

LIFE III



LIFE-Third Countries 1992-2006

Supporting Europe's neighbours in building capacity for environmental policy and action







European Commission Environment Directorate-General

LIFE ("The Financial Instrument for the Environment") is a programme launched by the European Commission and coordinated by the Environment Directorate-General (LIFE Unit - E.4).

The content of the publication "LIFE-Third Countries 1992-2006: Supporting Europe's neighbours in building capacity for environmental policy and action" does not necessarily reflect the opinions of the institutions of the European Union.

Authors: Nora Schiessler, Jon Eldridge, Eva Röben. Editorial department: Eric Sarvan (Astrale GEIE-AEIDL). Managing editor: Philip Owen (European Commission, DG Environment, LIFE Unit). LIFE Focus series coordination: Simon Goss (DG Environment, LIFE Communications Coordinator). Graphic design: Daniel Renders, Anita Cortés. Production: Christine Charlier. The following people also worked on this issue: Alban de Villepin, Yael Meroz, Michael Oliver, Katerina Raftopoulou, Egger Topper, Valts Vilnitis, Zeynep Yöntem. Acknowledgements: Thanks to all LIFE project beneficiaries who contributed comments, photos and other useful material for this report. Photos: Cover: LIFE97 TCY/TR/037, LIFE02 TCY/CRO/014, LIFE99 TCY/ROS/024, LIFE94 TCY/INT/988. Inside: From the respective LIFE projects unless otherwise specified - This issue of LIFE Focus is published in English with a print-run of 5,000 copies and is also available online.

Europe Direct is a service to help you find answers to your questions about the European Union.

New freephone number: **00 800 6 7 8 9 10 11**

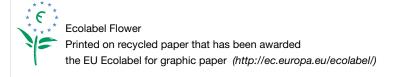
A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (http://europa.eu).

Luxembourg: Office for Official Publications of the European Communities, 2007

ISBN 978-92-79-05694-9 ISSN 1725-5619

© European Communities, 2007 Reproduction is authorised provided the source is acknowledged.

Printed in Belgium





Alban de Villepin Coordinator of LIFE-TCY

It is widely recognised that environmental problems must be tackled in co-ordinated and trans-national ways. Improving air quality and the cleanliness of rivers often involves cross-border co-operation. The prevention of climate change is another challenge to be met at an international level.

In the same way as it is in the common interest of both the European Union and its neighbours to promote prosperity, stability and security, it is also in their common interest to work jointly to foster environmental protection. One important tool supporting European neighbours in their efforts to improve environmental quality and capacities for environmental management has been the LIFE-Third Countries programme (LIFE-TCY), one of the three components of LIFE, the European Union's Financial Instrument for the Environment.

LIFE is at the forefront of the EU's environmental policy. When the programme was launched in 1992, it also included financial support for environmental projects implemented outside the European Union. Including third countries has been an important sign of the EU's willingness to tackle common wide-reaching environmental problems.

Since its launch, LIFE-TCY has co-financed numerous projects supporting the development of environmental policy and management capabilities in third countries. In this way, it has also become a thematic pioneer programme in the neighbourhood context. Different programmes directed at strengthening the relationship between the EU and its neighbours can profit from the rich pool of experiences assembled by LIFE-TCY.

Some of the many achievements of the programme are illustrated in this publication, which outlines 15 years of LIFE-TCY. The projects that have been selected for inclusion demonstrate the range and scope of activities carried out over the years and the phases of the LIFE regulation, as well as the environmental benefits derived from LIFE-TCY assistance.

The brochure shows the positive role that LIFE-TCY has played in helping to solve environmental problems, build institutional and administrative capacities in the environmental sector and increase the environmental protection in the EU-bordering regions.

Alban de Villepin

Coordinator of LIFE-TCY I IFF Unit Directorate-General for the Environment European Commission







Foreword1	Sustainable inland and marine water management	Promoting EMAS principles43
LIFE-TCY – Setting the scene3	Improving wastewater	LIFE-TCY
LIFE-TCY's contribution4	management in Gaza 31	Capacity building44
Actors and participants5	Preserving the environment of the Ölüdeniz Lagoon 32	Networks, administrative structures and institutional
TCY: From LIFE I to LIFE III8	Developing local institutional	strengthening
Building capacity to implement environmental policy9	capacity in environmentally sensitive areas	Regional agency for integrated waste management
Contributing to national and international environmental strategies10	Minimising the impact of economic activities Introducing an experimental	in Albania
Link to other programmes16	system for setting effluent	Environmental capacity
Looking back – and forward17	limits in Russia 34	building in the Lebanon 47
LIFE-TCY by country 18	Capacity building for cleaner production in Bosnia and	Helping countries in the accession process
Geographic scope19	Herzegovina35	Implementation of nature
LIFE-TCY by theme24	Boosting Croatian CHP capacity	conservation legislation in Estonia 48
Nature and biodiversity protection	Tackling wastewater treatment in Tunisian tanneries 37	Transposing the Seveso- Directive into Turkish law 49
Conservation network building in Cyprus	Waste management Treating infectious medical-	Managing pig waste in Cyprus 50
Restoring and managing coastal areas in Malta 26	waste in the Lebanon 38	Enhancing regional cooperation through international projects
Restoring wetlands and endemic species in Israel 27	Waste management through household recycling partnerships	Preparing for oil spills in the Mediterranean51
Sustainable land-use development and planning	Improving waste manage- ment in St. Petersburg 40	Conserving Mediterranean wetlands and their habitats52
Fighting forest fires in the Lebanon28	Environmental management Training and information	Capacity building to manage the Sava river basin53
Improving air quality and reducing fuel consumption through traffic legislation 29	centre for interregional studies in Poland41 Environmental audit and pollution prevention of	Comprehensive list of LIFE- TCY projects
Sustainable urban planning in Cyprus	the Syrian textile industry 42	Available LIFE publications61

LIFE-TCY - Setting the scene

The launch of the LIFE programme (the EU's Financial Instrument of the Environment') in 1992 provided the EU with an instrument for financing innovative environmental projects not only within the EU, but also in other neighbouring countries through the LIFE-Third Countries component of the programme.

Over the last 15 years, LIFE-Third Countries (LIFE-TCY) has provided financial support for environmental actions in countries bordering the Baltic Sea and the Mediterranean. As one of the three components of LIFE, LIFE-TCY has been an important tool for supporting neighbouring country initiatives to improve their environmental performance. In addition to Association Agreements concluded between the EU and its neighbours, this programme component has offered funding to a total of 227 projects that promoted sustainable development and supported the development of environmental management capabilities of countries in the Mediterranean and the Baltic Sea Regions (other than central and east European acceding states and candidate countries). It has also contributed to the strengthening of national environmental policies and to and increase in environmental protection in the EU-bordering regions.

LIFE-TCY in action: Donating sheepdogs to reduce wolf-caused damage of livestock as a measure to improve wolf conservation in Croatia



Selection of projects was not based on an initial repartition of funds per country, but according to the merit of each project. Any public institution, NGO or private sector organisation could apply for funding, provided that the projects to be financed were of Community interest, notably through their contribution to implementing regional and international guidelines and agreements, and made a significant contribution to the general programme objectives, namely capacity-building measures and the development of environmental policy and action programmes.

In addition, the Commission has selected projects that have been in line with EC environmental policy, corresponded to the priorities determined in the context of national environmental action plans and programmes, promoted co-operation and sustainable development at all levels and provided solutions to major environmental problems. Other factors taken into consideration have been the projects' demonstration character, their potential for being reproduced in other contexts, their cost-effectiveness, socioeconomic impacts and their possible added value of establishing an international partnership.

Although there has been no standard duration, TCY projects usually range from two to three years. In order to ensure sound project management and the most cost-effective use of the funds available, the Commission has generally favoured projects whose total costs have been above € 300,000 and under € 800,000. Of the eligible costs, LIFE-TCY has co-financed up to 70%. The average size of the LIFE-TCY contribution to projects under LIFE III has been € 360,000.



LIFE-TCY in action: Developing oil-spill response capacities in Cyprus, Egypt and Israel

This publication aims to present the impressive sum of achievements and work undertaken by LIFE-TCY beneficiaries since 1992. A brief history of LIFE-TCY, its contribution and participants as well as its geographic scope are also included. A small selection of the many TCY projects is featured according to main environmental fields and capacity-building activities. A comprehensive list of projects is presented on page 54. Information on all the closed and on-going projects can be found on the LIFE website's project database at: http://ec.europa.eu./life.

¹ Council Regulation (EEC) No 1973/92; Council Regulation (EC) No 1404/96; Regulation (EC) No 1655/2000; Regulation (EC) No 1682/2004.

LIFE-TCY's contribution

Serious environmental problems rarely respect national boundaries, and much action must therefore be cross-border in approach. As a result, the European Union has increased its role in international action on environment and sustainable development. Its Environment Action Programmes (EAP), in particular, provide a framework for co-operation with potential accession countries in central and Eastern Europe as well as with countries of the Mediterranean and Baltic Sea regions.



Building bridges: LIFE-TCY, an EU tool for strengthening environmental institutions and sustainable development in neighbouring states (here, in the Lebanon)

The EU has gained valuable experience in tackling the same environmental pressures countries across the Mediterranean and the Baltic Regions face. These countries can benefit from EU experiences through replicating best practices and avoiding the same errors.

For the EU, LIFE-TCY has become a useful instrument for transferring experience and addressing environmental problems. In line with the 5th and 6th EAP1, LIFE has contributed to the implementation, development and enhancement of Community environmental policy and legislation not only within the EU, but also in third countries. In addition, it supports objectives of direct initiatives for environmental co-operation such as Horizon 2020, a regional partnership to reduce pollution in the Mediterranean Sea set up in 2005 and coordinated by the European Commission².

The inclusion of activities outside the EU in LIFE has proved to be mutually beneficial: neighbouring countries as well as the EU have benefited from this strengthened co-operation. Such collaboration has not only resulted in the launch of new environmental initiatives in areas such as solid waste management, biodiversity, climate change prevention and water resources, but has also strengthened environmental institutions in many countries. Often, LIFE-TCY has not only supported the drafting of guidelines for new laws, but has also resulted in the introduction and enforcement of environmental regulations.

LIFE-TCY has benefited a wide range of applicants by:

- Strengthening environmental management capacities by insisting on a strong ownership by local beneficiaries:
- Employing a 'bottom-up approach' that allowed beneficiaries to design projects specifically to meet the most important local environmental needs, priorities and framework conditions;
- Promoting transfer of knowledge via project partnerships between TCY beneficiaries, European or local consulting companies or universities, international companies and EU or local research institutions; and
- Funding projects complementary to other EU programmes such as TACIS³, MEDA⁴, PHARE or CARDS⁵ that often considered bigger projects than LIFE.

Successful TCY projects demonstrate that the EU can effectively

work in a very flexible way with partner countries to limit negative environmental impacts. The sharing of knowledge, technologies and standards has also benefited the EU and advanced the accession process of its candidate countries. Capacity building has helped third countries to fulfil obligations to international conventions, thereby contributing to international efforts on environmental protection and sustainable development.

By co-financing projects together with project partners and other co-financiers, LIFE-TCY has achieved a maximum benefit from the available budget. Working in co-operation with local stakeholders to both encourage investment in the environment and to share valuable know-how has often resulted in additional co-operation and knowledge sharing.

Finally, the programme has allowed the EU to invest cost-effectively in environmental protection measures in countries with poorer records on environmental performance (where a little can go a long way) as a complement to the more costly activities undertaken at higher development levels within the EU.

financial assistance/index de.htm

¹ In 2002, the 6th EAP has been adopted as the EU's policy programme for the environment for 2002 to 2012. 2 http://ec.europa.eu/environment/enlarg/ med/horizon_2020_en.htm

³ http://ec.europa.eu/comm/external_relations/ceeca/tacis/

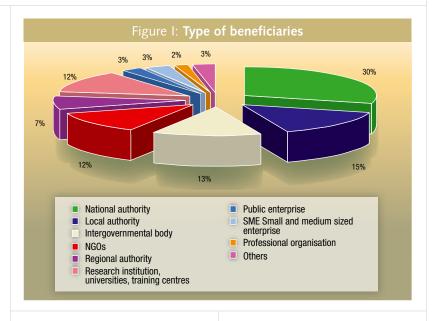
⁴ http://ec.europa.eu/comm/external_ relations/euromed/meda.htm 5 http://ec.europa.eu/enlargement/

Actors and participants

Centrally managed by the LIFE Unit in Brussels, the LIFE-TCY programme is actively supported by two important actors in the beneficiary countries: the national focal points, which are generally the countries' environmental authorities and help in the pre-selection of proposals and co-ordination of beneficiaries; and the EC Delegations and representations to the different countries. The Delegation staff help follow LIFE projects in their country. Staff members know the national environmental context and often have the opportunity to visit projects or events organised by the beneficiaries. They provide important knowledge about the local context to the administration in Brussels.

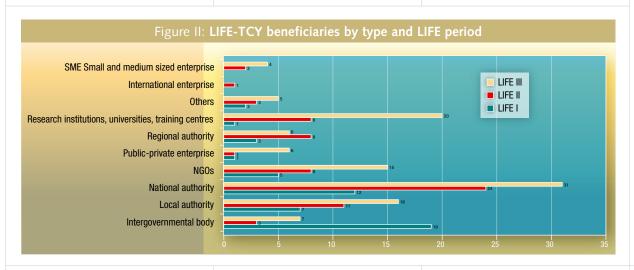
LIFE-TCY has been open to all 'natural and legal persons' as long as they originated from the eligible third countries (or had an international status in the case of governmental or non-governmental organisations), were technically competent to manage and carry out the proposed work, and were financially sound.

Over the years, a total of 165 different project beneficiaries (main contracting parties with the EC) - have received Community support under the LIFE-TCY programme. The beneficiaries alone were legally responsible for their projects' implementation and the related financial management. They also had to assume a part of the project's cost, too. However, they could decide to work closely with one or more partners. In which case, they had to fix the modalities of their contribution though partnership agreements. The partners' contribution aimed to enhance the innovative and demonstrative character



of the project, its dissemination, and the transfer of the developed techniques and methods. Beneficiaries could also ask co-financiers to contribute to the project with financial resources (other than Community funding); and hire subcontractors to provide external services.

LIFE-TCY beneficiaries have come from a wide variety of sectors. These include public bodies such as national, regional and local authorities, as well as intergovernmental bodies; enterprises, such as public enterprises, SMEs (small and medium sized enterprises), public-private and



international enterprises; and other institutions such as NGOs, research institutions, universities, training centres, professional organisations and park authorities.

