

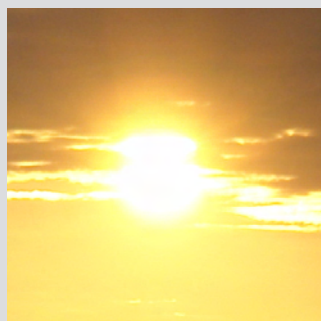
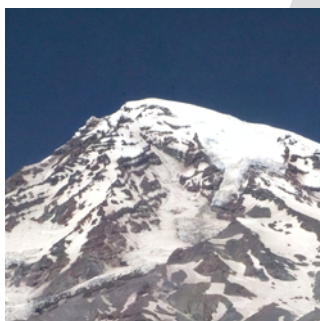
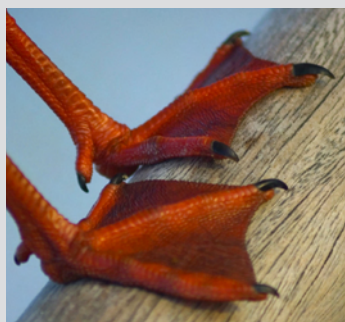
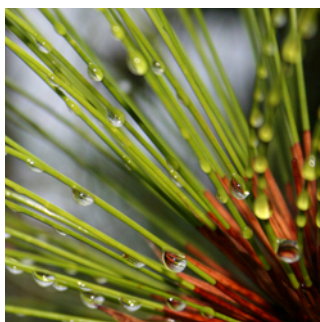
Directorate General Environment, Unit E.4. LIFE

Ex-Post Evaluation of Projects and Activities Financed under the LIFE Programme

Country-by-country analysis

Netherlands

July 2009



COWI

COWI A/S

Parallevej 2
DK-2800 Kongens Lyngby
Denmark

Tel +45 45 97 22 11

Fax +45 45 97 22 12

www.cowi.com

Directorate General Environment, Unit E.4.
LIFE

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The views expressed are those of the Consultant and do not necessarily reflect those of the European Commission.

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1 Executive summary

The Netherlands has been involved in the LIFE Programmes during all phases of LIFE from its inception in 1992. A total of 145 projects have received support since the start of LIFE, of which 107 (85 Environment and 22 Nature) projects fall within the period covered by this evaluation (1996-2006). Of these 21 (10 Environment and 11 Nature) were still ongoing in 2008.

Dutch LIFE projects are in general technically successful in delivering the expected results. The sustainability of the projects is perceived to be high, though follow-up funding to continue a LIFE project or spin-off projects is lacking, especially in Environment projects. LIFE Environment projects in the Netherlands have covered a quite diverse range of subjects, through focusing on water quality and related issues, such as efficient production applying recycling, reuse of resources production and energy saving issues. Dutch LIFE Nature projects have mainly focused on habitat restoration (Habitat and Birds Directive) and strengthening Natura 2000 areas (management approaches and buffer zones). Only a few Nature projects addressed specific biodiversity issues, such as the protection of a limited number of species rather than habitats.

2 Introduction

This country report on the implementation of the LIFE Programme in The Netherlands is part of the overall ex-post evaluation of the LIFE Programme. The evaluation was commissioned in July 2008 and covers all LIFE projects initiated during the period 1996-2006. The overall objective of the evaluation is to assess the relevance and impact of the activities and projects financed under the LIFE Programme. The evaluation comprises country studies in all Member States except Bulgaria, which has never had any LIFE projects. This report documents the analysis carried out concerning the implementation of the LIFE Programme in The Netherlands. The ex-post evaluation focuses on assessing the effect of the LIFE Programme on Europe's nature and environment through looking at the results and impacts of LIFE projects implemented under the Nature (NAT) and Environment (ENV) components. The results and impacts have been further assessed along three main evaluation criteria:

- Effectiveness, i.e. the extent to which planned objectives have been reached;
- Sustainability, i.e. the extent to which positive impacts have continued or are likely to continue;
- Utility, i.e. the extent to which impacts address key environmental needs and priorities in the EU and for the stakeholders concerned.

3 Environmental policy overview

As of 2004, the Dutch sectoral approach to most environmental and spatial issues (Environmental Programme, Nature Conservation Policy, water management plans etc.) was replaced by an overall spatial policy agenda, the "Nota Ruimte". In this programme, the designation of areas of (special) natural beauty, landscapes or agricultural importance were outlined alongside the key infrastructure, housing and water management issues to be dealt with in the next ten years, with a projection to 2030.

The main environmental challenges mentioned in the strategy include: water management and climate change (including energy saving and greening policies); ensuring that new and yet to be developed and technologies are designed to become "climate proof"; preventing the (further) diffusion of fertilisers and chemicals; reduced local air pollution in urban areas; efficient use of resources and waste generation and protection of species, and the restoration and protection of habitat types and "national" landscapes. The

strategy encompasses four cross-cutting areas of action in a structure which is similar to the 6th EAP. The national strategy is complemented by sector or issue-specific policies and schemes, often on a regional (provincial) level, e.g. for water, environmental quality, spatial development, nature and landscape, (over) fertilisation in agriculture etc.

Box 1 Some key issues in environmental policy in the Netherlands¹

Climate Change. As in many other Member States, environment policy in the Netherlands in 2007 focused on energy and climate change. Activities in this area included a new National Climate Strategy for Adaptation; the national "Clean and Efficient" plan for steering the economy towards greater energy sustainability and lower emissions; and spatial planning programmes such as "Space for the River" which integrates climate adaptation and mitigation policies into spatial planning. In 2005, greenhouse gas emissions were 212.1 million tonnes CO₂ eq., a 1.1 per cent decrease since the base year. Projections for 2010 indicate that the Netherlands will achieve the Kyoto target with a 4.1 per cent over-delivery. The Netherlands had an energy intensity of 196 kg oil equivalent/€ 1000 GDP in 2005, which is around the EU average. In 2006 almost 8 per cent of gross electricity consumption came from renewable sources, while the target is 9 per cent for 2010. In 2005 almost 30 per cent of electricity was generated from combined heat and power, among the highest levels in EU.

