regulatory framework and the Market Scaling Strategy (Task 5.4 and 5.5.) have started and will follow.

All **WP6** activities start at M1. Following the Preliminary Project Management Plan, the Project Quality Plan (D6.2), the Preliminary PEDR (D6.3) and the Project Website were issued at M3. The Initial Data Management Plan was issued at M6. The project Website is also the first Milestone of the project.

Input has been provided by all BIO4A partners for the drafting of the Management Plan at chapter 3. Task Leaders and WP Leaders concerned, provided replies to a list of requests on each respective Task, Deliverable and Milestone.

### 3 Management Plan

Task Leaders, on request of the Coordinator, have replied to the questions below, for each respective Task assigned.

- 1) Which type of input is needed? (ex. preliminary data, technical specification, specific material)
- 2) From which partner (or in alternative from which task) is the input needed?
- 3) At what time is it needed?
- 4) Is a revision session foreseen? When? (ex. telco, field visit)
- 5) Possible risks foreseen for the task
- 6) When do you plan to make an internal progress update (for other partners?).

Here below the list of the relevant tasks that either begin, continue, end or produce a deliverable/milestone within the period M18-M36, assessed following the method above.

Item	Lead	Input needed	Timing of input	Revision session	Possible risks	Internal progress update
T 1.1	TRC	<ul style="list-style-type: none"> <li>The technical specification of the feedstock was initially defined by the process licensor, Axens.</li> <li>It has been further refined with the actual operation of the bio-refinery in HVO (biodiesel) mode which started this summer.</li> <li>We have defined technical specifications and typical value (max or to be reported) in HVO mode.</li> <li>Since biodiesel and biojetfuel modes share the same feedstock we consider those specifications applicable to HEFA (biojetfuel) mode</li> </ul>		M18 (to share our findings)	None at this stage	M24 (due date)
Task 1.2	TRC	<ul style="list-style-type: none"> <li>Identified market size and suppliers for each feedstock</li> <li>Suitable feedstock supply for SAF to be set up by end of the year (HEFA trial not started yet)</li> <li>Proceeded with our first feedstock orders to ensure first runs summer 2019 (HVO production)</li> </ul>		M18	None at this stage	M18 + few months of operations (first HEFA trial not set yet)
Task 1.3	TRC	None		M24 (one year before target production M36)	Inadequate operation of the biorefinery (among which, but not limited to, capacity and yield performance)	M24

Task 1.4	TRC	None				M36
Task 1.5	TRC	None				M36
Task 2.1	REC	Agronomic Trials ongoing. Lysimeter experimental starting 4Q 2019, input exchanged between REC and CCE, experimental design defined.	Ongoing	M18		M19/20
Task 2.2	JRC	None at this stage.				
Task 2.3	REC	None at this stage.			None at this stage.	M24
Task 3.1	SKY	Input from Total needed on fuel deliveries and availability of logistics/blending facilities	We are working on this already and this is a continued activity.	No revision needed, as there is no real deliverable in the form of a document	Fuel not delivered or no availability of logistics/storage equipment. Chances for this are very low.	Internal updates during progress meetings
Task 3.2	SKY	Contracting is taking place for the downstream portion of the fuel deliveries, final documentation for compliance and traceability will come in final period of project	Input in the form of contracting with Total, no further inputs needed	N/A	No risks in this task identified	Internal updates during progress meetings
Task 3.3	SKY	Report input from tasks 5.4 and 5.1 and 5.2	First report on M24, so input latest by M22	M23 input from relevant partners, especially RE-CORD on RED-2	No external risks as it is a report from policy developments of the past 24 months	After delivery of deliverable in M24