However, since LIFE-TCY is primarily intended to support the efforts of national administrations in the eligible countries, it is no surprise that 65% of all projects have been led by public authorities.

National authorities were generally the most active. In 14 of the 22 submitting countries, they were the beneficiaries with the highest numbers of projects, followed by local

authorities who realised the most projects in four TCY countries. This is particularly true for LIFE II and LIFE III, where national authorities clearly took the lead (followed by local authorities under LIFE II and by research institutions, universities and training centres under LIFE III). Under LIFE I, however, intergovernmental bodies realised seven projects more than national authorities, which were responsible for a total of 12 projects.

Interview

Jamale Tekly (Comptable, Ministère de l'Environnement du Liban), sur l'effet d'un projet LIFE établissant un système de gestion de qualité

Avant d'installer le programme, je pensais que je faisais mon travail à la perfection, et j'étais une des personnes qui avaient des réticences à l'égard de ce projet, en croyant que notre travail est vraiment bien fait, alors on n'a pas besoin d'avoir un nouveau régime de travail. Avec le temps, et surtout durant ces derniers jours, je sens que c'est indispensable et que tous les ministères au Liban doivent avoir ce système. Premièrement, parce qu'il réduit le temps que prend chaque tâche et chaque activité. Par exemple, une décision qui avant aurait pris une demi-heure ou une heure, prend maintenant, pour être achevée, entre 5 et 10 minutes. Deuxièmement, cela nous aide à avoir un système de statistique. C'est-à-dire, à la fin de chaque mois, et plus tard de chaque année, on peut avoir des statistiques complètes de ce qui a été achevé et savoir comment cela s'est passé: savoir quel pourcentage du travail était réussi en relation aux objectifs antérieurement définis. Troisièmement, chaque personne qui lit le manuel peut avoir une connaissance assez complète des activités concernant chaque division. Et quand une des personnes est absente, c'est aussi facile pour une autre personne d'achever son travail.

Jamale Tekly (accountant, Lebanese Ministry of Environment), discussing a LIFE project that established a quality management system

Before installing this programme, I thought I had done my work perfectly, and I was one of the people who felt some resistance towards this project, believing that we had already performed our job very well, and that we did not need a new way to work. However, in time, and certainly in these last few days, I feel that it (the quality management) is indispensable, and that indeed all ministries in Lebanon should have such a system. First of all, because they reduce the time needed for each task and each activity. For example, previously, a decision could have taken half an hour or even an hour to make. Now we make decisions in 5 to 10 minutes. Secondly, they enable us to have a statistical system. This means that at the end of every month or year, we can have complete statistics of what has been achieved and how and we can find out the percentage of work that has been successful in comparison to formerly defined objectives. Finally, everyone who reads the manual can obtain quite comprehensive knowledge of the activities carried out in each unit. So if someone is absent, this person can be replaced easily.

Fevzi İşbilir (Çevre ve Orman Bakanlığı, Çevre Yönetimi Genel Müdürlüğü,

Müdür Yrd)

Size göre, LIFE üçüncü ülkeler programı, (Türkiye'nin AB'ye) uyum prosesine sağlıklı bir katkıda bulunuyor mu?
Fevzi İşbilir: Şüphesiz. Yani, LIFE ile yürütülen projelerde amaca uygun davranıldığı takdırde, uyulacağına da inanıyorum, bizim Bakanlığımızın

yürüttüğü ve benim müdahil olduğum

projelerde bu amaca hizmet ediliyor.

Fevzi İşbilir (deputy director-general of environmental management, Turkish Ministry of Environment and Forests)

In your opinion, did the LIFE-TCY programme provide a tangible contribution to Turkey's EU accession process?

Fevzi İşbilir: Undoubtedly. If the LIFE projects are implemented according to their objectives, and I firmly believe they will be, all projects I have been involved in, all projects carried out by our ministry, will have an impact on this goal.

It can be observed that the proportion of international organisations as beneficiaries continuously decreased, whereas national and local governments, which often were their previous partners, took over the lead of their projects. The nature of international beneficiaries also changed: during the LIFE I and early LIFE II phase, these were often major intergovernmental agencies such as the World Bank, UNDP, the REMPEC, Blue plan or similar regional UN offices, whereas the international beneficiaries of the past few years have often been environmental NGOs, also from TCY or Central and Eastern European countries.

Though the majority of beneficiaries have only implemented one project, some have also had several projects selected. Leading the field in this respect has been the World Bank which has implemented 10 projects, equalling 4.4% of all projects. The Turkish Ministry of Environment and Forests carried out seven TCY projects as a beneficiary and was a partner to three others. The Lebanese Ministry of Environment implemented five TCY projects and was a partner to five others. The Kaliningrad Environmental Centre for Administration and Technology (ECAT) and the Cypriot Ministry of Agriculture, Natural Resources and Environment were each the beneficiary of six projects.

In the context of visits to the beneficiary countries, the LIFE team asked several employees, both technical staff and decision-makers, of the three most important multiple beneficiaries - the environmental administrations of Turkey, the Lebanon and Cyprus - to provide comments on the contribution the LIFE programme has made to environmental policy-making and capacity building in their countries.

A key issue for the assessment of the overall sustainability of the LIFE programme is the long-term continuation of the results of these projects. Dr Aydın Yıldırım, also deputy general director of the general directorate of environmental management in the Turkish Ministry of Environment and Forests, says that the replicating effects of the projects were "like the waves produced when throwing a stone into a lake". He gives the example of the different Turkish waste projects, which incorporated the national waste policy and were the predecessors of larger infrastructure projects later implemented by the EU cohesion funds.

Seventeen LIFE-TCY projects were implemented in Cyprus, addressing horizontal themes such as EU environmental policy approximation and specific environmental subjects such as special areas of conservation, management and control of chemical substances, and the reduction of vehicle emissions. Elena Stylianopoulou, the LIFE focal point in Cyprus, based at the Environment Service of MANRE, says that LIFE-TCY was instrumental in raising environmental awareness among state authorities and the public through the promotion of recycling and the creation of bicycle lanes in cities.

Projects in Cyprus also helped create infrastructure and the acquisition of expertise at the central and local administrative levels in preparation of its accession to the EU.

Interview

Νίκος Γεωργιάδης (Κυπριακό Υπουργείο Γεωργίας, Φυσικών Πόρων και Περιβάλλοντος, πρώην Διευθυντής Υπηρεσίας Περιβάλλοντος)

Ποια ήταν η συνεισφορά του προγράμματος LIFE στην Κυπριακή περιβαλλοντική πολιτική; Νίκος Γεωργιάδης: Το LIFE (Τρίτες Χώρες) ήταν το μόνο χρηματοδοτικό εργαλείο στο οποίο η Κύπρος είχε πρόσβαση προενταξιακά, γι' αυτό και η ουσιαστική του συμβολή στην ανύψωση του περιβαλλοντικού πυλώνα στο επίπεδο του οικονομικού και κοινωνικού είχε προστιθέμενη αξία δυσανάλογα ψηλή σε σχέση με το ύψος της βοήθειας που δόθηκε και υπήρξε καταλυτική στο να ωθήσει την περιβαλλοντική πολιτική να βγει οριστικά από τη ζώνη του λυκόφωτος στην οποία βρισκόταν για δεκαετίες.

Πως αξιολογείτε τη συνέχεια των αποτελεσμάτων των Κυπριακών έργων LIFE; Νίκος Γεωργιάδης: Εκείνες οι κοινές παράμετροι όλων των προγραμμάτων που αποδείχτηκε να έχουν αειφορία, δηλαδή μακροπρόθεσμη διάρκεια και σταθερότητα, είναι αυτές που αφορούν τους τομείς της εμπέδωσης της περιβαλλοντικής ευαισθητοποίησης και της αναπροσαρμογής αντιλήψεων, της βελτίωσης των δυνατοτήτων συμμετοχής της κοινωνίας των πολιτών και άλλων εταίρων στις διαδικασίες διαμόρφωσης πολιτικής, και της ενδυνάμωσης της περιβαλλοντικής διακυβέρνησης.

Nicos Georgiades, former director of the environment service, (Cypriot Ministry of Agriculture, Natural Resources and Environment)

How has the LIFE programme contributed to Cypriot environmental policy?

N. Georgiades: LIFE (Third Countries) was the only funding instrument available to Cyprus before its accession. Therefore, its contribution in raising the height of the environmental pillar to the level of the economic and social ones, had an added value that was disproportionately high compared to the level of assistance granted and was a key catalyst in guiding environmental policy out of the twilight zone where it had been neglected for decades. How do you assess the sustainability of the results achieved through Cypriot LIFE projects?

N. Georgiades: The parameters common to all the projects that proved to be more sustainable, in other words with longterm duration and stability, are those that concern the sectors of solidifying environmental awareness and readjusting viewpoints; improving the capacity of civil society and other stakeholders to participate in policy formulation and the improvement of environmental governance.

Abdurrahman Uluirmak, head of the Turkish chemicals department and Alara Istemil, an expert at the Turkish foreign relations and EU department

Alban de Villepin (EC LIFE Unit): Do you think that one of the positive aspects of the LIFE programme is that it is the beneficiary who prepares the proposal, and, as a result, projects correspond exactly to their needs?

Abdurrahman Uluirmak: As a central government, we have benefited from the LIFE programme in preparing for accession. In our national programme, we have to harmonise our legislation with EU legislation. SEVESO is a type of accession project. Many of the outcomes of LIFE projects contribute to this goal.

Alban de Villepin: This was your choice?

Abdurrahman Uluirmak: This is our choice. Of course, the business sector also benefits from the LIFE programme for compliance with environmental legislation. For instance, in the SEVESO project we established an electronic notification system. It is already in use, but it will be used officially when our legislation comes into force. We will benefit very much from this electronic notification.

Alara Istemil: I want to make a comment on the submission of project proposals by other parties. The LIFE projects were not very well known in their early period. But last year, when LIFE came to its end, the programme received enormous attention. And I think it's a pity the programme has closed just when the LIFE-TCY was becoming well known, well implemented and quite efficient. It became better every year.

Alban de Villepin: Do you think that the large TÜBITAK (Scientific and Technological Research Council of Turkey) funding might, at least for research and development projects, provide an alternative after the closure of the LIFE programme? Alara Istemil: It might, but there is still a need for the LIFE programme. For exam-

ple, for the implementation of Natura 2000 projects the LIFE programme is a major tool. So at this stage, we hope for LIFE +...

TCY: From LIFE I to LIFE III

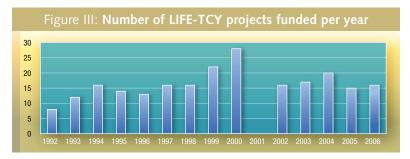
Since 1992, LIFE-TCY has financed 227 projects, corresponding to a total investment of more than \in 120 million of which the EC contributed over 65%. There are currently 80 ongoing projects in 16 countries.

The first phase of LIFE (LIFE I) ran from 1992 to 1995. It coincided with the first time that EU environmental policy was given a firm Treaty basis in the Single European Act, as well as with the Fifth Environment Action Programme (5th EAP), which was adopted in 1992. This programme was to set the pace of environmental reform for the next decade, and LIFE was one of its essential tools.

From its inception, LIFE envisaged actions outside Community territory (so-called 'third country assistance'). Such action came under LIFE I with an indicative allocation of 5% of the programme budget. Fifty projects benefiting third countries were selected during LIFE I, representing a total financial contribution of approximately € 19.4 million.

Funding was made available for technical assistance actions in third countries, as well as, in exceptional circumstances, for actions concerning regional or global environmental problems provided for in international agreements. Selection criteria included the focus on promoting the establishment of the necessary administrative structures in the environmental field, the transfer of appropriate environment-friendly technologies, and the fostering of sustainable development. Areas covered included also the provision of the technical assistance necessary to establish environmental policies and action programmes, and assistance to third countries faced with ecological emergencies.

Furthermore, these third country projects had to be of interest to the Community (notably through contributing to the implementation of regional and international guidelines, orientations and agreements), and



Since 1992, 227 LIFE-TCY projects have received funding. Due to a delay in the launch of the call of proposals under the new LIFE III, a cumulative budget covered 2000 and 2001

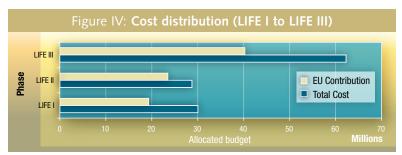
promote sustainable development at international, national or regional level. Projects sought to provide solutions to major environmental problems, increase cross-border co-operation, as well as ensure feasibility with regard to technical proposals, management and value for money.

Under LIFE II (1996-1999), the TCY strand maintained its allocation of 5% of the budget and funded 67 projects, amounting to € 20.7 million. It specifically addressed actions in Mediterranean and Baltic Sea countries. Its objective was to contribute to the development of environment policy and action programmes in the eligible countries. The funding criteria stayed the same.

With LIFE III (running from 2000 to 2004, and then extended until 2006), the spe-

cific objective of LIFE-TCY changed, now more strongly focussing on creating administrative capacities and structures in the environmental sector and developing and implementing environmental policies and action programmes. In addition, some EU candidate countries chose to use TCY as part of their accession preparations.

Technical assistance projects that support the afore mentioned specific objectives were eligible for funding under LIFE III. To facilitate the implementation of the programme accompanying measures were required to monitor and evaluate LIFE actions, as well as to support the exchange of experience between projects and the general dissemination of information on the results obtained. Under LIFE III, 112 projects were selected, receiving a total of approximately € 40.3 million.



LIFE has allocated approximately € 80.3 million to projects in third countries.

Building capacity to implement environmental policy

Capacity building refers to the range of measures that can be taken to support and encourage individuals, organisations and society as a whole to manage their affairs successfully.

The establishment of capacities and administrative structures needed in the environmental sector and in the development of environmental policy and action programmes is specifically defined as a central objective of LIFE III. LIFE-TCY is especially intended to support the efforts of national administrations in implementing, updating and developing environmental policies and action programmes in the eligible countries.

For this purpose, many projects have focussed on technical assistance. Through the establishment of new administrative bodies and structures or through the reinforcement of existing ones, they have helped to strengthen co-operation, promoted the exchange of experience and encouraged the transfer of expertise and knowledge. This was with a view to assisting the project country or region to develop environmental legislation and prepare adequate environmental management plans for sustainable development.

