

# BAMBOO

## D12.3: Project Communication Kit

30/12/2019 (M12)

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BAMBOO

## Technical References

Project Acronym	BAMBOO
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

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Document history		
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V1.0	06/08/2019	ICONS
V1.1	20/08/2019	ICONS
VF	30/08/2019	CIRCE (final review)

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## 0 EXECUTIVE SUMMARY

The Deliverable D12.3 “Project Communication Kit” is a public document of the BAMBOO project, delivered in the context of WP12, Task 12.3. One of the objectives of WP12 is to design and execute high quality communication material and activities and to efficiently disseminate project results to relevant stakeholders. To support this objective and the implementation of the Dissemination strategy in general, a set of communication material and tools were produced. They include the following:

- A visual identity (logo, brand book, icons, animated GIF, key visuals)
- PowerPoint and Word templates
- Standard presentation
- A written identity
- Key messages
- Press release about the launch of the project
- Brochure
- Presentation video

While D12.1 ‘Communication and Dissemination Plan’ outlines the communication and dissemination activities planned by the BAMBOO partners for the duration of the whole project, and how they interact with each other, the present deliverable is rather intended as a concise report on the tools created by Month 12.

These materials are not intended to be static. They will be further updated and improved throughout the project in order to better adapt to the target audiences and reflect the achievements of the project as the project goes. These updates will be described in the next updates of D12.1 “Communication and Dissemination Plan” (M18, M36).



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# 1 PROJECT LOGO

The BAMBOO logo has been developed by first identifying the BAMBOO's brand personality, which highlights the project's main features, characteristics and elements we want to convey when communicating about the project.

The logo has been designed to give a striking and memorable visual identity for the project. Two versions have been produced - with and without the project payoff, to be used as needed. The main green logo has also been declined in a black version and in a white one.

*Figure 1 - Main logo without pay off*

The logo consists of the word "BAMBOO" in a large, green, sans-serif font. The letter "B" is stylized with a horizontal bar that extends to the left, creating a unique visual element.

*Figure 2 - Main logo with pay off*

The logo consists of the word "BAMBOO" in a large, green, sans-serif font, with the same stylized "B". Below it, the phrase "BOOSTING INDUSTRIAL FLEXIBILITY" is written in a smaller, green, sans-serif font.

*Figure 3. Black declination of the main logo*

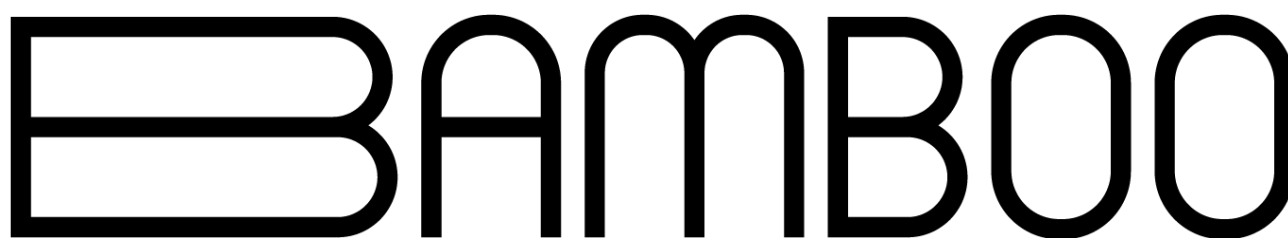
The logo consists of the word "BAMBOO" in a large, black, sans-serif font, with the same stylized "B".

Figure 4 - White declination of the main logo



The flexibility concept was reinforced by the animation logo formats, both in the extended version and in the icons' versions (see website [www.bambooproject.eu](http://www.bambooproject.eu)): several animated gifs representing the BAMBOO logo have been created by ICONS to highlight the idea of flexibility. This flexible movement also reminds the movement that industrial machineries usually follow. This further graphic element strengthens the link between the key elements of the project (intensive industries) and the BAMBOO visual identity.

Figure 5 - BAMBOO icons. Explanation of flexible configuration

#### Logo\_\_\_Flexible Configuration

BAMBOO Logo is flexible even in its configuration. The wordmark can be arranged to best fit the proportion of the container space, using 1, 2 or 3 rows to form a compact rectangular shape.





## 2 PAYOFF

A payoff or tagline is a one-sentence slogan, a variant of a branding slogan typically used in marketing materials and advertising. The idea behind the concept is to create a memorable phrase that will sum up the tone and premise of a brand or product or to reinforce the audience's memory of a product.

The following tagline was also developed for the project:

**“BAMBOO: Boosting Industrial Flexibility”**

The pay-off adds information to the title “BAMBOO” which may not otherwise be clear, whilst also remaining brief and memorable. It aims to communicate the general aim of the project - the improvement of flexible technologies for industrial processes.

The tagline should appear alongside the BAMBOO name wherever possible.



