BAMBOO

D12.5: Mid-term report on communication and dissemination activities

May/2020 (M21)

Author: Veronica Meneghello (ICONS)





Technical References

Project Acronym	ВАМВОО
Project Title	Boosting new Approaches for flexibility Management By Optimizing process Off-gas and waste use
Project Coordinator	Cristina Gonzalo Tirado Fundación CIRCE cgonzalo@fcirce.es
Project Duration	September 2018 - March 2022
Deliverable No.	D12.5 - Mid-term report on communication and dissemination activities
Dissemination level ¹	PU
Work Package	WP 12 - Communication and Dissemination
Task	T 12.3 - Communication and dissemination formats
Lead beneficiary	19 (ICONS)
Contributing beneficiary(ies)	
Due date of deliverable	May 31, 2020
Actual submission date	May 26, 2020

¹ PU = Public

- 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)





Document history		
V	Date	Beneficiary partner(s)
1.0	1-21/05/2020	ICONS
1.1	21/05/2020	CIRCE
1.2	25-26/05/2020	ICONS

DISCLAIMER OF WARRANTIES

This document has been prepared by BAMBOO project partners as an account of work carried out within the framework of the EC-GA contract no 820771.

Neither Project Coordinator, nor any signatory party of BAMBOO Project Consortium Agreement, nor any person acting on behalf of any of them:

- a. makes any warranty or representation whatsoever, express or implied,
 - i. with respect to the use of any information, apparatus, method, process, or similar item disclosed in this document, including merchantability and fitness for a particular purpose, or
 - ii. that such use does not infringe on or interfere with privately owned rights, including any party's intellectual property, or
 - iii. that this document is suitable to any particular user's circumstance; or
- b. assumes responsibility for any damages or other liability whatsoever (including any consequential damages, even if Project Coordinator or any representative of a signatory party of the BAMBOO Project Consortium Agreement, has been advised of the possibility of such damages) resulting from your selection or use of this document or any information, apparatus, method, process, or similar item disclosed in this document.





Table of content

0 EXECUTIVE SUMMARY	6
1 COMMUNICATION AND DISSEMINATION	7
2 COMMUNICATION ACTIVITIES	8
2.1 METHODOLOGY AND APPROACH	8
2.2 MATERIALS AND CHANNELS	8
2.2.1 POSTER/BANNER	9
2.2.2 WEBSITE	9
2.2.3 SOCIAL NETWORKS	12
2.2.4 Articles	15
2.2.5 Media kit	15
<u>3</u> DISSEMINATION	16
3 DISSEMINATION 3.1 Methodology and approach	<u> </u>
3.1 METHODOLOGY AND APPROACH	16
3.1 METHODOLOGY AND APPROACH3.2 MATERIALS AND CHANNELS	16 16
 3.1 METHODOLOGY AND APPROACH 3.2 MATERIALS AND CHANNELS 3.2.1 BROCHURES 	16 16 17
 3.1 METHODOLOGY AND APPROACH 3.2 MATERIALS AND CHANNELS 3.2.1 BROCHURES 3.2.2 NEWSLETTER 	16 16 17 18
 3.1 METHODOLOGY AND APPROACH 3.2 MATERIALS AND CHANNELS 3.2.1 BROCHURES 3.2.2 NEWSLETTER 3.2.3 PROJECT VIDEO 	16 16 17 18 18
 3.1 METHODOLOGY AND APPROACH 3.2 MATERIALS AND CHANNELS 3.2.1 BROCHURES 3.2.2 NEWSLETTER 3.2.3 PROJECT VIDEO 3.2.4 PRESS RELEASES 	16 16 17 18 18 19





List of figures

Figure 2.1 - BAMBOO poster/banner	. 9
Figure 2.2 - BAMBOO news section	10
Figure 2.3 - BAMBOO website analytics from December 2018 to May 2020 - Users	11
Figure 2.4 - BAMBOO website analytics from December 2018 to May 2020 - Countries	12
Figure 2.5 - BAMBOO total outreach indicators	13
Figure 3.1 - BAMBOO brochure	17
Figure 3.2 - BAMBOO subscription form to the newsletter	18
Figure 3.6 - PEI by publication	23
Figure 3.7 - BAMBOO publications' effectiveness quadrants	26

List of tables

Table 2.1 - BAMBOO total engagement indicators	13
Table 2.2 - BAMBOO SEI: outreach and engagement data	14
Table 3.1 - Engagement and outreach of BAMBOO video on BAMBOO social networks	19
Table 3.2 - BAMBOO publications' outreach indicators	20
Table 3.3 - BAMBOO publications' engagement indicators	21
Table 3.4 - BAMBOO publications	25
Table 3.5 - List of publications released by BAMBOO partners	26
Table 3.6 - BAMBOO technical publications	28
Table 3.7 - List of events were BAMBOO has been disseminated	29





0 EXECUTIVE SUMMARY

The main objective of BAMBOO is to develop new technologies addressing energy and resource efficiency challenges in 4 intensive industries (steel, petrochemical, minerals and pulp and paper).

Communicating and disseminating the project's motives and actions to its targeted audience is, therefore, a key task that will allow BAMBOO to support its uptake between professional stakeholders while raising the people's awareness on the economic, environmental and social impacts of a shift towards sustainability of the intensive industry sector.

This report provides an overview of the communication and dissemination activities carried out up to M21 (May 2020), the materials and channels developed to communicate and disseminate the project and the results get with such activities.

After the brief but crucial opening chapter "Communication and Dissemination" to explain the differences but complementary role of communication and dissemination activities, the report is divided into two main sections:

- Communication, which is mainly addressed to the public at large who is involved in the project through dedicated materials and channels, namely posters, website, social networks, news releases and articles
- **Dissemination**, whose main target are the experts and professional stakeholders. Here the materials, channels and the tone of voice is more technical, and the results are provided through brochures, videos, press releases, networking events, scientific publications etc.

The document also shows the monitoring strategy of Fondazione iCons and provides some initial data especially regarding the social activity and the release of BAMBOO publications. The monitoring activity is a continuous process that allows ICONS to improve the D&C activities. The final deliverable D12.6 - Final report on communication and dissemination activities will include all the monitoring data recorded along the project.