Dissemination has played an important role in encouraging the transfer of best practices for capacity building. Throughout its entire duration, the LIFE-TCY programme has always aimed to ensure the sustainability of project results, for example, through training, job creation, new organisational structures, follow-up on policy action programmes implementation and management plans.

Within a broad framework of capacity building, most LIFE-TCY projects have implemented a set of varying measures adapted to local or national needs. Many of the capacity building measures were built upon the introduction

of management tools such as EMAS or ISO certification, the related procedures and quality management systems. Very different organisations from the public and the private sector benefit from capacity building measures: In Tunisia, two projects focussed on the strengthening of environmental performance in industry; one through the introduction of EMAS and ISO 14001 to small and medium enterprises1, and the other one via preparation for the establishment of a Tunisian ecolabel². In Russia, the EMAS concept was adopted by a local government, the municipality of St. Petersburg³, and in the Lebanon, the Ministry of Environment introduced a comprehensive quality management system that allows it to apply for ISO certification as the first Lebanese ministry4.

Capacity building is often closely linked to the access and management of environmental information and to environmental awareness building, which form the basis upon which sustainable capacity building must rely.

1 LIFE00 TCY/TN/016 2 LIFE03 TCY/TN/000051 3 LIFE03 TCY/ROS/000068 4 LIFE02 TCY/INT/034

Many LIFE-TCY projects combine capacity building with awareness raising and information management. For example, one of the ongoing projects in Turkey has worked towards the establishment of an electronic information system on EU and national environmental legislation and its requirements for small and medium scale industry. However, to enable these industries to use the information provided by the project, door-to-door awareness raising and intensive training measures were planned to precede the introduction of the portal on environmental legislation to the industrialists⁵. The strong connection between environmental information management, awareness and capacity building can also be observed in two recent projects on air quality management in Istanbul⁶ and Kaliningrad⁷.

Examples for environmental awareness building include an Algerian project8 that also aimed to raise administrative capacity to support the country's environment.

5 LIFE04 TCY/TR/000004 6 LIFE06 TCY/TR/000283 7 LIFE06 TCY/ROS/000269 8 LIFE00 TCY/DZ/015

Capacity and awareness building measures undertaken by LIFE-TCY projects:

- Awareness raising;
- Facilitation of the access, use and management of environmental information;
- Definition of planning processes including policies, strategies or action plans;
- Drawing up standards and regulations;
- Development and adaptation of legislation;
- Development of technical tools and guidelines, and the transfer of best practice;
- Creation or reinforcement of environmental management structures;
- Creation or reinforcement of procedures for data collection and dissemination; and
- Reinforcement of legislation.

Contributing to national and international environmental strategies

In fulfilling the requirements of and criteria specific to LIFE-TCY, projects have successfully supported national and international environmental strategies, boosted the implementation of international conventions on environment, and facilitated the EU accession process.

Over the course of its 15-year history, the LIFE-TCY programme has made an important contribution to the formulation and implementation of national and international environmental policies. The foci of the LIFE-TCY projects dealing with environmental strategy preparation and application are manifold - from the elaboration of National Environmental Action Plans (NEAP) at the very beginning of the LIFE programme to the concrete implementation of the NEAPs or of the EU environmental acquis in EU accession countries during the late LIFE II and the whole LIFE III phase. Additionally, a large number of LIFE-TCY projects aim to ensure compliance with UN environmental conventions.

International conventions on the environment

In the last three decades, environmental policy-making has developed rapidly both at the national and international levels. The first UN conference on the human environment in Stockholm 1972 was a milestone in international environmental policy, constituting the basis for both the creation of the UN Environment Programme (UNEP) and the preparation of the UN conventions on migratory species (CMS-Bonn convention) and the trade in endangered species (CITES). Over the following 20 years, the UN issued a great number of major conventions on environmental protection. For example, the United Nations Conference on Environment and Development (UNCED) Earth Summit in Rio de Janeiro 1992 produced, along with Agenda 21, the Rio Declaration on Environment and Development, the Statement of Forest Principles, the United Nations Framework Convention on Climate Change and the United Nations Convention on Biological Diversity.

As well as its individual member states, the EU itself became a party

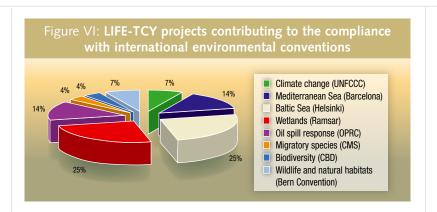
Iris pseudacorus community at Bjeline,
Bosnia-Herzegovina

and signatory to most UN environmental treaties and has participated actively in setting their frameworks for and promoted their integration. Additionally, the EU has issued several Europe-wide environmental conventions, such as the Bern Convention for the protection of wildlife and natural habitats. With respect to LIFE-TCY beneficiary countries, the European Commission is a partner of many of the major regional environmental actors, such as the Mediterranean Environmental Technical Assistance Programme (METAP)1, and the Mediterranean Action Plan or the Helsinki Commission. This close co-operation is also reflected in the areas of intervention of the LIFE-TCY programme.

Some 26 LIFE-TCY projects were conceived explicitly with the aim

¹ The METAP programme was set up by the World Bank and the European Investment Bank, the European Commission, UNDP and the governments of Finland and Switzerland. http://www.metap.org/

of contributing to the implementation of international conventions and protocols. As can be seen from the distribution of subjects in Figure VI, the protection of habitats and wildlife (Ramsar, biodiversity, migratory species and Bern conventions) and the protection of the marine environment (in the Mediterranean and Baltic Seas) were the main priorities. Other priorities included the implementation of national biodiversity strategies and action plans (NBSAP), which are an outcome of the Convention on Biodiversity. Meanwhile, a range of projects have carried out activities defined in the national action plans for the protection of the Mediterranean under the framework of the Barcelona Convention.



The combination of environmental protection and sustainable development, both of which are central to Agenda 21 and its local adaptations, have been the systematic foci of the Mediterranean countries. In recent

years, Israel, in particular, as well as Syria, Jordan, Tunisia and the Palestinian territories (the West Bank) have run several LIFE-TCY projects that focussed on the implementation of local Agenda 21.

Sector	Name and subject of the convention	Website	Related projects	
	UN conventi	ons		
Atmosphere	United Nations' Framework Convention on Climate Change (UNFCCC)	www.unfccc.int	LIFE05 TCY/TR/000164 LIFE04 TCY/CRO/000029	
Biodiversity and	Convention on biodiversity (CBD)	www.biodiv.org	LIFE95 TCY/EE/0889	
biosafety	Bonn Convention on Migratory Species (CMS)	www.cms.int	LIFE04 TCY/INT/000054	
	Ramsar Convention on wetlands, 1634 wetland sites until now	www.ramsar.org	LIFE93 TCY/INT/6027 LIFE94 TCY/INT/0988 LIFE94 TCY/SLO/0979 LIFE97 TCY/TR/015 LIFE02 TCY/INT/069 LIFE03 TCY/AL/000004 LIFE03 TCY/INT/000031	
Oceans, Sea and Water	Barcelona convention for the protection of the Mediterranean Sea against pollution	www.unepmap.org	LIFE92 TCY/INT/005 LIFE94 TCY/M/0983	
	Barcelona convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean	www.unepmap.org	LIFE99 TCY/INT/017 LIFE00 TCY/INT/063	
	Helsinki Convention on the Protection and use of transboundary watercourses and international lakes	www.helcom.fi	LIFE93 TCY/INT/6027 LIFE93 TCY/INT/6037 LIFE94 TCY/ROS/1640 LIFE96 TCY/ROS/056 LIFE97 TCY/ROS/093 LIFE98 TCY/ROS/095 LIFE99 TCY/ROS/022	
	Convention on oil pollution preparedness, response and co-operation (OPRC)	www.imo.org; full text: www.ecolex.org	LIFE02 TCY/TR/061 LIFE96 TCY/INT/08 LIFE99 TCY/INT/017 LIFE94 TCY/ROS/1640	
European conventions				
Biodiversity and biosafety	Bern convention on the conservation of European wildlife and natural habitats	www.conventions.coe.int	LIFE99 TCY/TR/065 LIFE99 TCY/TR/087	

Complying with the Convention on Climate Change has also been a major priority. Indeed, the EU accession process was an additional incentive for the development of projects that supported carrying out the Convention's requirements in **Turkey** and **Croatia**.

National environmental action plans and policies

In the late 1980s, the World Bank began to promote and finance the preparation of national environmental assessments and national environmental action plans, which were in turn often a product of these assessments. While the UNCED summit and Agenda 21 strongly supported the adoption of national strategies on the environment and sustainable development in the 1990s, the World Bank provided a general policy and procedure² for their elaboration. Since then, most countries around the world have started to develop national environmental action plans (NEAPs), which were later completed by more detailed strategic sector programmes.

2 WB Operational Directive 4.02



Developing management plans for protection of valuable ecosystems – such as for the Tunisian wetland, Sebkha el Kelbia

The METAP programme supported the preparation of NEAPs in the Mediterranean area very actively.

Malta, the Lebanon, Jordan, Algeria and the Palestinian Authority prepared their national environmental strategy documents within the context of a LIFE-TCY project. In 2005, the Palestinian Environmental Quality Authority was the beneficiary of

the first LIFE-TCY project to elaborate the Gaza Coastal and Marine Environmental Action Plan³, and of a second project that strengthened the implementation of the Palestinian environmental action programme. These projects achieved good, coherent outputs, and ensured the sustainable implementation of their environmental strategy, in spite of the well-know difficult political circumstances in the Palestinian territories of Gaza and the West Bank.

In Malta, the country's Ministry of Environment benefited from a LIFE project that supported the preparation of an eco-audit and the subsequent elaboration of a national environment and health action plan. In Algeria, a LIFE-financed World Bank project assisted the national government in elaborating the NEAP, which was then adopted and implemented by the Ministry of Environment and Land Use. In the Lebanon and Jordan. METAP helped the two governments to elaborate national environmental action plans within LIFE-TCY projects. Table II gives an overview of the NEAPs that have been elaborated with the support of LIFE.

3 LIFE99 TCY/GA/014

Table	NEAPs	elaborated with the	support
	of the L	IFE-TCY programme	

of the Life-TCT programme			
Country	LIFE project	Beneficiary	
International project (The Lebanon)	LIFE93 TCY/INT/6054 Preparation of the Lebanon environmental strategy	METAP (in co-operation with Lebanese Ministry of Environment)	
Malta	LIFE93 TCY/M/6040 Eco-audit and preparation of NEAP	Maltese Ministry of Environment	
International project (Algeria)	LIFE94 TCY/INT/1692 Preparation of Algerian NEAP	World Bank (in co-operation with Algerian Ministry of Environment and Land Use)	
International project (Jordan)	LIFE95 TCY/INT/1211 Preparation of Jordanian NEAP	METAP (in co-operation with Jordanian Ministry of Environment)	
The West Bank and Gaza	LIFE99 TCY/GA/014 Gaza coastal and marine EAP	Palestinian Environmental Quality Authority	
The West Bank and Gaza	LIFE02 TCY/GA/071 Palestinian environmental action plan	Palestinian Environmental Quality Authority	



Crocus hartmannianus in Cyprus

The LIFE programme provided most of its assistance for the preparation of national environmental strategies during the LIFE I phase. Since then, the national environmental authorities of the TCY countries have focussed increasingly on the implementation of the activities defined by the NEAPs. Nearly 50 LIFE-TCY projects have been conceived, mostly by governmental beneficiaries or local governments, with the aim of tackling the priority environmental issues laid out in the different NEAPs, and also to establish the necessary capacities to deal with environmental problems.

In the **Lebanon**, the country's Ministry of Environment was the beneficiary or partner of eight LIFE-TCY projects aiming at the development of both tools and capacities to carry out the activities formulated in the Lebanese environmental strategy. In other countries, LIFE projects dealt with very concrete NEAP objectives or sub-objectives, such as a project in the Municipality of Hebron (West Bank) from 2005 that recycles sludge from the marble industry4, a Lebanese quarry rehabilitation project from 20045, an Egyptian flashflood management project from 20066 or a 2004 sustainable traffic management project for the city of Tirana7. In Morocco, all projects since 2002 have been conceived in view of their NEAP objectives, and also take into consideration the objectives formulated in other national sector programmes.

Complementary to the NEAPs, all TCY countries adopted other national strategies, which, however, differ strongly according to their environmental priorities. Several Mediterranean countries perceived the protection of the Mediterranean Sea as a major environmental priority and prepared a national action plan for its protection, such as foreseen in the Barcelona convention and

4 LIFE05 TCY/GA/000115 5 LIFE04 TCY/RL/000040 6 LIFE06 TCY/ET/000232 7 LIFF04 TCY/AL/000018

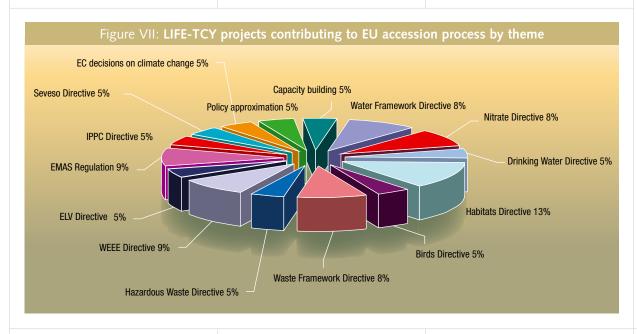


Preserving the marine environment in Turkey

the Mediterranean Action Programme. In Israel, one LIFE-TCY project contributed to the elaboration of the Israeli national action plan for the Mediterranean Sea, and two other projects carried out activities defined as priorities in this plan.

Nine TCY countries prepared a National Biodiversity Strategy and Action Plan, in compliance with the Convention on Biodiversity, and the six LIFE projects working on NBSAPs show a large thematic variety among the priorities in biodiversity protection. A 1997 Tunisian project8 aims to limit

8 LIFE97 TCY/TN/055



genetic erosion by creating a national park on the La Galite Island and adding the islands of La Galite and Zembra to the list of specially protected areas of Mediterranean importance. A 2002 **Croatian** project⁹ tackles the country's NBSAP priority of maintaining the Croatian wolf population.

In the Maghreb countries, the fight against desertification is a regionspecific environmental problem, so that as well as defining desertification as a NEAP priority, these countries have also elaborated national action plans to combat desertification. This is reflected in the subjects of regional Maghreb LIFE projects, such as a 2000 project supporting pilot systems to monitor desertification in Tunisia and Morocco¹⁰ and a 2005 capacity-building project at the Sahara and Sahel Observatory for a drought early-warning system covering Tunisia, Morocco and Algeria¹¹. Such cooperation in LIFE-TCY projects shows that the programme can even play a role in overcoming regional political differences.