Nature and biodiversity. The Natura 2000 network included 77 Special Protection Areas and 142 Sites of Community Importance by the end of 2007. The progress in establishing these areas is largely complete. The Netherlands has been the first to comply with the minimum standards of the Habitats Directive. The government has continued to purchase more land for nature development in 2007 and encouraged regional initiatives to promote nature and biodiversity plans.

Environment and health

- The government decided to allocate EUR 300 million to the improvement of air quality through transport-related measures such as compulsory filters and catalytic converters in the period up to 2010. Concrete measures are expected in 2008.
- Air quality is a major problem in urban areas although concentrations of particulate matter and ozone have shown a decrease in recent years.

Natural resources and waste. From the 625 kg/per capita of municipal waste produced in 2006, 34 per cent was incinerated and only 2 per cent was land-filled, the rest being treated by other means such as recycling or composting.

4 Overview of LIFE projects in the Netherlands

During the period 1996 to 2006, the LIFE Programme co-financed 107 projects in the Netherlands including 22 Nature projects and 85 Environment projects. A full overview table of the projects is provided in Appendix 1. Additional summary tables are provided in appendices 2 and 3.

¹ Source: 2007 Environmental Policy Review, EU DG Environment

Table 4.1 Overview of LIFE projects 1996-2006 in the Netherlands

	Number of projects	Total LIFE contribution (million EUR)	Main themes covered ²	Average LIFE contribution per project (million EUR)	Average project duration (years)
Environment	85	45.1	Water (42%) Natural resources and waste (20%)	0.5	3.2
Nature	22	24	Habitats (73%)	1.09	4.5

Source: Butler

The 85 **LIFE Environment** projects co-financed by the LIFE Programme were mainly technological development projects within various sectors, but had a particular emphasis on water issues (more than 40 per cent), developing and/or testing new processes, products or technologies to reduce waste (water) impact on the environment and reuse material input. The typical type of beneficiary was public and private enterprises accounting for 72% of projects.

The 22 **LIFE Nature** projects in the Netherlands co-financed by the LIFE Programme during 1996-2006 have focused on the restoration of habitat types and on specific habitats for species (16 out of 22 projects). The typical type of beneficiary was NGOs (45%) and national authorities (32%).

5 Effects of projects implemented

LIFE Nature projects in the Netherlands focused on the restoration of habitat types and on habitats for certain species, the majority of which were habitats in wetlands (11 projects) and bogs (6 projects). Most of these concerned Natura 2000 areas: of the 77 sites of special protection areas and the 142 sites of community interest an estimated 50 per cent were included (in some way or another) in a LIFE project.³ As the LIFE desk officer and national contacts mentioned, many projects have a high impact with regard to indicators such as restored habitats, and improved conservation status of Natura 2000 areas (both habitat types and species). Other aspects mentioned by the project managers are the control of invasive species; improved land management; land use agreements etc.

Compared to countries such as Belgium, land purchase was rarely an issue in the LIFE funded projects, mainly due to the fact that the (larger) NGOs managing these areas in the Netherlands already had sufficient funds to purchase the land beforehand, or the Dutch government supported the project with additional funds thereby enabling purchase of the land.⁴ Only on rare occasions was there an indirect exchange of experiences (such as demonstration and transfer of results, ca. five projects) reported as a key result.

² For the purpose of this evaluation, the LIFE projects were categorised according to the thematic structure of the LIFE+ Programme (ref. Regulation EC No. 614/2007, Annex II). The themes included for LIFE Nature: Habitat Directive, Birds Directive and Biodiversity. For LIFE Environment: Climate change, air, water, soil, forests, natural resources and waste, chemicals, urban environment, strategic approaches.

³ These findings are mentioned in the report "15 years of LIFE Nature projects in the Netherlands", published by the Ministry of Agriculture, Nature and Food quality (LNV) in September 2006.

⁴ This issue has also been confirmed in interviews with both the LIFE Unit officer and the Dutch national contacts for NAT.

The process of applying for and managing a LIFE Nature project in the Netherlands has, increasingly, only become feasible for larger professional organisations, such as governmental organisations or larger (operating on a national or provincial level) NGOs.⁵ The LIFE projects often coincided with and strengthened activities at NATURA 2000 areas (management, maintenance plans etc.), which involved the same organisations. According to the project managers and the interviewees, involvement with LIFE often strengthened the willingness of the beneficiaries to participate in other (EU and national) projects. It also strengthened the beneficiary organisation in dealing faster and more successfully with complex (stakeholder) problems as additional support and finance was available. Nevertheless, as opposed to LIFE Environment, most project managers mentioned they would also have carried out the project without LIFE funding and (according to the national focal point) several unsuccessful LIFE applications were successful in achieving national or provincial funding instead.

Many of the Dutch **LIFE Environment** projects aimed at developing new technological solutions to water and air pollution problems of a relatively specific nature, or at solving (industrial) waste or noise problems, and have in general demonstrated a beneficial environmental effect and/or documented the technical feasibility of the solutions. Some projects have also delivered solutions directly applicable in the production system of the beneficiary. Water was a theme where Dutch projects were active and successful, focusing mainly on new technologies for wastewater treatment, development of management systems or schemes for the protection of surface water, groundwater or river basins as such. For soil pollution, relatively few projects have been implemented in the Netherlands, as this sector has been active and innovative in applying new technologies since the 1980s, and the need to develop new standards was therefore less apparent.⁶

In terms of industrial sectors, the food processing industry has been relatively active in the Netherlands, where the success of a LIFE project has even resulted in setting a standard for certain branches within the industry, both in the Netherlands and abroad.⁷ However in other sectors, many projects have succeeded in technical terms but have failed to create wider, long-term impacts. This was largely because no legislative/regulatory driver existed for those cases where the technical solutions proposed were technically (too) demanding and/or not economically viable, or due to the fact that the maintenance costs were (too) high or substantial energy efficiency was unachievable. A similar pattern can be seen when viewing the issue of replication in terms of follow-up projects (“pump priming effects”). In this respect the score for Dutch Environment projects is perceived as low, both by the project managers who were interviewed (and as a conclusion from the e-survey), and according to the national contacts, LIFE officer and monitors.