1 COMMUNICATION AND DISSEMINATION

BAMBOO communication and dissemination activities aim to raise awareness about its real added value not only in economic terms but also in terms of technical, environmental and social impacts.

The **aim of dissemination activities** is to disseminate the project results, mobilise stakeholders and establish deep ties with relevant platforms, networks, associations and other related projects. The target of dissemination formats is the professional audience and the tone of voice is technical and formal, with accurate terminology and specific results in terms of technological improvements.

High priority is given to EU resource and energy intensive industries companies and technology providers, who will be the key targets in the project dissemination. However, as innovation action, BAMBOO addresses its outcomes also to the scientific community, researchers and technical experts as well as policy makers and public bodies.

The **aim of communication activities** is to translate technical language into easy-to-understand results and, therefore, to inform the public at large (citizens, users, media) about how BAMBOO innovations are connected to their lives and will affect their future.

In other words communication activities complement dissemination ones as they add public value to the achievements of the project by transforming the sometimes complex scientific and technological results into resources, focusing on a few key headlines outlining the benefits achieved by the project for themselves.

Given the dichotomy of the target audience, the project objectives can be met as we formulate a strong, inclusive and efficient communication and dissemination strategy. With the "Communication" approach, we aim to reach out to all types of audiences - including citizens by using the communication tools to be developed during the project and listed in this report. As for the "Dissemination" approach, we seek to reach out with the professional stakeholders via selected channels and events.

To target the above audiences the project will implement dedicated dissemination and communication activities, respectively targeting professional and stakeholders' communities on one side and larger audiences and citizens on the other. Depending on the specific target audiences, the project will implement either the dissemination activities or the communication activities, as mentioned above.





2 COMMUNICATION ACTIVITIES

2.1 Methodology and approach

Public communication is part of the BAMBOO strategy since the beginning of the project and all activities have been oriented to raise awareness about the project objectives as well as to foster public acceptance.

BAMBOO set up a global content diffusion framework, through the implementation of a communication approach aiming to provide the project with a complete set of dissemination and communication channels and tools to support replication of the BAMBOO concepts and solutions even beyond the project's duration.

The following channels have been used by the project to communicate and engage with external audiences:

- BAMBOO project website;
- Social networks;
- Multipliers and media platforms

Publicly available contents have been processed and treated considering the different audiences and have been packaged into the following communication formats and publications:

- News releases
- Journalistic articles and interviews
- Posters
- Roll-up
- Media kit

The overall and detailed communication strategy is explained in D12.1 - Communication and dissemination plan. Moreover, D12.3 - Project communication kit provides a specific list of all communication materials already produced and under production by the communication leader ICONS.

2.2 Materials and channels

The production of BAMBOO communication materials was developed mainly during the first 12 months of the project to the communication requests coming from the partners.

The BAMBOO communication channels were opened at the very beginning of the project to start interacting with the audience and to inform about the progresses of BAMBOO since the starting of the project.





This ensured both a constant update of the official communication materials and also made possible for all partners to be always equipped with dedicated formats and to count on dedicated channels, according to their communication and dissemination needs or to the type of events organised.

2.2.1 Poster/banner

BAMBOO C&D leader, ICONS, with the contribution of the project coordinator, CIRCE, has developed a brochure with a double use. Indeed, the BAMBOO brochure can be used as dissemination material from one side and as poster from the other side. The poster shows an impacting message in line with the BAMBOO visual identity and can be used also as a banner to be placed in the front of stands or speakers table in conferences.



Figure 2.1 - BAMBOO poster/banner

2.2.2 Website

The BAMBOO project website (http://www.bambooproject.eu/) was completed and made operational at the end of December 2018. It was developed with Wordpress CMS and it has been further developed in the following months by adding updated information and more sections. However, a basic landing page was available online since the beginning of November 2018.

It has been developed and is managed by Fondazione iCons, who is responsible for contents selection, release and distribution of the communication materials on external online resources.

The website is regularly updated to promote every BAMBOO activity: news item and events are regularly published. The structure of the BAMBOO website has been developed having in mind the primary need of the website, which is to act as a touch point between the project and the community of stakeholders as well as the general public potentially interested in the topics dealt with by BAMBOO. For these reasons, it has been considered essential that the website is easy to navigate, and content can be easily found.

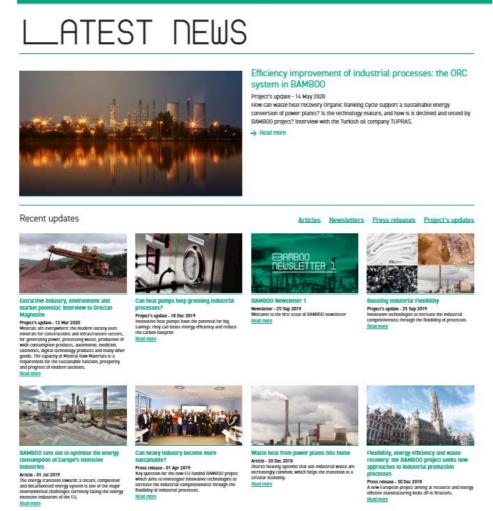
The News and Events sections have been kept constantly updated with the latest developments of the project, as provided by the image below.





Figure 2.2 - BAMBOO news section

BAMBOO



Registered users to the website receive updates and information about the project through the official e-Newsletter. Registration is allowed through the subscription format placed at the bottom of every page of the website.

The analysis of the performances of the website in terms of visits (considering the launch of the first version at the end of December 2018) provides an idea of the impacts on online audiences through the BAMBOO website.

The data were collected with Google Analytics, a widely known and used tool that tracks all available data about the traffic to websites and the audience they reach. This tool represents the state of the art in website statistics tracking. The website had a total of 15,684 pageviews and





2,707 unique users (out of a total of 3,977 sessions) with an average of 3,9 page per session¹ and 2:02 minutes of average time spent per session. Particularly relevant is the low percentage of the bounce rate², 23,26%, which basically is the percentage of single interaction visits to a website: generally speaking, the lowest the percentage is, the highest is the interest of your audience. This data shows that users are highly interested in the contents of the website and to not exit soon. The images below provide an overview of the audience, the countries of visitors and the most visited page in the period between December 2018 and May 2020.