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### 3 VISUAL IDENTITY GUIDELINES

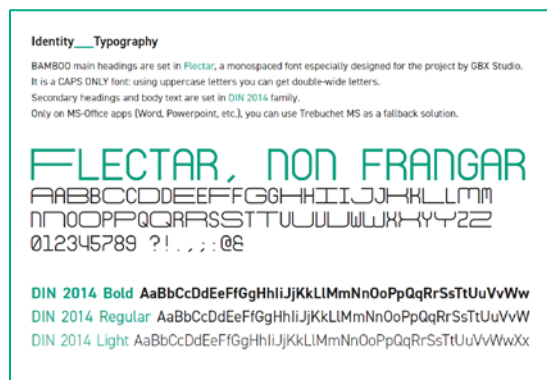
In addition to the logo, complete visual identity guidelines (brand book) have been developed to ensure consistent communication about the project. These guidelines have been circulated to the consortium and explain in detail how to use the visual identity in communication materials.

Figure 6. BAMBOO brand book with visual guidelines



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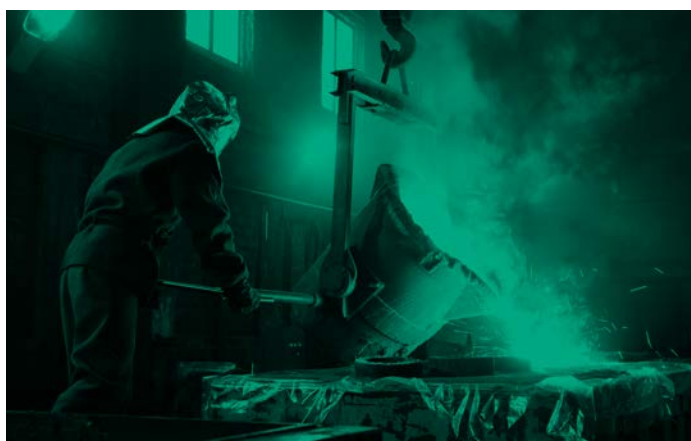
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## 4 KEY VISUALS

A set of key visuals has been designed in line with the BAMBOO visual identity. The key visual have been used for the project website and for communication materials (like the brochure, the project video etc.) Furthermore, key visuals are at disposal of partners if needed, for their own production of graphic materials for local communication.

*Figure 7 - BAMBOO key visuals*



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## 5 TEMPLATES

Word and PowerPoint templates have been designed to ensure that communications remain true to the common visual identity. Consistent visual and written style is important for ensuring project recognition and delivering a professional communications effort. Templates have been distributed to project partners.

- Deliverable template:

Figure 8 - Template to be used for BAMBOO deliverables

**Page 1: Title Page**

**BAMBOO**

D#.#: Full report name  
Date of document - month/year (MM/YY)

Authors: Author1 (Partner short name); Author2 (Partner short name)

**Page 2: Technical References**

Project Acronym	BAMBOO
Project Title	Boosting new Approaches for flexibility Management By Optimizing Process Off-gas and waste use
Project Coordinator	Cristina Gonzalez Tirado Fundación CIRCE cgonzalo@circe.es
Project Duration	September 2018 - March 2022

Deliverable No.	D#.#
Dissemination level <sup>1</sup>	
Work Package	WP # - WP Title
Task	T #.# - Task Title
Lead beneficiary	Partner number (partner short name)
Contributing beneficiary(ies)	Partner number (partner short name), partner number (partner short name)...
Due date of deliverable	DD Month 20YY
Actual submission date	DD Month 20YY

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**Page 3: Document history and Disclaimer**

Document history		
V	Date	Beneficiary partner(s)

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**Page 5: 0 EXECUTIVE SUMMARY**

**Page 6: 1 MY FIRST SECTION - EDITING RULES**

Each BAMBOO deliverable should follow the same formatting style and editing rules. The present document follows these styles and rules which are summarised below.

**1.1 My first sub-section - Formatting and styles**

- The language should be set to English (UK).
- Text font is Trebuchet 11.
- Regular text (style: normal) is justified; bullets and references should be left aligned.
- Line Spacing: 1,15
- Spacing gap before and after
- Page break in front of heading 1
- Blank line in front of heading 2, heading 3 and heading 4 (if there are)
- Bullets as in this list.
- Figures and Tables settings as in the figure and table below
- Page Setup: 2.5 cm top, left and right and 2cm bottom
- Footnotes in Trebuchet 10 as in this example (Format: Footnote text)
- Websites never fully provided in text, but in footnotes<sup>2</sup>
- All references are located in the chapter References. Use this marks [1], [2], [3], [4], [5] for the references in the text.