Finally, a number of (international) "strategic approaches" projects have also aimed at developing and implementing management systems or tools for, for example, the tourism industry and industrial noise in ports. Some of these systems and networks appear to be viable even after project termination, while others will require new funding in order to be sustained. An example of the first is the project “Noise management in ports”, where a best practices manual is now being distributed among both national and

⁵ These findings are also confirmed in the report “15 years of LIFE Nature projects in the Netherlands”, published by the Ministry of Agriculture, Nature and Food quality (LNV) in September 2006.

⁶ This was mentioned in the interview with the LIFE officer and national contacts and one can draw the same conclusions from the overview of LIFE projects (see also Table 4 in Appendix 2) and the e-survey.

⁷ For example, both the projects “Reduction of ethylene-oxide emission in starch derivative production” in the potato industry and “Environmentally friendly phosphorus removal in anaerobe effluent by means of the struvite process” in cheese processing led to substantial savings in terms of less energy and raw material input and a reduction of production losses (more recycling), which made both industrial partners and competitors decide to apply the new technology themselves.

local governments and the EU, with the expectation that a better implementation of these practices could generate “a level playing field” where planning restrictions (or the lack thereof) no longer affect the investor’s choice for a certain location. An example of a less successful project is the tourism benchmarking initiative, which tried to establish a sustainability label for tourist accommodation, but could not achieve its initial objectives due to lack of interest both from authorities, tour operators and accommodation (minimal response).

6 The effectiveness of projects

Effectiveness can be assessed at two levels: the project level, which compares achievements with project objectives, and at programme level, which compares achievements with LIFE Programme objectives.⁸

The project-level effectiveness of Dutch LIFE projects is, in general, assessed as high, with a few (mostly Environment) exceptions on the downside, due mainly to changes outside the direct influence of LIFE (changes in policy, other alternatives developed during the course of the project etc.). Projects have generally been technically (very) successful and have obtained most of their set targets and objectives.

The general, habitat rather than site species approach of most **LIFE Nature** projects ensured high effectiveness, as most measures were taken and activities carried out at management level (for example “types of grazing implemented”) rather than focusing on one or two specific species. Also, local obstacles (e.g. failed negotiations with single land owners) could largely be avoided, as measures that could not be carried out on one spot, for example, could be carried out elsewhere. Nature projects involving public or (large) NGO-owned lands have generally achieved a higher effectiveness than those involving private lands. However, land purchase was rarely an issue in the Dutch projects. Effectiveness at programme level is also assessed as high for nature projects, which have contributed towards ensuring and developing managing plans for NATURA 2000 areas in the Netherlands.

For **LIFE Environment**, programme-level effectiveness is assessed as medium, rarely reaching high. The projects have contributed to innovative and integrated techniques, but the extent to which these have been disseminated to a wider EU audience, and the extent to which the techniques were applicable and technically and economically viable in the EU at large, has only partially been achieved. There were only a limited number of sectors (mainly the food industry) which found a larger follow-up audience.

7 The sustainability of projects

Within the **LIFE Environment** projects there are examples of projects that have delivered solutions which are directly applicable in the production system of the beneficiary, possessing both economic advantages and environmental benefits. These projects show a high level of sustainability. There are also examples of projects/techniques which have proved to be technically or economically unviable and thus unsustainable.

⁸ Specific objective for: LIFE Nature: to contribute to the implementation of Council Directive 79/409/EEC (Birds Directive) and Council Directive 92/43/EEC (Habitats Directive); LIFE Environment: to contribute to the development of innovative and integrated techniques and methods and to the further development of Community environmental policy, such as Directives on air quality or, more recently, the “Noise Directive” (2002/49/EC) and the Water Directive.

Many **LIFE Nature** projects had a large NGO or public entity as their lead organisation and often involved public (or NGO-owned) lands, which provided important mechanisms for ensuring the long-term effects of the projects. Future management actions have already been incorporated into the management plans for these areas during the initial project phase, ensuring a very high level of sustainability. The national policy to secure (most) nature reserves and/or Natura 2000 areas,⁹ in terms of planning restrictions for agriculture and building activities, helped the sustainability of these (project) areas. The (mandatory) management plans for the Natura 2000 areas, which were included in projects concerning Natura 2000, have also contributed to the sustainability of the majority of the results.

8 The utility of projects

LIFE projects in the Netherlands addressed many of the objectives and targets formulated in the EU objectives and the 6th EAP. Links to EU environmental policies were also ensured through an observation of the application guidelines, which the applicants regard as being quite specific.

The vast majority of LIFE Nature project have contributed to the implementation and strengthening of Natura 2000 areas. Almost all projects however have focused on the Habitat and Birds directives, only one directly addressed Biodiversity actions outside these Directives. As Natura 2000 is an important issue in most projects, the results of these projects are taken into account in (regional and national) policy.¹⁰

LIFE Environment projects have had, in certain branches, a positive impact on cleaner technology initiatives in The Netherlands. The programme makes a difference particularly in relation to testing and demonstration of new technologies. Because of LIFE, environment projects have been larger, more comprehensive, and more rapidly realised in terms of obtaining their objectives than would otherwise have been expected without LIFE funding. Of those interviewed with regard to Environment projects, project managers in particular have reported that such projects would not have been realised at all without LIFE. It was frequently mentioned that it would be difficult to realise follow-up projects, even with additional LIFE funding, due to the complexity of the LIFE programme and the difficulties (especially for smaller organisations) of managing LIFE projects in general.

⁹ The Dutch government has developed a plan for securing the “main ecological network” or grid called EHS (“Ecolo-gische Hoofdstructuur”) as main element within the Investment Budget for Rural Areas (ILG), for which a vast budget of over four billion Euros between 2007 and 2013 is reserved. This budget covers reallocation schemes and regional development plans, and includes co-funding from the EU (EARDF) and provinces.

