

|                           |  |
|---------------------------|--|
| <b>Project acronym</b>    | Life Bitmaps   |
| <b>Project full title</b> | Pilot technology for aerobic Biodegradation of spent TMAH Photoresist solution in Semiconductor industries |
| <b>Project Number</b>     | <b>LIFE15 ENV/IT/000332</b>  |

|                                |  |
|--------------------------------|--|
| <b>Action D1</b>               | Action D1 “Dissemination Planning and Execution” |
| <b>Annex - Document title</b>  | ANNEX D1_1 Dissemination and Outreach Plan       |
| <b>Revision no.</b>            | 3  |
| <b>Document date</b>           | 21 Dec 2016                                      |
| <b>Due date of deliverable</b> | 31 Dec 2016                                      |
| <b>Dissemination level</b>     | Public   |
| <b>Responsible partner</b>     | LFoundry   |
| <b>Contributing partners</b>   | LFoundry, UNIVAQ                                 |
| <b>Reviewing partners</b>      | all partners                                     |

| Dissemination level |   |   |
|---------------------|---|---|
| PU                  | Public  | X |
| PP                  | Restricted to other programme participants (including the Commission Services)        |   |
| RE                  | Restricted to a group specified by the consortium (including the Commission Services) |   |
| CO                  | Confidential, only for members of the consortium (including the Commission Services)  |   |

| Revision Chart and History Log |            |   |
|--------------------------------|------------|---|
| Version                        | Date       | Comment   |
| 1                              | 21/12/2016 | Rev 1.0 submitted to partners for internal review         |
| 2                              | 06/02/2017 | Rev 2.0 Review of some typing mistakes                    |
| 3                              | 2/01/2018  | Rev 3.0 Updated the initial template and some events date |

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## Executive summary

This deliverable represents the Life Bitmaps project communication and dissemination objectives, strategy and planned activities. The report describes in detail target groups as well as dissemination actions, channel and tool that will be deployed to reach these groups and a wider audience. In addition, the document describes dissemination procedures to be followed by all Life Bitmaps partners to present the project at the planned events.

It is a public Deliverable , to be periodically updated and refined during the project.

It covers the following issues and is structured as follows:

- *Why – the purpose (introduction)*  
The goal of all dissemination activities in Life Bitmaps shall be the creation of awareness about the projects goals and progresses. Moreover, dissemination tools need to be easy to use following procedures outlined in the Dissemination plan.
- *What has to be disseminated – the message (Chapter 2 About Life Bitmaps- Key messages)*  
It is the message the project wants to send to the target audience: what stakeholders need to know about the project and how can Life Bitmaps communicate it clearly are core issues of this section .
- *To whom – the audience (Chapter 3 , Target Groups)*  
Dissemination is addressed to internal and to External audience. In particular Life Bitmaps external audience and the related communication flows are described in detail as target groups in this Chapter .
- *How – methods and tools (Chapter 4 Dissemination Strategy and Chapter 5 Dissemination Methods and Tools)* Criteria used as well as tools and Media which are planned to support and convey all Dissemination activities are drawn in these two Chapters .
- *When – the timing (chapter 5 Dissemination Methods and Tools )*  
The timing of activities and initiatives is planned in the Dissemination Plan, so as to have a precise and updated overview of resources to be employed. Chapter 5 contains also a list of events and conference where partners are encouraged to present the project.

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## 1.Introduction

### 1.1 Background

Awareness of project content, as well as of intermediate and final results, has a crucial significance for a project's success. This is even more valid for Life Bitmaps, since it is mobilizing a relevant amount of resources to achieve quite ambitious and significant results. Moreover, due to the innovative approach developed in Life Bitmaps, the success of the project will depend also on the interest generated among stakeholders in terms of adopted methodologies. For this reason, it will be fundamental to share information and to disseminate to the widest audience the project objectives, results and achievements during the project life. Therefore, Dissemination activities have always been considered of primary importance for the Life Bitmaps consortium. Dissemination activities focus on the extent to which the experiences, results, achievements in general, gained within Life Bitmaps, can be utilized by the Electronic and Semiconductor (E&S) industry . The purpose of the Dissemination activities in Life Bitmaps are to:

- Raise awareness – let others know what the project is doing
- Inform – increase the knowledge of the stakeholders
- Engage – get input/feedback from the stakeholders
- Promote – spread project outputs and results.

Defining the purpose of dissemination is a first step to decide on the audience, message, method and timing of the dissemination.

### 1.2 Scope and target audience

The purpose of the present document is to outline the planning of communication and dissemination activities that will help to disseminate widely Life Bitmaps achievements and results. Moreover, the document will describe dissemination procedures to be followed by all project partners. Dissemination activities have been carefully selected and planned since the project beginning in order to make an efficient use of the resources employed to this scope.