**Page 7: Figure 1 - Bambooprops, black version**

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<sup>1</sup> Footnote text.  
<sup>2</sup> www.bambooproject.eu



[illegible]

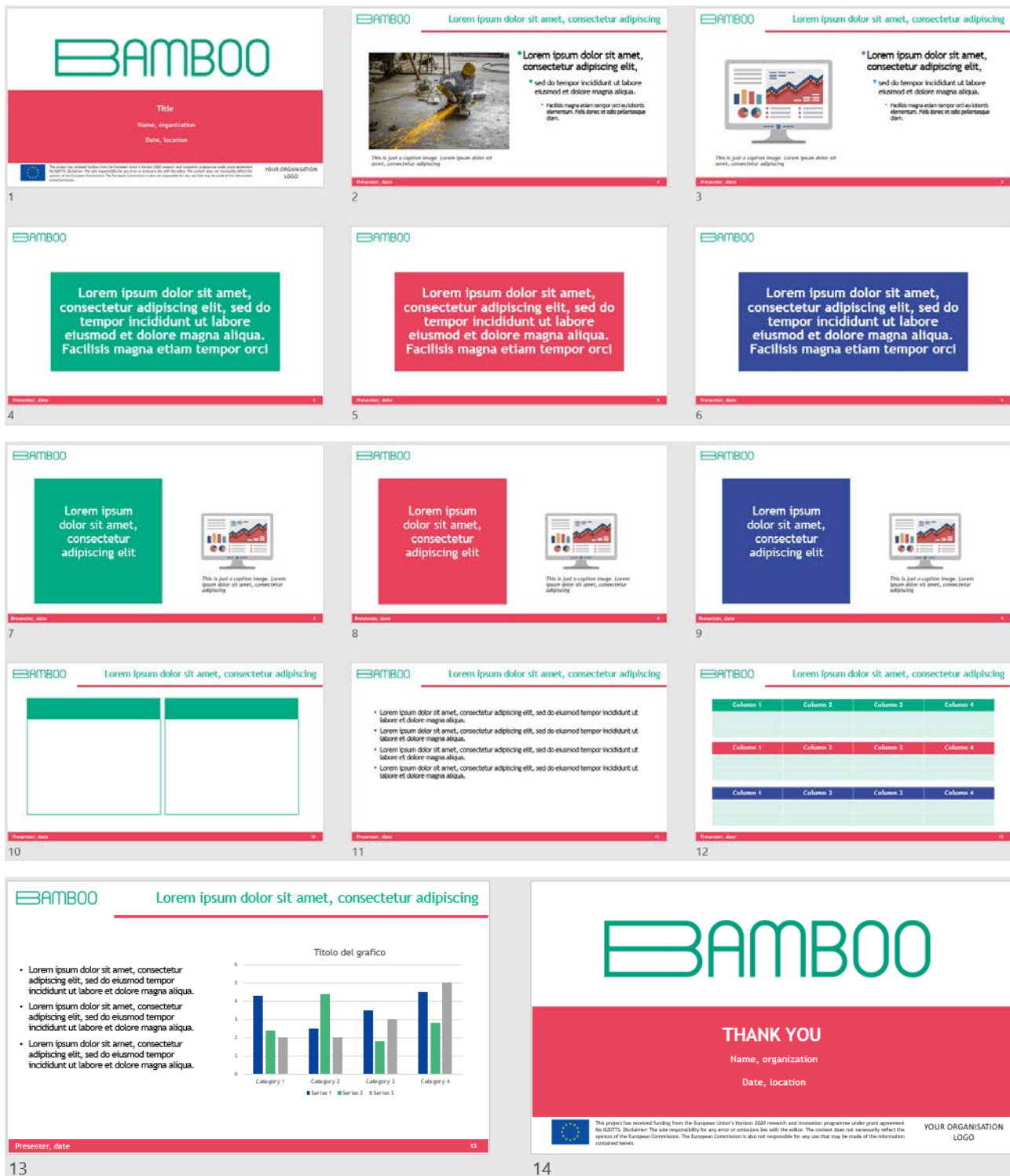
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- Power point template:

Figure 9 - Template to be used for BAMBOO power point presentations



- Agenda template

Figure 10 - Template to be used to draft the agenda of BAMBOO meetings

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**AGENDA**

Meeting (ex: First progress meeting)  
City (ex: Zaragoza)  
Location (ex: Palacio de congresos)  
Address (ex: Av. del Rio 18, zip code, Zaragoza)  
Date (ex: 28-29 March 2019)

**AGENDA**

Date (ex: Thursday, 28th March 2019)

Time	Topic	Partner
	Coffee break	
	Lunch	
	Coffee break	

**Social dinner**

Time	Location

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- Minutes template

Figure 11 - Template to be used for minutes of BAMBOO Webex meetings

**BAMBOO minutes**

Meeting/session title  
Date, Location

Type of meeting:  
Meeting organised by:

Partner	X	Name of attendee(s)
1		CIRCE
2		TUBS
3		AIT
4		IKL
5		CERTH
6		ED
7		N-ISE
8		TURBOCOEN
9		ANT
10		VHE
11		RINA
12		COSMO TECH
13		AMB
14		TUPRAS
15		GA
16		UPM

**Name of the meeting, date**

17	SENIOR		
18	MAGNA		
19	ICONS		

Work Package X - XXX  
Task Leader (XXX)

**0 AGENDA**

**1 MINUTES OF THE MEETING**

**2 ACTION PLAN/CONCLUSIONS**

TASK	Task Leader	Future Actions	Deadline

**Name of the meeting, date**

TASK	Task Leader	Future Actions	Deadline

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## 6 WRITTEN IDENTITY

Whether communicating online or via other means, it is essential to provide a clear and concise overview of the BAMBOO project. To this end, a written identity has been produced to ensure that the project is presented accurately and consistently in all internal and external publications, documentation and communications. This covers a one-sentence, one-paragraph and one-page descriptions of the project. The various versions of the written identity can be translated in other languages for local dissemination purposes; but they should not be used in a different format without first consulting Fondazione iCons.

### One sentence

The BAMBOO project aims at developing new technologies for energy and resource efficiency challenges in four intensive industries: steel, petrochemical, minerals and paper.

### Bullet points

The BAMBOO project aims to:

- Develop a Decision Support tool for flexibility management in an hourly basis and covering all the energy and material vectors in the plant for a full exploitation of its flexibility potential;
- Increase the use of process syngas and solid by-products as fuels up to 30 % by means of advanced combustion technologies;
- Develop a high temperature heat pump to recover waste heat streams of up to 120°C in order to produce low pressure steam;
- Reduce net electricity imports from the grid up to a 5% by designing a novel Organic Rankine Cycle able to valorise multiple low-to-medium temperature (between 100 and 250°C) waste streams;
- Reduce energy costs up to 18% and ease RES integration by designing a trivalent drying system combining waste heat, fuels and electricity inputs, allowing to valorise organic sludge to produce biofuels;
- Ensure the exploitation of the flexibility potential of REIs through a capacity building program to train plants managers and employees and undergraduate and masters students.



### One paragraph

#### **BAMBOO: Boosting Industrial Flexibility**

BAMBOO aims at developing new technologies addressing energy and resource efficiency challenges in 4 intensive industries (steel, petrochemical, minerals and paper). BAMBOO will scale up promising technologies to be adapted, tested and validated under real production conditions focus on three main innovation pillars: waste heat recovery, electrical flexibility and waste streams valorisation.

These technologies will be demonstrated in the four project REII integrated in a cross-sectorial energy and raw materials flexibility management tool. These four REII demonstrators expect to increase the industrial competitiveness by means of the flexibility of the processes reaching 15-20% reduction in the energy costs, improving efficiency 17-20% and reducing 5-23% GHG emissions.

[www.bambooproject.eu](http://www.bambooproject.eu)

### One page

#### **BAMBOO: Boosting Industrial Flexibility**

Can heavy industry become more sustainable?

Due to its significant resource use, its waste and emissions, heavy industry has for many years been seen as an obstacle to sustainable development. But this is not the full story. The heavy industry sector is facing new challenges: the global fight against climate change, the environmental goals and their related constraints as well as the social reputation are the main drivers of their change towards sustainability.

The energy transition towards a secure, competitive and decarbonised energy system is among the main environmental challenges that energy intensive industries are currently facing. They must adapt their current consumption and production patterns to a higher share of fluctuating renewable energy supply.

The EU-funded BAMBOO project set itself to help four heavy industries in this shift. A paper industry in Germany, a mineral one in Greece, a steel company in Spain and a Turkish petrochemical industry are at the core of the project.

BAMBOO partners will work together for four years to develop new technologies for energy and resource efficiency challenges in these four intensive industries.

BAMBOO technologies will focus on three main innovation pillars: waste heat recovery, electrical flexibility and waste streams valorisation. Furthermore, their application and impact will be supported flexible measures to be implemented in each demo case. Finally, technologies will be tested and validated under real production conditions to measure the plants' improvements in terms of energy efficiency and raw materials consumption.



As a result, BAMBOO hopes that industries will be able to cut their costs by between 16% and 20%, improve energy efficiency by 18% and reduce CO2 emissions by 5%.

Within the field of electrical flexibility, BAMBOO will develop an innovative hybrid process capable of working with residual heat, steam or electricity. This will allow flexible operating strategies to be deployed so that the plant can benefit from the lowest energy prices.

In the area of waste heat recovery, the project will roll out technologies and processes that enable both its internal reutilisation and the introduction of alternative streams. In particular, it will work towards validating advanced process gas combustion monitoring techniques, developing technologies that will allow the use of biomass as an alternative fuel.

