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ACTION PLAN OF THE POST-PROJECT WORKING GROUP 03/2023

UBS



European Regional Development Fund



Partners

PP Leader: UBS

Partners involved : TVDC, ECOTECHNILIN, HOWA-TRAMICO, KAIROS, INRAE, UOC, UOP

Content

The FLOWER partners have come together to put in place a post-project action plan to ensure the sustainability of the products developed. The project extension granted has already shown interest from new sectors. Actions to make the results of FLOWER flourish have already started during the project and will continue along three different axes: the follow-up of industrial advances, the setting up of collaborative projects and the continuation of scientific actions.

A timetable of actions over 24 months has been set up and will run as follows:

Date	Actions done		
	Industrial advances	Project set up	Scientific actions
+6 months	Objectives: <ul style="list-style-type: none"> Foiling boat validated by the Glénans Summer sailing school 6 new applications defined 	Objectives: <ul style="list-style-type: none"> 2 new projects submitted (national or international) 	Objectives: <ul style="list-style-type: none"> 4 international scientific publications submitted
+12 months	Meeting : All the partners meet to report on progress of the actions		
	Objectives: <ul style="list-style-type: none"> POS support used in shows in plate forms Second sailing boat produced for the Glénans Summer sailing school All defects removed from the headliner with flax reinforcement First prototypes of the new 	Objectives: <ul style="list-style-type: none"> 2 new projects submitted (national or international) 	Objectives: <ul style="list-style-type: none"> 4 international scientific publications accepted and published 2 international scientific publications in writing 1 PhD financed by an industrial between uoC and UBS



	applications developed with EcoTechnilin semi-products		
+18 months		Objectives: 1 new project submitted (national or international)	
+24 months	Meeting: all partners meet to report on progress of the actions and validate common actions possible in the future		
	Objectives: <ul style="list-style-type: none"> • First contract signed using the headliner with flax reinforcement • First prototypes of new applications developed with new semi-products 	Objectives: 1 new project submitted (national or international)	Objectives: 2 international scientific publications accepted and published

❖ Follow-up of the industrial advances and new applications

The first action set up in order to make the FLOWER developments last is to follow the industrial progress of the prototypes developed in the project. All the industrial partners of the project will be involved in this task, with the support of the academic partners in carrying out tests. Thanks to this work and the dissemination efforts, the partners have already considered integrating the semi-finished products into new demonstrators and thus creating new applications. Some collaborations are the result of exchanges during conferences organised by the project and for others, industrialists have directly contacted the partners by discovering the project results on the website and social networks, or by spreading the word.

The main actions that will take place in the months following the end of the project are the following:

- Development of the advertising medium in other formats than the plate to meet the needs of various companies
- Marketing of the veil developed by EcoTechnilin for other sectors
- Development of a bathtub with the Baudet company: contact made with TVDC
- Development of a marketable panel for refrigerated trucks with the Chereau group, contact with UBS (continuation of the work done in the project extension)



At the end of the project, the partners succeeded in producing demonstrators. Between this demonstration phase and the commercialisation phase, it takes 4-5 years to obtain net revenues. No FLOWER partner will receive net revenues within 3 years after the project on the products developed.

❖ Setting-up of collaborative projects :

The FLOWER partners have also already considered new collaborations to set up new collaborative projects. This action involves all the project partners.

Projects on a national scale have already been funded, notably in France by the ANR. Alessia Melelli's thesis work opened the door to new research on ancient Egyptian fibres, which will be explored within the framework of the ANUBIS project, coordinated by the UBS and in which INRAE is one of the partners and in which the University of Cambridge is involved by co-supervising a thesis.

The UBS and Kairos partners have collaborated in the framework of a Horizon Europe project on biosourced materials (HORIZON-CL4-2021-TWIN-TRANSITION-01-05).

UBS and the partner EcoTechnilin wish to continue their research in the framework of Interreg. As the France Channel England programme is coming to an end, they are now setting up a project in response to the North Sea programme call. This project will aim to develop biocomposites in the field of smart cities and urban mobility.

INRAE and UBS are collaborating on a new European project, this time in the framework of Horizon Europe. The theme of the project will be more focused on bio-based textiles than on composites but requires the same skills from both partners.

Currently, the University of Cambridge is structuring a consortium including HT, INRAE and UBS in the framework of a Horizon Europe project, while Ecotechnilin is considering developments around nettle fibre via an ADEME project including INRAE and UBS.

❖ Proceeding of scientific actions :

As the academic partners already have strong relationships with each other, they will obviously continue to work together. The first point on which they will work together in the months following the end of the project will be the finalisation of the publications started during the project, thanks to the latest results. Some of these publications are already submitted to journals and others are still being written. A total of 4 publications in international journals remain to be published as a result of the FLOWER work; they will be available within the next year.

In addition, scientific work is continuing between certain English and French partners; a collaboration is underway between UoP and INRAE and UoC is involved in the co-



supervision of a post-doc with UBS; a future joint thesis, with industrial funding, is also envisaged.

CONCLUSION

This action plan provides a framework for future collaboration between the FLOWER partners. However, it should be noted that the partners had already discussed before the drafting of this plan to continue the work started together, notably through bilateral collaborations.

Finally, all partners will also continue to promote the project and its results at events such as trade fairs and conferences.