The LIFE Programme

LIFE is one of the main EU financial instrument supporting environmental, nature conservation and climate action projects throughout the EU. On **21 May 2022,** the LIFE programme – will turn thirty. The programme exists since 1992, so far has co-financed more than 5 500 projects. The European Commission has increased LIFE funding by almost 60% for 2021 - 2027. It now stands at €5.4 billion for the 2021-2027 period. LIFE is therefore a major source of lessons and inspiration, including for cooperation on the green economy, considering the programme experience in areas such as green jobs promotion and support to SMEs in the circular economy.

Overview of the programme

LIFE is designed to support reaching the objectives of the Union legislation and policy on environment, including nature and biodiversity, and on climate action, including the transition to renewable energy and increased energy efficiency through:

1. Developing and promoting innovative techniques and approaches and disseminating knowledge and best practices, including through the support of the Natura 2000 network;
2. Improving governance at all levels, in particular through enhancing capacities of public and private actors and the involvement of civil society;
3. Catalysing the large-scale deployment of successful technical and policy-related solutions by integrating related objectives into other policies and into public and private sector practices, mobilising investment and improving access to finance.

For 2021-2027, the number of sub-programmes has increased from two (Environment; and Climate Action) to four (Nature and Biodiversity; Circular Economy and Quality of Life; Climate Change Mitigation and Adaptation; and Clean Energy Transition). Clean Energy Transition is an incorporation of actions for capacity building supporting energy, efficiency and renewable energy previously funded under Horizon 2020 (until 2020). A reinforced focus on Nature and Biodiversity is ensured.

The programme is open to the participation of third countries and provides for activities outside the EU. It also provides a framework for cooperation with international organisations. LIFE is instrumental for the Green Deal and contributes to the transition towards a circular economy.

Implementing the LIFE Programme

LIFE is implemented through direct management (grants, procurement and prizes) and indirect management for specific activities. Within the Commission, Directorate-General for Environment (DG ENV) is the lead with support from DG CLIMA, DG ENER. The Climate, Infrastructures and Environment Executive Agency (CINEA) is entrusted with the management of the bulk of grants.

Key achievements

The programme achieved added value by improving **the implementation of EU environmental policy** at national, regional or local levels and by providing EU-wide exchange of information.

LIFE has funded 700 projects on waste prevention and reduction, recycling and re-use totaling more than €1 billion of investment until 2020. More than 120 projects were implemented for the protection, remediation and restoration of the marine environment. Around 250 LIFE projects have focused on air pollutants reduction from mobility, agriculture, industry, energy. Between 2014 – 2020 LIFE devoted about €105 million to supporting air quality.

The **Nature & Biodiversity** strand, helped adopting management plans, restoring valuable habitats, recovering emblematic species and developing the Natura2000 network. It also helped creating collaborative platforms that enhance partnerships thereby facilitating the transfer of best practice between stakeholders and decision-makers. The biodiversity projects contributed to combat invasive alien species, promote green infrastructure or the role of agriculture in preserving biodiversity.

Life invested €3 billion so far for more than 1,800 nature projects. A quarter of the Natura 2000 network – 6,000 protected areas – benefitted from LIFE funding. LIFE has helped over 1,800 species of wild animals and plants, including 460 species of birds.

The LIFE Programme (2014-2020) was also a **driver for** green skills and jobs. The programme, now in its 30th year, **has fostered skills development and created sustainable jobs** in many sectors of the economy. This is happening at **all skills levels** - from highly-qualified architects, chemical engineers and ecologists to skilled manual labour (e.g. builders, ship dismantlers, park wardens, aquaculturalists) to low-skilled labour in centres for reuse and recycling. Many of the new jobs in cities are **linked to the circular economy.** LIFE projects are contributing and demonstrating potential of the transition to a circular economy to create jobs and upskill the workforce.

A study published by LIFE in 2017 demonstrates the programme's considerable impact on job creation and growth. The study found that for an **initial investment of €2.1 billion**, LIFE has contributed an estimated **€9.3 billion to the European economy**. It also showed that in addition to direct contributions to employment and growth, LIFE Nature projects have a 'hidden' added value in terms of ecosystem services (e.g. providing us with clean air and water, flood protection, climate stabilisation, and recreation and eco-tourism).
The **average** LIFE **project** was found to **create 31 person-years** in full-time equivalent (FTE) **jobs**: 21 directly and the rest indirectly. Therefore, 1 000 projects would create a total of 31 000 jobs during project implementation, with at least 43 500 more jobs in the five years after the start of project replication, based on the most conservative replication scenario used.

LIFE and green jobs in the countryside

The Natura 2000 network of protected areas also contributes to social and economic goals. The network of 28 000 sites has safeguarding Europe's biodiversity as its primary aim. Indirect employment linked to the Natura 2000 network includes activities for which sites are catalysts, such as **eco-tourism**, or support services for **conservation** and **downstream activities** such as processing fish, using timber, or making honey. The **Natura 2000** network has been estimated to support **104 000 jobs** directly, and a further 70 000 jobs indirectly, with LIFE playing a fundamental role. LIFE Nature project restoration work involves many job types and skill levels, from manual labourers to graduate professionals. LIFE has frequently enabled the **return or continuation of appropriate low-intensity traditional farming or forestry** - jobs that depend on the ecosystem services they are

helping to maintain.