Pageviews is the total number of pages viewed. Repeated views of a single page are counted.





¹ A session is the period time a user is actively engaged with your website, app, etc. All usage data (Screen Views, Events, Ecommerce, etc.) is associated with a session.

Users had at least one session within the selected date range. Includes both new and returning users

Pages/Session (Average Page Depth) is the average number of pages viewed during a session. Repeated views of a single page are counted.

Avg. Session Duration The average length of a Session

Bounce Rate is the percentage of single-page visits (i.e. visits in which the person left your site from the entrance page without interacting with the page). % New Session An estimate of the percentage of first-time visits

² A bounce is a single-page session on your site. In Analytics, a bounce is calculated specifically as a session that triggers only a single request to the Analytics server, such as when a user opens a single page on your site and then exits without triggering any other requests to the Analytics server during that session. Bounce rate is single-page sessions divided by all sessions, or the percentage of all sessions on your site in which users viewed only a single page and triggered only a single request to the Analytics server. As a rule of thumb, a bounce rate in the range of 26 to 40 percent is excellent. 41 to 55 percent is roughly average. 56 to 70 percent is higher than average,but may not be cause for alarm depending on the website. Anything over 70 percent is disappointing for everything outside of blogs, news, events, etc. (https://www.gorocketfuel.com/the-rocket-blog/whats-the-average-bounce-rate-in-google-analytics/)

Country.	Usava 🦉 Usava
Country	Users % Users
1. 🧮 United States	427 16.56%
2. 📰 United Kingdom	324 📘 12.57%
3. 💶 Spain	280 📘 10.86%
4. Ilaly	150 🚦 5.82%
5. 🥅 Germany	124 4.81%
6. France	100 3.88%
7. 📰 India	94 3.65%
8. Belgium	91 3.53%
9. 🔚 Greece	68 2.64%
10. 🖶 Finland	64 2.48%

Figure 2.4 - BAMBOO website analytics from December 2018 to May 2020 - Countries

2.2.3 Social networks

The BAMBOO social media strategy has been defined at the very beginning of the project. BAMBOO has a social media presence on LinkedIn as main social network, with a BAMBOO company page. Indeed, since the project is mainly addressed to professional and industrial stakeholders and investors, the LinkedIn strategy seemed to be the most appropriate for BAMBOO. The account was opened in March 2019, after the launch of the website and once the first piece of news about the project were online. At the same time a twitter account was launched as secondary social media of BAMBOO. The goal at the basis of the strategy was to approach with different audiences which may be not present on LinkedIn and have different objectives (e.g. journalists, whose main social is twitter, citizens, civil society etc). Both the accounts are constantly updated and monitored, with fresh contents to engage with new users and stakeholders.

Once the project will achieve the first results which could be publicly disseminated, the social networks will be further exploited. D&C activity is a continuous process which grows together with the project therefore we expect numbers to improve as long as the project improves.

Fondazione ICONS developed a dedicated strategy to monitor the outreach and the engagement of BAMBOO social media³. This allows ICONS to develop the **Social Engagement Index (SEI)** which measures the level of interest generated in the social community by eTEACHER social posts. SEI considers both the outreach of each post and the corresponding generated activity on social media. Below we provide an explanation of what we consider as outreach and engagement, the indicators and the tools used to generate the index.

³ Partners' social media activity cannot be included in the monitoring strategy (SEI) produced by Fondazione iCons. The index refers only to BAMBOO social media, managed by ICONS.





Outreach

Total outreach on social media assesses the size of the audience of BAMBOO posts across its social media, mainly LinkedIn and Twitter.

The following table shows BAMBOO social media outreach indicators and the tools used to collect the data.

Channels	Outreach indicators of eTEACHER social posts	Tools
Social media	Twitter impressions on @bambooH2020 (*osp)	Twitter Analytics
Social media	Visualisations on LinkedIn (* <i>osp</i>)	LinkedIn Statistics

Considering this, total outreach of social media is represented by the overall number of impressions and visualisations of each post (*osp: outreach social posts**).

Engagement

Engagement on social media represents all the activities carried out by individuals to engage with content posted on social and animate the social community.

Considering eTEACHER leverage of LinkedIn and Twitter, the following table describes the perimeter adopted within the project and the tools used to collect the data.

Table 2.1 - BAMBOO tota	I engagement indicators
-------------------------	-------------------------

Channels	Engagement indicators of eTEACHER social posts	Tools
	Twitter engagements (incl. Clicks, Retweets, Replies, Follows and Likes) (*esp)	Twitter Analytics
Social media	LinkedIn Likes, Clicks, Comments, and Shares (*esp)	LinkedIn Statistics
	Total Mentions (nuvi mentions posts)	NUVI

Total engagement on social media (**esp, engagement social posts*) is therefore the sum of clicks, likes, shares, tweets, retweets, new follows, links and NUVI mentions connected to each post.

BAMBOO mainly leverages LinkedIn and Twitter as key social channels to distribute its content, drive engagement and create a virtual community of stakeholders.





2.2.3.1 BAMBOO Social Engagement Index: SEI

The table below shows the key data in terms of outreach and engagement for BAMBOO. Data refers to the period March 2019 - April 2020.

Total outreach on social media amounts to 63,985 visualizations, with Twitter dominating (84.6%) not only because it was the main social leveraged (52 tweets versus 22 posts on LinkedIn), but also for its ability to attract on average a larger audience (3,866 versus 704).

Total engagement on Twitter amounted to 493; total engagement on LinkedIn (including followers, clicks, likes, comments and shares) to 993, for a total of 1,486 interactions with BAMBOO content on social media. What is relevant to stress is that, unlike the outreach, LinkedIn can engage on average with larger audience (993 versus 35). This is reflected in the more positive Social Engagement Index (SEI) for the first compared to the latter. With the project achieving a total SEI of 2.3%, LinkedIn stands at 10.1% while Twitter reaches 0.9%. It is still worth stressing that 0.9% on Twitter is considered a very positive rate⁴.

