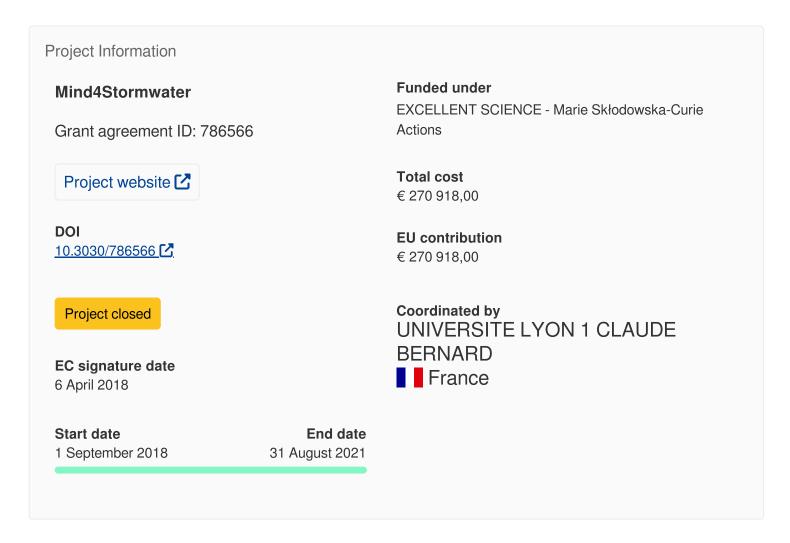


Innovative stormwater asset management in future cities

Fact Sheet



Objective

Mind4Stormwater aims to help cities achieve sustainable management of their "stormwater control measures" (SCMs). These nature-based solutions (e.g. wetlands, swales, infiltration trenches, bioretention systems) have emerged worldwide in the last few decades, meaning that their long-term management is far from assured. Operational and research questions have so far largely focused on optimising hydrologic, hydraulic and water quality performance. However, there is a growing concern regarding sustainable long-term management, and its impact on performance and cost. Such concern will likely limit application and development of SCMs. On the other hand, SCM operation and maintenance could create new

business opportunities related to sensors, monitoring and asset management. According to the UN, investing US\$188 billion to manage stormwater and preserve water quality in the US could generate US\$265 billion in economic activity and create nearly 1.9 million jobs. The situation is likely very similar with the 600,000 direct jobs in the EU water services sector. Mind4Stormwater will adapt existing low-cost technology sensors to the specific context of SCMs, and develop an innovative Expert System to guide the utility manager in selecting the best O&M actions for each SCM. The Expert System will be developed on an Australian case-study with an asset base of 500 SCMs. It will then be adapted for French cities and an adaptation draft for European cities will be developed. Mind4Stormwater tackles a major problem that is emerging worldwide. This novel research will establish the researcher and both organisations as leaders in the emerging research topic of integrated monitoring and asset management of stormwater control measures. It will reinforce their international recognition and increase opportunities to host excellent researchers. A series of outreach activities will also deliver public education and awareness of the major importance of integrated urban water management.

Fields of science (EuroSciVoc) 6

natural sciences > earth and related environmental sciences > hydrology

natural sciences > computer and information sciences > artificial intelligence > expert systems

engineering and technology > electrical engineering, electronic engineering, information engineering > electronic engineering > sensors

engineering and technology > environmental engineering > natural resources management > water management



Programme(s)

H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions (MAIN PROGRAMME

H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility

Topic(s)

MSCA-IF-2017 - Individual Fellowships

Call for proposal

H2020-MSCA-IF-2017

See other projects for this call

Funding Scheme

MSCA-IF-GF - Global Fellowships

Coordinator



UNIVERSITE LYON 1 CLAUDE BERNARD

Net EU contribution

€ 270 918,00

Total cost

€ 270 918,00

Address

BOULEVARD DU 11 NOVEMBRE 1918 NUM43

69622 Villeurbanne Cedex





Region

Auvergne-Rhône-Alpes > Rhône-Alpes > Rhône

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation Website Participation in EU R&I programmes

HORIZON collaboration network

Partners (1)



PARTNER



UNIVERSITY OF MELBOURNE

👯 Australia

Net EU contribution

€ 0,00

Address

PARKVILLEOFFICE OF THE VICE CHANCELLOR 3010 Melbourne

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation Website Medicipation in EU R&I programmes Medicipation in EU R&I programmes Medicipation network Medicipation

Total cost

€ 178 380,00

Last update: 24 August 2022

Permalink: https://cordis.europa.eu/project/id/786566

European Union, 2025