

**Project acronym: BECOOL**

**Project full title: Brazil-EU Cooperation for Development of Advanced  
Lignocellulosic Biofuels**

**Grant Agreement Number: 744821**

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**Deliverable D6.1**

Title:	
<b>DISSEMINATION AND COMMUNICATION PLAN</b>	
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**Dissemination Level: Confidential**

## Definitions and objectives

The present Dissemination and Communication Plan aims at defining an effective long-term strategy to pursue the following objectives:

- Raising awareness on the project BECOOL and stimulating interest among all stakeholders;
- Disseminating the results of the project and transferring the knowledge generated by the project to relevant stakeholders;
- Facilitating the exploitation of the project's foreground;
- Ensuring the achievement of impact after the end of the project.

In the context of this document and the related activities, we consider the following definitions for dissemination, communication, and exploitation<sup>1</sup>.

**Dissemination** is the public disclosure of the results of the project in any medium. It is an active process of promotion and awareness-raising that starts 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. Dissemination helps to enable the transfer of knowledge and results to the ones that can best make use of it. It helps to maximize the impact of research, enabling the value of results to be potentially wider than the original focus and preventing the loss of results.

**Communication** means taking strategic and targeted measures to promote the project 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.

**Exploitation** is the use of the results during and after the project's implementation. It can be for commercial purposes but also for improving policies, and for tackling economic and societal problems.

**Results** are any tangible or intangible outputs of the action, such as data, knowledge and information whatever their form or nature, whether or not they can be protected.

The Dissemination and Communication Plan will constitute an essential tool to guide the activities of the Consortium throughout the lifetime of the project and beyond. It is a living document and it will be updated annually with the contribution of all the partners. General principles regarding the dissemination activities, in particular with reference to the publications, are set out in the Consortium Agreement.

The strategy for dissemination and communication in this plan is structured following these principles:

- Identifying the relevant target audience: whom does the project want to speak to?
- Defining clear messages: what messages does the project want to convey to its audience and why?
- Identifying means and tools: how and when will those messages be conveyed to the relevant audience?

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1 Sources:

[http://ec.europa.eu/research/participants/portal/desktop/en/support/reference\\_terms.html](http://ec.europa.eu/research/participants/portal/desktop/en/support/reference_terms.html)

[http://ec.europa.eu/research/participants/data/ref/h2020/other/events/2017-03-01/8\\_result-dissemination-exploitation.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/other/events/2017-03-01/8_result-dissemination-exploitation.pdf)

- Setting measurable objectives and control points to ensure the effective implementation of dissemination and communication activities.

The dissemination activities will take place in the initial phase of BECOOL, by developing the visual identity, the early stage materials and tools such as leaflets, rollup, and the initial website. Tools will provide a basis to raise awareness and interest in the project, for the communication activities that will be developed in a second stage. In the beginning of the project, the main aim is to raise awareness on BECOOL itself and to engage with specific targeted audiences of researchers, policy makers and the general public. In the second half of the project the focus will shift towards communicating results and impact.

## Key messages and target audience

Some of the key messages of the BECOOL project were already identified by the consortium since the preparation of the project proposal. These reflected the initial ambitions and interpretations of the partners and are described in the table below:

Messages	Main relevant audience
BECOOOL and BioVALUE <sup>2</sup> will address two innovative gasification pathways for advanced biofuels	Industrial R&D community
BECOOOL and BioVALUE will promote innovative biomass logistic solutions that will increase resource efficiency both in the EU and Brazil	Agricultural R&D community, biomass suppliers
BECOOOL and BioVALUE will focus only on lignocellulosic feedstock from annual/perennial crops or process residues, no food vs fuel competition and reduced ILUC risks	Agricultural R&D community, biomass producers, association and NGOs, regulators, general public
BECOOOL and BioVALUE will promote the rational integration of lignocellulosic crops into traditional agricultural systems and will increase crop diversification	Biomass suppliers, Agricultural R&D, general public
BECOOOL and BioVALUE will benefit from complementarities in expertise and experience in EU and Brazil on advanced lignocellulosic biofuels	R&D community
BECOOOL will increase the overall energy efficiency of advanced biofuel processes through the valorization of lignin rich residues from current industrial advanced bioethanol production by their conversion into advanced biofuels and heat/power	R&D, Advanced biofuel Industry
BECOOOL will increase the industrial relevance of current lab scale technologies by validating them in a relevant environment	R&D, Advanced biofuel industry
BECOOOL will help advanced biorefineries to meet their biomass requirements through integrated cropping systems	Advanced biofuel industry
BECOOOL AND BIOVALUE will increase the share of scientific knowledge and will foster innovation in the whole value chains of advanced biofuels	International R&D community
BECOOOL international cooperation activities will promote a more efficient use of sugarcane bagasse, from the current use for cogeneration to new thermochemical and biochemical processes	Associations, EU and international regulators, industry

<sup>2</sup> BioValue is the twin Brazilian project of BECOOL.

for advanced biofuels	
BECOOOL will foster innovation in biochemical processing of multiple biomass feedstock	Industrial R&D community, industry
BECOOOL will provide leading examples of sustainable technology solutions to decarbonise the energy system, energy security, and self-supply, contributing to achieve the short and long term targeted goals	Regulators, Associations and NGOs, general public

*Table 1: Preliminary messages to be delivered and target audience as identified at the proposal stage.*

### Brainstorming session at the kick-off meeting

After almost one year since the submission of the proposal, the partners have now drawn a more defined outline of their activities and have become more familiar with the project's targets and ambitions. To collect the different views reflecting this increased awareness from the partners and to come to a common vision of the project, all the participants to the kick-off meeting in Bologna were involved in a brainstorming session. The participants included project partners, as well as the EC officers, and the representatives from the Brazilian twin project. All participants were asked to fill in a simple questionnaire with two questions:

- 1) *Based on your specific contribution to the work packages and on your overall view of the project, what are the main messages that BECOOL should communicate during the first year of activity?*
- 2) *Please identify the main target audience to which the above messages should be addressed (i.e. scientific community, industry, policy-makers, NGOs, general public, other)*

The survey was successful and provided useful insights in what the partners consider as the most appropriate messages to communicate to the different target audience of BECOOL. In several cases these reflect also the specific point of view of the partners based on their relative expertise and their contribution to the different work packages.

The table below summarizes these results:

Message	Target audience
BECOOOL will advance the understanding on how to setup logistic chains for lignocellulosic biofuels in EU and in Brazil	Industry, farmers
BECOOOL will feed the political discussion about how to define "advanced" and "low ILUC" biofuels in the EU	Policy-makers, industry
The message is "connection". Connecting the EU with Brazil. Connecting agriculture with industry	The scientific community through the EUBCE and the general public as this aspect raises a lot of interest from the media
Technology can always be improved with study, research and with collaboration among people. In this case collaboration with Brazilian people. The exchange of know-how and experience is always positive and leads to improvement in everything in life	Scientific community and industry to find out collaboration; policy-makers, general public
The potential implementation of advanced lignocellulosic biofuels can be assessed and	National and EU policy-makers