¹⁰ As was also mentioned in the report “15 years of LIFE Nature projects in the Netherlands, published by the Ministry of Agriculture, Nature and Food quality (LNV) in September 2006.

Appendix 1 Comprehensive overview of LIFE Projects in Netherlands

In connection with the ex-post evaluation, data was extracted from the BUTLER database of the LIFE Unit. Table 1 and Table 2 below provide an overview of the information available on each project as well as the LIFE+ theme attached by the evaluation team to the project. The budget figures for LIFE co-financing do not necessarily correspond to the actual payments made.

Table 2 Overview of LIFE Environment Projects in Netherlands

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE96 ENV/NL/000203	Management system for urban air quality and noise	LIFE II	1996	1997	1999	255,875	127,104	Research institutions	No	Air
LIFE96 ENV/NL/000211	Re-use of potable water sludge replacing iron salts in waste water treatment and industrial applications	LIFE II	1996	1996	1999	843,344	369,571		No	Water
LIFE96 ENV/NL/000215	Towards development of a deposition monitoring network for air pollution in Europe ; low-cost monitoring methods	LIFE II	1996	1997	1999	796,569	398,285	Development agency	No	Air
LIFE96 ENV/NL/000216	Sustainable water supply limiting ground water use by re-use of local surplus water as domestic water for non-drinking purposes through dual piped supply	LIFE II	1996	1997	2000	3,440,531	307,189	International enterprise	No	Water
LIFE96 ENV/NL/000218	Demonstration project concerning the recycling of the paper / plastic fraction from municipal waste : separation, processing, upgrading and re-use	LIFE II	1996	1997	2000	11,050,036	528,361	SME	No	Natural resources and waste

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE96 ENV/NL/000219	Demonstration plant and spin-off projects for the recovery of back-wash water treatment using dead-end membrane filtration	LIFE II	1996	1996	1999	997,863	404,358	Public enterprise	No	Water
LIFE96 ENV/NL/000223	CLT (Cold lamination technology) project	LIFE II	1996	1996	1998	1,245,380	199,944	SME	No	Chemicals
LIFE96 ENV/NL/000224	Total paste return in textile printing	LIFE II	1996	1996	1999	1,007,623	260,932	International enterprise	No	Natural resources and waste
LIFE96 ENV/NL/000230	Demonstration of a groundwater quality prediction system for impact assesment of landuse development on sustainable drinking water production	LIFE II	1996	1997	2001	427,832	212,527	University	No	Water
LIFE97 ENV/NL/000117	Bubbling bed FBC process for conversion of paper (de-inking) residue.	LIFE II	1997	1997	2002	9,067,572	1,363,066	SME	No	Natural resources and waste
LIFE97 ENV/NL/000120	Recycling of used disposable diapers and other incontinence materials.	LIFE II	1997	1997	2000	5,651,727	849,645	International enterprise	No	Natural resources and waste
LIFE97 ENV/NL/000123	Demonstration of implementation of waterbased ink in the rotogravure industry.	LIFE II	1997	1997	2000	591,156	163,727		No	Water
LIFE97 ENV/NL/000124	Integrated BIO/F/C technology: a new process for the removal of waste fom the PCB industry.	LIFE II	1997	1997	2001	1,295,605	388,682	International enterprise	No	Water
LIFE97 ENV/NL/000125	Demonstration project fixation of pigment on cotton through electron Beam.	LIFE II	1997	1997	2001	1,222,084	366,625	International enterprise	No	Water

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE97 ENV/NL/000128	Demonstration of a municipal contribution to a sustainable urban technology: land use planning, household water and bio-installations (Stroomdal-Life).	LIFE II	1997	1997	2002	6,357,487	611,513	Local authority	No	Urban environment
LIFE97 ENV/NL/000137	The Blue Transformation : to a waterfriendly city.	LIFE II	1997	1997	2000	776,675	302,010	Local authority	No	Water
LIFE98 ENV/NL/000183	The Iguana Project	LIFE II	1998	1998	2000	641,630	91,498	SME	No	Climate change
LIFE98 ENV/NL/000186	'Sulphur Plus' Pilot Plant	LIFE II	1998	1997	1999	1,830,407	530,742	International enterprise	Yes	Air
LIFE98 ENV/NL/000189	Demonstrationproject environmental-friendly cleaningfluid for the processingplants of AtoHaas Nederland B.V.	LIFE II	1998	1999	2003	2,424,797	301,409	International enterprise	No	Strategic Approaches
LIFE98 ENV/NL/000191	High pressure carbon-dioxide disinfection method	LIFE II	1998	1998	2001	2,761,106	669,103		No	Natural resources and waste
LIFE98 ENV/NL/000192	Acetylation of Solid Wood	LIFE II	1998	1998	2001	2,002,810	575,528	International enterprise	No	Chemicals
LIFE98 ENV/NL/000195	Integrated sustainable urban drainage Infiltration & Transport system Dordrecht, filtering of rainwater at the source	LIFE II	1998	1998	2001	1,032,443	407,743	Local authority	No	Water
LIFE98 ENV/NL/000197	The use of local surface water to supply non potable water for households and industrial purposes	LIFE II	1998	1998	2002	2,005,593	550,525	Public enterprise	No	Water

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE98 ENV/NL/000198	Detection of ozone trends in relation to emission changes	LIFE II	1998	1998	2001	298,934	147,312	International enterprise	Yes	Air
LIFE98 ENV/NL/000199	Action to demonstrate the harmful impact of TBT. Effective communication strategies between scientists and policy makers to assist in policy development	LIFE II	1998	1998	2001	676,540	329,827	Research institutions	Yes	Water
LIFE99 ENV/NL/000228	Short distance, high speed Rail Distribution of consumer goods	LIFE II	1999	1999	2002	2,380,611	463,702	Mixt enterprise	No	Climate change
LIFE99 ENV/NL/000230	The sanitation of groundwater pollution with volatile organic chlorohydrocarbons by means of an in situ molasses -injection technique at the former business premises of the Nederlandse Philips Bedrijven.	LIFE II	1999	1999	2004	771,880	231,564	International enterprise	No	Water
LIFE99 ENV/NL/000231	Reduction of ethylene-oxide emission in starch derivative production	LIFE II	1999	1999	2002	3,119,936	660,711	International enterprise	No	Air
LIFE99 ENV/NL/000232	Paperfoam: demonstration of the applicability of an innovative technology to produce packagings, made of natural fibres and starch, which are both environmental friendly and of a high quality	LIFE II	1999	1999	2001	1,608,449	358,040	SME	No	Natural resources and waste
LIFE99 ENV/NL/000233	The RESPECT project: RE-use of Second-hand car comPonEnts iin Company car fleeTs	LIFE II	1999	1999	2002	651,628	176,294	International enterprise	No	Natural resources and waste