LIFE and green jobs in the water sector

The LIFE programme has funded nearly 2 000 projects directly or indirectly related to the water sector. These projects have extended along the water cycle, from the management of groundwater and water resources – including wetland and river restoration - to industrial wastewater treatment. They have developed **green skills and created jobs**, ranging from manual work for socially disadvantaged people to highly-skilled technical positions. To alleviate water scarcity LIFE projects have developed new skills in groundwater management and remediation. Creating highly-skilled technical jobs in areas such as **water quality, sanitation, and urban and industrial wastewater treatment** is a positive side effect of LIFE's core activities. Innovations in water supply funded by LIFE, including a novel filtration system for drinking water developed by the AFM (Advanced Filtration Management) project, have led to skilled and highly-paid technical jobs for quality control specialists, engineers and industrial chemists.

LIFE and green jobs in cities

The LIFE programme has contributed to the spread of green jobs and skills in cities in a host of areas. **Projects** relating to the **circular economy** are already a motor for **job creation** in areas ranging from innovative production processes to **waste upcycling** to starting real markets for secondary raw materials. Perhaps the greatest impact in terms of developing green jobs and skills has been in **waste management**. LIFE has created a positive symbiosis between nature and enterprise is its support for **organic city farming**. It has helped restore agricultural land around cities by connecting agricultural schools and agronomists to citizens, often with no previous farming experience. These newly-skilled urban farmers have set up in business to supply locally-grown produce to city-dwellers. As well as creating new jobs, such projects boost cities' green infrastructure and resilience to climate change.

LIFE and voluntary work

LIFE Nature and Biodiversity projects in particular have benefited from the ability of nature conservation NGOs to leverage their networks of volunteers. LIFE projects have traditionally involved volunteers in everyday **conservation and restoration work**, such as monitoring, tracking, wardening, ground clearance and planting. The experience of volunteering can help **people learn new skills**, many of which are not only useful in the workplace toda, they are applicable to the greener economy of the future.

During the four first phases of the programme (**1992-2013**), LIFE has co-financed **about 4000 projects** across the EU, contributing approximately **€3.1 billion** to the protection of the environment.

From 1996 to 2006, the programme produced projects results that reflect the specific character of its three main components:

LIFE Nature improved the NATURA 2000 network, restoring habitats and strengthening species protection

LIFE Environment across nine environmental themes promoted product and management innovation and demonstration. The environmental effects of LIFE Environment were mainly local.

LIFE Third Countries assisted mainly local environmental authorities in 16 beneficiary countries to modernise environmental administration.

From 2007 to 2013, LIFE+ **consolidated** almost all environmental expenditure by DG Environment into a **single financial instrument**, with a new set of strands and components aligned to the 6th Environment Action Programme priorities. It also brought together two types of interventions, i.e. **public procurement** and **grants** to increase the flexibility depending on the policy needs.

LIFE in practice: experience in the EU

- LIFE PROJECT "DYEMOND SOLAR" (Sweden) - Innovative Technology for Low Cost Production of Energy Efficient Dye-Sensitized Solar Cells has facilitated kick-starting of the Swedish solar technology company EXEGER, which develops and produces novel printable solar cells for use in consumer electronics, on buildings and in other applications. EXEGER's long-term strategy is to enter multiple solar markets, including consumer devices, smart homes, and building integration. The company's solar cell technology excels in indoor illumination, is flexible and aesthetically superior to existing commercial technologies, allowing the company to target the consumer electronics market for seamless integration into a variety of devices.
- LIFE Green Sinks (LIFE12 ENV/IT/000736) has produced marketable green composite sinks substituting organic and mineral primary materials by recovered waste.
- LIFE In-BRIEF - Integrated business model for turning Bio-waste and sewage sludge into renewable energy and agri-urban Fertilizers (LIFE14 ENV/ES/000427) turns old Waste Water Treatment plants into energy sources.
- LIFE LEMA - Intelligent marine LittEr removal and Management for local Authorities (LIFE15 ENV/ES/000252) works towards providing solutions for cleaning up marine litter.
- LIFE RE-WEE (LIFE14 ENV/GR/000858) reduces Waste from Electrical and Electronic Equipment (WEEE) through prevention and reuse. The project demonstrates efficient sorting and preparation for reuse processes for a variety of WEEE, leading to an increased acceptance of Used Electrical and Electronic Equipment (UEEE) by the consumer.

Lessons learnt

- The catalyst effect of LIFE+ projects improves the implementation of nature policies in the Member States.
- The LIFE programme represents a significant support for eco-innovation for both the private and the public sector.
- The clarity of the guide for applicants, especially by providing more examples of types of projects suitable under the strands, improves the overall quality of submitted projects.
- More flexibility in the geographic scope of the funding helps prevent the trade-offs encountered, especially regarding transboundary environmental problems beyond the EU. Moreover, it lessens the negative impact on the international dimension of NGOs work. For public procurement, it increases the capacity to carry out communication activities, such as international events, outside the EU.
- Being a flexible instrument, which finances projects of different sizes and attracts a large variety of entities, such as small, medium and large enterprises, universities, research centres, national and local authorities, the civil society as well as NGOs, the LIFE programme can react very quickly to changing political and societal needs. It also represents an effective instrument to exchange best practices and promote learning between countries, as well as to respond to trans-boundary and transnational challenges which a Member State is unlikely to address alone;
- The LIFE programme is well positioned to provide a contribution to the economy by:
    - incentivising EU industry to further develop green technology capabilities, which form one of EU's competitive advantages;
    - delivering closer to market than other funds;
    - demonstrating solutions for nature that can be up-scaled in the market or through other funds, thereby boosting green jobs; and
    - supporting long-term economic viability and stability by promoting sustainable development.

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