Facilitating the EU accession process

Among the countries eligible for LIFE-TCY funding, six have ultimately become members of the European Union¹², while two others are currently

9 LIFE02 TCY/CRO/014 10 LIFE00 TCY/TN/018 11 LIFE05 TCY/TN/000150 12 Cyprus, Malta, Poland, Estonia, Lithuania, Latvia in 2004.

Protection of the Estonian countryside – one objective of LIFE-TCY





LIFE-TCY projects contribute to capacity building in environmental protection - such as a sludge disposal study project implemented in Egypt.

negotiating accession¹³. The LIFE-Environment and LIFE-Nature programmes were open to all EU candidates, provided they contributed to their financing. However, candidate countries had the option of participating in the LIFE-TCY programme. In the end, Malta, Cyprus and Turkey and Croatia have opted for remaining within the scope of LIFE-TCY.

In some of these countries, a large number of the LIFE-TCY supported completion of their accession processes. During the LIFE I and LIFE II phases, Cyprus, Malta and Estonia benefited from support from LIFE for the transposition of the EU environmental acquis, followed by Turkey and Croatia, which have since acquired candidate status.,

Within the LIFE-TCY programme, the first project used for accession preparations was a 1995 **Estonian** project¹⁴ that built capacity for the implementation of the Convention on Biodiversity and the transposition of the EU Directives 79/409/EEC¹⁵ and 92/43/EEC. **Cyprus** used the LIFE-TCY instrument for a series of EU accession projects, the latest of which supported the transposition and implementation

13 Turkey and Croatia 14 LIFE95 TCY/EE/0889 15 79/409/EEC: Birds Directive, 92/43/ EEC: Habitats Directive of three special waste directives. As with Cyprus, **Turkey** also used LIFE for the transposition of EC directives and for drawing up directive-specific implementation plans.

Other projects focused on the implementation of the particular requirements of EU directives and corresponding national legislation. For example, a recent project aimed to ensure that the Turkish framework law on hazardous waste complies with EU legislation¹⁶. During LIFE III, Croatia also used LIFE-TCY projects to prepare the ground for parts of their accession obligations.

The contents and the degree of detail of these LIFE-TCY projects have changed considerably during the past 15 years. During the LIFE I phase and at the beginning of LIFE II, projects generally aimed to familiarise authorities with the EU environmental acquis, and at creating capacities for policy approximation. With the progress of the countries' candidature, but also with the evolution of the LIFF-TCY programme, projects developed a different approach and depth, aiming increasingly at the development of instruments for the transposition and implementation of the acquis.

16 LIFE06 TCY/TR/000292

The Turkish EU accession projects illustrate this development very well. In those sectors where the Turkish transposition of the EU environmental acquis is already well advanced and where the country has considerable capacities of its own, the projects focus on very specific aspects, as for example the setting up of a collection system for Waste Electrical and Electronic Equipment (WEEE) in Istanbul, or the elaboration of a directive-specific implementation plan or the development of a quite sophisticated electronic notification system for industries falling under the scope of the Seveso Directive¹⁷.

The LIFE-TCY instrument is also flexible enough to provide more general support in sectors where a country has recently started upgrading its environmental management capacities. For

17 Directive 96/82/EC on the control of major- accident hazards involving dangerous substances



A wolf cub observed in Croatia

example, it has helped establish an information and training system on EU environmental requirements for smalland medium-sized enterprises, and has supported a project managed by the Regional Environmental Centre for Central and Eastern Europe that aids the Turkish authorities' efforts to meet their obligations under the UN Convention on Climate Change.

One ambitious 2006 LIFE project18 clearly illustrates how LIFE initiatives that facilitate EU accession can also contribute to the implementation of EU environmental policies in neighbouring countries. This project aims to ensure integrated management of the Sava river basin in accordance with the requirements of the Water Framework Directive. The management plan covers both Bosnia-Herzegovina and Croatia.

As well as the 18 LIFE projects explicitly aimed at the introduction and transposition of the EU environmental acquis in candidate countries, many other LIFE projects show that countries neighbouring the EU are also interested in implementing Union's environmental standards. The EMAS projects in Russia and the Maghreb countries in particular are a good example of this.

Table III: Overview of the different LIFE-TCY accession projects			
Sector	Name and subject of the convention	Website	Related projects
Water protection	Water Framework Directive	2000/60/EC	LIFE05 TCY/CRO/000108 LIFE06 TCY/INT/000246
	Nitrate Directive	91/676/EEC	LIFE03 TCY/CY/000021 LIFE00 TCY/M/036
	Drinking Water Directive	80/778/EEC	LIFE00 TCY/M/036
Nature protection	Habitats Directive	92/43/EEC	LIFE02 TCY/CRO/012 LIFE98 TCY/CY/172 LIFE95 TCY/EE/0889
	Birds Directive	79/409/EEC	LIFE95 TCY/EE/0889
Waste manage- ment	Waste Framework Directive	75/442/EEC	LIFE05 TCY/CRO/000114 LIFE03 TCY/CY/000018 LIFE03 TCY/CY/000021
	Hazardous Waste Directive	91/689/EEC	LIFE06 TCY/TR/000292
	WEEE Directive	2002/96/EC	LIFE03 TCY/CY/000018 LIFE06 TCY/TR/000282
	ELV Directive	2000/53/EC	LIFE03 TCY/CY/000018 LIFE04 TCY/TR/000004
Pollution prevention and management	EMAS Regulation	1836/93	LIFE99 TCY/CY/102 LIFE97 TCY/M/071
	IPPC Directive	96/61/EC	LIFE98 TCY/CY/167
	Seveso Directive	96/82/EC	LIFE03 TCY/TR/000061
Climate change	EC decisions on climate change	94/69/EC	LIFE05 TCY/TR/000164

Link to other programmes

The LIFE programme works as a specific financial instrument and complements other Community instruments. In this way, LIFE-TCY contributes to a coherent European Union funding policy beyond EU borders.

LIFE acts alongside several different EU funding programmes that have been designed to support neighbouring countries and achieve common objectives. Although initiatives can sometimes overlap, every programme has its own particular scope and target. Co-ordination with larger aid programmes through close liaison with other departments of the European Commission and particularly the EU Delegation in the target countries¹ helps to achieve greater coherence and to avoid overlapping of funding. LIFE-TCY is a complementary funding tool that concentrates on the environment and funds for example projects that are generally smaller than those considered under larger programmes - EuropeAid² programmes such as TACIS3, or MEDA. While EuropeAid projects are determined through governmental negotiations, the LIFE programme funding follows an independent call for proposals.

The **TACIS** programme, launched by the European Commission in 1991, provided grant-financed technical assistance to 12 countries of Eastern Europe and Central Asia (of which only Russia was also eligible under LIFE), and mainly aimed to strengthen the transition process in these countries. Its areas of cooperation included environmental protection and the management of natural resources. Organisations

1 Report from the Commission to the European Parliament and the Council - Mid-term review of Regulation (EC) No 1655/2000 LIFE /* COM/2003/0668 final. 2 http://ec.europa.eu/europeaid; EuropeAid is the roof programme under which the regional programmes like TACIS, PHARE, ISPA or MEDA are operating. 3 TACIS focuses on projects of at least €2 million in Russia and Ukraine and €1 million in the other partner countries.

from the EU and accession countries were selected to implement projects, transferring their knowhow to beneficiaries in the partner countries.

ISPA, managed by EC's Directorate-General Regional Policy, was the Commission's instrument for structural policies for pre-accession countries and provided assistance for infrastructure projects in the area of environment and transport. Although many large-scale construction projects were funded via ISPA, the programme also implemented projects on a similar scale to LIFE projects.

The Programme of Community aid to the countries of Central and Eastern Europe (PHARE) was the main financial instrument of the pre-accession strategy for those Central and Eastern European countries that have applied for membership of the European Union. The main priorities of PHARE for the period 2000 to 2006 have been institutional and capacity-building and investment financing. Although the programme was originally reserved for the countries of Central and Eastern Europe, it is set to be extended to the applicant countries of the western Balkans.

While the international/regional dimension is a bonus of the LIFE-TCY programme (which mainly finances national projects), the 1997 **SMAP** programme, the short- and medium-term priority Environmental Action Programme, focused on regional projects proposed by several countries in the Mediterranean region. SMAP aimed to join policylevel activities with practical actions on the ground, which would lead to

tangible results on environmental protection, capacity building and improvement of legislative, regulatory and institutional frameworks of the Partner countries. Actions focussed on five priorities (Integrated water/ waste/ coastal zone management, Hot Spots, Combating Desertification). The programme was financed by the Commission through **MEDA**, the principal instrument of economic and financial cooperation under the Euro-Mediterranean partnership.

MEDA enabled the EU to provide financial and technical assistance to the countries in the southern Mediterranean to help them to reform their economic and social structures and mitigate the social and environmental consequences of economic development. Activities financed included technical assistance, training, institution-building, information, seminars and studies. Eligible beneficiaries are not only the Euro-Mediterranean partners, but also local authorities, regional organisations, communities and NGOs.

Finally, the EU is implementing the objectives of the European Neighbourhood Programme (ENP)⁴, which covers Eastern European and Balkan countries neighbouring the EU, Southern Mediterranean countries and Armenia, Georgia and Azerbaijan. Set up in 2004, it is geographically broader than the LIFE-TCY programme. The ENP projects extend to all major sectors of co-operation and address the most pressing environmental concerns.

⁴ http://ec.europa.eu/world/enp/index_ en.htm

Looking back - and forward

A mid-term evaluation in 2003 of LIFE III concluded that LIFE-TCY had met its objectives.

"There is good evidence that LIFE-TCY has been well managed and these projects are contributing significantly to developing capacity in third countries." according to the mid-term review of the LIFE programme. "LIFE has filled an important niche in that it has been able to respond relatively quickly and flexibly to the environmental need and priorities of third countries"1.

In 2007, after 15 years of implementation, a retrospective of the results achieved by TCY projects supports the review's conclusion. LIFE-TCY represented an accessible funding scheme which has received widespread interest. From 1992 to 2006. more than 1,250 project proposals were submitted, of which just 18% were selected for funding due to the rigorous selection process.

1 Report from the Commission to the European Parliament and the Council -Mid-term review of Regulation (EC) No 1655/2000 LIFE /* COM/2003/0668 final. Based on an independent evaluation carried out by AEA Technology plc (AEAT) in 2003.



However, LIFE-TCY has not only been an attractive and competitive funding programme, but it has also achieved its two main objectives: encouraging the development of environmental policy and supporting management capabilities. Particular attention of TCY projects has been devoted to sustainability, in order to contribute to establishing capacity and administrative structures that will outlive the LIFE projects themselves. This has been reflected in training, job creations, durability of new structures, and implementation of policies, management plans, action programmes and other measures.

Furthermore, the programme has addressed kev environmental issues in the target countries. The main sectors were waste and biodiversity. LIFE-TCY has contributed to preparing and realising various national and international environmental strategies (such as National Environmental Action Plans and international conventions like the Ramsar Convention), contributed to the European Neighbourhood Programme and facilitated the European accession process (for example, by supporting projects dealing with the Water or the Waste Framework Directives or the Birds and the Habitats Directives).

For beneficiaries, LIFE-TCY also represented a learning process that enabled the creation and implementation of different environmental policies not only with EU funding but often in close cooperation with

Over the last 15 years, LIFE-TCY has successfully driven capacity building for environmental policy and action beyond the European Union - also in the clinical waste sector in Lebanon.



Small steps leaving big marks: in Russia and other third countries

regional or international partners. These partnerships have been beneficial since third countries could rely on their partners' knowledge and experiences. The networks created also offered a useful communication platform to address common environmental problems. In addition, results developed under LIFE have often been duplicated and followed by neighbouring countries.

LIFE+, the new EU regulation for the period 2007-2013, enters into force in June 2007. Provided that supplementary budget resources are made available, the new programme will be open to members of the European Free Trade Agreement (EFTA) that have become members of the European Environment Agency. It will also be open to candidate countries for accession to the European Union, as well as to the western Balkan countries included in the stabilisation and association process.

Other funding possibilities will be offered under the EU's external assistance instruments2.

² More information on European Neighbourhood Policy (ENP) on http:// ec.europa.eu/world/enp/faq_en.htm



LIFE-TCY by country



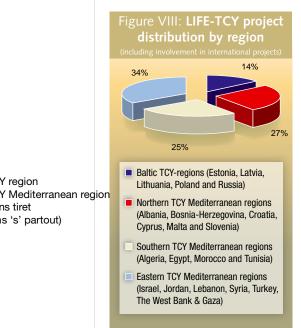
TC TC (sa sar

Geographic scope

LIFE-TCY projects are divided geographically between the Baltic Sea and the Mediterranean. The particular needs of different regions and countries, as well as the enlargement of the European Union, have created a wide scope for projects.

The LIFE programme has been funding projects to improve environmental performance in third countries from the Mediterranean region or bordering the Baltic Sea since 1992. During its lifespan, LIFE-TCY funded projects submitted from 21 third countries (as well as beneficiary of TCY projects aiming at setting-up of ECATs) as well as 40 international projects submitted by international organisations and involving different countries or regions facing similar problems.

With sixteen TCY-countries bordering the Mediterranean, it is not surprising that 86% of all LIFE-TCY projects have been implemented in the Mediterranean region. However, 41 projects were implemented in the five TCY countries in the Baltic region. Four of these went on to become Member States, leaving Russia as the only Baltic country still eligible for TCY funding. Several acceding countries chose to apply for funding under LIFE-Environ-



Y region

ns tiret

s 's' partout)

Who received funding under LIFE-TCY?

- Albania Algeria
- Jordan
- Latvia
- Bosnia and Herzegovina
 Lebanon
- Croatia Cyprus Egypt

Estonia

Israel

- Lithuania
- Malta
- Morocco
- Poland
- Russia (Kaliningrad and St. Petersburg regions)
- Slovenia
- Syria
- Tunisia
- Turkey
- · West Bank and Gaza

ment or LIFF-Nature, as was the case with Estonia, Latvia and Slovenia from 2000 on, while Cyprus and Malta, for example, opted to remain within the scope of TCY until joining the EU.