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE99 ENV/NL/000235	Reflex-house	LIFE II	1999	1999	2002	787,989	210,588	International enterprise	No	Natural resources and waste
LIFE99 ENV/NL/000236	Firing technics for the reduction of fluoride emission by producing bricks	LIFE II	1999	1999	2002	5,797,269	598,479	SME	No	Air
LIFE99 ENV/NL/000241	WATER-project	LIFE II	1999	1999	2001	899,687	142,594	SME	No	Air
LIFE99 ENV/NL/000242	Demonstration of a subsea robot for remote recovery of oil and hazardous substances from sunken ships	LIFE II	1999	1999	2002	1,003,762	301,129	International enterprise	No	Water
LIFE99 ENV/NL/000257	DOPASS: demonstration of an innovative environmental friendly and sustainable drinking water supply concept based on DOuble quifer PASSage	LIFE II	1999	1999	2002	5,594,041	559,407	SME	No	Water
LIFE99 ENV/NL/000258	Durable integrated water and energysystem industrial area Hesenpoort	LIFE II	1999	1999	2003	3,103,176	427,988	Local authority	No	Natural resources and waste
LIFE99 ENV/NL/000263	Development of a common method in quality assessment and approach of contaminated sediments	LIFE II	1999	1999	2002	501,427	250,714	Public enterprise	No	Water

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE00 ENV/NL/000787	DROP-WISE - Disconnection Roofs, Places and streets within the inner city area of small and medium sized towns, water management with an Interactive System approach to improve the Environment	LIFE II	2000	2001	2004	2,615,324	329,676	Local authority	No	Water
LIFE00 ENV/NL/000789	Implementation of smart pump-and-treat through diverting the natural groundwater flow	LIFE II	2000	2000	2003	1,671,475	288,030	International enterprise	No	Water
LIFE00 ENV/NL/000790	Demonstration of integrated total water management for a cluster of 8 industries, implementing a centralised water supply and a semi collective WWTS and resulting in substantial ground water and energy savings	LIFE II	2000	2001	2004	6,281,796	673,332	SME	Yes	Water
LIFE00 ENV/NL/000791	Smart Flow in Reiderland	LIFE II	2000	2000	2004	3,769,702	361,485	Development agency	No	Water
LIFE00 ENV/NL/000794	Zero Emission Lacquer	LIFE II	2000	2001	2003	1,974,731	354,185	International enterprise	No	Air
LIFE00 ENV/NL/000797	Demonstration Textile CO2 Treatment Introduction Validation Effort	LIFE II	2000	2001	2004	804,000	241,200	SME	Yes	Air
LIFE00 ENV/NL/000808	Demonstration and dissemination project for stimulating architects and local governments to build sustainable with help of innovative design tools	LIFE II	2000	2001	2004	645,100	322,551	Public enterprise	Yes	Strategic Approaches

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE00 ENV/NL/000809	Demonstration project PlusPunten Rotterdam	LIFE II	2000	2001	2004	535,875	411,403	Local authority	No	Strategic Approaches
LIFE00 ENV/NL/000810	Eco-labels for Sustainable Tourism in Europe: demonstrating how Eco-labels can move the European tourism market towards sustainability	LIFE II	2000	2001	2004	1,804,918	882,858	NGO-Foundation	Yes	Strategic Approaches
LIFE02 ENV/NL/000114	Demonstration of effective and efficient TANnery Effluent TREATment using an innovative integrated and compact biological and physical treatment plant	LIFE III	2002	2001	2006	5,096,690	724,762	SME	No	Water
LIFE02 ENV/NL/000116	Wastewater management saves natural ecosystems	LIFE III	2002	2002	2006	4,165,875	603,125	SME	No	Water
LIFE02 ENV/NL/000117	Membrane bioreactor WWTP Varsseveld	LIFE III	2002	2002	2006	8,055,071	1,584,695	Public enterprise	No	Water
LIFE02 ENV/NL/000118	Biocontrol instead of pesticides for sustainable horticultural production	LIFE III	2002	2002	2005	655,845	152,279	SME	No	Chemicals
LIFE02 ENV/NL/000120	Ground water and surface water suppletion by collecting run off and surplus drainage water and treating sewer overflows in a helophyte filter	LIFE III	2002	2001	2005	1,738,063	364,181	Local authority	No	Water

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE02 ENV/NL/000121	Demonstration of a new additive called S2K used for paper production that gives paper fibres additional strength, resulting in more recycleloops of paper fibres, 8 % reduction in VOC-emissions during paper production [...]	LIFE III	2002	2002	2004	1,099,850	299,955	International enterprise	Yes	Air
LIFE02 ENV/NL/000124	The demonstration of an environmental friendly cargo handling plant in the port of Rotterdam, the Netherlands	LIFE III	2002	2002	2005	623,315	623,315	International enterprise	No	Strategic Approaches
LIFE02 ENV/NL/000128	BioFuel: biological drying and upgrading of biodegradable residual municipal waste into BioFuel for coal burned power stations.	LIFE III	2002	2001	2005	5,693,459	868,633	SME	No	Natural resources and waste
LIFE02 ENV/NL/000130	Wet separation of anaerobically digested rest waste for the recovery of recyclables	LIFE III	2002	2002	2006	4,543,618	941,419	SME	No	Natural resources and waste
LIFE02 ENV/NL/000133	WaddenWaterHouse	LIFE III	2002	2001	2004	727,336	169,002	SME	No	Strategic Approaches
LIFE03 ENV/NL/000464	High quality water recycling including thermal energy recovery in photo film and photo paper production	LIFE III	2003	2003	2006	2,391,776	358,060	International enterprise	No	Water
LIFE03 ENV/NL/000465	Environmentally friendly phosphorus removal in anaerobe effluent by means of the struvite process	LIFE III	2003	2002	2005	965,180	169,689	International enterprise	No	Water
LIFE03 ENV/NL/000466	Circox reactor at the waste water treatment plant of Bavaria brewery	LIFE III	2003	2002	2005	1,843,204	357,961	International enterprise	No	Water