The planning was made through the “Dissemination planning and execution” document (Action D1) which was planned to be issued within six months from the project beginning with updates during the project life.

Such a document addresses the following entities within Life Bitmaps:

- 
- ❑ European Commission: Provide a clear overview of the Dissemination activities carried out inside the project.
  - ❑ Sub-Project Leaders: Provide a common base to harmonise their dissemination and communication effort.
  - ❑ Steering Committee, Project Management: Provide an overview of activities, tools and procedures on dissemination and communication.
  - ❑ Consortium: Provide a base to harmonise their individual communication activities – intended as internal and external - and keep the whole consortium up to date on progresses and results. Provide procedures to be followed for all dissemination and communication activities.

## 2. About Life Bitmaps - Key Messages

BITMAPS is strongly related with the fundamental EU legislation regarding water resource preservation, reduction of industrial emissions and more efficient water management. It is a pilot project aimed to demonstrate the aerobic biodegradability of TMAH/PR (TetraMethyl-Ammonium Hydroxide / Photoresist) avoiding impacts on water body and meanwhile facilitating the industrial water reuse.

Maintaining and improving the aquatic environment is one of the main objectives of European water policy. According to the European Water Framework Directive (2000/60/EG) “the ultimate aim is to achieve the elimination of priority hazardous substances and contribute to achieving concentrations in the environment near background values for naturally occurring substances”.

**BITMAPS addresses pressures from chemical pollutants in the water environment and aims at reducing emissions of priority substances at source, through the use of innovative and efficient treatment technologies of industrial streams.**

Nowadays, 12% of water utilisation in the EU is devoted to industrial use. Since water is a scarce resource, it is crucial for the European industry to change the current paradigm and develop more sustainable and efficient water technologies, which is also an important element for increasing its competitiveness, because a significant

amount of energy is consumed for industrial water treatment. In the scope of Water Industry (Annex III, section A point (a)(iv)) is included the search of more efficient, effective and innovative solutions for industrial wastewater treatment.

**BITMAPS aiming at reusing a quite large amount of treated wastewater in a circular manner, also implement water saving measures to reduce the quantitative and qualitative pressures on water bodies**

The E&S sector makes use of large scale of substances in order to guarantee the innovation of its products. In some cases, like for TMAH, no environmental discharge concentration limits are commonly established in Europe.

**BITMAPS, aiming at reducing a substance of large use in the E&S sector through an innovative treatment which will represent the state-of-art technology to remove TMAH can help filling the gaps in the regulatory scenario by providing tangible results to local and EU policy makers to introduce shared regulations on TMAH emissions.**

In addition, the disposal or even chemical treatment of such TMAH spent solution represents a huge operating costs of the E&S industry

**BITMAPS, aims at reducing a substance of large use in the E&S sector through an innovative treatment which will represent the state-of-art technology to remove TMAH and implement an approach that brings to cost effective, resource efficient and legally compliant results**

The dissemination activities will serve as a source of important stakeholders feedback that will help to adjust project activities, if needed. Thus, according to the project's steps and achievements, dissemination activities will be started as soon as possible aiming to use the above feedback for optimization of project implementation.

During the project, the following issues and messages will be disseminated:

- Current developments
- Achieved results
- Achieved milestones
- Published deliverables and other publications, like scientific articles
- Attended events and own events

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### 3. Target Groups

The following groups have been considered:

1. **Internal audience** The members of the project consortium and institution need to stay well informed about the progress of the project. Adequate internal dissemination can also ensure that the project has a high profile.

2. **Other projects** Sharing project results with coordinators and key actors of projects dealing with similar topics, both within the program and in others, will ensure visibility and uptake of results, and provide opportunities to receive feedback, share experiences and discuss joint problems and issues.

3. **ESIA** (European Semiconductor Industry Association) represents the interests of the semiconductor industry to the European Institutions as well as other relevant stakeholders ESIA advocacy activities, both at the European and International levels, cover a large number of areas relevant to the further growth of the rapidly evolving semiconductor industry. The ESIA Sustainability & Environment, Safety and Health Committee, together with specific working groups are active directly on technical cooperative projects and regulatory issues of value to member companies. This group will be kept informed of high level developments and about workshops that will be organized during the project. Members of the ESIA committee will be part of the Steering board of the project.

4 **AIDIC (Italian Association of Chemical Engineering)** AIDIC is a no-profit association founded in Milan in 1958. AIDIC brings together professionals from industry and academically active in chemical engineering, but also young people still in training and anyone interested in the chemical engineering.