quantified in terms of social, employment, environmental and biodiversity impacts	
Another way to produce and transform the energy in an environmentally friendly way is possible	Farmers, markets, policy-makers, general public
Biomass is an essential renewable feedstock we need to supply this world with power heat chemicals, fuels and materials. BECOOL aims to develop an integrated approach to supply us with biofuels obtained from different feedstock	Policy-makers
BECOOL will lead to new business opportunities	industry
Most potential feedstock for advanced biofuel production- Criteria: availability, quality, sustainability, cost-effectiveness	Industry, potential investors, scientific community
Advantages of feeding liquid fuel (pyrolysis oil) instead of solid feed (biomass) – Criteria: effect of Potassium on performance of gasification (no Potassium in pyrolysis oil, a lot in biomass)	
Legislation to be clarified – use of agricultural feedstock for advanced biofuels to be discussed	Policy-makers
BECOOL should communicate the technical and economic potential of biofuel production at the EU level based on crop residues and what costs can be expected once the technology has reached maturity	Policy-makers principally and all actors in the supply chain
Sustainability from economic, environmental and social point of view of agricultural dedicated crops for second generation biofuels in EU and in Brazil	Policy makers Industry NGOs General public and scientific community
Sustainable production of advanced biofuels - potential assessment of different conversion pathways	Policy makers
Development of advanced biofuels is a global challenge. Joint European and Brazilian research and innovation projects are working together towards the solutions of these challenges	Policy-makers, NGOs, general public

*Table 2: Project messages and relevant target audience as results of the partner's brainstorming session.*

By using all the statements in tables 1 and 2 in a word cloud generator, it is possible to draw a graphical representation of the most frequent words used by the consortium in defining the initial messages of the project.



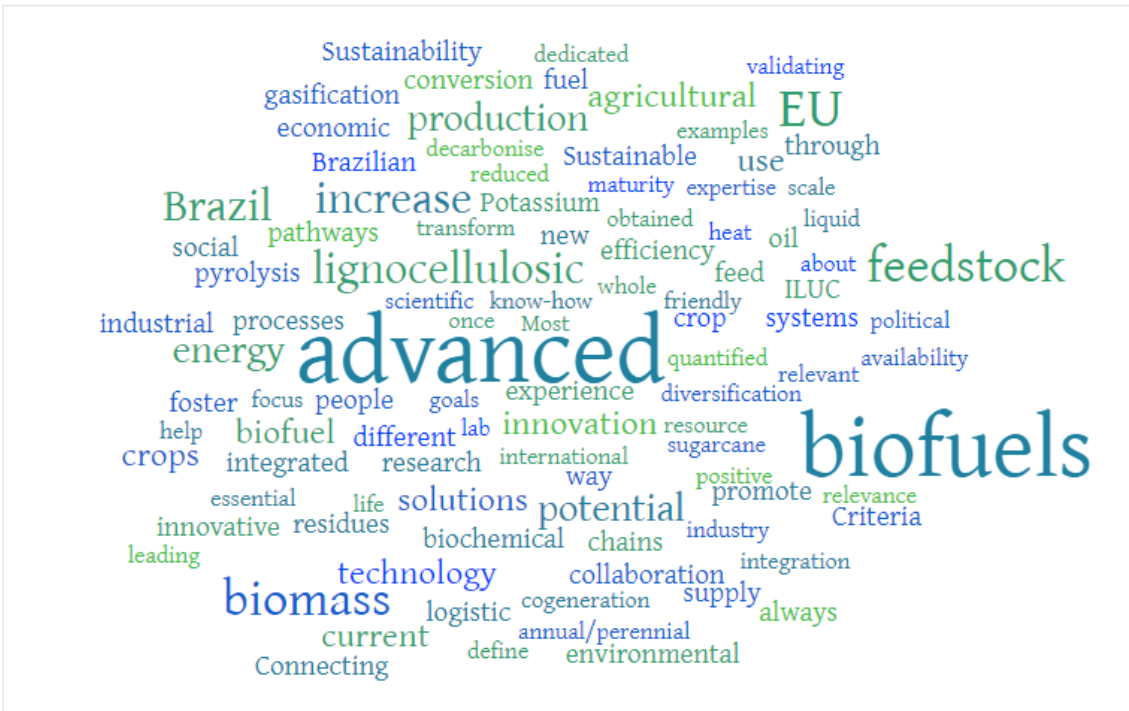


Fig. 1 – word cloud of the project messages as identified in tables 1 and 2.