As regards residual heat recovery, BAMBOO will develop technologies to recover the energy content that is usually lost in order to use it at other points of the productive process itself where demand exists. These three pillars will be contained within a flexibility tool that will work transversally to improve industrial competitiveness. This tool is easy to replicate, given that its analysis and actions can be adapted to the peculiarities of each plant.

[www.bambooproject.eu](http://www.bambooproject.eu)



## 7 KEY MESSAGES

Key Messages have been devised to help project partners to communicate the main aims of the BAMBOO project to different audiences, who will have different interests in what the project hopes to achieve. Each message focuses on a different aspect of the project.

- BAMBOO will develop a Decision System tool to optimise operation management on hourly basis and recommend investments to enhance flexibility potential of the plan.
- BAMBOO will monitor, control and optimise the combustion processes when fossil fuels are replaced by non-traditional fuels.
- To improve the fuel flexibility of combustion systems, BAMBOO will increase the use of process syngas and solid by-products up to 30% by developing advanced combustion techniques
- BAMBOO will reduce fossil fuel consumption by 9% by developing a high temperature heat pump to recover waste heat streams.
- To valorise the waste process in the paper industry, BAMBOO will maximise the electricity consumption and reduce the energy costs up to 18% by developing a hybrid drying process combining waste heat, fuels and electricity inputs.
- BAMBOO will ensure the exploitation of the flexibility potential of the REIIs by creating a capacity building program to foster the knowledge transfer to managers and employees.
- BAMBOO will cut processes costs up to 14% by reducing the raw materials consumption.
- BAMBOO will increase process energy efficiency by about 18% for the 4 demo site sectors by implementing saving solutions among which the re-use of energy and waste streams.
- Thanks to its demo site-based technologies, BAMBOO will cut CO<sub>2</sub> and NO<sub>x</sub> emissions from 5 till 35% depending from the sector considered.
- BAMBOO will ensure a wide dissemination of its knowledge through a specific training strategy dedicated to a large audience.
- The benefits of BAMBOO will cascade down to the general public by facilitating public access to data on intensive industry.
- BAMBOO will quantify how citizens can contribute in reducing CO<sub>2</sub> emissions and improve the overall carbon footprint by using bio-based products.
- BAMBOO will quantify the jobs associated to the industry sustainable transformation and estimate new job opportunities to be forecasted in the future.



## 8 BAMBOO PRESS RELEASE: THE LAUNCH

An official BAMBOO press release has been released on the occasion of the kick-off meeting, to summarise the projects' objectives and the main details.



### Flexibility, energy efficiency and waste recovery: the BAMBOO project seeks new approaches to industrial production processes

*A new European project aiming at resource and energy efficient manufacturing kicks off in Brussels.*

Drawing on the cutting-edge expertise of 19 partners from 8 countries, the BAMBOO project is co-funded by the EU and led by Fundación CIRCE.

BAMBOO's overall purpose is to develop and demonstrate innovative solutions for efficiency in the use of resources and renewable energy within manufacturing, especially Resource Energy Intensive Industries (REII). BAMBOO technologies will focus on three main innovation pillars: waste heat recovery, electrical flexibility and waste streams valorisation. Using extensive knowledge from production processes, energy simulation, resource planning and energy storage, the consortium will develop:

- emerging technologies to improve the flexibility in industrial processes and the energy efficiency by enhancing the use of renewable energy and energy storage
- a Decision Support System tool to manage flexibility at industrial level to help industries dealing with different energy and materials streams. This will help in collecting data, forecast boundary conditions and facilitate the participation in a future European energy market
- and integrate technologies for the valorisation of waste streams based on the three main pillars to improve a more sustainable consumption of energy and the recovery and reuse of by-products within the plants.

Within this framework, BAMBOO moves towards a lower carbon manufacturing and higher flexible and conscious industries. BAMBOO will empower intensive industries to take better decisions to become more competitive in the use of natural resources in a broader context" said Cristina Gonzalo, BAMBOO Project coordinator during the kick-off meeting held in Brussels on 11<sup>th</sup> and 12<sup>th</sup> September 2019. BAMBOO solutions will be trialled and validated under real conditions within four intensive industries, namely steel, petrochemical, minerals and pulp and paper. The technologies will be demonstrated in four different manufacturing settings: Arcelor Mittal in Spain (steel), Tupras in Turkey (petrochemical), Grecian Magnesite in Greece (Minerals) and UPM in Germany (pulp and paper).

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#### Note to editors

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## 9 BROCHURE

BAMBOO's flyer was developed by Fondazione iCons and validated by the project coordinator Fundaci3n 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.

The BAMBOO brochure was developed in two formats:

- three-fold format (closed format 21cm x 10cm; open format 21cm x 30cm)
- six-fold format (closed format 21cm x 10cm; open format 21cm x 60cm).