Among his associates supporters it includes some of the most important companies active in the sector. AIDIC was a founding member of EFCE - The European Federation of Chemical Engineering -. This enables it to operate at international level, including through its two national delegates for each of the 25 European Working Party; these are valuable tools for promoting co-operation between professionals and researchers in specific fields of chemical engineering. Moreover, AIDIC is part of EFCE Executive Board and is associated with EFB (European



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Federation of Biotechnology) and WEC (World Energy Council) Italy. For this reason AIDIC involvement ensures the Life project BITMAPS a wide diffusion in both the academic world and the industrial world.

**5 Policy makers and Regulatory Bodies** - Other relevant stakeholders are the decision makers at Italian and European level. EU and national decision makers could set new quality standards and guidelines in terms of discharge thresholds of TMAH/photoresist by the industry.

**6 EU and national authorities** - BITMAPS project aims to contribute to the EU environmental policy and waste legislation and possibly influence governance bodies to improve recycling behaviour and stimulate the “green business”. For this, the necessary contacts with the EU competent authorities would be established in order to ensure the project’s EU added value. These will include, among others, DG ENV (in particular Directorate C: Industry) who may take advantage from BITMAPS outcomes to initiate, define and put in practice legislation and measures in the EU to favour the uptake of technologies for water resource preservation.

DG ENTR whose primary aims are to promote industrial innovation to generate new sources of growth, encourage the growth of SMEs and promote an entrepreneurial culture and strengthen the industrial base in Europe. This DG will be surely much interested in BITMAPS results and follow-ups at national and local level, the partners will address the competent governance bodies (Ministry of Environment, Ministry of Economic Development) and local authorities. Some contacts are already in place with Regional competent authorities (Regione Abruzzo), and the local Chambers of Commerce who are competent on environmental matters (especially at informative level) and innovation matters related with enterprise development.

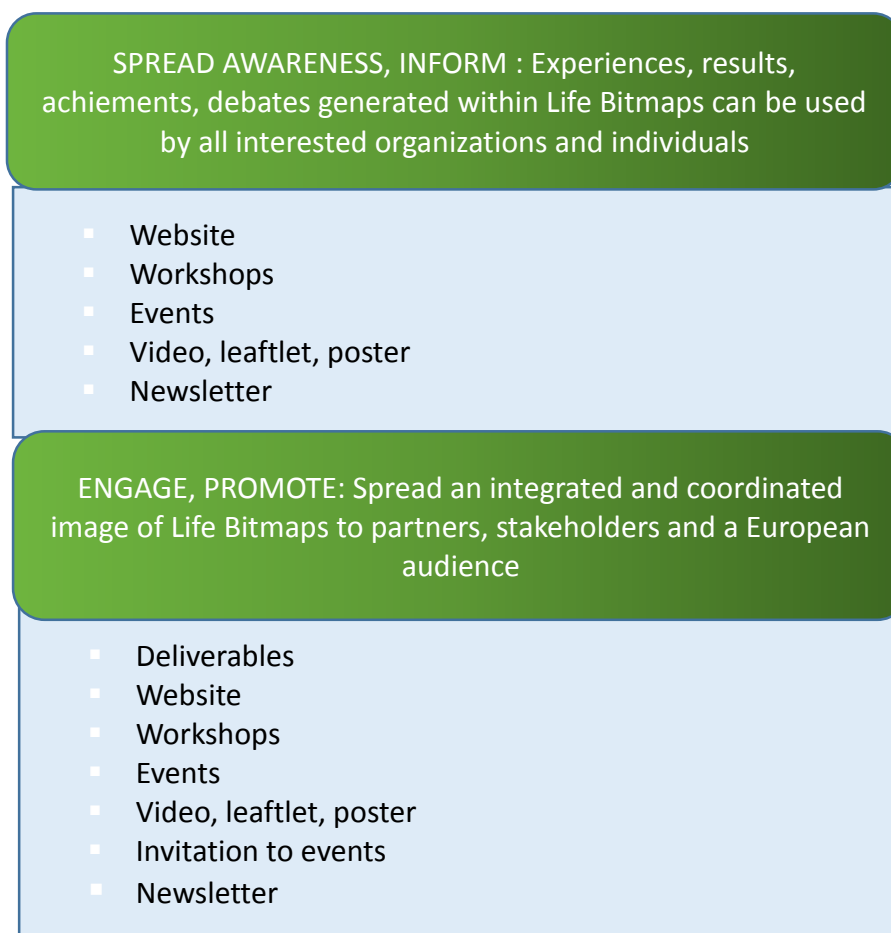


## 4. Dissemination Strategy

In the previous chapter it has been described whom Dissemination is directed to and needs to be addressed for effective communication.