Building on these initial elements and on the results of the brainstorming meeting, four main keywords and twelve main project messages can be defined as follows:

Keywords	Key message
<b>Cooperation</b>	<ol style="list-style-type: none"> <li>1. International cooperation in BECOOL will deliver solutions for advanced biofuels globally</li> <li>2. BECOOL will connect agriculture with industry in Europe and in Brazil</li> <li>3. Knowledge exchange between Europe and Brazil will improve the production of advanced biofuels</li> </ol>
<b>Innovation</b>	<ol style="list-style-type: none"> <li>4. BECOOL will foster innovation in the whole value chains of advanced biofuels</li> <li>5. BECOOL will bring lab-scale technologies closer to industry</li> <li>6. BECOOL will lead to new business opportunities</li> <li>7. BECOOL will bring new knowledge for the policy debate to define “advanced” and “low ILUC” biofuels</li> </ol>
<b>Integration</b>	<ol style="list-style-type: none"> <li>8. BECOOL will develop a “food and fuel” system by integrating lignocellulosic crops into traditional farming systems</li> <li>9. BECOOL will integrate different conversion processes to produce many products from multiple feedstock</li> </ol>
<b>Sustainable production</b>	<ol style="list-style-type: none"> <li>10. BECOOL will develop logistic solutions for an efficient production and use of biomass</li> <li>11. BECOOL will increase the overall energy efficiency of advanced biofuel processes</li> <li>12. BECOOL will assess and quantify the environmental economic and social effects of advanced lignocellulosic biofuels</li> </ol>

Table 3 - BECOOL Keyword and key messages for year 1.

These messages will represent the base for the elaboration of all the dissemination and communication actions during the first year of the project. Further messages can be derived from this initial set, focusing on specific aspects pertaining to the different tasks and activities, such as agro-logistics, gasification, pyrolysis, co-fermentation and integrated life cycle assessment. If

necessary these messages will be reviewed and adjusted in year 2 with the update of the present D&C Plan.

## Target audience

The main categories of target audience that the project will address were already identified in the proposal stage. During year one, BECOOL dissemination and communication activities will be aimed at conveying the messages expressed above to the following categories of stakeholders.

Category	Stakeholder category
R&D community in the EU and Brazil	Scientific community in the fields of agriculture, mechanization and biomass production, advanced biofuels, gasification, biochemical processing, LCA and sustainability assessment
Biomass suppliers	Agro-industries, farmer's cooperatives, agricultural demonstration extensions, cereal straw producers, agricultural machine producers and contractors
Industry	Bioethanol producers and advanced biofuels companies, renewable energy companies, producers of harvesting machines, gasifier producers, fuel and petrochemical companies, aviation and aviation fuel companies
Regulators and authorities	National and regional authorities in renewable energy and fuels. EC DG Energy, EC DG Agri, EC DG Research, ED DG Environment etc., European Parliament, Standardization bodies etc.
Associations, industry groups and NGOs	National/international energy and (bio) fuel associations; Farmer's associations (COPA-COGECA, UNICA etc.) national/international renewable energy and bioenergy associations. IEA; IRENA. GBEP etc.
Platforms	European Technology Platform for Bioenergy, European Industrial Bioenergy Initiative; Biobased industries Consortium, EIP-AGRI, Other H2020 projects
General public and media	Press and journalists, renewable energy magazines, sustainability magazines, farmer's magazines, EU policy magazines (examples: Renewable Energy World, Biomass Magazine, BE-Sustainable, Euractiv, RE-Charge, Farmer's weekly. Research and innovation magazines (Horizon Magazine) and TV programs (Futuris, Euronews etc.)

*Table 4 - Target audience by category of stakeholder.*

During year one the contacts (email addresses, social media accounts etc.) of the different individual stakeholders belonging to the above categories will be reached by using the contact lists of all the partners. For reasons of privacy policy and confidentiality, these contacts will not be shared but all the partners will commit to conveying all the communication and dissemination items produced by the project to their contact lists. ETA in particular as the leader of the work package for dissemination and communication will use its database of 20.000+ contacts for newsletters, email shots and press releases (1,300+ media contacts to date).