An overview¹

Albania - AL

8 projects: LIFE-TCY contributed to the improvement of the management and planning capacity of local administrations in the fields of waste management as well as of sustainable tourism development. It also implemented conservation projects for wetland ecosystems and drew up a general plan for water resources. Public awareness of environmental issues was raised, several pilot projects on waste recycling and separation were implemented, and a regional agency on waste management planning was established. Additionally, the Albanian ECAT has been set up by a LIFE-TCY project with a German beneficiary, the Ministry of Environment and Landscape Planning of Thüringen.

Algeria - DZ

3 projects: The programme supported the establishment of a centre for environmental awareness, training and diffusion of information, and assisted in the creation of structures dealing with asbestos pollution prevention and control. Other projects have included the rehabilitation and development of ecosystems.

Bosnia-Herzegovina - BiH

10 projects: After the war in Kosovo, Bosnia-Herzegovina made good use of LIFE funding. Most projects focussed on integrating environmental activities. Funding has been used to promote cleaner production techniques, create economic incentives for industrial development, establish a waterworks association and develop an integrated and coherent environmental protection policy.

An Algerian library for kids, with books on animals, plants and the environment



¹ The following numbers only refer to the projects submitted by the specific country





Demonstration activities for cleaner production in Bosnia and Herzegovina

Giving advice to farmers about the safe use of sewage sludge in agriculture, Egypt

The programme helped local authorities to develop and implement environmental action plans for wetlands and to strengthen the control on diffuse source pollution. LIFE-TCY also provided a framework for local conflict resolution processes and developed links between local, regional and national environmental administrations. Furthermore, it helped to create a secretariat aimed at representing the country when dealing with international organisations under UNEP.

Croatia - CRO

15 projects: In Croatia a large number of LIFE-projects were implemented by public authorities preparing EU membership. Project themes included: collection and recycling of polyethylene terephthalate; international climate change commitments; the implementation of the National Waste Management Plan, and the National Emission Inventory System. Several nature protection projects received funding, the establishment of a Croatian ecological network, the conservation of wolves, and the completion of the Corine land cover database. Support has also been given to conservation activities in protected areas.

Cyprus - CY

17 projects: Cyprus has benefited from projects aimed at improving air quality, setting emission standards, implement-

ing sustainable waste and recycling management systems as well as identifying sustainability indicators for spatial urban development and planning policy. Other work has focussed on urban wastewater treatment and on environmental noise policy. A national network of conservation zones has been created and arrangements for monitoring and controlling chemical substances, industrial pollution and emissions of volatile organic compounds have been developed. Environmental public awarenessraising was an important result of most projects, and a number of projects were linked to the country's preparation for EU membership in 2004.

Egypt - ET

6 projects: LIFE-TCY has assisted Egypt in promoting the environmentally sound disposal of municipal solid waste, to reinforce the administrative structures dealing with solid waste management, and to introduce clean technologies in the tanning industry. Recent projects concerned capacity building in the water supply and sanitation sector as well as with flood protection and management.

Estonia - EE

3 projects: Activities in Estonia focussed on environmental training and audit schemes, and were implemented in view of the country's accession to the EU.

Israel - IL

11 projects: The main emphasis in Israel has been on environmental protection, such as of wetlands and coastal plains, groundwater and endangered bird species. Most projects have been implemented by regional or municipal authorities. Funding also supported the establishment of a centralised management plan for the treatment of organic and local waste, the development of models for environmental education and increased co-operation on wastewater treatment in rural areas, along with public awareness activities.

Reintroduction of formally disappeared animal species in Israel



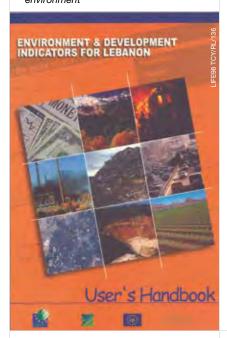
Jordan - HKJ

5 projects: Work in this country has included the creation of new structures for nature protection and sustainable development of natural heritage, the implementation of a management system for hazardous materials, the development of methods supporting sustainable tourism, voluntary agreements, and economic instruments to promote sustainable environmental policy.

The Lebanon - RL

8 projects: In the Lebanon, LIFE-TCY has assisted administrative strengthening at a national level, the training of staff and main partners implementing environmental requirements and, in particular, the implementation of an environmental auditing system for industries. The establishment of a Cleaner Production Centre which offers comprehensive services and advice on cleaner production, the preparation of an action plan for protected areas and the introduction of a mechanism for reducing forest fires, along with quarry rehabilitation and the management of infectious medical waste have also been made possible.

Producing guidelines for a better environment



Latvia - LV

1 project: Funding in Latvia was aimed at the protection of rare and endangered species of plants and animals.

Lithuania - LT

1 project: In Lithuania, the programme supported the implementation of cleaner production projects in the textile industry.

Malta - MT

8 projects: LIFE-TCY funding facilitated the setting up of a soil information system and a maritime environmental risk management system and assisted in the drawing up of a code for good agricultural practice and an action plan for reduction of nitrates pollution. It also contributed to the creation of a pollution control coordination unit within the Ministry of Environment, the introduction of an environmental management system, eco-auditing and the establishment of a pilot air quality monitoring system. Other projects supported the country's preparation for EU membership.

Morocco - MA

14 projects: Several of the projects in Morocco concentrated on promoting sustainable environmental management principles through the introduction of environmental management and auditing systems and awareness-raising for industries. Others assisted in developing national guidelines for the decontamination of liquids, implementing training modules for management of industrial pollution, evaluating pollution risks and prevention, as well as managing solid domestic waste and wastewater. A number of projects worked on nature protection, such as protecting biodiversity and water resources, and establishing a wetlands co-ordination unit within the Ministry of Water and Forests. The programme also helped strengthen the environmental management role of national and local authorities through the establishment of a policy



Aerial view of the Ghajn Tuffieha Bay, Malta, showing the sandy beach, clay slopes and boulder scree.

framework for proper management of natural and technological risks, the creation of an important central infrastructure for sorting waste and extracting recyclable materials, and through supporting the drafting of legislation and the formation of administrative structures for implementation and enforcement of adopted legislation.

Poland - PL

1 project: In Poland, LIFE assisted the creation of an international nature park in the Lower Oder valley.

Russia (Kaliningrad and St. Petersburg regions) - ROS

24 projects: LIFE-funding has supported the sustainable management of groundwater sources on the Estonian-Russian border, the implementation of an environmental action plan for municipal solid waste management in St. Petersburg and environmental tools in municipal enterprises of Kaliningrad. Other activities included the development of a network of protected areas in the Leningrad region and an action programme on the conservation of wild fauna and their habitats, as well as the implementation of

Clinical waste treatment pilot in St. Petersburg, Russia





a system to deal with oil spills in the Baltic Sea. The programme also supported activities dealing with air pollution caused by traffic and the integration of geological information in city management. Assistance has been given to improve the administrative capacity of local governmental bodies for dealing with environmental issues. Further work has been carried out to implement environmental economic tools and voluntary agreements compatible with European practices, as well as to align regional environmental practices in Russia with European ones and to meet the specific requirements of EU legislation.

In addition to these, three LIFE-TCY projects submitted by German and Danish municipalities contributed to the establishment of three Environ-

Assessing pollution of Syrian textile mills



mental Centres for Administration and Technology (ECATs) located in Riga, St. Petersburg and Kaliningrad. Twinning arrangements with the German cities of Bremen and Hamburg respectively have been the basis for ECAT Riga and ECAT St. Petersburg. The ECAT Kaliningrad, which is currently one of the most active beneficiaries of the LIFE-TCY programme, has been established in cooperation with the city of Aalborg.

Slovenia - SLO

2 projects: In the early 1990s, Slovenia received LIFE-funding for two projects. One aimed at the establishment of the Notranjski Park and a UNESCO reserve, the other at drafting environmental regulation for solid waste management.

Syria - SYR

5 projects: In Syria, LIFE-TCY has been involved in introducing environmental management systems for businesses, capacity building within public administration bodies, creating an environmental impact assessment unit at the national level and



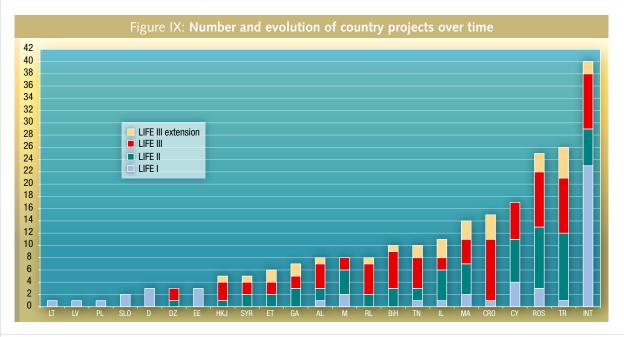
Preserving karstic phenomena in Slovenia: the intermittent Lake Cerknica appears and dries out every year

general environmental directorates at the regional level, and in promoting sustainable local development planning. Specific sectors have included: municipal waste management, medical waste, pollution prevention and control for the textile industries, marine oil pollution, integrated pollution control and prevention, as well as public awareness activities.

Tunisia - TN

10 projects: The programme has contributed to the establishment of

Turkey and Russia submitted and implemented the most TCY projects over the years, but the highest number of projects were international projects that were either submitted by an international organisation or implemented in several countries.



a system for environmental management and monitoring, the introduction of eco-labelling provisions in the textile, tourism and agricultural sectors as well as pilot technologies for wastewater treatment in the tanning sector and water quality monitoring. A national strategy and an action plan for environmental education have been drawn up as well. In addition, pilot desertification monitoring systems have been established in Tunisia and neighbouring Morocco, a decision aid system for natural resources and environmental management was created, and measures to preserve the ecosystems of three Tunisian archipelagos have been undertaken. LIFE-TCY has also supported the development of five local Agenda 21 action plans in local communities and the creation at the national level of a steering committee including representatives from 13 ministries, in charge of coordinating local initiatives.

Turkey - TA

26 projects: Most of the recent projects in Turkey have been linked to the country's preparation for EU membership. Themes include the establishment of an environmental legislation information system for SMEs, the development and implementation of a monitoring system for the preservation of the marine environment, and the establishment

Collection of wastewater samples in the Beit-Lahia area in the northern Gaza Strip





of a sustainable network of relevant organisations for the effective management and protection of lakes in Turkey. Other projects targeted the introduction of environmentally and economically sound mechanisms for dealing with agricultural residues as well as climate change, and the establishment and implementation of an action plan for strengthening solid waste management. Several projects involved the implementation of the requirements of specific EU Directives into national legislation. Work was also undertaken to develop and launch local awareness campaigns, and to establish special environmental education programmes. A recent project aims to preserve thermal water resources, with a view to encouraging therapeutic tourism.

The West Bank and Gaza - GA 7 projects: The programme has assisted in the capacity building of the Environmental Quality Authority, allowing for better implementation of the Palestinian Environmental Action Programme. The establishment of a centre for rural environmental protection, the development of a rural environmental action plan and the preparation of a coastal and marine action plan have also been made possible by LIFE-TCY funding.

International - INT

40 projects: Of the 40 international projects (often submitted by International Organisations) financed under LIFE-TCY, 22 have been implemented in a single country. Several were realised in two to six countries facing similar environmental challenges, or in a specific geographical region. Particularly in the Mediterranean, international projects involved many countries: 14 participated in a project dealing with eco-efficiency within companies, 13 in a project aimed at improving the environment in coastal cities and ten countries were involved in a project on port state control capabilities.

In total, 21 countries have been involved in international projects. The Lebanon (12), Tunisia (12), Jordan (11), Syria (10) and Morocco (10) participated most.

Projects themes included: sustainable management of bird hunting, capacity building of environment ministries in applying environmental economic tools and voluntary agreements, strengthening of capacities of businesses, development and implementation of tools for the control and management of land degradation, implementation of policies for wetlands' management, and accidental marine pollution response systems. A recent project focusses on developing strategies for sustainable tourism, and another on the protection of biodiversity of the Sava river basin floodplains.



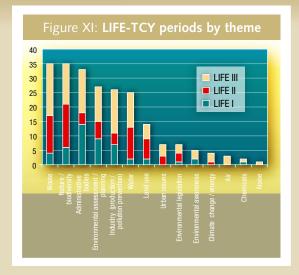
LIFE-TCY by theme

LIFE-TCY projects have focussed on a wide range of subjects and have often addressed key environmental issues in line with EU policy while also tackling specific problems of high priority or urgency in the respective beneficiary countries.

From 1992 to 2006, neither the thematic priorities set by LIFE-TCY projects nor the areas of implementation changed considerably. The most important sectors dealt with were waste management and the protection of nature and biodiversity, with 36 projects each (16% of all LIFE-TCY projects), followed by water (13%). 33 projects (14%) supported the establishment of administrative bodies for environmental management. Especially during LIFE I and LIFE II, the setting up of Environmental Centres for Administration and Technology (ECATs) in different Central and Eastern Europe countries, the creation of other types of environmental centres1, networks2 or new units in environmental administrations3 were among the programme's major achievements.

The proportion of projects tackling industrial pollution prevention, air quality and the management of the urban environment increased during LIFE II and especially LIFE III. The growing awareness of the need to meet the challenges of climate change also became visible under LIFE III, which for the first time funded TCY projects dealing with climate change and energy issues.

The focus of solid waste management projects varied throughout the different LIFE phases, as well as from country to country. During LIFE I, projects concentrated mainly on strengthening solid waste management administrations and the implementation or improvement of technical disposal solutions. Following the general trend to prevention-oriented integrated waste management, many of the newer waste projects aim at waste minimisation and recycling. Likewise, while waste projects in the first years of the LIFE programme often tackled the management of mixed household waste, newer projects generally focus on specific waste streams and appropriate specialised treatment.



Nature projects also addressed a wide variety of issues, becoming more complex with the advance of environmental policies and capabilities in the benefiting countries. Many nature and biodiversity oriented TCY projects aim to protect specific areas such as wetlands4. Forest protection, marine biodiversity and the protection of threatened species are other prominent subjects of LIFE-TCY projects on nature conservation.

The sustainability of conservation initiatives funded by projects was a major objective. For example, in Croatia, the Lonjsko Polje Nature Park was involved in three subsequent LIFE projects⁵, each one building on the results of the previous ones.