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE03 ENV/NL/000467	The Vertical Flow Reed Bed at Leidsche Rijn. A natural way to filter urban water.	LIFE III	2003	2003	2008	1,414,803	674,652	Local authority	No	Water
LIFE03 ENV/NL/000470	Demonstration of the Biomass Processing System : generating renewable energy from liquid biomass.	LIFE III	2003	2002	2005	1,628,552	356,904	International enterprise	No	Natural resources and waste
LIFE03 ENV/NL/000472	Brine Recovery in the production of polycarbonate	LIFE III	2003	2003	2006	10,269,040	800,000	International enterprise	No	Natural resources and waste
LIFE03 ENV/NL/000473	European Monitor and Benchmarking Initiative for Environmental Impacts and Costs in Tourist Accommodation	LIFE III	2003	2003	2006	1,511,618	745,784	SME	No	Strategic Approaches
LIFE03 ENV/NL/000474	LNG Tanker, Demonstrating the effective and safe use of liquid natural gas as fuel for ship engines for short-sea shipping and inland waterway transport.	LIFE III	2003	2002	2005	4,922,900	874,245	SME	No	Climate change
LIFE03 ENV/NL/000476	Emulsion Pertraction for Europe	LIFE III	2003	2003	2006	1,070,000	321,000	SME	No	Natural resources and waste
LIFE03 ENV/NL/000477	Large scale heat and power generation for a new residential area of Amersfoort by means of innovative biomass gasification; reduced greenhouse gas emissions and optimal utilisation of construction and demolition waste wood as renewable fuel	LIFE III	2003	2003	2006	8,405,577	1,000,000	Public enterprise	No	Air

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE03 ENV/NL/000481	New HFA concentrates for coal mining roof support systems that are less harmful when released to the environment.	LIFE III	2003	2002	2007	753,550	226,065	International enterprise	No	Water
LIFE03 ENV/NL/000488	A dairy industry which is self-supporting in water	LIFE III	2003	2002	2005	7,023,130	975,000	Mixt enterprise	No	Water
LIFE04 ENV/NL/000652	Sustainable drinking water production from low quality ground water enabling flexible ground water management	LIFE III	2004	2003	2006	2,488,620	439,835	Mixt enterprise	No	Water
LIFE04 ENV/NL/000656	Asbestos Fibre Cement - Denaturing Plant	LIFE III	2004	2003	2007	6,558,484	1,241,920	International enterprise	No	Natural resources and waste
LIFE04 ENV/NL/000659	Eco-friendly tanning at ECCO Tannery Holland BV	LIFE III	2004	2003	2007	3,658,359	503,883	International enterprise	No	Water
LIFE04 ENV/NL/000661	Demonstrating how an integrated ecolabeling and tour operating supply chain management strategy can foster sustainability in tourism	LIFE III	2004	2004	2007	1,871,949	935,310	NGO-Foundation	No	Strategic Approaches
LIFE04 ENV/NL/000663	Sustainable weed control on pavements: demonstration of a decision support system for environmentally benign and cost effective weed control on hard surfaces	LIFE III	2004	2004	2007	546,055	163,816	Research institutions	No	Water
LIFE05 ENV/NL/000018	Noise Management in European Ports	LIFE III Extension	2005	2005	2008	1,503,489	707,645	Local authority	No	Urban environment

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing budget (EUR)	Beneficiary type	International partners (yes/no)	LIFE+ theme
LIFE05 ENV/NL/000020	HM de Jong -Energy- efficient by Innovative Geometry and HFC-replacing Technology	LIFE III Extension	2005	2005	2008	6,566,550	640,000	SME	No	Climate change
LIFE05 ENV/NL/000021	Reduction of pest control impact of horticulture on ground and surface water through a system of constant crop monitoring, early diagnoses, prevention and early treatment	LIFE III Extension	2005	2005	2008	1,444,386	409,382	Research institutions	No	Water
LIFE05 ENV/NL/000029	Total Roof Recycling - New ways for old bitumen	LIFE III Extension	2005	2005	2009	5,740,060	1,250,000	International enterprise	No	Strategic Approaches
LIFE05 ENV/NL/000030	Residue to Products demonstration project : converting bottom ash into high grade products	LIFE III Extension	2005	2005	2009	6,214,070	1,356,546	Local authority	No	Strategic Approaches
LIFE05 ENV/NL/000035	Demonstration of a closed loop blanching system for the potato processing industry	LIFE III Extension	2005	2005	2008	1,007,627	302,288	SME	No	Water
LIFE05 ENV/NL/000036	Demonstration of a new environmentally friendly high voltage overhead line	LIFE III Extension	2005	2005	2007	2,443,022	732,907	Public enterprise	No	Strategic Approaches
LIFE06 ENV/NL/000167	Wastewater & Effluent Treatment	LIFE III Extension	2006	2005	2009	2,814,980	1,176,240	Regional authority	No	Water
LIFE06 ENV/NL/000176	Demonstrating innovative technologies that significantly improve the environmental performance of bearings	LIFE III Extension	2006	2006	2009	4,623,200	1,071,960	International enterprise	No	Strategic Approaches
LIFE06 ENV/NL/000178	Brine Recovery in the production of polycarbonate	LIFE III Extension	2006	2005	2009	7,986,431	1,200,000	International enterprise	No	Natural resources and waste