Furthermore, it is necessary to define how this information has been transmitted. In a more general perspective, within the aim to raise awareness of the project goals, achievements and results to the widest audience as possible, the target groups have to be reached by all of the tools featured in the project. In this deliverable a specific chapter is devoted to Dissemination methods and tools, including their description, scopes and use. In the present chapter, on the other hand, the core objectives of LIFE BITMAPS Dissemination are identified and Dissemination tools are put into relationship with them, as shown in the figure below.

**Figure 1 - Disseminations scopes and tools**



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Different tools and media are planned to be used and combined in various ways during the project development in order to effectively reach Dissemination objectives.

During the first project phase (june 2016 – april 2017) the dissemination activities will aim to make the public aware of project's objectives and expected results. The LIFE BITMAPS official website has been developed; a first version of leaflets and posters has been designed and presented. Templates for documents and presentations have been created. Most of the dissemination material produced at this stage will be used throughout the project life.

It has to be pointed out that in the initial stage of the project dissemination activities are not limited to specific groups, but rather addressed to the general public in order make it aware of the project's existence and goals. Publications and presentations aim at describing mainly the project's concept and approach, as well as the research methodology.

After this period, it is needed to use these tools and activities to effectively spread the Life Bitmaps identity, scopes and first relevant results towards more targeted groups.

During the second phase of the project (May 2017 – December 2017) efforts will be spent to start- up the LIFE BITMAPS pilot plant. Initial feedback is expected from Stakeholders via the first Workshop (May 2017). The newsletters are expected to play an important role in spreading the information about the progresses of the project. An Open Day will be organized at LFoundry premises in the winter 2017-2018 with the aim to demonstrate the pilot plants results and initial project's achievements.

In the third project phase (year 2018) the Life Bitmaps pilot will be validated. An evaluation of compliance with Life Bitmaps high level objectives will also be addressed. This will imply a more targeted use of the media and a major participation in events to present Project's result. In the third phase it will be important to spread the results achieved aiming to reach as wide audience as possible. Differently from the first project phase, on the base of results achieved and on the impact assessed in the project, it will be also important to target for the Final Conference, which will be held at LFoundry facility, specific audiences as well as to show how Life Bitmaps results represent an opportunity for stakeholders.

## 5. Dissemination Methods and Tools

### 5.1 Overview of dissemination methods and tools

This chapter outlines the major dissemination methods and tools of LIFE BITMAPS coupled with purposes and timing

**Table 1 - Overview of Dissemination methods and tools**

| METHOD                               | DESCRIPTION   | PURPOSE                               | DELIVERY DATE  |
|--------------------------------------|---|---------------------------------------|--|
| <b>Logo</b>                          | Project logo including the project acronym, representing LIFE BITMAPS's visual identity. It should be used anywhere where possible when presenting the project.   | Project identity                      | Available within the first 3 months of the project.  |
| <b>Web Site</b>                      | The website will also contain a download section where there is an access to all public deliverables. The project's newsletter will be made available too.  | Awareness<br>Inform/Engage<br>Promote | December 2016 (webpage);<br>periodically updated   |
| <b>Dissemination tools templates</b> | The consortium decided to introduce uniform templates for all dissemination tools aiming to facilitate producing dissemination outputs  | Project identity                      | First version early in the project, updated if the need arises, see Annex 4, Annex 5 and Annex 6 |
| <b>Project leaflet and poster</b>    | Project leaflets and posters will be produced including all key information about LIFE BITMAPS (project planning, development, goals and results).  | Awareness                             | December 2016 in order to convey the project approach and objectives;                            |
| <b>Project video</b>                 | At the end of the project, it will be evaluated the arrangement of a demonstrative video (5-10 minutes) which will present the results and outcomes of LIFE BITMAPS   | Inform<br>Engage<br>Promote           | At the end of the project  |
| <b>Press Releases</b>                | The project will produce press releases on a regular basis and disseminates them to the media in order to give the maximum visibility to the implementation and distribution of the outcomes generated by the project                                   | Inform<br>Engage<br>Promote           | When a relevant progress or information is to be communicated                                    |
| <b>Newsletters</b>                   | The project will develop a digital newsletter addressed to the key stakeholders, policy makers and the scientific community. Newsletter will be aimed to update stakeholders on the project implementation. It will be available on the project website | Inform                                | Every six months   |