	Twitter	LinkedIn	Total
Number of followers (May20)	107	124	231
Number of tweets/posts	52	22	74
Average outreach per tweet/post	3,866	704	-
Average engagement per tweet/post	35	993	-
Total outreach	54,124	9,861	63,985
Total engagement	493	993	1,486
SEI	0.9%	10.1%	2.3%

Table 2.2 - BAMBOO SEI: outreach and engagement data

The initial data underline that the double social media strategy works well because the two social media compensate each other in terms of outreach and engagement and, as a consequence, in terms of audience reached. Indeed, while the outreach is higher on twitter, LinkedIn ensures higher engagement from followers. While Twitter works well in spreading the news at a large audience, LinkedIn is a very important channel to raise the attention of a more specific share of audience, like industrial stakeholders and companies, investors etc. and, according to the literature and to our previous studies, its Social Engagement Index (SEI) is usually higher compared

Regarding LinkedIn, a 2% engagement rate is also considered good, and an above 2% engagement rate is the reflection of a very good work, meaning the project is engaging with 1 out of 10 people, which for social media is a quite high engagement (source: <u>https://acumen.aamplify.partners/what-is-a-good-linkedin-engagement-rate</u>).





⁴ The literature provides some explanation to read the engagement rate data (SEI) and to understand how good is the work we're doing on social networks. Generally speaking, as for Twitter, an engagement rate (SEI) between 0.33% and 1% is considered to be very high, with expected reactions to be between 3 - 10 for every 1000 Twitter followers (source: https://blog.scrunch.com/what-is-a-good-engagement-rate-on-twitter).

to the twitter one. We can conclude that the two social networks complete each other in terms of audience reached and outreach and engagement produced.

Therefore, this draws some interesting preliminary conclusions:

- Twitter is by far the most effective social in reaching its targets. Its outreach data are outstanding, making it a perfect tool for communicating with a large audience, including the general public.
- LinkedIn creates smaller communities, but very interactive and engaged with the project's content. It is clearly a stakeholders' tool. So, while its outreach is very little and, in a way, irrelevant, leveraging LinkedIn is still crucial to project's success, thanks to its ability to animate the community of the key stakeholders.

2.2.4 Articles

Independent journalistic articles will be written by professional journalists. They will cover topics relevant to BAMBOO while keeping in mind the wide range of audiences who will be reading them.

Four journalistic articles are set to be released in the duration of the project: three covering the impacts on the business areas of the BAMBOO REII demonstrators and a more general one on the innovation related to the BAMBOO demand management concept dealing with waste streams that are usually neglected at the REII sectors.

Articles will be written at a more mature stage of the project once more results and data are available and can be used to raise a high interest in the BAMBOO audience and increase the reputation and the reliability of the project.

The journalistic articles will be published also via the BAMBOO Project Website and promoted using the available social media channels. Moreover, they will be widely distributed to the media and information multipliers to address the public at large (including citizens, policy makers, investors, etc.) and to specific portals and industry associations to target a more specific audience.

They are meant to inform and to stimulate interest among the public (as well as the professional community) to raise the public awareness and acceptance of the project's key ideas.

2.2.5 Media kit

A dedicated BAMBOO press kit has been uploaded on the website and available for partners, journalists and stakeholders in general interested in spreading the project.

It contains the logo and the main graphic materials available in the brand book that can be used whenever necessary for the dissemination of the project. It will be further updated over the project whenever new graphic materials are designed.





3 DISSEMINATION

3.1 Methodology and approach

Dissemination and communication represent a key activity for BAMBOO to raise awareness and acceptance towards the new industrial paradigm. While communication is addressed to a more general public, dissemination focuses on the professional audience that may be highly interested in the BAMBOO's results, namely industry companies and technology providers, grid system operators, technical experts, researchers and scientific community, policy makers and public bodies as described in the D&C plan.

Dissemination activities will focus on increasing awareness and acceptance of the abovementioned macro audiences.

BAMBOO has set up a global content diffusion framework, through the implementation of a dissemination approach aiming to provide the project with a complete set of dissemination and communication channels and tools to support replication of the BAMBOO concepts and solutions even beyond the project's duration.

The following dissemination formats and publications will be developed across the project by the D&C Secretariat with the contribution of all partners:

- Graphic materials dedicated to professional communities (posters, brochure, video etc.)
- e-Newsletter
- Info-packs
- Publications in technical literature and dedicated journals

The following channels have been defined by the project to disseminate the project's achievements and engage with external audiences:

- Networking with key stakeholders and EU associations
- BAMBOO website and online channels to disseminate the e-formats of the dissemination tools (e-newsletter, info-packs, webinars, final video etc.)
- External events to be attended by project partners on behalf of BAMBOO
- Training and capacity building programs, practical workshops and online seminars

3.2 Materials and channels

An active participation of the BAMBOO project consortium in Dissemination & Communication activities will be crucial along the whole project to achieve the dissemination goals and enhance awareness and interest around the project.

In the paragraphs below a list of dissemination materials and formats that have been or will be produced by the BAMBOO is provided. Numerical terms are included to the list whenever available.





3.2.1 Brochures

BAMBOO's brochure was developed by Fondazione iCons and validated by the project coordinator Fundación CIRCE. It is compliant with the project's visual identity and it is designed to provide BAMBOO's stakeholders with a concise and exhaustive overview of the project.

A total of 1,600 brochure have been printed by ICONS and distributed to partners upon their request. Brochures are a key dissemination material especially during conferences and events in general. The cutting-edge concept of the BAMBOO brochure was expressly conceived to attract a professional audience: while one side provides key information about BAMBOO project, the other side shows four infographics, one per demo site. The final aim is to turn technical topics like those related to the industrial flexibility in energy-intensive industries into a catchy and versatile material. A more detail presentation of the brochure is available in D12.3 - Project communication kit.



Figure 3.1 - BAMBOO brochure





3.2.2 Newsletter

A periodic e-Newsletter is issued anytime relevant information are available on the website and/or in occasion of BAMBOO events to invite the subscribers to participate. The aim of the newsletter is to provide information on BAMBOO progresses and results as well as links to news and upcoming events. Newsletters are made available on the project website and sent-out to the subscribers.

The e-Newsletter is designed and sent out through a dedicated Wordpress Newsletter plug-in⁵ available in the back end of the project website. The BAMBOO issues are readable on the project website and directly online by clicking "View in your browser".