Table 3 Overview of LIFE Nature Projects in Netherlands

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing (EUR)	Beneficiary type	International partners (yes/no)	Directive (Birds, Habitats) or biodiversity
LIFE96 NAT/NL/003010	Integral Restoration Plan Naardermeer	LIFE II	1996	1996	2000	1,867,458	933,729	NGO-Foundation	No	Habitats
LIFE97 NAT/NL/004210	Black Vulture Conservation in a European Network	LIFE II	1997	1997	2000	495,918	371,938		No	Birds
LIFE98 NAT/NL/005159	Restoration plan for the important bird area "Nieuwkoopse Plassen"	LIFE II	1998	1998	2005	1,791,007	895,503	NGO-Foundation	No	Birds
LIFE99 NAT/NL/006280	Restoration programma of the Fochteloërveen raised bog	LIFE II	1999	1999	2003	4,273,584	1,495,754	NGO-Foundation	No	Habitats
LIFE99 NAT/NL/006282	Restoration and demonstration project pSCI "De Wieden and De Weerribben"	LIFE II	1999	1999	2006	3,400,000	1,700,000	NGO-Foundation	No	Habitats
LIFE00 NAT/NL/007049	Peat bog restoration programme of the Korenburgerveen	LIFE II	2000	2001	2006	1,279,376	639,688	NGO-Foundation	No	Habitats
LIFE00 NAT/NL/007050	Biotope improvement for <i>Crex crex</i> in the brook valley of SPA Drents-Friese Wold	LIFE II	2000	2000	2007	1,387,438	693,719	NGO-Foundation	No	Birds
LIFE02 NAT/NL/008486	Restoration of biotope for <i>Botaurus stellaris</i> , <i>Anas penelope</i> and <i>Limosa limosa</i> in the SPA IJperveld	LIFE III	2002	2002	2007	2,596,625	1,298,313	NGO-Foundation	No	Birds

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing (EUR)	Beneficiary type	International partners (yes/no)	Directive (Birds, Habitats) or biodiversity
LIFE2003NAT/CP/NL/000006	Dissemination of ecological knowledge and practical experiences for sound planning and management in raised bogs (7110*, 7120, 7140, 7150, 91D0*, 3160) and sea dunes (2110, 2120, 2130*, 2140*, 2150*, 2160, 2170, 2180, 2190, 3110)	LIFE III	2003	2004	2006	152,000	98,000	University	No	Biodiversity
LIFE04 NAT/NL/000201	Amphibian Biotope Improvement in the Netherlands	LIFE III	2004	2004	2009	1,302,539	651,270	National authority	No	Habitats
LIFE04 NAT/NL/000202	Tiengemetten, restoration of freshwater tidal area in the Haringvliet estuary, the Netherlands	LIFE III	2004	2003	2008	6,378,552	1,722,209	National authority	No	Habitats
LIFE04 NAT/NL/000203	Habitat improvement for <i>Microtus oeconomus</i> in Alde Feanen	LIFE III	2004	2004	2007	1,163,500	581,750	NGO-Foundation	No	Habitats
LIFE04 NAT/NL/000206	From degraded to active raised bogs pSCI Bargerveen	LIFE III	2004	2003	2007	3,222,510	1,933,506	National authority	No	Habitats
LIFE05 NAT/NL/000124	Restoration of dune habitats along the Dutch coast	LIFE III Extension	2005	2005	2011	4,625,510	1,887,750	National authority	No	Habitats
LIFE06 NAT/NL/000071	Restoration of Brackish Marsh for Root Vole, Waders and Terns	LIFE III Extension	2006	2006	2011	2,465,508	1,145,365	Regional authority	No	Habitats

Id.	Title	LIFE generation	Funding year	Start year	End year	Total budget (EUR)	LIFE co-financing (EUR)	Beneficiary type	International partners (yes/no)	Directive (Birds, Habitats) or biodiversity
LIFE06 NAT/NL/000072	Marsh area "De Zouweboezem": conservation, restoration and development	LIFE III Extension	2006	2006	2011	1,480,825	740,413	NGO-Foundation	No	Habitats
LIFE06 NAT/NL/000074	Wetlands: challenges and innovation in succession management	LIFE III Extension	2006	2006	2011	4,852,480	1,940,992	NGO-Foundation	No	Habitats
LIFE06 NAT/NL/000075	From Degraded to Active Raised Bogs: pSCI Engbertsdijksvenen (NL)	LIFE III Extension	2006	2005	2008	3,028,869	1,491,325	National authority	No	Birds
LIFE06 NAT/NL/000076	Restoration of brackish ecosystems in Westzaan polder	LIFE III Extension	2006	2006	2010	3,406,241	953,747	National authority	No	Habitats
LIFE06 NAT/NL/000077	Salt Marsh restoration Eastern Scheldt	LIFE III Extension	2006	2006	2011	4,239,350	1,277,500	National authority	No	Habitats
LIFE06 NAT/NL/000078	Restoring migration possibilities for 8 Annex II species in the Roer	LIFE III Extension	2006	2006	2009	3,187,646	1,220,329	Public enterprise	No	Habitats
LIFE06 NAT/NL/000079	Connecting 3 pSCI around the Hoeksche Waard for Root Vole	LIFE III Extension	2006	2006	2009	1,170,112	388,347	Local authority	No	Habitats

Appendix 2 Summary tables on LIFE Environment projects in Netherlands

Table 4 Overview of LIFE ENV projects in Netherlands by year, 1996-2006

Generation	Year	Number of projects	Total budget (EUR million)	Total LIFE co-financing budget (EUR million)	Average duration (years)	Average LIFE funding per project (EUR million)
LIFE II	1996	9	20.1	2.8	2.8	0.3
	1997	7	25.0	4.0	3.9	0.6
	1998	9	13.7	3.6	3.0	0.4
	1999	12	26.2	4.4	3.1	0.4
	Total	37	84.9	14.8	3.1	0.4
LIFE III	2000	9	20.1	3.9	3.0	0.4
	2002	10	32.4	6.3	3.6	0.6
	2003	12	42.2	6.9	3.3	0.6
	2004	5	15.1	3.3	3.4	0.7
	Total	36	110	20	3.3	0.6
LIFE III extension	2005	7	24.9	5.4	3.1	0.8
	2006	3	15.4	3.4	3.7	1.1
	Total	10	40.3	8.8	3.3	0.9
Grand total		83	235.1	44.0	3.2	0.5
Comparative figures for all ENV projects		1,076	1,947.7	615.9	3.3	0.6