| METHOD   | DESCRIPTION   | PURPOSE                     | DELIVERY DATE  |
|--|---|-----------------------------|--|
| <b>Workshops and events</b>                          | Organization of project workshops, events and related demos carried out by the LIFE BITMAPS consortium.   | Engage<br>Promote           | WORKSHOP at UNIVAQ premises on may 31th 2017<br>OPEN DAY (Start-up event) at LFoundry premises during the spring 2018<br>FINAL CONFERENCE at LFoundry premises at the end of 2018                  |
| <b>Events and Publications</b>                       | BITMAPS partners are encouraged to participate in workshops and other events<br>This participation can take the form e.g. of paper presentation to demonstrate the LIFE BITMAPS outcomes.   | Engage<br>Promote           | National and international conferences have been planned, since they are important opportunity to share achievements with experts in the field. A list of events is published in this deliverable. |
| <b>ESH and sustainability bi-annual ESIA meeting</b> | Project outcomes and results shared and discussed during the ESIA biannual Working group meeting during 2018.   | Inform<br>Engage<br>Promote | Every six months   |
| <b>Laymans's Report</b>                              | At the end of project, a layman's report will be prepared in Italian and English and published on the project's web pages and as well be available on paper. It will be addressed to a large public of industrial and institutional stakeholders, interested citizens, environmental organizations, waste treatment operators | Engage<br>Promote           | December 2018  |

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## 5.2 Description of dissemination tools

### 5.2.1 Logo

The LIFE BITMAPS (Figure 2) has been created few months after the project start. It is composed by the acronym LIFE BITMAPS and by graphic elements.



**Figure 2 - LIFE BITMAPS logo**

The idea is that technology, represented by a wafer containing semiconductor devices, can be consciousness pursued by saving water and safeguarding the environment.

### 5.2.2 Templates



Templates are important to follow and give a coherent impression of the project as well as to establish a visual language that at a glance shows that information given concern the LIFE BITMAPS project.

They have been produced and made downloadable for all members of the project from the project repository in the web site. Each new official document must be initiated from these templates.

Dedicated templates were drawn up for:

- ☐ Documents for Deliverables and Deliverable Review Report
- ☐ PowerPoint Slides template to be used for presentations related to the project.

**Figure 2 - LIFE BITMAPS Deliverable and Report template**


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|                    |   |
|--------------------|---|
| Project acronym    | Life Bitmaps  |
| Project full title | Pilot technology for aerobic Biodegradation of spent TMAH Photoresist solutions in Semiconductor industries |
| Project Number     | LIFE15 ENV/IT/000332  |

|                         |  |
|-------------------------|--|
| Document no.            |  |
| Document title          |  |
| Revision no.            |  |
| Document date           |  |
| Due date of deliverable |  |
| Dissemination level     |  |
| Responsible partner     |  |
| Contributing partners   |  |
| Reviewing partners      |  |

| Dissemination level |   |
|---------------------|---|
| 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)  |

| Revision Chart and History Log |      |         |
|--------------------------------|------|---------|
| Version                        | Date | Comment |
| 1                              |      |         |

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**Figure 3 - LIFE BITMAPS Power Point template**



PRESENTATION TITLE

Name/Title of the Presenter /Author

Event Name , date, location



SLIDE TITLE






Thank You very much for your attention



This Project has received funding from the European Union under the LIFE Programme under Grant Agreement No. LIFE15 ENV/IT/000332



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### 5.2.3 Web site

A detailed description of the website is available in the dedicated Deliverable

The webpage was branded with the project logo and with its acronym

It was uploaded at the URL: <http://www.lifebitmaps.eu/>

The LIFE BITMAPS website is structured as follows:

- **Home** core project objectives and information, synopsis page and last news
- **Project** - project description & details, with project brochures and flyers available for download; work packages; expected outcomes (deliverables)
- **Consortium** - logos and hyperlinks to partner websites, Advisory Board and Networking with other similar projects;
- **Publications & Media** Scientific publications; Press releases; Gallery; Useful Links.
- **Events** – database of project-related events organized by the partners
- **Results** – public reports, presentations and scientific articles coming from the project
- **Contacts** – main points of contact
- **Partners section** is accessible to the partners only. Includes documents and meetings minutes