Both the flyer presents the following sections:

- Cover
- About: Description of the project
- Expected impacts: main impacts foreseen by BAMBOO
- Field demonstration: main information about the four industries
- Innovation pillars
- Contacts' page with contacts' details and partners' logos

While the information in the threefold flyer are split on the front and the back, in the six-fold flyer all the sections are provided in the front page. The back page of the flyer shows a general key message and some key words. Therefore, the six-fold flyer can be used both as brochure and hung on the wall as poster.

Figure 12 - Three-fold brochure: front and back



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Figure 13 - Six-fold flyer: front

# BAMBOO

## BOOSTING INDUSTRIAL FLEXIBILITY

### CAN HEAVY INDUSTRY BECOME MORE SUSTAINABLE?

**Innovative technologies to increase the industrial competitiveness through the flexibility of processes**

Due to its significant resource use, its waste and emissions, heavy industry has for many years been seen as an obstacle to sustainable development. But this is not the full story. Today the resource energy intensive industries (REI) must adapt their current consumption and production patterns to a higher share of renewable energy supply. In this new scenario, industrial plants need access to better information and new technologies to enable higher flexibility on electricity supply while decreasing the consumption and dependence on fossil fuels. BAMBOO is a EU-funded project developing new technologies for energy and resource efficiency challenges in four intensive industries. These technologies will be adapted, tested and validated under real production conditions and focus on three main innovation pillars: waste heat recovery, electrical flexibility and waste streams valorisation. BAMBOO will provide the industries with the information they currently lack for the adaptation of their processes to new and more advanced industrial demand response schemes to help them taking better decisions and to increase their competitiveness.

**EXPECTED IMPACTS**

BAMBOO is expected to demonstrate energy and materials demand management concepts in highly intensive industries relying on the valorisation and reuse of waste streams. BAMBOO solutions will make REI more sustainable as they will improve the energy efficiency of the processes while enabling a better management of the energy sources. Overall, BAMBOO technologies will save costs, reduce emissions and improve energy efficiency in the four REI. However, it must be considered that BAMBOO will enable the recovery and reuse of waste streams currently underused, which will become valuable by products instead of residual streams, which will also influence the environmental impact of the REI.

- 23% costs of the process
- +18% energy efficiency of the process
- 5% CO<sub>2</sub> emissions
- 35% NO<sub>x</sub> emissions
- 15% environmental impact

**FIELD DEMONSTRATION**

**STEEL**  
BAMBOO will test innovative solutions in the Spanish steel plant of ArcelorMittal, where the use of ArcelorMittal's waste heat recovery technology is the world's most popular technology. BAMBOO will study relevant streams in terms of waste heat recovery potential and its different uses, thus contributing to increase the flexibility options of the plant.

**MINERALS**  
In the northern part of Greece, the Greif Bros Magnesite company is a pioneer in the mining sector committed to environmentally sound mining practices. BAMBOO will reduce its dependence on fossil fuels, cut CO<sub>2</sub> and NO<sub>x</sub> emissions and improve the flexibility.

**PAPER & PULP**  
The Paper & Pulp demonstration will take place at UPM plants. In Germany, the main waste stream released in BAMBOO is a low-biogenic industrial wastewater treatment after residual fibre production process. The project will work on reducing residues and emissions while improving the process competitiveness.

**PETROCHEMICAL**  
BAMBOO demonstration activities will take place in the Treppe petrochemical site in France. The objective is to generate electricity from waste heat decay and reducing carbon emissions.

**INNOVATION PILLARS**

**WASTE HEAT RECOVERY**  
Waste streams usually have a valuable energy content associated to its exhaust temperature that is wasted in most cases. Hence the goal is to develop technologies to valorise this energy content and use it wherever is required within the process. BAMBOO will study relevant streams in terms of waste heat recovery potential and its different uses, thus contributing to increase the flexibility options of the plant.

**ELECTRICAL FLEXIBILITY**  
Flexibility in electricity consumption offers industries the possibility to benefit from lower electricity prices and potentially provide grid services, as well as enabling the potential integration of renewable energies. BAMBOO will develop an innovative hybrid process for sludge drying to allow the plant to consume electricity according to the grid conditions, provide grid services and facilitate the integration of renewable energy.

**WASTE STREAMS VALORISATION**  
Many waste streams have a valuable caloric content and can be valorised as fuels for other processes, thus being a potential revenue stream for the industries. Therefore, BAMBOO will deploy technologies and processes that allow the upgrading of these streams and their valorisation (through improved combustion monitoring systems that enable the replacement of fossil fuels by off-gases).

**BAMBOO** BOOSTING NEW APPROACHES FOR FLEXIBILITY MANAGEMENT BY OPTIMIZING PROCESS OFF-GAS AND WASTE USE

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°820771.