BAMBOO newsletter 1 is available on the website: http://bambooproject.eu/news/newslettter1/

A dedicated subscription form has been designed by ICONS to make the subscription easier⁶.

	⊟AMB00	
1	nterested in Industrial Flexi	bility?
Subscribe to BAM	IBOO newsletter: you will receive the la	atest news on the project
and i	nvitations to networking events right ir	i your inbox.
	E-mail address	
	Type your e-mail here	
	I accept the privacy notice	
	SUBSCRIBE	

Figure 3.2 - BAMBOO subscription form to the newsletter

3.2.3 Project video

The project presentation video has been conceived, designed and produced by Fondazione iCons, with the help of the coordinator Fundación CIRCE and demo sites' leaders who provided parts of the real video footage used for the presentation video.

The video is used by partners to present BAMBOO at professional conferences and events.

⁶ <u>http://bambooproject.eu/subscribe/</u>





⁵ <u>https://www.thenewsletterplugin.com/</u>

- 1. The main target is a very industrial audience: stakeholders/companies working in the REII field, investors, technology providers.
- 2. The second target are policy makers in charge of changing industrial policies, constraints etc.
- 3. The third target is the public at large

BAMBOO presentation video is available on the <u>BAMBOO YouTube channel</u>, on the BAMBOO the website under the "<u>project" section</u> and it's been disseminated through BAMBOO social networks.

Table 3.1 - Engagement and outreach of BAMBOO video on BAMBOO social networks

	Twitter	LinkedIn	Total
Total engagement (social networks-only)	48	51	99
Total outreach (social networks-only)	2,491	262	2,753

3.2.4 Press releases

BAMBOO press and news releases address the different specific issues or aspects of the project, thereby drawing the stakeholders' and the public's attention towards it. Press releases will be used to communicate the project key milestones, training, events and any other initiative, which is worth bringing up to a selected audience. News releases, on the other hand, have an informal structure of posts and are easily read by the public.

Press releases and news releases aim at raising the audience awareness about any occurrence worth disseminating. Both are published on the project website and are eventually distributed to external online resources and news multipliers (like Cordi, Wire and AlphaGalileo). This will be done to increase the visibility of the project's concrete actions via take up, sharing and republishing some of the project's content and cascading them down to the existing audience.

The consortium is in charge to spread the dissemination materials among (inter)national sector/subject specific channels in order to reach, inform and create interest among the predefined target groups. These channels are sector magazines, blogs, websites, social media groups/pages and channels of relevant international sector organisations or interest groups.

The monitoring of the editorial production developed by the D&C leader and uploaded on the BAMBOO website is part of Fondazione iCons's strategy⁷. The **Publication Engagement Index (PEI)** helps to measure, in a quantitative way, the actual engagement of people with the publications' content delivered by BAMBOO on the websites (project website and youris.com), social media and multipliers. The PEI takes into account both the outreach of a given publication and the corresponding generated activity, merging them into a unique composite indicator (index) able to

⁷ The publications released by project partners not available on the BAMBOO project are collected by ICONS through a dedicated template on a six-months basis. However, since such publications are not available on the project website, they cannot being part of the publications' monitoring strategy (PEI) of Fondazione iCons.





accurately represent the engagement of the BAMBOO community into the topics treated by the project's publications.

The publication strategy will improve and provide more insights as long as the journalistic activity of BAMBOO will start. Below a full explanation of the publications' monitoring strategy is provided. Data available refers to the news and press releases available on the website.

Publications' outreach

Publications' outreach indicators assess the size of the audience of BAMBOO content published in articles, videos, interviews, page flows, news and press releases across the three channels where content is made available (websites, social media and information multipliers). Websites include both the project website and youris.com, ICONS proprietary public communication portal on EU research and innovation distributing independent journalistic content (e.g. articles). Information multipliers are online communication platforms leveraged to "multiply" publications' reach.

The following table shows BAMBOO publications' outreach indicators and the tools used to collect the data.

Channels	Outreach indicators of eTEACHER publications	Tools
	Total visits on eTEACHER website	Google Analytics
Website	Unique visitors on eTEACHER website	Article
Website	Total visits on youris.com	Press Release
	Unique visitors on youris.com	Article
	Twitter impressions on @eteacherEU	Twitter Analytics
Social	Twitter impressions on @YourIS_com	News release (brochure)
media	Visualisations on LinkedIn	LinkedIn Statistics
	Visualisations on eTEACHER YouTube account	YouTube counter
Multipliers	Impressions on multipliers (EU Agenda, AlphaGalileo, Cordis, BuildUp, Construction 21, etc)	Provided directly by the multipliers or, in a minor number of cases, estimates based on a solid number of parameters leveraging time series and historical data

Table 3.2 - BAMBOO publications' outreach indicators





In the above table the following definitions apply:

- Visits, impressions, visualisations: number of times a content has been seen online (different platforms use different terms to describe the same action).
- Visitors, viewers: number of people who got in contact with the content online.

Considering this, total outreach of publications is represented by the overall number of visits, impressions and visualisations of each publication.

Publications' engagement

Publications' engagement metrics are a measurement of if and how stakeholders engage with BAMBOO content available in publications through online interaction on websites, social media and multipliers.

The following table shows BAMBOO publications' engagement indicators and the tools used to collect the data.

Channels	Engagement indicators of eTEACHER publications	Tools
Website	Facebook Likes and Social Shares on Youris.com	Youris.com social widget
	Twitter engagements (incl. Clicks, Retweets, Replies, Follows and Likes)	Twitter Analytics
Social	LinkedIn Likes, Clicks, Comments, and Shares	LinkedIn Statistics
media	YouTube Likes and Comments	YouTube counter
	Total Mentions	NUVI
Multipliers	Multipliers' engagement metrics (ScienceX social shares and comments, AlphaGalileo Asset Hits)	Provided directly by the multipliers
Other	Other/local uptakes	Communicated by project partners to ICE

Table 3.3 - BAMBOO publications' engagement indicators

Total mentions represent the number of times NUVI found any of the keywords related to the article (corresponding to title, subtitle, first sentence, URL or tweet) on the web pages and the social media it monitors (Twitter, WordPress, Google+, Blogs, News, RSS, Tumblr, Automattic, Reddit, VK, Facebook, YouTube). NUVI® is a real-time social monitoring platform leveraged for this purpose.