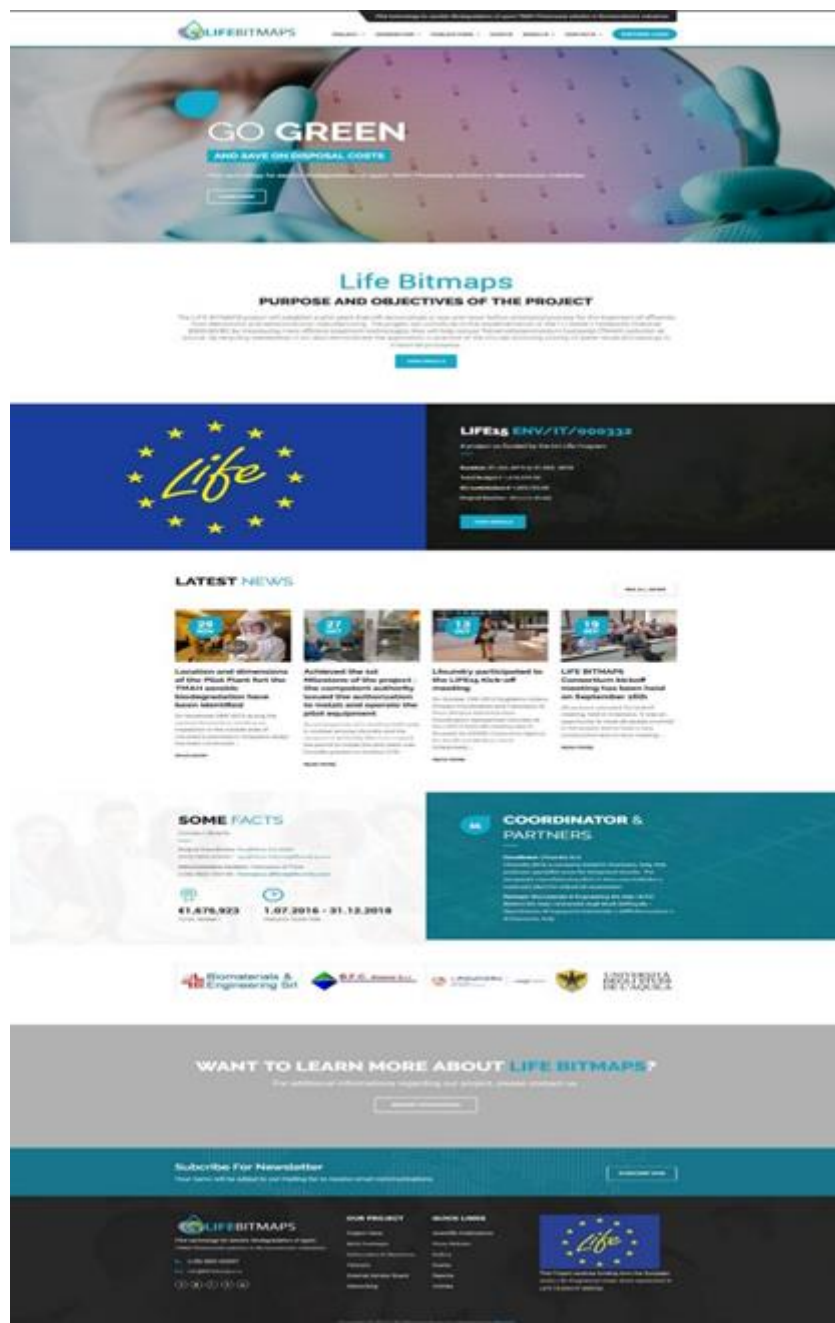


Figure 4 - LIFE BITMAPS Web site homepage

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All partners are encouraged to actively collaborate to provide and update information about their organization, publications or presentation to events, progresses in the project, etc.

It is expected that during the first project year the website will undergone frequent changes to get to an optimized version in terms of content and functionalities. Moreover, the website is expected to change on the content side over the project duration in order to include project progresses and achievements.

The LIFE BITMAPS website is composed of a public and private part reserved for the administrators of the site and partners. The access to the private part is restricted and a password is required.

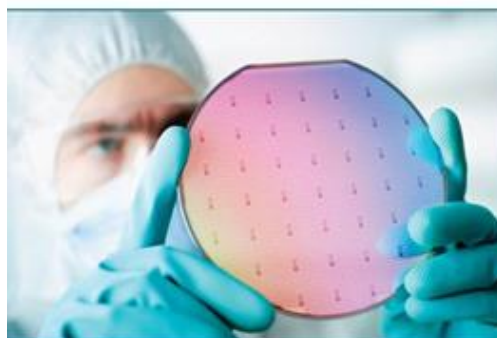
#### 5.2.4 Poster and Leaflet

They contain relevant information on the project and the core objectives and expected outcomes. As shown in Figure 4, the Poster provides information on:

- ☐ Connection among the Life Program and LIFE BITMAPS
- ☐ LIFE BITMAPS objectives, outputs and core information (e.g. duration, funding)
- ☐ Consortium.



**"Pilot technology for aerobic Biodegradation of spent TMAH Photoresist solution in Semiconductor industries"**



*LIFE aims to contribute to the implementation, updating and development of EU environmental and climate policy and legislation by co-financing projects with European added value, demonstrating Commission's ongoing commitment for circular economy.*

*LIFE BITMAPS Project is carried out HERE under the EU LIFE "Environment & Resource Efficiency Programme"*

A large amount of wastewater containing tetramethyl ammonium hydroxide (TMAH) and Photoresist (PR) is generated every year in Europe by the Electronics and Semiconductor (E&S) industries that use it as a developer and etchant. Due to their toxic properties, the industrial streams containing TMAH and PR have to be treated in order to protect the water ecosystem, with high costs for the companies and impacts on the environment.