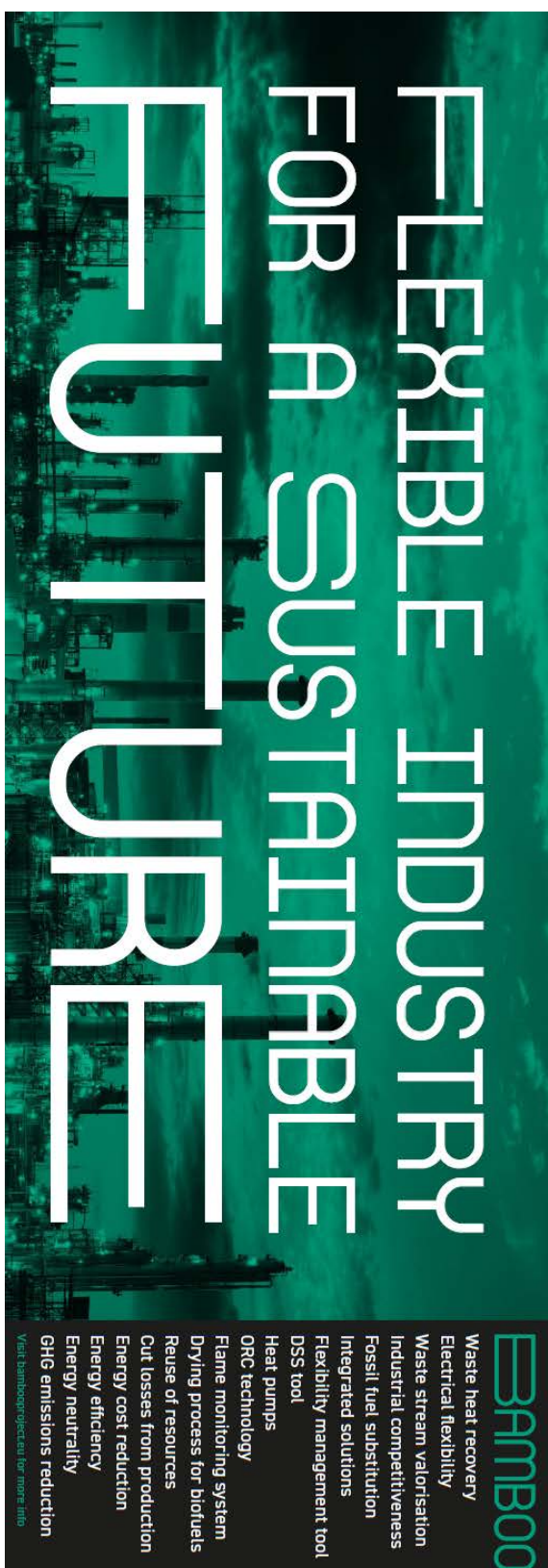
**SPE PROJECT**



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**BAMBOO**

Figure 14 - Six-fold flyer: back



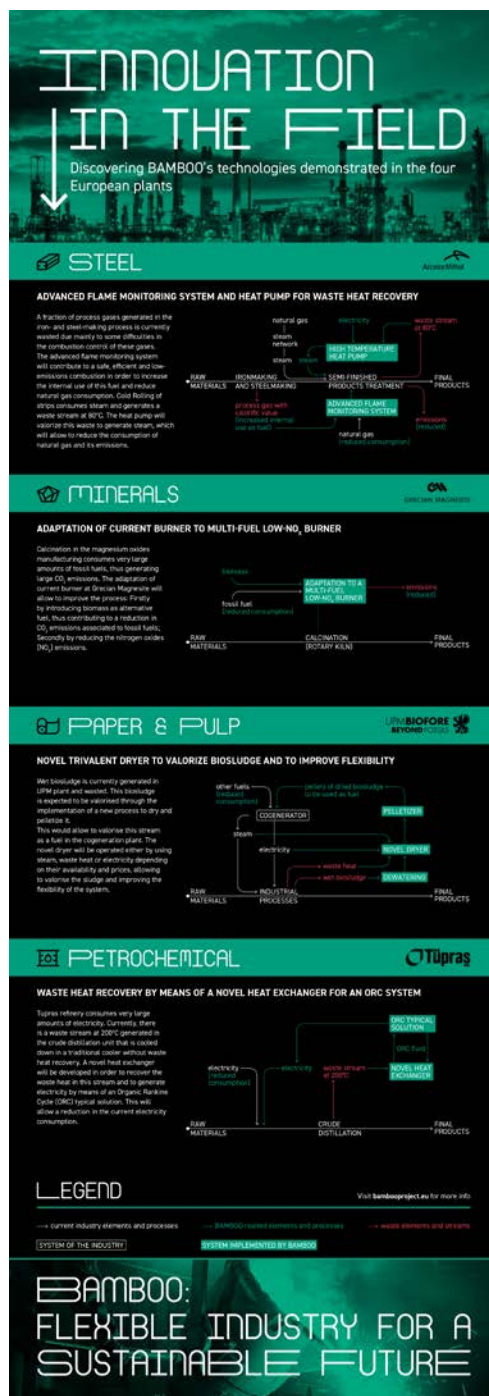
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**BAMBOO**



Fondazione iCons is working on a further version of the six-fold brochure where the key message is replaced by an infographic dedicated to the industrial processes of the four industries of the project. With the help of the coordinator Fundación CIRCE, Fondazione iCons has elaborated four infographics, one per industry, showing the potential of BAMBOO and its implementation in the different stages of the processes to show the impact and the interaction of BAMBOO in the four fields of application.