## Tools for dissemination and communication in BECOOL

The multiplicity of messages and the diversity of target audiences identified above will require the utilization of a wide series of dissemination and communication tools, in order to ensure that the right message is conveyed to the relevant target audience in the most effective way. The tools and measures that BECOOL will use are:

### Visual identity and branding material

Basic project dissemination material will include a **project logo**, a **leaflet** (2.000 copies print and pdf), an introductory **slideshow presentation**, an introductory poster and roll-up. Templates of slides and poster to be used in all communication activities will be prepared. All partners will be provided with these materials and will be asked to distribute it at events, workshops and all available opportunities to raise awareness on the project since year 1. In addition to details on the

EU project all these items will clearly include a section about the joint EU-Brazilian cooperation project.

**Note:** By the time of preparation of this deliverable the official project logo and visual identity of the project have already been designed and adopted, as represented below:



A rollup poster and initial flyers were designed and printed. Both the rollup and the flyers were displayed and distributed on the occasion of the 25<sup>th</sup> European Biomass Conference and Exhibition in Stockholm (12-15 June 2017).



### Website and social media channels

A **project website** will be developed in order to raise awareness about the project's activities. The website will contain a public section and a member area. The public section will include information about the project, background information about each one of the main steps of the supply chain investigated by the project: feedstock; logistics; processes, final products, sustainability. A section will be dedicated to presenting the joint EU-Brazil cooperation projects, the common aspects of the two projects and the links to all web and social media tools of the Brazilian project.

A news section in blog style will be updated regularly with content provided by all partners, then promoted via social media channels (Linkedin, Twitter and Youtube).

**E-newsletters** will be mailed every 6 months to the contacts in the stakeholders database, to subscribers via a registration form in the website and finally to the mailing list of all the partners. Both the newsletter and the social media updates will be shared with the persons in charge of the Brazilian project to ensure cross-promotion.

### Press releases

At least **3 press releases** will be published, one at the launch of the project, one at mid-term, one before the final event. The press release will be sent to general press and specialized media



(agriculture magazines, renewable energy magazines, sustainability magazines etc.). ETA (WP leader) will send the press release to its mailing list of 1,300 media contacts, and all partners will be asked to send the press release to their respective media contacts. a press review will be performed by ETA to keep track of the media coverage of all published press

**Note:** At the time of preparation of this deliverable the first press release has been already published (June 5<sup>th</sup> 2017) and is available at this address: <http://ympl.com/zlihVI>



**Press Release – A new research and innovation project will foster Europe-Brazil cooperation on advanced lignocellulosic biofuels**

BOLOGNA, 5 June 2017 – A new Horizon 2020 project will foster cooperation between Europe and Brazil in the development of advanced biofuels from sustainable agricultural value chains, based on lignocellulosic biomass. Coordinated by the University of Bologna, Department of Agricultural Sciences, the four-year BECOOL project will be carried out by a consortium of thirteen partners from seven EU countries, including universities, research institutes, industries and SMEs.

The activities of BECOOL will be aligned with those of BioVALUE, a twin project in Brazil, funded by five State Foundations (FAPESP from São Paulo state, FAPEMIG from Minas Gerais state, FAPERJ from Rio de Janeiro state, FACEPE from Pernambuco state, and FAPERGS from Rio Grande do Sul state) and five Industrial Companies (Petrobras, Fibria, Klabin, Boeing, and Embraer), with 12 research institutions and university partners, coordinated by the Brazilian Bioethanol Science and Technology Laboratory (CTBE) of the Brazilian Center for Research in Energy and Materials (CNPEM). Building on existing complementarities in scientific expertise and experience between EU and Brazil in the development of advanced biofuels, the two projects will adopt a synergistic work programme, to develop a series of research and demonstration activities, covering the entire value chain in a balanced way: from innovative biomass production and logistics, to efficient conversion pathways and exploitation.

releases. Follow-up activities such as interviews by journalists to the project coordinator and/or partners will be done after the press release. Cross-promotion of the EU and Brazilian projects will be ensured via at least 2 joint press-releases to respective media in the EU and in Brazil.

