

D.C1.2 Report on the evaluation of Performance Indicators



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DELIVERABLE D.C1.2

Report on the evaluation of Performance Indicators

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| PROJECT NUMBER | LIFE19 ENV/GR/000100 |
| PROJECT TITLE | InnoVative photocatalytic paintS for healthy envirOnment and eNergy Saving |
| PROJECT ACRONYM | VISIONS |
| ACTION | C.1 Development of Performance Indicators |
| DELIVERABLE | D.C1.2 Report on the evaluation of Performance Indicators |
| BENEFICIARY | NCSR D |
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1. Introduction

Action C1 includes the identification and monitoring of the project performance indicators. On the basis of the Project's objectives a monitoring system that will provide a mechanism by which specific information is provided to the interested parties will be developed considering performance indicators. Monitoring also highlight strengths and weaknesses during the project's implementation and also enable responsible beneficiaries to deal with problems occur and adapt to changing circumstances. By the end of the monitoring period the current report on the evaluation of performance indicators will be finalized.

Project monitoring is conducted continuously and periodically. Several qualitative and quantitative indicators have been selected. Main aim of this deliverable is to specify and update the additional LIFE Project performance indicators which contribute to evaluating the impact of the project, both during its implementation and beyond project's end. Key Project Indicators (KPI) are included in the KPI Webtool.

2. Project Performance Indicators

The list of monitoring indicators includes the following issues:

- i) The photocatalytic efficiency in terms of the **expected reductions in the concentration of specific pollutants** (NO_x, VOCs) in indoor environments
- ii) The expected improvement of the **energy efficiency** of the building sector attributable to the application of the proposed Photo Paint, as a result of the expected reduced need for artificial (mechanical) ventilation and hence reduced electricity consumption
- iii) The expected improvement of **environmental performance** of the building sector correlated with energy consumption and expressed by means of carbon indicator.
- iv) The photocatalytic efficiency in terms of **economic efficiency** of the building sector related to operational costs due to energy savings.
- v) Considering the different beneficiaries, the project's results indicators reflect the interest of the parties and stakeholders involved; **social indicators** will hence be introduced to express the objectives from the perspective of industry sector, local authorities, citizens and scientific community.

The project specific indicators are appropriately updated and provided below. A few of these indicators were reconsidered concerning their qualitative assessment and/or their estimated end value with regard to the results of the project activities during the project implementation.

Table 1. LIFEVISIONS Project Performance Indicators

| Indicator | Estimated start value | | End value | Qualitative assessment |
|--|--------------------------------|-----|-------------------|--|
| Expected reduction of NO and Touene due to photocatalytic VISIONS powder under laboratory scale tests | NO | 70% | 85.4% | High (NO) Medium (Toluene) 0-30% low 30-60% medium >60% high |
| | Toluene | 20% | 31.9% | |
| Expected reduction of NO and Toluene due to VISIONS photo paint under control real scale application (DEMO House) | NO | 40% | 61.7% | High (NO) Low (Toluene) 0-20% low 20-50% medium >50% high |
| | Toluene | 15% | 5.80% | |
| Expected reduction of NO and Touene due to VISIONS photo paint under real world application (HNA) | NO | 40% | 46% | High (NO) Low (Toluene) 0-20% low 20-50% medium >50% high |
| | Toluene | 15% | 16% | |
| Expected storage stability of VISIONS photo paint (viscosity) | +/- 10% from the initial value | | 5% | 0-5% excellent 5-10% satisfactory >10% unsatisfactory |
| Expected energy reduction due to VISIONS photo paint under control real scale application (DEMO House) | 10% | | 25%-54% | 0-20% low 20-50% medium >50% high |
| Expected energy reduction due to VISIONS photo paint under real world application (HNA) | 10% | | 11% - 22% | 0-20% low 20-50% medium >50% high |
| Expected accuracy of DSS to provide prognostic data on the improvement of IAQ due to photocatalytic paint application | 0 | | 75-80% | 0-30% low 30-60% medium >60% high |
| Product's Total Environmental Footprint | 2% | | 2.83% up to 4.68% | 0-2 low 2-5 medium 5-8 high |
| Persons reached/ influenced via dissemination or awareness raising project- | 0 | | 3149 | 0-2000 low 2000-5000 medium >5000 high |

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| actions/Networking | | | |
| Letters of interest from relevant authorities to make use of the developed tools | 0 | 5 | 0-3 low 3-5 medium > 5 high |
| Number of persons trained | 0 | 148 | 0-30 low 30-50 medium > 50 high |

The monitoring of the project indicators was periodically updated based on the project implementation stage. Values are in line with the corresponding deliverables. Based on the values achieved by the end of the project the qualitative assessment of the indicators could be characterized “High”.