## AMBITIONS

- Contribute to reach the ultimate aim of the European Water Framework Directive (2000/60/EG) that is "to achieve the elimination of priority hazardous substances and achieving concentrations in the environment near background values for naturally occurring substances".
- Prove that the proposed process could replace the state-of-the-art technologies for the TMAH removal as they are less effective and consume great amounts of reagents.
- Help filling the gaps in the regulatory scenario by providing tangible results to local and EU policy makers to introduce shared regulations on TMAH emissions.
- Increase the awareness among the European E&S industry about the problem influencing industrial investments in safer and eco-innovative technologies.

## OBJECTIVES

- Design, construction and validation of a semi-industrial pilot plant enabling the treatment of spent PR/TMAH, and other mixed solutions generated by the E&S manufacturing processes.
- Demonstrate, at industrial scale, the biodegradation of TMAH to non-toxic biomass plus NH<sub>3</sub> by using some specific savage microorganisms selected during the previous R&D phase.
- Prove the cost sustainability of the process, in a LCC perspective, also taking into account the actual annual operating costs for the PR/TMAH concentrated disposal.
- Set up a more efficient water management approach proving that it is possible to reduce the net water consumption by saving water of the currently used ionic exchange process, and evaluate the total reuse of treated wastewater in the company's industrial plant.
- Promote the project through dedicated dissemination and networking means and activities.
- Pave the way for replication and transfer of the results to E&S Sector.

| THE PROJECT   |                              | More information on: <a href="http://www.lifebitmaps.eu">www.lifebitmaps.eu</a> |  | PARTNERS  |  |
|---|------------------------------|---|--|---|--|
| Start<br><b>01/07/2016</b>  | Duration<br><b>30 months</b> | Funding<br><b>€ 1,003,753.00</b>  |  |   |  |
|  <p>This project has received funding from the European Union's Life Programme under grant agreement N. LIFE15 ENV/IT/000332</p> |                              |   |    |   |  |
|   |                              |   |  <p>Associated Beneficiary<br/><b>UNIVAQ</b><br/>L'Aquila, Italy</p>            |  <p>Associated Beneficiary<br/><b>B.F.C. Sistemi S.r.l.</b><br/>Busnago, Italy</p> |  |
|   |                              |   |  <p>Coordinating Beneficiary<br/><b>Lfoundry S.r.l.</b><br/>Avezzano, Italy</p> |  <p>Associated Beneficiary<br/><b>BME S.r.l.</b><br/>L'Aquila, Italy</p>           |  |

**Figure 5 - LIFE BITMAPS Poster**

The leaflet will be arranged providing the same information than the Poster with more level of details.



Figure 6 - LIFE BITMAPS Leaflet

Both the poster and the leaflet are available on the LIFE BITMAPS website in the Publications section.

### 5.2.5 Video

At the end of the project, it will be evaluated the arrangement of a demonstrative video with the aim to present results and outcomes of LIFE BITMAPS. It could be particularly useful and appropriate in case of demonstrations and presentations at congresses and events in order to focus on the innovative solutions provided by the project.

### 5.2.6 Newsletter

Newsletters are planned to be published on the project website and distributed periodically, especially when a relevant event occurs. The aim is to inform about project progresses and to stimulate a debate supposed to continuously grow during the project life on project topics, results, and news related to LIFE BITMAPS

## 5.3 List of events and activities

Partners of the consortium are encouraged to publish project results.

The list of conferences and workshops relevant to the project will be kept updated in the web site. Each partner detecting a new opportunity is expected to circulate the information among the Consortium.

The following events, initiatives and activities have been identified as opportunities to make LIFE BITMAPS known and increase its visibility, according to the Dissemination Strategy described in Chapter 4.

### 5.3.1 Own Events

The following events have been planned to be arranged during the project life by the members of the Consortium in order to make LIFE BITMAPS known and increase its visibility, according to the Dissemination Strategy described in Chapter 4.