### Conferences and workshops

In order to engage with the international bioenergy community, **two conferences** (one day each) will be held by M24 (mid-term) and M47 (final conference), as side events of the European Biomass Conference and Exhibition that is organized annually by ETA in different locations across Europe. All partners will be invited to participate as speakers, and all the aspects of the project will be included in the agenda, activities, results and challenges of the whole supply chain will be presented. In addition to the European partners, representatives of the Brazilian project will also be invited to speak at the 2 events in Europe (and vice versa), in order to present the activities and results of the Brazilian project. The events will also include panels and debates between European and Brazilian partners and interaction with the audience, so that proper feedback will be provided to the consortium about the impact that can be generated by the project at academic industrial and socio-economic level.

In addition to the events organized by the project, the consortium will also ensure the participation of partners as speakers to leading events at national level, to address different audiences (i.e. agricultural fairs, sustainability fairs, renewable energy events and conferences etc.).

### Demonstrations and site visits

At least one **demonstration day** will be organized in Italy to show the harvesting logistics and handling of agricultural residues, as well as the results of the field trials with annual and perennials dedicated energy crops. Local farmers and stakeholders will be invited to attend, and video footage will be collected for publication in the project's website and social media channels.

At the time of preparation of the present D&C plan, some partners have expressed interest in hosting a demonstration day at their experimental station. A possible occasion for a demonstration day of innovative harvesting systems is foreseen in November 2017, located in the experimental fields of CREA-ING in Italy, although the final decision has not been taken yet.

### Webinars

A series of **webinars** will be organized by ETA and recorded to be available on the project's Youtube channel. These web events will focus on specific aspects of the project: 1) agriculture and

supply chain; 2) processing technologies; 3) sustainability, 4) market and exploitation. They will be effective in addressing different target groups. The topics of the webinars will be presented with slides and video/oral comments by ETA and the other project partners. At least one representative from the Brazilian joint project will be invited to speak in order to ensure cross-promotion. These webinars will be conducted with online interactive meeting tools, so that participants will be able to raise questions and comments.

### Publications

All publications will be open access. Scientific publications will target mainly academia and other research organizations, while more general articles will be published in agricultural and trade magazines in order to reach a wider audience. At least one joint EU-Brazil **scientific paper** will be published on a peer reviewed open access journal.

At least **4 outreach articles** (one every year) with results and activities of both the EU and the Brazilian projects will be published on BE-Sustainable magazine, the magazine about bioenergy and the bioeconomy edited and published by ETA since 2012 and distributed in print and digital version.

One **final publication** (provisional title: *Advanced Biofuels: 4 years of EU-Brazil cooperation*), in form of a book will be edited by ETA with the contribution of all partners. This will summarize the results of the project in a fact based and public oriented document. The publication will feature chapters on the aspects of the supply chain, results from the WPs, sustainability and case studies. It will clearly highlight the results and the added value of the cooperation between the twin EU-Brazil projects. The publication (print) will be distributed at the final conference and will represent one of the main tools to ensure the generation of impact after the end of the project. The publication will clearly highlight the results of the cooperation with Brazil. An online version will also be available on the project's website.