Alphagalileo asset hits represent the number a publication has been downloaded from Alphagalileo.





Other/local uptakes are communicated directly to ICE by project partners and might include the translation of a publication in local language, the reference to the project in a local newspaper, etc. Data represent local engagement with the content delivered by eTEACHER at EU level.

Considering this perimeter, total engagement of publications is represented by the overall number of interactions with the content of each publication.

3.2.4.1 BAMBOO Publications Engagement Index (PEI)

The figure below provides a list of the publications released by ICONS up to April 2020⁸. Total engagement and outreach are provided for each publication. Outreach and engagement data are not able to provide the full picture of impacts of BAMBOO publications if they are analysed in isolation. Only integrating the two dimensions it is possible to draw conclusions on the overall publications' engagement in the community they reached.

To this aim, Fondazione iCons leverages the Publication Engagement Index (PEI). The index was calculated by publication, by publication type and by channel.

Overall, PEI is 3.1%. Thanks to higher than average engagement on social media and website, publication I shows the highest PEI (5.2%). The publication is the first interview published by BAMBOO. It focuses on one pillar industry, specifically mineral industry, with an introduction about the challenges and importance of minerals in the EU market, and with a 4-questions interview with Grecian Magnesite, which is the mineral demo site leader. Its focus on industry, technology, market potential and long-term benefits of this industry proved of good interest to BAMBOO community of stakeholders. This specific analysis (by topic, channel, type of publication) is constantly done by Fondazione iCons to monitor the interest generated and, consequently, align the strategy accordingly.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 820771. Disclaimer: The sole responsibility for any error or omissions lies with the editor. The content does not necessarily reflect the opinion of the European Commission. The European Commission is also not responsible for any use that may be made of the information contained herein



⁸ Data were collected at the end of April 2020 (May was excluded). On May two more publications were released (interview about ORC cycle and e-newsletter). However, to allow ICONS to analyse data for the drafting of the current report the monitoring had to stop in April.

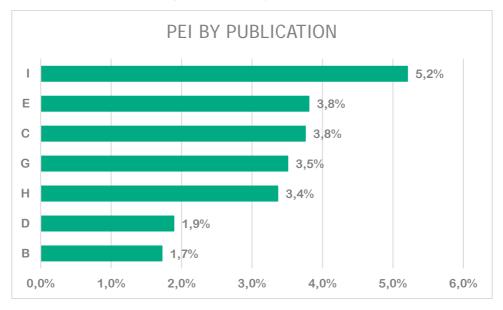


Figure 3.3 - PEI by publication

Publications' effectiveness quadrants

Neither outreach nor engagement indicators as defined by Fondazione iCons are in the full control of communication project managers. Other indicators (like number of publications) would be, but they are not insightful in explaining impacts. While the quality of the work produced has of course a positive impact on overall controllability, other tools are needed not only to measure communication effectiveness but also to improve control over its performance. The analyses reported in the previous sections are combined in the "Communication Effectiveness" tool. This tool can be applied also to social posts, webinars and events, but it is particularly suitable to analyse publications and guide their production strategy. The tool:

- Offers a graphical representation of the communication effectiveness of BAMBOO's publications.
- It is used during the project's execution to improve the effectiveness of publications and try to move them into the "effective" quadrant.
- It does not represent the project's publications' effectiveness compared to other projects, rather it compares and evaluates the level of effectiveness of each publication within the BAMBOO project.
- The analysis is based on a limited number of publications. The tool will become more effective once BAMBOO editorial production begins.

The tool is based on two orthogonal Cartesians axes. The X and Y axes represent total outreach and engagement respectively and identify 4 quadrants, on which publications are distributed based on their outreach and engagement values. The size of the bubble represents each publication's PEI. The two axes cross at the publications' average outreach and engagement values. The 4 quadrants are as follows:





- 1. Above average outreach, above average engagement: "effective" publications, able to reach a large audience and engage it.
- 2. Above average outreach, below average engagement: "reaching" publications, able to reach a large audience but not particularly engaging.
- 3. Below average outreach, above average engagement: "engaging" publications, reaching a limited audience compared to average, but engaging it effectively.
- 4. Below average outreach and engagement: "neutral" publications, not particularly effective in reaching the public and engaging it.

As the axes cross at their average values, by definition there will be some publications below average and in the "neutral" quadrant. The quadrant is called neutral as these publications have a neutral impact on outreach and engagement in comparison with other publications.

The tool has been developed to identify the most effective publications in terms of content, style, channels and formats, hence improving BAMBOO's communication strategy. Note that every action undertaken to improve communication increases automatically outreach and engagement. Hence, it also moves right the intersection of axes. As a consequence, there will always be some publications in the neutral quadrant. This is why, the quadrants offer a dynamic tool to be used during the project and are less effective to present the final view of the project's results.

The preliminary analysis of the publications released so far shows:

- Press release C in the effective quadrant, has a higher than average outreach and engagement in absolute terms, and a good PEI (represented by the size of the bubble); the result achieved is very good especially considering that it was the launch press release of BAMBOO
- G (video) has a good performance especially considering that it's achieved only through social networks i(t's not been distributed to the multipliers yet; it will be distributed soon);
- B and D as on average publication, close to the intersection of the 4 quadrants;
- E (newsletter), H and I are neutral publications. However, looking closely, their PEI is above the average (represented by the size of the bubble; see also the table below for the numerical reference); this is in line with the kind of publications, considered that the three publications are addressed to a very specific target. Indeed, the newsletter is generally for a specific audience, H is a press release about heat pumps and I is an interview about the minerals sector. The high low outreach but quite high engagement reported in the table shows that the publication reached a limited but very interested target.