Figure 15 - Six-fold brochure: infographic



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**BAMBOO**

## 10 PRESENTATION VIDEO

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

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

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

The video has been developed around the following keywords: flexibility, heavy industry, resource energy intensive industry, industrial competitiveness, innovative technologies, energy efficiency, emissions reduction, resources valorisation.

BAMBOO presentation video will be uploaded to the BAMBOO YouTube channel and will be embedded to the website as well as spread through BAMBOO social networks (Twitter and LinkedIn).

The video format will mix graphic animations with real footage to make it as much real as possible. Real footage was partially provided by demo partners while graphic animations were realised by Fondazione iCons.

Considering the target audience and the BAMBOO topics, the voiceover of the video is provided by a real actor who is constantly present in the video so as to let the viewers being more attached and involved to BAMBOO's mission. The voiceover is in English. Subtitles in local languages (Spanish, German and Greek) will be provided by demo partners and will be included to the video.

Both the script and the storyboard were developed by Fondazione iCons.



*Figure 16 - Script of the BAMBOO presentation video*

"As we know, industry plays a major part of a country's economic development. It provides employment opportunities and, obviously, generates wealth and the goods we use every day.

On the other hand, industrial activities put a lot of pressure on the environment by depleting its natural resources, polluting our air, water and soil and producing waste.

Over the last decades heavy industry has transitioned quickly towards a greener path thanks to stricter environmental regulations and new alternatives. However, this transition is still slow compared to the current resource consumption rate. So, how can we make heavy industry become all the more sustainable?

The EU-funded project BAMBOO will tackle this problem. The project will develop new technologies addressing energy and resource efficiency challenges on 4 process industries: steel, petrochemical, paper and minerals.

The project will develop a demand management approach dealing with waste streams usually neglected in energy intensive industries. This will make processes more flexible, resource-efficient and sustainable.

BAMBOO's approach will be based on 3 innovation pillars: Waste-heat recovery, electrical flexibility and waste streams valorisation.








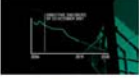




















The project will empower industrial flexibility and make it more competitive in the use of natural resources in a broader context.

Old-fashioned heavy industry is changing, for the better.

Are you ready for this flexible industry revolution?"



Table 1 - Storyboard of the BAMBOO presentation video

As we know, industry plays a major part		by depleting its natural resources,	
		polluting our air,	
of a country's economic development.		water and soil and producing waste.	
It provides employment opportunities and,		Over the last decades heavy industry has transitioned quickly towards a greener path thanks to stricter environmental regulations and new alternatives.	
obviously, generates wealth and the goods we use every day.		However, this transition is still slow compared to the current resource consumption rate.	
On the other hand, industrial activities put a lot of pressure on the environment.		So, how can we make heavy industry become all the more sustainable?	
The EU-funded project BAMBOO will tackle this problem,		This will make processes more flexible,	
The project will develop new technologies addressing energy and resource efficiency challenges		resource-efficient and sustainable.	
on 4 process industries: steel, petrochemical, paper&pulp and mineral		BAMBOO's approach will be based on 3 innovation pillars:	
The project will develop a demand management approach		Waste-heat recovery, electrical flexibility and waste streams valorisation.	
dealing with waste streams		The project will empower industrial flexibility	
usually neglected in energy intensive industries.		and make it more competitive in the use of natural resources in a broader context.	
Old-fashioned heavy industry is changing.			
for the better.			
Are you ready for this flexible industry revolution?			
			



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BAMBOO

# 11 CONCLUSIONS

An effective communication and engagement strategy must reach and involve all parties as early as possible and not just at the end of a project, when the main results are expected.

The intensity of your communication as well as your messages may change over time according to progress:

1. at the beginning of the project: explain what the project is about and the main purpose, highlighting the most unique idea; this was the focus of the first project year
2. in the course of the project: communicate the progress and possible research results on a regular basis; indeed, further communication formats and materials will be produced by Fondazione iCons according to the needs of the BAMBOO partners
3. towards the end of the project: show the results achieved by the project and its potential future applications.

The present deliverable focuses on the 1<sup>st</sup> stage. All the communication materials produced so far have been approved by the coordinator Fundaci3n CIRCE and provided to the BAMBOO partners. Further communication materials will be designed and provided over the all project to meet the need of the partners and reach a wide audience.

