

Newsletter december 2018

LIFE-PHOTOSCALING



Sustainability of photocatalytic technologies on urban pavements: From laboratory tests to in field compliance criteria

Welcome to the fourth newsletter of the LIFE-PHOTOSCALING project.

The PHOTOSCALING project, co-funded by the European Commission began on 1st October 2015, has duration of 52 months and a total budget of 1.761.341 euros. Its implementation will allow undertaking the gap between the study of the photocatalytic efficiency in laboratory and full-scale measurements.

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Sustainability of photocatalytic technologies on urban pavements: From laboratory tests to in field compliance criteria

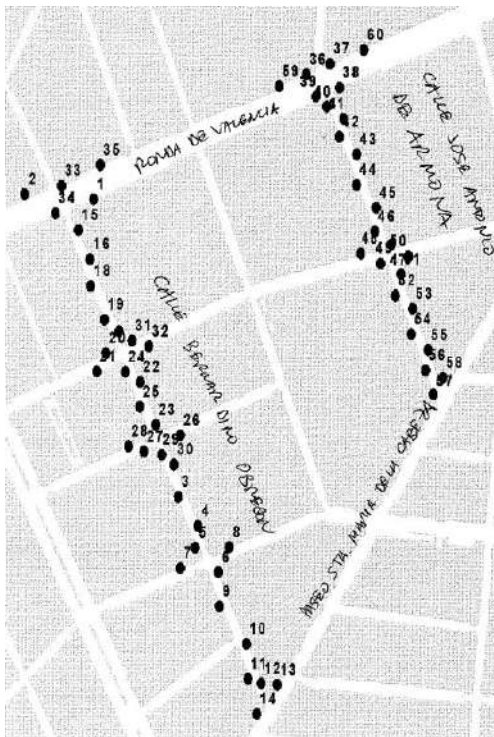


Since the last newsletter, we want to point out the following aspects related to PHOTOSCALING



Monitoring of Madrid area previous the implementation of photocatalytic product

Passive air sampling tubes have been installed in the selected area in Madrid previous to the implementation of the selected photocatalytic product.



From the results obtained, **Bernardino Obregon** was selected as the “reference street” and **Jose Antonio de Armona** as the “photocatalytic street”

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Placing the selected material on the street

The photocatalytic emulsion chosen was implemented on the street José Antonio de Armona on the 4th and 5th December 2018.



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Taken of cores for evaluation at the laboratory



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Monitoring nanoparticles emission during the product implementation on street



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Monitoring of the performance of the product implemented

In situ NO_x measurements



Photocatalytic activity indicator ink



Continuous measurements: NO, NO₂, O₃, Irradiation, RH and T^a



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Durability and nanoparticles emission under simulated traffic

TEMIS: Mobile device developed during LIFE-PHOTOSCALING that simulated vehicles traffic deterioration of pavements and measure the potential emission of nanoparticles



Nanoparticles sampling and measurements equipment



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Monitorization of Ti, pH, conductivity and nitrates in the leachates

Water collector



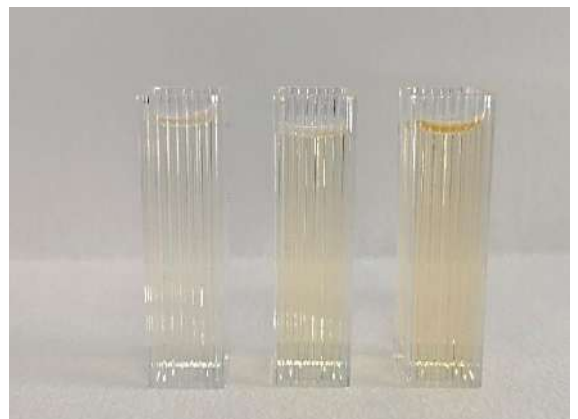
pH and conductivity



Leaching samples



Nitrates color measurements



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Socioeconomic impact evaluation of project: information and surveys

Staff of the project informed people in the neighborhood. Additionally an in situ, available also online, survey was carried out around the district in which the photocatalytic product was implemented

Cuestionario del nivel de conocimiento y satisfacción del proyecto LIFE-PHOTOSCALING / Survey about level of knowledge and satisfaction in relation to LIFE-PHOTOSCALING project

El objetivo global de LIFE-PHOTOSCALING es demostrar la viabilidad de la tecnología fotocatalítica en pavimentos para reducir la contaminación del aire en las ciudades, fundamentalmente en cuanto a NOx se refiere. Para ello, está llevando a cabo el desarrollo de instrumentos innovadores para el escalado de los procesos del laboratorio a la aplicación real mediante la implementación de una herramienta de apoyo a la toma de decisiones para la evaluación integral de los productos fotocatalíticos ofertados por el mercado.

The global objective of LIFE-PHOTOSCALING is to demonstrate the validity of the photocatalytic technology in urban agglomerations to reduce the air pollution in the cities, fundamentally NOx. For that purpose, innovative instruments are being developed for scaling up from laboratory measurements to application in our cities, by developing a decision support tool, to assess the sustainability of each particular solution in each particular environment to encourage the widespread use of this technology and evaluate the photocatalytic products available on the market.

Más información sobre el proyecto en:
More information about the project in:
www.life-photoscaling.eu

Su opinión es muy importante. Muchas gracias por su participación.
Your opinion is very important. Thank you very much for your participation.



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SOME DISSEMINATION ACTIVITIES...



Networking in the LIFE MINOX-STREET closing event



LIFE Photoscailing presented in the national congress CONAMA 2018



TEMIS equipment in the specialist press



Awareness activity in SedNet Steering Group in Hamburg



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SOME DISSEMINATION ACTIVITIES...



V Reunión Nacional de Grupos de Fotocatálisis y 2018 Joint UK&Ireland/Spain Semiconductor Photochemistry Meeting



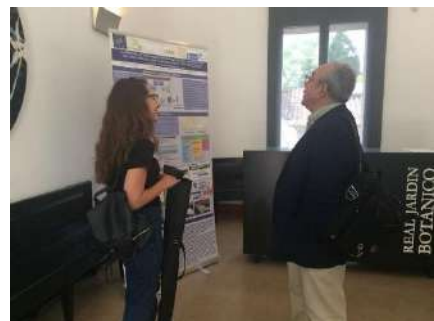
Marta Castellote presents Photoscaling project in SPEA10



LIFE Photoscaling presented in the International Conference on Sustainable Energy and Environment Sensing



LIFE Photoscaling project presented in INFODAY about LIFE Projects



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**SOME DISSEMINATION
ACTIVITIES...**



**BECSA and Primlab SL
visit LIFE Photoscaling
installations**

**Canal de Isabel II staff visits
LIFE Photoscaling installations**



**Technical visit with teacher
and students from
Universidad Nacional de San
Agustín (Arequipa, Perú)**