¹ For example: LIFE00 TCY/RL/020

² For example: LIFE97 TCY/INT/051

³ For example: LIFE93 TCY/INT/6053

⁴ For examples: LIFE99 TCY/BiH/035, LIFE04 TCY/AL//000004,

LIFE03 TCY/INT/000031, LIFE02 TCY/INT/069

⁵ LIFE00 TCY/CRO/076, LIFE05 TCY/CRO/000111 and LIFE06

TCY/INT/246



Nature and biodiversity protection

Conservation network building in Cyprus

As part of an initiative to combat the pressures on habitats from tourism and increased agricultural land-use in Cyprus, one LIFE project gathered important information for the creation of a network of conversation areas in the country within the framework of Natura 2000.

Cyprus is known for its considerable diversity of species and habitats and for the presence of endemic, rare and endangered fauna and flora. However, it has suffered from environmental degradation, particularly due to the development of tourism and encroachments on land for agricultural uses. As a result, the need to step up environmental protection measures has been made a national priority.

The project, which was coordinated by the Ministry of Agriculture, Natural Resources & Environment, helped identify those habitats and endangered species in Cyprus listed in the annexes of the Birds and Habitats Directives, and also made recommendations for further inclusions. A list of 38 Special Areas of Conservation (SACs) for inclusion in the Natura 2000 network was drawn up, and digital maps for each of these sites was produced. The Cypriot authorities approved the list of SACs. This represented the first step towards the implementation of Natura 2000 in Cyprus. These sites immediately benefited from a reduction in harmful activities and more sustainable development.

National biodiversity database

Another key aspect of the project was the creation of a database. BIO-CYPRUS, which contains additional tables and templates necessary for recording data on flora and fauna specific to Cyprus. BIOCYPRUS is useful for the monitoring of the SACs and for the subsequent drawing up of management plans. The database will also



The north coast of the Akamas Peninsula, one of the SACs approved by the Cypriot authorities

form the basis of a national archive of ecological data in Cyprus. In addition, the database can be used by various ministries for the improvement of physical planning and environmental impact assessment.

Project results were disseminated through three information seminars. The beneficiary also organised information meetings with Cypriot NGOs. Two articles on the project were published in the bi-monthly journal of the Greek Centre of Biotopes-Wetlands and the Habitats Directive was presented in two well-known weekly Cypriot television programmes on rural life. Two pamphlets and a poster were distributed (3,000 copies). The pamphlets presented the objectives and results of the project, explained the purpose of the Habitats Directive and answered common questions concerning the

implementation of the Natura 2000 network. Finally, a book with an in-depth presentation of the project's results was distributed to a targeted audience.

Project Number: LIFE98 TCY/CY/172

Title: Special areas of conservation (Directive 92/43/EEC) in Cyprus

Beneficiary: Ministry of Agriculture, Natural Resources & Environment (MANRE)

Total Budget: € 318,000

LIFE Contribution: € 159,000

Period:

01-Apr-1999 to 30-Sep-2002

Beneficiary's website: http://www. cyprus.gov.cy/moa/Agriculture.nsf/ index_en/index_en?OpenDocument

Contact: Nicos S. Georgiades Email: rocperiv@cytanet.com.cy





Nature and biodiversity protection

Restoring and managing coastal areas in Malta

The coast of Malta is one of the country's most valuable resources, but development of the less-than-200km-long coastline has inflicted a heavy price on natural habitats. A LIFE-TCY project implemented integrated coastal zone management plans at two protected coastal sites on the island.





LIFE-TCY needed: to survey the unspoilt Rdum Majjiesa area and to fight erosion of the blue clay slopes

The sites of the project, Ghajn Tuffieha (on the main island of Malta) and Ramla Bay (on the island of Gozo), are both important tourist areas. They also included agricultural land, and both farmers and tourists worked closely with the project's site managers, the Euro-Mediterranean Centre on Insular Coastal Dynamics and the Gaia Foundation, on initiatives for the rehabilitation of biodiversity and protection of the sites' features of ecological and scientific importance (including the control of erosion of the blue clay slopes).

The project carried out its wide-reaching activities through a participatory approach. Local farmers were encouraged to adopt environmentally friendly farming techniques and were consulted on the implementation of an organic farming project. The pilot project achieved a production sufficient to establish an organic food club, which had attracted 40 members by the end of the project. This aspect of the project also helped protect the region's local aquifers by promoting the use of organic fertilisers and pest control agents.

Restricting access and raising awareness were the two means chosen to combat some of the negative effects of tourism on the coastal environment. The project made sure that sensitive areas were protected from illegal structures, unofficial footpaths and unrestricted access. Bollards and fencing were also installed, and the footpath systems surrounding the beaches were modified and enforced through regular warden patrols and even, where necessary, by security or police officers.

A beach-cleaning and separated waste management system was implemented at both sites. Agreements between the project management, the Malta Tourism Authority, and the Ministry of Resources will ensure the continuation of these activities at the Ghajn Tuffieha site, which is intended to serve as a pilot project for the extension of the approach to other Maltese beaches.

The public was informed of the reasons behind these measures by the erection of information boards which explained the importance of maintaining the island's biodiversity. The project also carried out guided tours for visiting

groups of tourists. Finally, the project results were shared at conferences, seminars and on the Gaia Foundation's website.

Indigenous tree and shrub nursery

One of the lasting achievements of the project, however, has been the establishment of Malta's first indigenous tree and shrub nursery. At the close of the project, the nursery contained 10,000 saplings and 1,500 seedlings. The project has also contributed to the rehabilitation of the two project sites by planting large numbers of indigenous species and also by ensuring that they are maintained through watering and fire protection activities. Additionally, an "adopt-atree" campaign was implemented to help support the afforestation activities. The nursery promises to be a resource that will enhance conservation efforts in Malta in the future.

Project Number: LIFE99 TCY/M/095

Title: Integrated management of specially protected coastal areas in Malta

Beneficiary: Euro-Mediterranean Centre on Insular Coastal Dynamics (ICOD)

Total Budget: € 379,000 **LIFE Contribution:** € 189,000

Period:

01-Feb-2000 to 30-Apr-2003 **Website:** www.projectgaia.org **Contact:** Michelle Cassar

Email: michelle.cassar@fis.org.mt



Restoring wetlands and endemic species in Israel

Draining the Hula Lake in Israel has severely affected the region's ecosystems and the water quality from Lake Kinneret, the country's largest single source of drinking water which is linked with the Hula Valley by the Jordan River. A LIFE project to restore wetland habitats in the area has led to the successful reintroduction of several animal and plant species.

The Hula Lake was drained in the 1950s as a public health measure to contain malaria. The lake has since been reflooded, providing an opportunity to restore some of the wetlands and reintroduce endemic plant and animal species. These included Persian fallow deer (Dama dama Mesopotamia), white tailed eagles (Haliaeetus albicilia), eight indigenous plant species; and a herd of locally adapted cattle (Baladi).

The project, which was carried out by MIGAL - Galilee Technology Centre, an applied research centre, studied the capacity of half-dried areas and the effect of grazing on the vegetation in moist habitats. It also conducted a grazing trial with donkeys. The results indicated that even heavy continuous grazing leads to an open, vigorous pasture. These findings formed the basis for the introduction of grazing animals, including the Baladi cattle, a locally adapted species that is able to graze on poor pasture.

In two lakeside areas, trees were planted to provide shade and shelter for animals and birds. Other types of

Birds are happy guests at the re-flooded Hula lake



habitat restoration included the creation of artificial islands and exposed soil surfaces for common tern (Sterna hirundo) nesting. The project also collaborated with local farmers to protect several bird species, including the collared pratincole, cranes and pelicans, offering a unique tourist attraction in the area during migration periods. For example, finding alternatives to mechanical weed control has resulted in a friendlier environment for the collared pratincole (Glareola pratincola).

Managing reintroduced species

To record and assess the impact of the re-flooding and subsequent management of bird populations, the project carried out a number of monitoring activities, including an analysis of the habitats, the number of specimens, nesting data and response to management practices. The project also produced a yearly updated vegetation map of the newly flooded Lake Agamon, located in the southern part of the Hula Valley. These monitoring activities have proven invaluable in allowing the project to carry out preventative measures and effective pest control.

Monitoring activities also showed that the reintroduced species populations are stable and that bird numbers had already increased before the end of the LIFE project. For example, 50 breeding pairs of collared pratincole were observed at the project site and successful nesting began around the lake. The common tern was using the artificial islands for winter resting (although not yet for nesting).



Characteristic endemic plants and animal species were reintroduced by the LIFE project.

A small breeding herd of Persian deer was established, and the Baladi cattle were surviving without additional feed. Finally as part of the project, 12 pairs of white-tailed eagles were released, and at least one is nesting in the area.

The LIFE project created a rich habitat for birds, important from the viewpoint of both nature conservation and ecotourism. Furthermore, the initiative demonstrated the possibility of minimising conflicts between agriculture and nature protection.

Project Number: LIFE97 TCY/IL/038

Title: Restoration and conservation in the re-flooded Hula wetland habitat in northern Israel

Beneficiary: Migal, Galilee Technological Centre

Total Budget: € 394,000 LIFE Contribution: € 197,000

01-Nov-1997 to 31-Jan-2001

Website: http://www.migal-life.co.il

Contact: Mario Gutman Email: mgutman@shani.net



Sustainable land-use development and planning

Fighting forest fires in the Lebanon

Forest fires in the Lebanon can have a devastating impact on the environment, destroying hundreds of hectares of forests, shrubs, and grasslands. Combating fires is a priority issue for the Lebanese government, and a LIFE-TCY project aided the establishment of operational structures for fighting and preventing fires.



In 2002, volunteers of LIFE-TCY project beneficiary AFDC participated in fighting several forest fires.

Project Number: LIFE00 TCY/RL/022

Title: Towards a sustainable mechanism for forest fire fighting in Lebanon

Beneficiary: Association for Forest Development and Conservation

Total Budget: € 469,000 **LIFE Contribution:** € 319,000

Period:

15-May-2002 to 14-May-2005

Website: www.afdc.org.lb
Contact: Mounir Bu Ghanem
Email: afdc@afdc.org.lb

Though the Lebanese civil defence and army lead forest fire fighting efforts, their interventions often occur relatively late, after fires have spread. Difficulties are further aggravated by the weak and ad hoc fashion of local participation in forest fire fighting. In 1993, after severe forest fires on Mount Lebanon, the project beneficiary, the Association for Forest Development and Conservation (AFDC), was founded to address these issues. AFDC has acquired experience in fire fighting and control through a voluntary system created in several areas of the Lebanon. It has been implementing capacity building and awareness-raising activities on forest conservation and development targeted at local communities.

The project aimed to build on these initiatives by establishing a working mechanism to detect, prevent and fight forest fires through restoration, capacity building, public awareness and information campaigns in five areas of Mount Lebanon and South Lebanon (Ramlieh, Kornayel, Ras El Matn, Dmit and Mtein located in Mount Lebanon).

These areas have valuable mixed forests that are highly vulnerable to fires. The project aimed to demonstrate appropriate techniques to fight forest fires, and means to implement restoration operations and draw up emergency action plans for local communities to combat fires. The underlying goal of the project was to build stakeholder and national participant capacities

on forest fire issues, based on a participatory approach.

Successful structures

The following actions were undertaken and results achieved:

- Facilitation of conservation actions such as restoration and prevention of forest fires by local groups, including local committee members, concerned stakeholders and the Al-Shouf Cedar Society:
- Restoration of 13 hectares of degraded areas in the project sites;
- Elaboration of forest-restoration and fire-prevention action plans for project sites;
- Creation of a national database for forest fires, and forest fire risk maps of the Lebanon and the project sites;
- Implementation of awareness campaigns and publishing of project outputs at local and national levels;
- Development of co-operation procedures with relevant public entities such as the Lebanese civil defence and army, the Lebanese Red Cross and forest guard centres. The Ministry of Interior supported the initiative to launch and implement a national media campaign against forest fires.

The project succeeded in establishing an operational structure enabling local communities to avoid and fight forest fires. This represents a sustainable investment in the preservation and development of remaining forests in the Lebanon.



Improving air quality and reducing fuel consumption through traffic legislation

A LIFE-TCY project provided a needed boost to the long-term goals of reducing the environmental effects of road transport in Cyprus. The project developed a series of traffic-emission reduction measures that will bring legislation and environmental infrastructure in Cyprus in line with EU standards.

While most EU Member States have made significant progress in reducing the adverse environmental effects of road transport by developing environmental planning and relevant administrative structures and policies, in 2002 the situation in Cyprus called for urgent intervention. The country had no emission standards and no periodic inspection of vehicles' emissions. It clearly needed to adapt its national legislation prior to EU membership in 2004, and to improve its administrative capacity to meet EU standards.

A LIFE-TCY project, led by the Cyprus Ministry of Communications and Works, aimed to bring about a reduction in vehicle-related air pollution and fuel consumption through the establishment of a legislative framework in accordance with EU practices and relevant administrative instruments and structures.

Methodology and results

1. In order to harmonise Cypriot legislation with several EC directives, the project team drew up a range of new laws covering emission standards for newly registered vehicles, the periodic inspection of in-use vehicles and fuel quality specifications. Such legislation will have a positive impact on reducing road traffic emissions. For example, measures of road worthiness are estimated to save up to 2,000 tonnes of carbon oxide (CO), 650 tonnes of hydrocarbons and 170 tonnes of nitrogen oxide (NO) emissions per annum.

- 2. A newly established tax system for Cypriot vehicles has accelerated the renewal of vehicles and reduced the number of high fuel consumption cars. These reforms constitute a major project success since such large structural changes are usually very difficult to achieve. They are also estimated to save at least 17,000 tonnes of CO, 7,500 tonnes of hydrocarbons and 1,300 tonnes of NO emissions per annum.
- 3. Through the introduction of several laws on catalytic converters, the project aimed to bring the national legislation in line with a number of EC directives. The project also recommended exporting catalytic converters for recycling.
- 4. The proposals of the beneficiary for the renewal of the bus fleet and more bus lanes were also agreed on by the competent authorities. Although these have not yet been implemented, the beneficiary is optimistic that funding for the required major investments will be approved and that Cyprus will have an efficient bus service within the next five years.
- 5. The relevant authorities approved several reforms proposed in view of the administrative structure concerning road traffic emissions in Cyprus. The creation of a separate unit within the Ministry of Communications and Works constitutes a significant institutional strengthening that is expected to lead to more efficient management of road traffic emissions.





Inspection of imported second-hand cars in Cyprus

The LIFE project was highly innovative at a national level and very successful. Most of its results, in particular the legislation and policies developed in line with EU standards, are long-term measures. The realisation of the potential benefits and their sustainability is safeguarded by the administrative instruments and structures that have been put in place. Such structures also ensure efficient implementation of legislation and enable progress to be monitored.