N	Publication date	Туре	Title	Bubble	Total Outreach	Total Engagement	PEI
1	30/12/2018	Press Release	Flexibility, energy efficiency and waste recovery: the BAMBOO project seeks new approaches to industrial production processes	A	102	-	0.0%
2	30/12/2018	Article	Waste heat from power plants hits home	В	2.266	39	1,7%
3	01/04/2019	Press Release	Can heavy industry become more sustainable?	С	4.873	183	3.8%
4	01/07/2019	Article	BAMBOO sets out to optimise the energy consumption of Europe's intensive industries	D	2.857	54	1.9%
5	25/09/2019	Newsletter	BAMBOO Newsletter 1	E	1.182	45	3.8%
6	25/09/2019	News release (brochure)	Boosting industrial flexibility	F	25	-	0.0%
7	02/10/2019	Video	Boosting industrial flexibility: BAMBOO video	G	2.880	101	3.5%
8	18/12/2019	Press Release (event)	Can heat pumps help greening industrial processes?	Н	1.367	46	3.4%
9	12/03/2020	Press Release (interview)	Extractive industry, environment and market potential: interview to Grecian Magnesite	I	557	29	5.2%
			Total	16,109	497	3.1%	
			Average	1,790	55	3.1%	





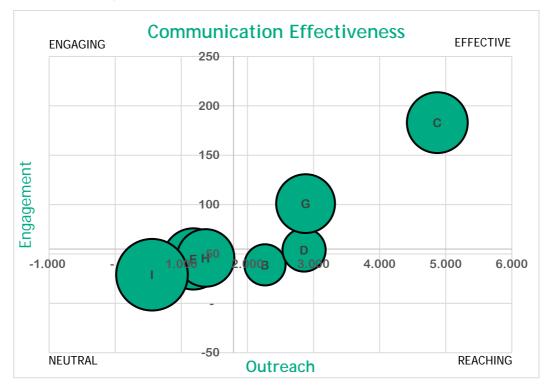


Figure 3.4 - BAMBOO publications' effectiveness quadrants

3.2.4.2 Partners' publications

Fondazione iCons regularly collects a list of publications (news, press release, articles, newsletters, videos, interviews etc.) released by partners and disseminated through their channels. Last collection of publications dates back to end February 2020, on the occasion of the project review.

Overall, BAMBOO partners released 19 news in total both in local languages and English. The exhaustive list is provided below.

Partner	Type of Publication	Title	Date	Language	URL or pdf
CIRCE	E A energético de las industrias intensivas de Europa"		01/05/2019	ESP	Printed magazine (pdf files shared)
IKERLAN	IK4-IKERLAN lidera la apuesta europea para la meiora del		01/02/2019	ESP	

Table 3.5 - List of publications released by BAMBOO partners





TUPRAS	PR	Tüpraş'ın Ar-Ge Projesi AB Horizon2020'den tek seferde en yüksek teşviği almaya hak kazandı	23/02/2019	TR	
TUPRAS	PR	Tüpraş'ın Ar-Ge Projesi tek seferde en yüksek teşviği aldı.	25/02/2019	TR	
TUPRAS	PR	Tüpraş'ın Ar-Ge Projesi tek seferde en yüksek teşvik	25/02/2019	TR	
TUPRAS	PR	Tüpraş'ın Ar-Ge Projesi tek seferde en yüksek teşvik	23/02/2019	TR	
TUPRAS	PR	En yüksek Teşviki aldı.	23/02/2019	TR	
TUPRAS	PR	Tüpraş'ın Ar-Ge Projesi tek seferde en yüksek teşvik	23/02/2019	TR	
TUPRAS	PR	AB Horizon2020'den Tüpraş'a teşvik	23/02/2019	TR	
TUPRAS	PR	Tüpraş'ın Projesine büyük Teşvik	23/02/2019	TR	
TUPRAS	PR	Tüpraş'ın Ar-Ge Projesi En yüksek teşviki alacak	23/02/2019	TR	
TUPRAS	PR	Tüpraş'ın Ar-Ge Projesine en yüksek teşvik	24/02/2019	TR	
TUPRAS	PR	Tüpraş'a AB'den teşvik	24/02/2019	TR	
TÜPRAŞ	R	Tüpraş Sustainability Report 2017-2018	01/11/2019	ENG/TR	https://www.tupras.com.tr/cr-report
ICONS	PR	Flexibility, energy efficiency and waste recovery: the BAMBOO project seeks new approaches to industrial production processes	30/12/2018	ENG	http://bambooproject.eu/news/flexib ility-energy-efficiency-and-waste- recovery-the-bamboo-project-seeks- new-approaches-to-industrial- production-processes/
ICONS	PR	Can heavy industry become more sustainable?	01/04/219	ENG	http://bambooproject.eu/news/can- heavy-industry-become-more- sustainable/
ICONS	PR	Boosting Industrial Flexibility	25/09/2019	ENG	http://bambooproject.eu/news/boost ing-industrial-flexibility/
ICONS	NL	BAMBOO Newsletter	25/09/2019	ENG	http://bambooproject.eu/news/newsl ettter1/



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 820771. Disclaimer: The sole responsibility for any error or omissions lies with the editor. The content does not necessarily reflect the opinion of the European Commission. The European Commission is also not responsible for any use that may be made of the information contained herein

⊟AMB00

ICONS	PR	Can heat pumps help greening industrial processes?	18/12/2019	ENG	http://bambooproject.eu/news/can- heat-pumps-help-greening-industrial- processes/
-------	----	--	------------	-----	---

Legend: PR - Press release, A - Article, I - Interview, W - Webinar, V - Video, NL - Newsletter, R - Report, O - Other

3.2.5 Scientific publications

Technical publications and conference papers will represent an important tool for effective peerto-peer dissemination and knowledge sharing. BAMBOO results will be published in peer reviewed scientific journals and sector specialised magazines.

At the moment of the releasing of this deliverable, there's one paper confirmed. However, since the paper will be published in the conference proceedings within Procedia CIRP after the conference, i.e. on mid-May, some piece of information (e.g. DOI, repository link etc) are not yet available and will be included in the next version of the current reporting.

Furthermore, AIT produced a conference proceeding for the DKV 2019, which is also included in the table below. However, due to the non-open access, this paper cannot be considered a scientific publication. It is included as further technical dissemination activity.