All the tools for dissemination and communication described above will be chosen to reach different groups of stakeholders and audiences as indicated in principles in the table below:

Main audience	Activity/tool
R&D and scientific community	Scientific publications; conferences, university lectures
Industries, biomass suppliers, technology platforms,	Website, workshops, site visits, videos, webinars and direct meetings, factsheets and magazine articles
Industries, regulators and authorities, associations, international policy makers, stakeholders and technology platforms	Website, factsheets and publications, target workshops and meetings, webinars
General public, associations and NGOs, regulators and policy makers, press and media	Website, videos, factsheets and publications, press-releases, magazine articles, interviews, direct meetings

Table 5 – communication and dissemination tools by target audience

### Plan of dissemination and communication activities

During the first year the main activities will be related to the objective of raising awareness and interest about the project among a wide audience of stakeholders. These activities will include initial press release, development of a visual identity, production and distribution of project branding material (logo, leaflets, slide presentations, posters, rollup etc.), establishment of project online presence: website setup, initial content creation and start-up of social media channels (project blog, linkedin groups, twitter etc.); regular information and project promotion through online newsletters; video and/or text interviews to partners to explain the ambition and the added value of the project, published on website and promoted via social media and press, etc. These tools will be maintained and used throughout the lifetime of the project. In the choice of the most suitable tools

for dissemination, the strategy will adopt also an approach based on the objective of the single actions (informing about project, informing about results, making results available for use) as described in the figure above:



Fig. 2- Source: European Commission - [http://ec.europa.eu/research/participants/data/ref/h2020/other/events/2017-03-01/8\\_result-dissemination-exploitation.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/other/events/2017-03-01/8_result-dissemination-exploitation.pdf)

From the second year on, these actions will be gradually complemented by some additional activities to support the exploitation of the project's foreground and to promote the transfer of knowledge. Activities will include the organization of events (workshops, conferences, online webinars, demonstration days etc).

Finally, in the last part of the project, all the activities above will be complemented by measures to promote BECOOL impacts beyond the project (e.g. scientific and technical publications, online and print project summary publications for target groups, project conference, project repository on website, etc.). **All the above mentioned activities will be implemented with the utmost care in sharing information with the BioVALUE project such as the cross promotion of website updates, social media updates and joint press releases.**

## Timeline of dissemination and communication activities for year 1

A timeline of the planned activities for year 1 is described in the page below. At the time of delivery of the present document, the first four activities represented in the timeline have already been implemented. The other activities are planned between M3 and M12. A possible update of this timeline will be done at M7 with contributions from all partners indicating their individual planned activities until M12.

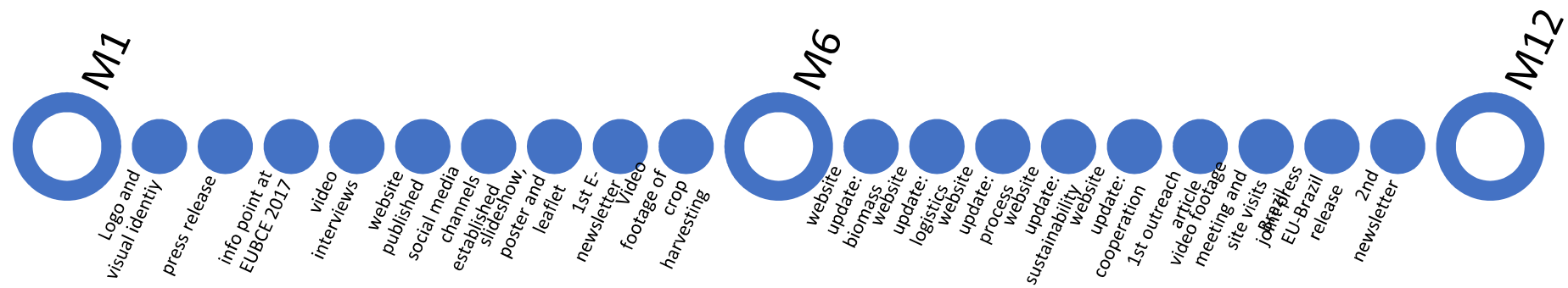


Fig 3- Timeline of planned dissemination and communication activities for year 1.