Project Number: LIFE00 TCY/CY/051

Title: Legislation and policy options for air quality in Cyprus

Beneficiary: Ministry of Communications and Works, Cyprus

Total Budget: € 514,000 **LIFE Contribution:** € 358,000

01-Feb-2002 to 31-Jul-2004

Beneficiary's website: http://www. mcw.gov.cy/mcw/rtd/rtd.nsf/

Contact: Yiannis Nicolaides

Email: ynicolaides@rtd.mcw.gov.cy





Sustainable land-use development and planning

Sustainable urban planning in Cyprus

A LIFE-TCY project, URBANGUARD, aimed to facilitate the incorporation of urban sustainability indicators into the spatial planning decision-making process in Cyprus. This would greatly facilitate the current planning system, where until the project started no integrated analysis tool had been available to deliver early warnings and help assess the impacts of development on the urban environment.

The lack of systematic monitoring tools, the inadequacy of available data and the application of empirical practices for the evaluation of spatial trends has resulted in planning processes that are not based on transparent criteria, and are therefore vulnerable to pressures from individuals and local authorities that often result in intense and unsustainable development. This situation has led to the aggravation of a range of environmental problems in urban and periurban areas, including urban sprawl, increased traffic, and air, water and noise pollution. Therefore, a new approach to monitoring development plans through an appropriate planning analysis tool was essential. This was to be based on the principles of sustainability and recognised by all spatial development stakeholders.

Project Number:

LIFE03 TCY/CY/000019

Title: Capacity building for enabling the incorporation of urban sustainability parameters in Spatial Urban development and planning policy and practices through the use of indicators in Cyprus

Beneficiary: Department of Town Planning and Housing (Cyprus Ministry of the Interior)

Total Budget: € 425,000 (expected)

LIFE Contribution: € 293,000 (expected)

Period:

01-Feb-2004 to 31-Jan-2007

Website: http://www.moi.gov.cy/

urbanguard

Contact: Phaedon Enotiades

Email: penotiades@tph.moi.gov.cy

The specific objectives of the LIFE project were to:

- Define urban spatial development policies and goals;
- Coordinate the various competent government departments to promote a mutually agreed integrated indicator scheme:
- Select appropriate urban sustainability indicators applicable in Cypriot cities:
- Establish monitoring and reporting tools and capabilities for sustainability indicators;
- Carry out a pilot study to implement the indicators in selected areas; and
- Disseminate project results.

Urban sustainability indicators

URBANGUARD established some 100 indicators across ten broad thematic categories. These address issues typical of Cyprus and other Mediterranean areas, such as tourism development and heritage preservation, but also spatial development issues common to small and medium-sized towns in other parts of Europe. Specific indicators include the proportion of seafront designated as a tourist zone, percentage of listed buildings restored, perceived adequacy of cultural infrastructure, number of protected landscapes and intrusion of development into good agricultural land.

These urban sustainability indicators for use by experts and authorities when preparing and reviewing development plans were piloted in Strovolos, a municipality of the greater Nicosia urban area. They were incorporated into a geographic information



Town planner, Skevi Makariti, and project manager, Phaedon Enotiades, on a tour of Strovolos, for which the set of urban indicators compiled was piloted

systems-based tool (GIS), which was developed by URBANGUARD. The project also offered training assistance for the new tool.

The results of the project were widely disseminated and were presented at a conference in December 2006 in Nicosia. The conference also discussed the value of the concept of sustainability for spatial planning in Cyprus, the use of indicators to monitor sustainability, adapting sustainability indicators to the planning system in Cyprus, the functionality of the URBANGUARD system, and the use of GIS within the project.

The sustainability of the project will depend on several factors, such as the utility of the tool developed or the guidance and training provided on the tool's use. The Department of Town Planning and Housing intends to use the planning tool in the monitoring and future reviews of development plans, as provided for by the Cyprus Town and Country Planning Law.



Sustainable inland and marine water management

Improving wastewater management in Gaza

To combat ineffective management of wastewater in Gaza, a LIFE-TCY project helped establish urgently needed guidelines and proposals on effluent and reuse standards for the region.

Inadequate management of water resources has meant freshwater is scarce in Gaza. Up to 40% of supplied water is lost and only around 60% of the population has access to the sewer system. Effective management of wastewater, however, would lead to a reduction of the wastewater that is discharged untreated into the sea and would allow wastewater to be reused for irrigation or the replenishing of groundwater.

In this context, the LIFE-TCY project intended to formulate guidelines for the management and use of treated wastewater as an additional water source in the Gaza Strip. Its main objectives were to:

- · Assess the quality and quantity of current wastewater treatment and disposal in the Gaza Strip;
- · Based on this study, draw up guidelines for wastewater management in the region; and
- · Build the capacity of local technicians in the field of wastewater monitoring and analysis.

The project, implemented by a group of experts from Palestine, Morocco and

In Gaza, some existing treatment facilities (based on an aeration system) tend to be overloaded

Germany, conducted an evaluation of the status of wastewater and effluent for reuse as a first step towards producing guidelines on treated water reuse. Over a six-month period, the beneficiary - the Islamic University of Gaza (IUG) - carried out field measurements and sample collections of water quantity and quality. The study resulted in the report, "Comprehensive monitoring program: wastewater quality in six locations in Gaza Strip" (October 2001).

Other aims of the project included the identification and planning of integrated solutions on water resource management, and the establishment of institutional structures for future operational management. To meet these objectives, two training sessions were organised. The first was on sampling and analyses for wastewater engineers. The second workshop (held in Morocco) trained ten Palestinian wastewater engineers, agricultural engineers and environmentalists on wastewater standards and technology.

Policy guidelines

These initiatives formed the basis for the key output of the project: the "Policy Guidelines for Sustainable Wastewater Management in the Gaza Strip" (June 2002) 1. This document is divided into two sections:

1. Legal and institutional issues, including the draft Palestinian standards for treated wastewater and the requirements for a water management plan.

1 http://www.adelphi-research.de/projektberichte/Guidelines Palestine.pdf

2. Technical issues and case studies, covering wastewater quality, wastewater treatment technologies, potential applications of treated water and public awareness measures. It also contains a number of country studies, from Germany, Tunisia, Israel and Jordan.

The Palestinian Environmental Quality Authority (PEQA) took into consideration many of the project's findings. The policy guidelines are available on CD, along with a video of the project's final workshop and two presentations on the project's results, for example in June 2001 at the MedAqua INCO-MED conference in Amman.

LIFE project staff collect water samples



Project Number:

LIFE99 TCY/GA/141

Title: Policy Guidelines for Wastewater Management in the Gaza Strip

Beneficiary: The Islamic University

Total Budget: € 452,700 (expected)

LIFE Contribution: € 317,000 (expected)

01-Apr-2000 to 30-Jun-2002

Beneficiary's website: http://www.iugaza.edu/eng

Contact: Samir Afifi

Email: safifi@iugaza.edu





Sustainable inland and marine water management

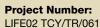
Preserving the marine environment of the Ölüdeniz Lagoon

A LIFE-TCY project aimed to protect the Ölüdeniz Lagoon in Turkey and its surroundings with the help of environmental-awareness measures.

The Ölüdeniz Lagoon, located in south-western Turkey, is a very popular tourist area in the Mediterranean Sea. Several endemic species live in the area, and the coastline consists of beautiful sandy beaches, bays, islands, islets and other fragile ecosystems. This natural habitat is also important for the survival of several sea birds and loggerhead turtles. However, the lagoon ecosystem is threatened by uncontrolled wastewater and solid waste disposal, oil spills and heavy tourism pressure.

The LIFE project LAGOON aimed to combat these threats via monitoring and control of the lagoon water quality, awareness-raising activities and the preparation of long-term protection plans and strategies.

At the start of the project, the Ölüdeniz Lagoon was on the verge of being discovered by major tourism operators. Tourism growth represents a growing threat to the aquatic life of the Ölüdeniz Lagoon and its bay. An increasing



Title: Preserving the Marine Environment of the Ölüdeniz Lagoon

Beneficiary: TÜDAV – Türkiye Deniz Araştırmaları Vakfı

Total Budget: € 336,000 (expected)

LIFE Contribution: € 225,000 (expected)

Period

01-Jan-2003 to 31-Dec-2004

Website: www.tudav.org/oludeniz Contact: Prof. Dr. Bayram Öztürk Email: tudav@superonline.com



An underwater photo campaign revealed the beauty of the rich underwater life of the Ölüdeniz Lagoon.

number of boat operators, uncontrolled construction of beach facilities, litter on the beaches and the discharge of wastewater from tourist resorts has all had an impact on the lagoon.

During the project's implementation, the Turkish Marine Research Foundation (TÜDAV) established a water quality laboratory and a project office for the organisation of public-awareness events in the Ölüdeniz village. Awareness raising focused on hotel owners, fishermen and tourist boat operators as well as local pupils, students and national/regional authorities. The drawing up and distribution of a biodiversity map of the lagoon, beach cleaning and underwater photo campaigns drew the attention of the local population to the rich underwater life of the lagoon and the pollution threatening this aquatic environment.

In addition to these activities, TÜDAV co-operated on a local scale with the Muğla Province Governorate for the preparation of a tender for the operation of the Ölüdeniz Beach, setting for the first time quantitative and qualitative standards for tourism activities at the Ölüdeniz lagoon. TÜDAV also prepared local emergency response plans for oil spill accidents. Although an oil pollution incident has yet to threaten the Ölüdeniz lagoon, such an event is likely in the Mediterranean Sea due to the high volumes of sea transport.

LAGOON's output

Although the reception of the project by local stakeholders was less promising than expected, the project's outputs were highly appreciated by regional and national authorities. The Province Governorate of Muğla endorsed the TÜDAV Foundation's approach to limit tourism activities in the most sensitive lagoon area and restrict construction (benches. commercial buildings and mobile commerce) on the lagoon's beaches. The Turkish Ministry of Environment and Forest, which is preparing emergency action plans for Turkish coastal areas, incorporated some of the main ideas developed by the LAGOON project into its policies (changes to the law and related regulations on emergency response and protection of coasts).

TÜDAV transferred its permanent office at the Ölüdeniz village to the local NGO Hisarönü, and is currently applying the experiences and lessons learnt during the LAGOON project to the creation of an underwater protection area at the Gokceada Island in the North Aegean Sea.



Sustainable inland and marine water management

Developing local institutional capacity in environmentally sensitive areas

The EU supports several interrelated projects to redevelop the organisation of environmental protection in Bosnia-Herzegovina. One particular LIFE project, which focused on the Bardača wetland, strengthened the local capacity for environmental planning and project management.

The Bardača wetland is one of the most important ecosystems in the Republic Srpska, as it is a stopover for migratory birds. Although it is under considerable development pressure and the effects of human activities may soon become irreversible, the wetland area can still be preserved and the sustainable development of its surrounding areas ensured.

Responding to the need for immediate action, the LIFE project LICENSE aimed to (1) assist local communities in developing the institutional potential to deal with environmental protection at the local level; (2) facilitate the process of environmental protection by providing the operational structure and guidelines, as well as training local authorities and enterprises to co-operate and resolve conflicts; and (3) help in the protection of an important wetland1 and demonstrate how the environmental sector can be organised at a local level in Bosnia-Herzegovina (BiH)2.

Vegetation map displaying data collected on the Bardača wetland's flora and fauna

The LICENCE project achieved good results. It strengthened the capacities of local authorities and communities in environmental planning and project management. The project's success in developing the human resources for existing and future institutional structures was remarkable since it usually takes a lot of time for current staff, in particular engineers, to learn how to manage issues of conservation and environment.

The project led to the formulation of a methodology to develop local environmental action plans (LEAP), which was approved by the BiH Environmental Steering Committee as official guidelines to be applied across the country. Local level professionals received training on how to use this methodology and the instruments for environmental planning, including a conflict resolution tool.

A local stakeholders' committee was established in Srbac, with an advisory board in charge of co-ordinating local level co-operation on environmental issues. The committee collected data to draft the LEAP for Bardača. Important elements aim at regulating and at repopulating indigenous habitats. In addition, the project drew up a local spatial development plan that was not foreseen in the initial project proposal. After the project ended, this plan was officially adopted by the local government and its implementation started in 2006. The advisory board will ensure the continuation of the activities and sustainability of the projects' results beyond the end of LIFE funding.

Finally, public awareness was raised through workshops, dissemination activities, presentations at school, TV programmes, an up-to-date website, the publication of a monograph "Life in Wetland" and the production of a 30-minute film. The film and the "Life in Wetland" publication have won international prizes, and have been instrumental in attracting attention and additional funding for follow-up activities related to the wetland.

In March 2007, the conservation efforts were widely recognised when the Bardača wetland was included in the Ramsar list of wetlands of international significance.

of the region's wetland flora and fauna and applied the methodology and tools maintaining the water systems, and

mental Sensitive Areas of the Republic Srpska

Project Number: LIFE00 TCY/BIH/041

Beneficiary: Institute for Urbanism

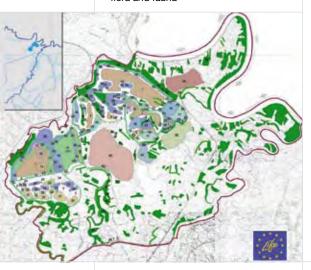
Title: LICENSE: Local Institutional

Capacity Development in Environ-

Total Budget: € 507,000 **LIFE Contribution:** € 337,000

01-Jan-2002 to 31-Dec-2004 Website: www.life-license.rs.sr

Contact: Dalibor Bielica Email: uzbl@iu-rs.com



1 Also: Common implementation strategy for the Water Framework Directive (2000/60/ EC). Horizontal Guidance on the Role of Wetlands in the Water Framework Directive.

2 Complementary to this project, LIFE00 TCY/BiH/041 aimed to establish environmental planning and pollution prevention capacity in the Republic Srpska.





Minimising the impact of economic activities

Introducing an experimental system for setting effluent limits in Russia

By introducing best available techniques (BAT) and harmonising Russian and European Union environmental legislation, this LIFE project made a notable contribution to protecting the Baltic basin's environment.

Pollution is a major problem in the Baltic Sea, where the protection of the marine environment is important for all coastal states. Industry is considered one of the main polluters, but although a number of norms and standards exist, they are not systematically applied by the different regions and relevant industries. The 1999 Russian LIFE-TCY project set out to rectify this by bringing Russian legislation in line with international and regional conventions.

