The EU LIFE Programme

Local and regional authorities (LRAs) face significant environmental challenges in areas as diverse as spatial planning, transport planning, waste management, water management and climate change. They have an important role to play in their citizen’s quality of life (air quality, noise reduction, green infrastructure & biodiversity) and can also bring their support to developing the circular economy.

To date, LRAs have led around 560 LIFE Environment, Information or Climate co-funded projects, and partnered with other beneficiaries in over 430 more.

Two good practice LIFE projects are profiled below, followed by a list of eight other notable projects. Further details about all LIFE projects can be found in the LIFE project database: ec.europa.eu/environment/life/project/Projects/

ECOREG

The primary objective of the project was the application of Industrial Symbiosis (IS) principles in the area of Suceava County, Romania. Industrial symbiosis brings together traditionally separated industries in a collective approach to create a competitive advantage involving the physical exchange of materials, energy, water, and/or by-products. Key to industrial symbiosis is taking advantage of collaborations and the synergistic possibilities offered by geographic proximity. The goal of the project was to use IS methodology to boost regional development with minimal environmental impact, by conserving and developing industrial, natural, human, leisure and cultural potential. Among the project’s specific objectives was a reduction in the amount of natural resources used as raw materials.

A total of 241 companies and institutions from various sectors participated in four IS workshops. This led to the formation of a regional symbiotic network. The workshops helped to identify how resources could be reused, and by-products utilised through the creation of mutually beneficial partnerships. Out of 246 potential synergies and 638 resource flows identified, a total of 194 synergies were created.

IS methodology was successfully adapted to the specifics of the target region, with more than 537,000 tonnes (t) of waste recirculated in other production cycles. In addition, the equivalent of more than 3,000 hectares (ha) of forest was preserved thanks to the substitution of raw wood materials with different types of waste. This was especially valuable in an area where the most valuable resource is timber. These results were achieved at a cost that was significantly below the original projection. The project also helped create 28 jobs and safeguarded 10 more.

ECOREG proved that Industrial Symbiosis can deliver environmental, economic and social benefits in one of the poorest regions in Romania.

WASTE-LESS in CHIANTI

The main objective of the project was to implement a pilot strategy for waste prevention and sustainable waste management in the local community. Reflecting the waste management hierarchy from the Waste Framework Directive (2008/98/EC), the Chianti plan encourages waste prevention through the introduction of collection schemes, accounting systems, collection fees and regulatory frameworks. It also promotes the use and marketing of recycled materials.

The key element of the strategy is the integration of these separate schemes into a single approach. The project demonstrated the effectiveness of combining many different good practices in a comprehensive approach, characterised by the implementation of concrete waste prevention actions through the active involvement of different local stakeholders, accompanied by the revision of waste collection schemes and the related regulatory/charging framework in a ‘waste prevention’ perspective, and by extensive local communication campaigns.

The project approach provided some relevant economic and social benefits at the local level. These are related in particular to the positive ‘territorial marketing’ effects of the economic activities (tourism facilities, cafés and restaurants, shops etc.)...linked to the implementation and promotion of the ‘waste-less’ label.” Costs for the local authorities were saved thanks to the reduction of the amount of waste sent to final disposal and to the door-to-door collection of recyclable materials. Households also benefit financially from lower waste collection fees, owing to the introduction of a pay-as-you-throw (PAYT) system made possible by individual accounting of waste.

One of the most important outcomes of the project is its high replicability in other territories. The project strategy is easy to implement and doesn’t require intensive investments by local communities.
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The project aimed to offer a direct response to the requirements of the Water Framework Directive (WFD) implementation. It piloted a structured approach to undertake work to maintain or recover the good ecological status of two water bodies. This included proposing tools to expand the experience to other water bodies and creating a decision-making tool for the preliminary evaluation of the relevance and efficiency of management measures.

The project aimed to set up biodiversity competitions for local authorities in different EU countries and establish a concept for an overall European award. These aimed to reward good practice through recognition of the best urban areas as ‘Capitals of Biodiversity’. This ultimately aimed to encourage improved nature and biodiversity protection in urban areas across the EU.

The project aimed to reduce negative environmental impacts from the public city passenger transport sector (in terms of CO2 and air pollutant emissions). It tested for the first time in real-world conditions (urban roads) the efficiency and fuel consumption of the optimal hydro-methane blend. The prototype bus was monitored over a year, demonstrating the advantages of using hydro-methane, namely reduced atmospheric pollutant emissions and lower fuel consumption.

The project aimed to develop and adopt a territorial climate action plan for the department of Essonne, France, in order to reduce GHG emissions. This action plan focused mainly on eco-friendly businesses, sustainably-designed housing, transportation and energy. Most of the actions aimed at encouraging behavioural change among stakeholders in various sectors are continuing post-LIFE.

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The project aimed to create a new and innovative management model for urban trees in southern Spain, to contribute to improving both the air quality and quality of life in the city and mitigating climate change. It specifically implemented a new framework procedure for the management of urban trees and integrated the management of green areas in urban planning processes.

The project aimed to find the best winter practices to reduce the levels of street dust (PM10) in urban areas. The project carried out traction control practices (winter tyres, traction sanding), dust binding practices (dust binding solutions, dispersion techniques) and street cleaning practices. This led to a reduction in the number of times when this form of air pollution exceeded daily limits in participating Finnish cities.

The CLIMATE project aimed to develop and adopt a territorial climate action plan for the city of Jerez de la Frontera. It specifically implemented a new framework procedure for the management of urban trees and integrated the management of green areas in urban planning processes.

The Hyper Bus project was a public-private sector collaboration aiming to demonstrate a pilot fleet of public transport city buses with an outstanding performance in low energy consumption. Three new plug-in hybrid buses with fast charging batteries - making it possible to run the majority of city bus lines in electrical mode - were operated in Gothenburg for a year. Thalled for the first time in regular service, the Hyper Buses achieved better than expected results.

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The project aimed to promote, in the territory of the city of Jerez de la Frontera, the protection of natural capital and biodiversity with the objective of being granted the title of ‘Capital of Biodiversity’. This led to a reduction in the number of times when this form of air pollution exceeded daily limits in participating Finnish cities.

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The project aimed to publish strategic noise maps every five years, using modelling data that can be gathered over a large area at relatively low cost. Aiming to make noise information more easily understandable to the general public and decision-makers, the project defined a new index that better reflects people’s perceptions of noise. The tools developed are available via the ‘Noise in EU’ portal.