<p>Task 4.1</p>	<p>REC</p>	<ul style="list-style-type: none"> <li>* T1: new installed annual production capacity</li> <li>* T2: Bio kerosene compliance with reference ASTM</li> <li>* T3: Potential lands for feedstock production</li> <li>* SE1: Improvement of the economic viability of the the biojet production</li> <li>* SE2: Compliance to sustainability biofuels standards</li> <li>* SE3: Social and techno-economic sustainability of potential feedstock production on marginal land is assessed through the measurement of a set of sustainability indicators (including but not limited to Land tenure, Change in income, Jobs in bioenergy sector, Modern energy access, Productivity, Net energy balance, Gross value added, Trainings, Infrastructures and logistics for bioenergy distribution, Capacity and flexibility of use of bioenergy).</li> <li>* E1: GHG emissions saving</li> <li>* E2: Environmental sustainability of feedstock potential production on marginal land is assessed through the measurement of a set of environmental sustainability indicators (including but not limited to Soil</li> </ul>	<p>Cultivation related data: CCE                  * UCO or other feedstock related data: TRC                  * Aviation biofuel process related data: TRC                  * Logistics and transportation to the airport related data: SkyNRG</p>	<p>Draft Assessments discussion and presentation along M30 meeting</p> <p>* Other telcos will be fixed when required for the proper implementation of the tasks</p>	<p>Possible risk: no actual data or lack of feedback for the inputs requested.</p> <p>*Risk mitigation: Anticipate discussion on data available</p>	<p>During project meeting in M30</p>
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Task 4.2	REC	Process related data in order to be compared with other lower and higher TRLs alternative pathways. Exchange of information and drafting of ToC between CENER and REC already started.	*Process comparison:M30  * Quantitative inputs of the process TRC:M18-M33	During project meeting in M30		During project meeting in M30
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Task 4.3	CENER	*Process Description. Qualitative process flow diagrams (PFD).	* Task 4.3 and Task 4.4 can be tackled in parallel: *Process Description. Qualitative process flow diagrams--> M22  Environmental draft Assessment deadline--> M30	*Draft Assessments discussion and presentation along M24 meeting  * Other telcos will be fixed when required for the proper implementation of the tasks	*Possible risk: no actual data or lack of feedback for the inputs requested.  *Risk mitigation: Anticipate discussion on data available  *Possible risk: process data are needed in WP4: <ul style="list-style-type: none"> <li>• ...and as those data might be confidential information from BIO4A companies (Camelina Company, Total and SkyNRG)</li> <li>• Risk mitigation: It is important to clarify that we/BIO4A/the consortium/ CENER won't make those data public (although the final deliverable is public). For that: <ul style="list-style-type: none"> <li>o No confidential data will be published</li> <li>o Deliverables will be circulated and discussed among partners before submission</li> <li>o The final data to be presented</li> </ul> </li> </ul>	* Task 4.3 starts on M20 . *However, previous work on the PFD will be required. *And integral progress update of this tasks is foreseen each 6 months, or as requested by coordinator
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					can be aggregated results (and not breakdown of specific stages) upon request and agreement of partners, so that confidential information is not disclosed indirectly.	
Task 4.4.	CENER	*Process Description. Qualitative process flow diagrams (PFD). * Quantitative inputs of the PFD	Task 4.3 and Task 4.4 can be tackled in parallel: *Process Description. Qualitative process flow diagrams--> M22	Idem 4.3	Idem 4.3	* Task 4.4 start M25 *However, previous work on the PFD will be required.
Task 5.3	REC	Waste feedstock market analysis initiated		30		
Task 5.4	REC	None at this stage: continuous update on RED-II ongoing		30		
Task 5.5	SKY	Input is needed as a matter of review, we will take deliverables 5.1 and 5.2 as starting point.	Deadline is not within this period, so no direct input required	NA	No risks, as it is a written report without many external influencing factors	We will show the update of this task during a progress meeting.
Task 6.1	REC	Input needed from all partners for Technical-Scientific and Financial Report of 1 <sup>st</sup> RP				
Task 6.2	ETA	Target audience  Update of main project messages ;  Measures and activities to reach each target group	M24		Communication strategy not focused on the key messages and not targeted	

Task 6.3	ETA	Short public summaries of deliverables, news updates on task activities, publication and regular updates from each partner's activity needed for newsletters and website updates	M18 – M24- M30-M36	n.a	n.a	n.a
Task 6.4	ETA	Subtask 6.4.1 1st BIO4A conference – input needed by partners to shape agenda and as speakers  Subtask 6.4.2 – webinars input needed by partners for webinar slide presentations  Subtask 6.4.3 – publications Input needed by partners for at least two outreach articles	M24  M30  M24- M36	n.a	1 <sup>st</sup> conference postponed	
Task 6.5	ETA	<u>Data Management Plan</u> Information on dataset, metadata, Open Access repositories, responsible researchers/manager, policy on data created, etc.	M48			



## 4 Conclusions

All activities and Tasks foreseen in the M18-M36 are currently on time.

The possible risks foreseen for the tasks in chapter 2.2 have been evaluated by BIO4A partners. Their capacity of generating possible delay can be considered mild for the project at the time of submission of the Project Management Plan.

All risks will however be constantly monitored, and mitigation measures will be taken according to the indications in Chapter 3.