**Table 2 – List of Project's events**

| Event Title |          |    | Place/ date                    | Dissemination material                                 |
|-------------|----------|----|--------------------------------|--|
| Kick-off    | Workshop | at | UNIVAQ - L'Aquila<br>31/5/2017 | Poster, Leaflet, Presentations<br>on project's updates |



|                                       |                                |  |
|---------------------------------------|--------------------------------|--|
| Open Day at LFoundry Facility         | Avezzano (AQ)<br>Spring 2018   | Poster, Leaflet, Presentations on project's updates, Papers        |
| Final Conference at LFoundry facility | Avezzano (AQ)<br>December 2018 | Poster, Leaflet, Presentations on project's updates, Video, Papers |

### 5.3.2 Attended events

The following events, initiatives and activities have been identified and will be monitored as opportunities to make LIFE BITMAPS known and increase its visibility, according to the Dissemination Strategy described in Chapter 4:

**Table 3 – List of Conferences, trade shows and initiatives**

| Event Title  | Place/ date                                | Dissemination material  |
|--|--|---|
| <b>EESD2017 (2017 International Conference on Energy, Environment, and Sustainable Development</b>   | April 21-22 2017, Phuket, Thailand         | Presentation of the paper: "Kinetic study of aerobic degradation of tetramethylammonium hydroxide (TMAH) at room temperature"   |
| <b>CEMEPE Conference</b>   | June 25-30, 2017, Thessaloniki, Greece     | Presentation of the poster: "Treatment of TMAH solutions from microelectronic industry: a combined process scheme"  |
| <b>Photolife Project ("Process and automated pilot plant for simultaneous and integral recycling of different kinds of photovoltaic panels")</b> | Rome 24 <sup>th</sup> , 2017               | Presentation: «Il progetto LIFE BITMAPS per la gestione di sostanze pericolose esauste quale opportunità di sviluppo sinergico tra privato ed istituzioni»  |
| <b>Exhibition "Street Science".</b>  | I'Aquila September 29th 2017,              | Presentation of the BITMAPS Project   |
| <b>Ninth Carbon Dioxide Utilization Summit. ,</b>  | 18th-19th October 2017, Reykjavik, Iceland | Presentation of the poster: "LIFE BITMAPS project for the biodegradation of Tetramethylammonium Hydroxide (TMAH) in the wastewaters of semiconductor production: neutralization of waste by CO <sub>2</sub> in lab and pilot scale" |
| <b>Eigth World Congress and Expo on Recycling</b>  | June 25th-26th, 2018 Berlin, Germany       | Presentation of the paper "Treatment of wastewater from microelectronic industry: process analysis of a combined process"   |

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#### 5.4 Submitting papers and articles

A procedure for submitting papers and articles to conferences and publications has been set up. The participation of LIFE BITMAPS Partners in an event relevant to BITMAPS must be approved beforehand by the Steering Committee (SC).

Moreover, before and after BITMAPS is presented at a conference, or elsewhere, some brief information needs to be published on the partners' section of the web site, while making presentations and any accompanying publications downloadable.

The participation of any partner in an event must be approved beforehand in a Steering Committee (SC) meeting. If this is not feasible, due to limitations, etc. there should be at least an e-mail approval by the Coordinator and by all the SC members. For a conference presentation or publication, the following procedure should be followed:

- ☐ 4 weeks before the submission deadline: Completion of an appropriate communication to the SC Committee and the Consortium. Authors will make available the material to be presented to the SC Committee.
- ☐ 2 weeks before the submission deadline: Comments have to be sent to the Authors copying the SC and the Consortium. Then the author should revise the draft paper accordingly. In case of conflicts, it is the duty of Project Coordinator involving the SC Committee to resolve it.

## 6. Key Performance Indicators

In order to track the effectiveness of the dissemination, several key performance indicators (KPI) have been defined.

For financial reasons it is not planned to use a professional media observation tool. Trends of the KPIs are checked on a half-year basis since the end of the first year of the project.

The KPIs used in LIFE BITMAPS include:

- ☐ Number of press releases
- ☐ Number of scientific articles
- ☐ Provided public deliverables
- ☐ Visitor numbers on homepage
- ☐ Number of downloaded publications
- ☐ Number of recipients receiving the newsletter regularly, differentiated by stakeholder group



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## 7. Conclusions

The dissemination plan focuses on communication activities which will help to disseminate widely LIFE BITMAPS results.

Therefore, this document aims at being a reference point for all information related to communication and dissemination activities at Project level. In addition, the document includes dissemination procedures to be followed by all project partners. This Dissemination Plan presented a comprehensive dissemination strategy with a common graphic identity, specific tools and activities adapted to the respective target groups, a clear communication policy and a strict internal Dissemination release procedure. Scope of the present document is to put the user in the condition to know:

- ☐ which tools have been developed for Dissemination and procedures to follow to use them,
- ☐ where to find them,
- ☐ how to manage them,
- ☐ use the coordinates of the project leaders in case anything relate to the dissemination would not be clear.

To further improve the dissemination strategy, the Dissemination Plan will be carried over the project whole duration by monitoring KPI and eventually adopting appropriate actions and initiatives.

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