

European  
Commission

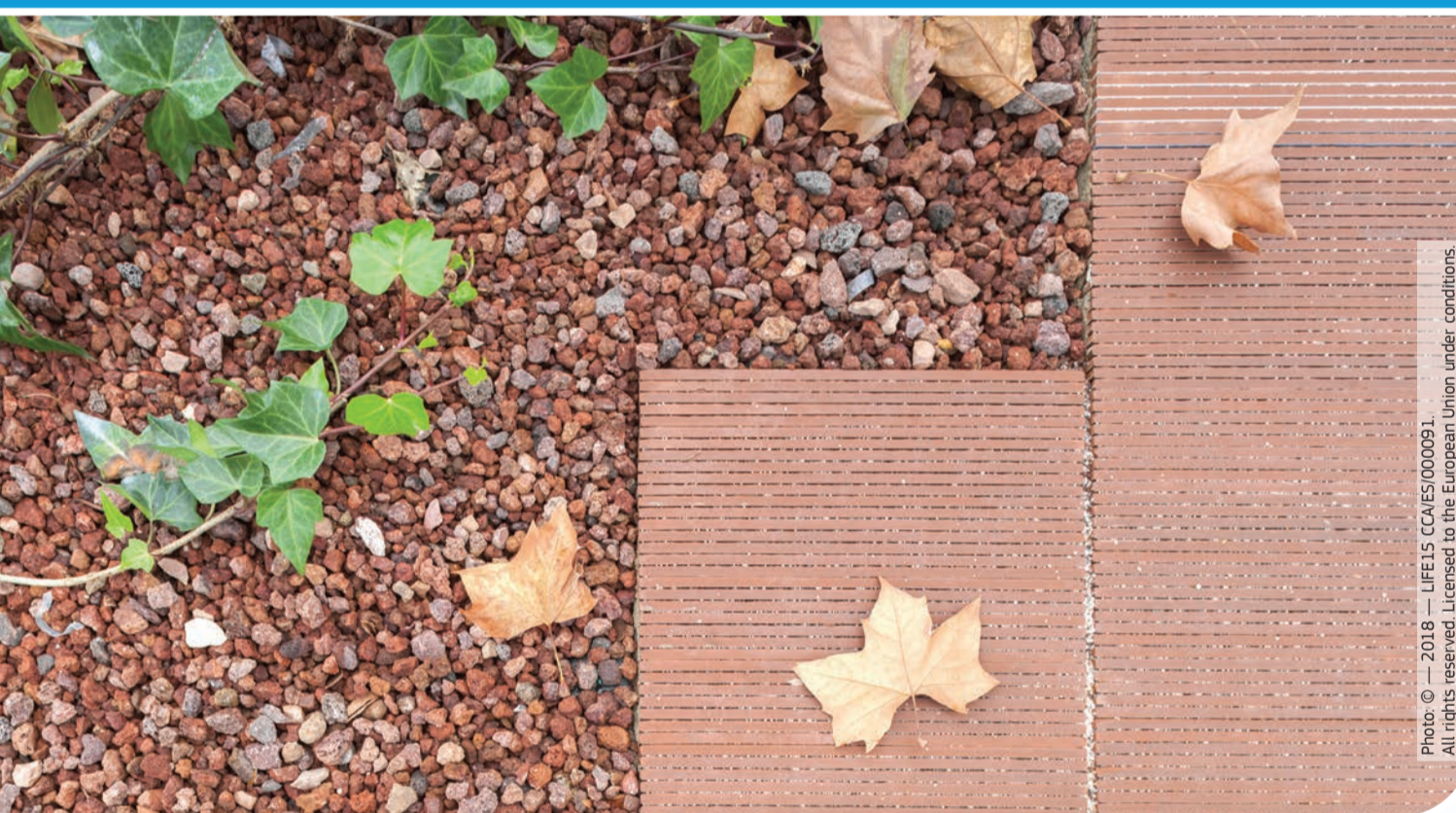
# LIFE & urban resilience

## LIFE, the EU funding tool for the Environment



Since 1992, LIFE has contributed to the implementation, updating and development of EU environmental policy and legislation by co-financing pilot or demonstration projects with European added value. To date, the LIFE programme has co-funded nearly 150 projects that focus on climate change adaptation and some 28 projects focused on urban resilience demonstrating the adaptive potential of 'green infrastructure', including the ability of green roofs or sustainable urban drainage systems to reduce storm water run-off and the positive effects of requalifying green areas and creating green belts and corridors in peri-urban areas. In recent years, there has been a noticeable evolution in the scope of LIFE projects funded, shifting to integrated, ecosystem-based solutions for whole districts or even whole cities by incorporating green and blue infrastructure in local planning as well as creating the collective participation of citizens and local businesses.