Table 5 Overview of LIFE ENV projects in Netherlands 1996-2006 by theme

LIFE+ theme	No. of projects	In % of total	Total budget (EUR million)	In % of total	LIFE contribution (EUR million)	In % of total
Climate change	4	5%	14.5	6%	2.1	5%
Air	11	13%	25.3	11%	4.5	10%
Water	35	42%	80.9	34%	15.8	36%
Soil	0	0%	0.0	0%	0.0	0%
Forests	0	0%	0.0	0%	0.0	0%
Natural resources and waste	16	19%	73.4	31%	10.6	24%
Chemicals	3	4%	3.9	2%	0.9	2%
Urban environment	2	2%	7.9	3%	1.3	3%
Strategic approaches	12	14%	29.2	12%	8.8	20%
Total	83	100%	235.1	100%	44.0	100%

Table 6 Netherlands LIFE ENV projects 1996-2006 according to beneficiary type

Beneficiary type	No. of projects	In % of total	Total budget (EUR million)	In % of total	LIFE contribution (EUR million)	In % of total
Public entities						
National authority	0	0%	0.0	0%	0.0	0%
Regional authority	1	1%	2.8	1%	1.2	3%
Local authority	10	12%	25.3	11%	5.6	13%
Development agency	2	2%	4.6	2%	0.8	2%
Intergovernmental body	0	0%	0.0	0%	0.0	0%
Park-reserve authority	0	0%	0.0	0%	0.0	0%
Sub-total	13	16%	32.7	14%	7.5	17%
Public and private enterprises						
International enterprise	29	35%	77.3	33%	14.4	33%
Large enterprise	0	0%	0.0	0%	0.0	0%
SME Small and medium sized enterprise	3	4%	11.9	5%	1.9	4%
Mixed enterprise	7	8%	23.1	10%	4.8	11%
Public enterprise	21	25%	79.0	34%	11.1	25%
Sub-total	60	72%	191.2	81%	32.2	73%
NGOs and research						
NGO-Foundation	2	2%	3.7	2%	1.8	4%
Research institutions	4	5%	2.9	1%	1.0	2%
University	1	1%	0.4	0%	0.2	0%
Training centre	0	0%	0.0	0%	0.0	0%
Sub-total	7	8%	7.0	3%	3.1	7%
None indicated	3	4%	4.2	2%	1.2	3%
Total	83	100%	235.1	100%	44.0	100%

Appendix 3 Summary tables on LIFE Nature projects in Netherlands

Table 7 Overview of LIFE NAT projects in Netherlands, 1996-2006

Generation	Year	Number of projects	Total budget (EUR million)	Total LIFE co-financing budget (EUR million)	Average duration (years)	Average LIFE funding per project (EUR million)
LIFE II	1996	1	1.9	0.9	4.0	0.9
	1997	1	0.5	0.4	3.0	0.4
	1998	1	1.8	0.9	7.0	0.9
	1999	2	7.7	3.2	5.5	1.6
	Total	5	11.8	5.4	5.0	1.1
LIFE III	2000	2	2.7	1.3	6.0	0.7
	2002	1	2.6	1.3	5.0	1.3
	2003	1	0.2	0.1	2.0	0.1
	2004	4	12.1	4.9	4.3	1.2
	Total	8	17	8	4.5	1.0
LIFE III extension	2005	1	4.6	1.9	6.0	1.9
	2006	8	23.8	9.2	4.1	1.1
	Total	9	28.5	11.0	4.3	1.2
Grand total		22	57.8	24.1	4.5	1.1
Comparative figures for all NAT projects		771	1,224.1	637.2	4.2	0.8

Table 8 Categories of LIFE NAT projects in Netherlands, 1996-2006

LIFE NAT themes	No. of projects	In % of total	Total budget (EUR million)	In % of total	LIFE contribution (EUR million)	In % of total
Habitats Directive	16	73%	48.3	84%	19.2	80%
Birds Directive	5	23%	9.3	16%	4.8	20%
Biodiversity projects	1	5%	0.2	0%	0.1	0%
Total	22	100%	57.8	100%	24.1	100%

Table 9 Netherlands LIFE NAT projects 1996-2006 according to beneficiary type

Beneficiary type	No. of projects	In % of total	Total budget (EUR million)	In % of total	LIFE contribution (EUR million)	In % of total
Public entities						
National authority	7	32%	26.2	45%	9.9	41%
Regional authority	1	5%	2.5	4%	1.1	5%
Local authority	1	5%	1.2	2%	0.4	2%
Development agency	0	0%	0.0	0%	0.0	0%
Intergovernmental body	0	0%	0.0	0%	0.0	0%
Park-reserve authority	0	0%	0.0	0%	0.0	0%
Sub-total	9	41%	29.8	52%	11.5	48%
Public and private enterprises						
International enterprise	0	0%	0.0	0%	0.0	0%
Large enterprise	0	0%	0.0	0%	0.0	0%
SME Small and medium sized enterprise	0	0%	0.0	0%	0.0	0%
Mixed enterprise	1	5%	3.2	6%	1.2	5%
Public enterprise	0	0%	0.0	0%	0.0	0%
Sub-total	1	5%	3.2	6%	1.2	5%
NGOs and research						
NGO-Foundation	10	45%	24.1	42%	10.9	45%
Research institutions	0	0%	0.0	0%	0.0	0%
University	1	5%	0.2	0%	0.1	0%
Training centre	0	0%	0.0	0%	0.0	0%
Sub-total	11	50%	24.2	42%	11.0	46%
None indicated	1	5%	0.5	1%	0.4	2%
Total	22	100%	57.8	100%	24.1	100%