

<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>

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<b>Reviewing partners</b>	all partners

<b>Dissemination level</b>		
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)	

<b>Revision Chart and History Log</b>		
Version	Date	Comment
1	30/09/2020	Rev 1.0 submitted to partners for internal review



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## Scope

The scope of the present deliverable is to report the Project indicators as defined in the initial part of the project.

### Selection criteria of the project specific indicators

For the most of indicators reported in the next section, given the nature of the project, it has been possible to make a first evaluation of their status only at the end of the project itself.

From the environmental perspective, as the project focuses on the waste-water treatment process the indicators are related to waste management, water recycling and pressure reduction on the environment. Other indicators are mandatory or related to socio-economic impacts or improvements.

Indicators and comment for each of them are available in the eproposal platform:

<https://webgate.ec.europa.eu/eproposalWeb/kpi>



## Table of Indicators



**LIFE KPI**

LIFE KPI								
Objective	Indicators			Estimated Impact (absolute values) At the beginning of the project	Estimated Impact (absolute values) At the end of the project	Estimated Impact (absolute values) 3 Years after the end of project	Unit	Please comment and give brief explanations of assumptions used for the calculation
1.5. Project area/length				0	2.50	2.5	Km2	AREA at the C.B. site where the pilot was installed
1.6. Humans (to be) influenced by the project				10	1500	1550	Humans influenced by the project	People, impacted at the C.B site
2. Water (Including the Marine Environmental )	2.3 Pressure or Risk addressed	2.3.5 Resource efficiency - water	2.3.5.2 Water abstraction / diversion	1.49	1.35	1.35	Mm3/year	Recycle and reuse of a part of main wastewater stream



								coming from the Wafer Fab focusing on water with low polluting content
3. Waste	3.1 Waste Management		Liquid Waste CER 11.01.12	1,336	1,295	25	ton/year	Reduction of Liquid Waste to disposal (TMAH, NH4F, SEZ) as a output of a full scale plant using the technology of the project pilot plant for wastewater treatment.
			Liquid Waste CER 11.01.11*	766	755.5	0	ton/year	
5. Environmental s and health (including chemicals and noise)	5.1 Chemicals	5.1 Chemicals Released		107.9	105	6.	Kg/year	TMAH concentration reduction at the final discharge , is the first goal of LIFE Bitmaps project;



								The target is to reduce the TMAH concentration at final discharge point from 7 mg/l to 0.4 mg/l
10. Governance	10.2 Involved non-government organisation (NGOs) and other stakeholders in other project activities	NGOs		1	3	5	Number of NGOs	
		Private for profit		0	1	3	Number of Companies	
		Public bodies		1	2	5	Number of Authorities	
11. Information and awareness raising to the general public		11.1 Website (Mandatory)	Unique Web Visits	0	3182	5000	Number of individuals	
12. Capacity Building		12.1 Networking		0	15	40	Number of individuals	



13. Jobs		Jobs	FTE	0	1.00	6.00	Number	
14. Contributor to economic Growth		14.1 Running cost/operating costs during the project and expected in case of continuation/replication/transfer after the project period	Running Cost	0	25.000	200.000	€	Assumed the total operating cost of 1 plant operating after 3 years
		14.2.4 Cost reduction expected in case of continuation/replication/transfer after the project period	Cost Saving	0	0	300000	€	Savings supposing to build 1 full plant at the C.B. site
		14.2.2 Operating expenses expected in case of continuation/replication/transfer after the project period	Operating Cost	0	0	20000	€	Supposing to build 1 full plant at the C.B. site
		14.3 Future Founding		0	0	4.500.000	€	Funding 3 plants after 3 years





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