Partne	Title of the scientific publication	DOI	Authors	Title of Journal	Place of publication	Year of publication	Publisher	Open access	Public/ private publication	Peer- review	 Link to the publication
TUBS	Integrated Methodolog y to Assess the Energy Flexibility Potential in the Process Industry		Pierri, Erika Schulze, Christine Herrmann, Christoph Thiede, Sebastian	PROCEDIA CIRP	Grenoble (France)	2020	<u>Elsevier</u>	YES	NO	YES	
AIT	Dampferze ugung aus Abwärme mit Wärmepum pen		Veronika Wilk, Franz Helminger, Sabrina Dusek, Michael Lauermann, Thomas Fleckl	DKV Tagung 2019		2019	<u>DKV</u>	NO	NO	NO	

Table 3.6 - BAMBOC) technical	publications
--------------------	-------------	--------------





3.2.6 Participation in events

With the aim of sharing BAMBOO project and its results among stakeholders, some stakeholders were contacted and travels to events and networking were done.

On the one hand, concerning stakeholders, SPIRE has been contacted for explaining project scope and results to be committed in order to start commons actions with other related projects. This is the starting point for the upcoming workshops and exploitation and dissemination events.

On the other hand, we have attended to some events for networking and establishing links between interested contacts and new stakeholders.

The D&C leader Fondazione iCons regularly collects a full list of events attended by partners on behalf of BAMBOO project. Last collection of events dates back to end February 2020, on the occasion of the review.

Overall, BAMBOO partners attended to a total of 15 national and international events, which allowed them to disseminate BAMBOO to around 1,350 people.

Partner	Partner's role (Organiser, Speaker, Attendee, Other)	Type of event (see legend below)	Title of the event	Date	Place
CIRCE	Attendee	E	IOT Solutions World Congress	29-30/10/2019	Barcelona (Spain)
AIT	Speaker	С	DKV Klima- und Kältetagung 2019	22/11/2019	Ulm (Germany)
AIT	Speaker	С	Herausforderung 2020 für die Kälte, Klima- und Wärmepumpentechnik	18/02/2020	Darmstadt (Germany)
EI-JKU	Speaker	С	Forum Econogy	13/11/2018	Linz (Austria)
EI-JKU	Attendee	W	Technology Platform Smart Grids	04/12/2018	Vienna (Austria)
EI-JKU	Attendee	W	New Energy for Industry Visioning Workshop	15/02/2019	Leoben (Austria)
EI-JKU	Organiser	С	Forum Econogy	25/09/2019	Linz (Austria)
TURBODEN	Speaker	E	Key Energy 2019	05-08/11/2019	Rimini (Italy)
RINA	Attendee	E	EUSEW 2019	18-20/06/2019	Brussels (Belgium)
RINA	Attendee	С	SUPEHR 2019	4-6/09/2019	Savoan (Italy)
RINA	Attendee	E	EUW 2019	12-14/09/2019	Paris (France)

Table 3.7 - List of events were BAMBOO has been disseminated





TÜPRAŞ	Speaker	Т	Tupras Energy Efficiency Training	07/01/2020	Izmir (Turkey)
TÜPRAŞ	Speaker	С	Tupras Energy Management Applications	06/02/2020	Izmir (Turkey)
TÜPRAŞ	Speaker	С	İzmir Energy Summit 2020	29/02/2020	Izmir(Turkey)
GM	Speaker	W	BIOFIT Industry workshop with invited speakers from Greek industries / equipment manufacturers	25/09/2019	Thessaloniki (HELPE Refinery, Greece)

Legend: C - Conference, W - Workshops, E - Exhibition, BE - Brokerage event, PE - Pitch Event, TF - Trade Fair, O - Other





4 CONCLUSIONS

This report presents BAMBOO communication and dissemination activities and results as well as the methodological approach to assessing such impacts. An analysis of available data as of May 2020 is also provided, driving some initial useful indications for BAMBOO D&C strategy going forward.

As first results, we can highlight what follows:

- Communication materials (visual identity, icons, poster, brochure, video) have been delivered on time, disseminated through BAMBOO channels and made at disposal of partners for further dissemination. Overall ICONS has produced 3 brochures (1 with infographics, 1 with a poster), 1 video with subtitles in 5 languages, and a visual identity compliant with the BAMBOO topics;
- Overall, 19 news have been released to disseminate the project;
- Overall, partners attended to/organised 15 national and international events, which allowed them to disseminate BAMBOO to around 1,350 people;
- One open access and one non-open access publications have been published so far, and further are expected to be released soon;
- ICONS is closely monitoring BAMBOO's outreach and engagement indexes for several activities: social networks, website, publications;
- So far, BAMBOO's publications have a total outreach of 16,109 (1,709 outreach per publication on average) and a total engagement of 497 (55 engagement per publication on average). The Publication Engagement Index is 3.1%. PEI will be more significant once the project editorial activity will start;
- The website is engaging and with worldwide visitors. The website has a total of 15,684 pageviews and 2,707 unique users (out of a total of 3,977 sessions) with an average of 3,9 page per session and 2:02 minutes of average time spent per session. Particularly relevant is the low percentage of the bounce rate, 23,26% (further explanation in chapter 2.2.2);
- The initial data underline that the double-channels social media strategy works well because the two social media compensate each other in terms of outreach and engagement and, as a consequence, in terms of audience reached. Indeed while Twitter is by far the most effective social in reaching its targets (54,124 people reached and 9,861 users engaged), LinkedIn creates smaller communities (493 people reached), but very interactive and engaged with the project's content (993 people engaged). This is reflected in the Social Engagement Index which, merging 0.9% from Twitter and 10.1% from LinkedIn, reached 2.3% of total engagement (further explanation in chapter 2.2.3)

In the upcoming months, the monitoring activity will continue, and a more detailed view will be available and published in D12.6 - Final report on communication and dissemination activities, which will also consider the impacts generated by:

• The launch of BAMBOO editorial publications. This will add youris.com to the analysis, as editorial products will be published also on this platform, as well as more information





platforms (such as science X) not yet leveraged to date. The publications of articles and other editorial publications is also expected to drive increasing engagement on Twitter as more sophisticated publication types and content are usually more effective in animating the social community.

- The possibility to analyse downloads from the projects' website.
- The *running of webinars, events and workshops,* whose impacts will be assessed along the lines described in this publication.