### SUSTAINABLE URBAN DRAINAGE SYSTEMS (SUDS)



**Main objective: LIFE CERSUDS** aimed to manage surface water flooding via the use of green infrastructure in urban planning. To this end, it set out to develop a low-carbon Sustainable Urban Drainage System (SUDS). The system comprises a permeable surface of tiles with a low environmental impact.

#### Key results:

- Production of low-cost tiles and construction of a demonstrator to produce the tiles, avoiding 11,700 kg CO<sub>2</sub> eq. emissions.
- Validation in terms of satisfied users, good hydraulic performance and significant water quality improvement.
- Of the more than 1,000 m<sup>3</sup> of rainfall, 86% was managed by the system, either by collection for future reuse (7,8%), infiltration to the ground or evaporation back into the atmosphere (78,2%).
- Demonstration of the system's ability to reduce flooding, runoff volumes and peak flows; to integrate rainwater treatment in the urban landscape; and to protect water quality.
- Provision of an aesthetic and safe pavement, reducing slipperiness even in wet weather.
- Production of technical and financial documentation and educational tools on the ceramic draining system, which was presented to several European universities.

Find out more: [www.lifecersuds.eu](http://www.lifecersuds.eu)

LIFE CERSUDS LIFE15 CCA/ES/000091

### DISASTER RISK MANAGEMENT ACTION PLANS



**Main objective: LIFE DERRIS** looked at how to manage the risks catastrophic weather events cause to insurance companies, public administrations and SMEs. The project successfully tested an innovative public-private partnership model involving insurers, public administrations and SMEs in order to increase their resilience to climate change. It also explored the potential of using various innovative financial instruments after such weather events.

#### Key results:

- Risk assessment and/or risk management training for 296 people from SMEs and public authorities.
- Development of a Climate Risk Assessment and Management (CRAM) Tool for companies.
- Creation of 128 Company Adaptation Action Plans (CAAPs) to help businesses cope with floods, drought, high temperatures, high winds and other extreme weather events.
- Provision of access to credit.
- Development of a new governance model in Turin for climate risk management: the Integrated District Adaptation Plan.
- Replication of the project's plans in ten Italian municipalities, and the drafting of Sustainable Energy and Climate Action Plans (SECAP).
- Guidance for other insurance and financial services companies wanting to replicate the project's innovations.

Find out more: [www.derris.eu](http://www.derris.eu)

LIFE DERRIS LIFE14 CCA/IT/000650

### GREEN AND BLUE INFRASTRUCTURE



**Main objective: LIFE GREEN4GREY** focused on designing and introducing multifunctional green and blue infrastructure (GI&BI) elements into seven peri-urban areas across Belgium.

#### Key results:

- Transformation of grey infrastructure (former mining or intensive agricultural areas) into green, multifunctional and landscapes high in biodiversity.
- Restoration of ponds and pools, ecological transformation of artificial basins, water courses, retention zones and stream valleys.
- Development of large peri-urban forests and natural grasslands, planting hundreds of trees, bushes and orchards on former farming land.
- Protection of districts from flooding via natural meandering water courses, green hiking paths and improved ecological areas around industrial sites.
- Securing engagement from business and school children for the project's longevity and legacy.
- Recommendations and transfer of knowledge on the importance and benefits of GI&BI for EU peri-urban areas.
- Creation of two action plans for larger peri-urban valley systems, which could be used to promote GI&BI initiatives across the EU.

Find out more: [www.green4grey.be](http://www.green4grey.be)

LIFE GREEN4GREY LIFE13 ENV/BE/000212

### SUSTAINABLE ENERGY AND CLIMATE ACTION PLANS



**Main objective: Life SEC Adapt** aimed to increase the climate resilience of local authorities in Italy and Croatia. The project helped them to integrate climate objectives into their local policies and practices through the so-called 'Mayors Adapt' initiative. The project also adopted the Sustainable Energy Communities (SEC) model in order to improve climate governance.

#### Key results:

- Support for 21 municipalities to join the "Covenant of Mayors for Climate and Energy" through harmonised Sustainable Energy and Climate Action Plans (SECAPs).
- Development of risk assessment and climate vulnerability maps at regional and local level.
- Provision of a set of indicators to measure the impact of the SECAPs.
- Creation of an online open source software tool to monitor the trends of the indicators. This monitoring software can be used across EU countries.
- Establishment of a governance mechanism to effectively address global warming through a European framework.
- Capacity building and awareness raising initiatives on climate change issues.
- Drafting a policy paper on cross-border climate change adaptation and development of National Adaptation Plans for climate change in Italy and Croatia.
- Replication of the methodologies is expected in 78 municipalities across six EU countries.

Find out more: [www.lifeseadapt.eu](http://www.lifeseadapt.eu)

Life SEC Adapt LIFE14 CCA/IT/000316