The existing Russian legislation is based on the concept of maximum allowable concentrations (MAC). This legislation comes into conflict with the recommendations concerning pollution from the Convention on the Protection of the Marine Environment of the Baltic Sea Area (also know as the Helsinki Convention - HELCOM1) and the EU directive on integrated pollution prevention and control (IPPC), both of which are based on BAT. The harmonisation of Russian and EU countries' environmental legislation was therefore desirable.

Since there was no legal basis for the technological standardisation of production processes, the LIFE project included experimental action in four pilot companies that represented major activities in the region: the wastewater treatment plant of the city of Pushkin, a fish processing plant (ROK-1), a tanning company (KHOZA) and the St. Petersburg cardboard and printing plant (KPK).

1 http://www.helcom.fi

Improved environmental performance

The project developed applications for permits, including monitoring programmes, norms of discharges and emissions, and schedules for adopting BAT. The environmental and sanitary authorities delivered environmental permits on discharges, emissions, and waste disposal on the basis of technological norms and BAT, first to the wastewater treatment plant in the city of Pushkin and the cardboard and printing plant, and, later, to the fish processing factory and the leather factory.

The enhanced monitoring and evaluation resulted in several improvements in the pilot companies' environmental performance. The fish processing plant, for example, halved its wastewater output by laying a system of pipes allowing the re-use of wastewater. In the cardboard and printing plant, water consumption dropped by as much as 80% because of improved systems and processes, while wastewater discharges are around one third of what they were previously. The wastewater treatment plant launched a programme for nutrient recovery from wastewater, mainly intended to reduce maximum total nitrogen concentration from the initial 14 mg/l to 13 mg/l in 2004 and 10 mg/l in 2006. The tanning company decreased the annual volume of waste. expressed in tonnes of raw material, from 42.5 to 33.8 m3, and also developed plans for building a modern water treatment plant. Upon completion of the project, two of the pilot companies received operating authorisation in accordance with BAT criteria.



Chief project manager Leonid Korovin presents a project participation certificate to Dmitry Antonovsky, ecologist of the St. Petersburg cardboard and printing plant

Another major result of the project was in the field of environmental law. The introduction of the concepts of technological norms and BAT in the 2002 Russian federal law on Environment Protection was an impressive contribution of the project, demonstrating the power of LIFE projects to achieve sustainable results that can be transferred well beyond the project's original scope and geographical area.

Project Number: LIFE99 TCY/ROS/022

Title: Systems for establishing effluent limits based on best available technology in accordance with Helcom recommendations as a basis for improved environmental conditions

Beneficiary: Scientific Ecology Research Centre, Russian Academy of Sciences

Total Budget: € 200,000 **LIFE Contribution:** € 141,000

Period:

01-Jan-2000 to 30-Jun-2002

Website: http://life99.spb.ru

Contact: Michael V. Begak

Email: mbegak@online.ru



Capacity building for cleaner production in Bosnia and Herzegovina

A LIFE-TCY project assisted the introduction of the concept of cleaner production in Bosnia and Herzegovina, contributing to the improvement of the country's environmental performance.

Cleaner production (CP) techniques can reduce pollution loads significantly at little cost and are central to achieving environmentally sustainable and economically successful business practices. The EU integrated pollution prevention and control (IPPC) directive of 1996 requires operators of industrial installations in the EU to use best available techniques (BAT) and best environmental practices (BEP).

Against this background, this LIFE-TCY project sought to improve the quality of the environment and to create economic incentives for industrial development in Bosnia-Herzegovina (BiH), while at the same time raising the level of competitiveness of the country's industries.

In order to raise awareness and disseminate information on CP among key stakeholders and industries, numerous project presentations were carried out, 27 companies were visited and provided with information material, and meetings with targeting ministries, experts and universities were organised. Twelve representatives from government and industry participated in a study tour of the Regional Activity Centre for Cleaner Production (RAC/CP) in Barcelona. The beneficiary also contributed to the preparation of a strategic action programme for the reduction of land-based sources of pollution under the Mediterranean Action Plan.

The project built the capacity of professionals from government, chambers of commerce, consultancies, industry and universities on CP through two different series of trainings. The first successfully trained more than 70 participants on CP and the role of government in industrial environmental management. The second combined theoretical training on methodologies for introducing CP in industrial processes with demonstration projects. More than 50 individuals were trained using a mix of lectures and experience exchange between participating enterprises.

Nine demonstration projects have been implemented in industrial companies, showing the direct positive environmental impacts of CP practices. According to the beneficiary, water savings - and therefore the reduction in the amount of wastewater discharged by the companies - varied from 24% to 81%, and averaged 60%. Total annual energy saving was 144,372 kW, while waste was reduced by 1098.8 tonnes/year. Production costs were reduced by an equivalent of €505,746 / year. Most of the CP measures implemented had payback periods of less than 12 months.

Long-term success

The project achieved notably positive results and the chance of their long-term continuation is also good. The beneficiary reports that thanks, in part, to the results of the LIFE project, the government has selected pollution prevention and CP as one of the priority activities detailed in its national environmental policy document.

The economic benefits achieved are a key driver for industries to participate in CP initiatives. Furthermore, by implementing the CP concept, companies are better prepared for introducing ISO standards.



Demonstration activities in the soft drink industry showed positive impacts of cleaner production techniques

Building on the experiences of the LIFE project, a subsequent project focussed on strengthening capacity for the implementation of environmental management systems. In turn, this project is currently being followed up by a 2005 LIFE-TCY project¹ aimed at introducing integrated pollution prevention and control in BiH.

1 LIFE05 TCY BiH/000102

Project Number: LIFE00 TCY/BIH/043

Title: Capacity Building on Cleaner Production in Bosnia and Herzegovina

Beneficiary: Centre for Environmentally Sustainable Development

Total Budget: € 537,000 LIFE Contribution: € 372,000 Period: 01-Feb-2002 to 01-Jan-2005

Contact: Tarik Kupusovic / Sanda Midžić Kurtagić / Irem Silajdžić

Email: coorsa@bih.net.ba

Website: http://www.coor.ba





Minimising the impact of economic activities

Boosting Croatian CHP capacity

To ensure more efficient use of fossil fuels and to reduce emissions of greenhouse gases, the EU is encouraging greater use of combined heat and power (CHP). A LIFE-TCY project was set up to increase the use of CHP in Croatia.

At the start of the LIFECROCHP project, Croatia neither had approved national strategies on energy and environment nor a government agency working on rational energy use and climate change. Such strategies and agencies, however, are essential for closer co-operation between Croatia and the EU, and are necessary to introduce legislation in line with European environmental policy. Croatia has signed and ratified the UN Framework Convention on Climate Change (UNFCCC) as an Annex I country and has pledged, in the Annex of the Kyoto Protocol, to reduce its greenhouse gas emissions by 5%. This obliges Croatia to draw up a climate protection strategy, including a cogeneration strategy.

The objective of the project was to drive forward sustainable development in Croatia in line with EU priorities and UNFCCC objectives. The project aimed to equip local communities with the necessary capacity for implementing European guidelines. The project also aimed to strengthen co-operation and knowledge-sharing among EU countries and Croatia in order to provide technical assistance to promote sustainable development strategies.



The project objectives were to:

- Identify and gather the necessary data on advanced management systems;
- Define measures for improving the energy efficiency of the CHP system;
- Evaluate environmental and social impacts of policies;
- Undertake a sustainability assessment:
- Define a framework for the national CHP strategy;
- Establish generalised guidelines for the CHP sector;
- Increase the capacity of Croatian institutions: and
- Disseminate the project results among the public and key stakeholders, both national and regional.

Results

The project was successful in achieving these objectives. Measures were drawn up for improving efficiency for the CHP systems and a study of emissions optimisation of a CHP plant was carried out. This study helped define pollution indicators and evaluate future strategies and measures needed for improving the energy efficiency of the CHP system.

The beneficiary, the Centre for Technology Transfer (CTT), also studied social aspects of the heating and power generation system and developed indicators for analysing its sustainability. CTT also selected different scenarios for the CHP system in Zagreb.

A study on emissions optimisation of a CHP plant helped improve its energy efficiency



Establishing guidelines for the CHP sector ensure continued capacity building

By developing guidelines for the CHP sector and organising workshops for Croatian institutions, the project ensured continued capacity building. Based on project activities, the Ministry of Economy, Labour and Entrepreneurship has introduced an action plan for the promotion and development of the cogeneration tariff system. Results were disseminated through presentations and contact with government officials, plant managers and branch experts.

Project Number: LIFE00 TCY/CRO/084

Title: Sustainable development of Croatian capacity in CHP (combined heat and power) sector

Beneficiary: Centre for Technology

Transfer, CTT

Total Budget: € 482,000 **LIFE Contribution:** € 337,000

Period:

01-Jan-2002 to 30-Jun-2004

Website: http://powerlab.fsb.hr/lifecrochp/pages/home.php

Contact: Zeljko Bogdan

Email: zeljko.bogdan@fsb.hr



Tackling wastewater treatment in Tunisian tanneries

The main objective of the 'Eaucuir' LIFE-TCY project is to promote and improve the use of wastewater treatment technologies in the tannery industry in Tunisia.

The leather sector is one of the most important economic sectors in Tunisia. Export to the EU has increased ten-fold since 1997. However, the industrial processes involved in leather production have a very negative impact on the environment due to the high quantities of water and chemicals used, and wastewater treatment technologies are rarely applied in Tunisian tanneries. In order to comply with environmental legislation and to improve the competitiveness of the leather sector, the development and introduction of wastewater treatment systems are necessary.

To improve its wastewater treatment capacity, the Centre National du Cuir et de la Chaussure (CNCC) applied for LIFE-TCY funding. Together with its experienced European project partner INESCOP (a Spanish service organisation for footwear and related industries), CNCC aimed to foster wastewater treatment in Tunisian tanneries

Project Number:

LIFE04 TCY/TN/000063

Title: Demonstration of wastewater treatment in Tunisian tanneries

Beneficiary: Centre National du Cuir et de la Chaussure

Total Budget: € 787,000 (expected)

LIFE Contribution: € 537,000

(expected)

Period: 01-Jan-2005 to 31-Dec-2007

Beneficiary's website: www.cnccleather.nat.tn

Contact: Mohamed Ben Abdallah Email: cncc.leather@email.ati.tn

The ongoing LIFE-project foresees the following activities:

- 1. The creation of an environmental laboratory to:
 - Analyse the most significant parameters in the sector of wastewater treatment;
 - · Respond to the needs of the tanneries with regard to wastewater analysis and tests; and
 - · Create a pool of local technicians trained in specific tanneryrelated wastewater problems.
- 2. A comparative study of the current wastewater treatment situation in Tunisia to gain detailed knowledge of the water problems in the tannery sector and to verify the particular situation of each participating enterprise in comparison with the sector's average. Participation was open to all tanning enterprises, and the study was based on a questionnaire and the analysis of wastewater samples taken over five consecutive days from ten selected companies.
- 3. The setting up of two mobile pilot prototypes (physic-chemic / biologic) for wastewater treatment and the respective training of technicians.
- 4. The demonstration of prototypes in selected tanneries in 2007. Cleaning capacities will be tested and studied over a four-month period. The results will be presented in a final report and in a video.
- 5. The distribution of results through publications, presentations and workshops. Several info-days, a book, a video, two articles on the project's results and a comparative study are planned for the coming months.



Training on wastewater analysis takes place in the CNCC environmental laboratory with new LIFE equipment

Mid-term evaluation and outlook

A project visit by the LIFE programme's external monitoring team carried out in June 2006 showed that the technical aspects of the project had been realised without major problems. The dynamic project team and the first results it has achieved (for example, the well-equipped laboratories and working wastewater treatment prototypes) are convincing.

Environmental benefits expected include the creation of infrastructures that will contribute to promoting the development of the wastewater treatment in Tunisian tanneries, the demonstration and dissemination of the use of technologies to analyse and treat wastewaters, and strengthened national capacity to fight pollution produced by the tanneries. The project also aims to improve the image of the tanneries and to help meet the environmental requirements for leather exports to Europe. It is expected that the project outcomes will even be transferable to other industrial sectors in the country.





Waste management

Treating infectious medical-waste in the Lebanon

Arcenciel, a social- and environment-focussed NGO that developed out of a self-support initiative for handicapped people, aims to support the healthcare sector in the Lebanon to achieve the environmentally sound treatment and disposal of infectious medical waste.



Treating medical waste in situ – thanks to the LIFE mobile sterilisation plant

Uncontrolled incineration of hospital waste and insufficient national policies for dealing with dangerous and infectious medical refuse have had a considerable negative impact on health and the environment in the Lebanon. Dealing with medical waste is therefore a high priority for both the Lebanese Ministry of Environment and the Ministry of Health.

An ongoing LIFE-TCY project aims to develop an integrated approach to dealing with medical refuse in order to support authorities in developing a comprehensive national strategy for the collection and treatment of hazardous medical waste from hospitals. To this effect, Arcenciel, the project beneficiary, has initiated the treatment of hospital waste in the South Mont Liban region, started training hospital personnel and launched an awareness-raising campaign on hospital waste.

The expected results of this initiative include the training of 1,500 people and the collection of 900 to 1,000 kg of medical waste daily. The project also plans to create a steering committee, represent-

ing the principal institutions concerned, to facilitate the introduction of proposals for laws and regulations, as well as the harmonisation and enforcement of procedures on a national level.

The first activities of the project (public dissemination and training in hospitals) showed that the levels of awareness are low and that much work will have to be done, including at the higher levels of the healthcare's administration. Despite these problems, the beneficiary was able to carry out 37 training sessions in four months, attracting 746 participants. A press conference was also held during this time, and a video on medical waste and the LIFE project was produced. A planned poster campaign had to be postponed due to the Israeli occupation.

A larger, mobile plant

In the first few months of the project, the beneficiary realised that the demand for medwaste treatment was greater than had been expected and LIFE permission was granted for a larger, mobile sterilisation plant with a capacity of 2,000 kg/day – twice what initially expected. Waste collection and treatment now also follows a well-established routine.

According to Arcenciel, several hospitals asked on their own initiative to have their medical waste collected and treated by the project. The LIFE project forms part of a national medical waste network that already covers 60% of the country, and the beneficiary is confident of achieving complete coverage. With the LIFE project, the concept of mobile treatment units that reduce the health hazards of

transporting untreated infectious waste by treating them *in situ* was introduced for the first time to the country.

The members of the project's steering committee intend to create a permanent body, the National Medwaste Committee, which will remain operational after the end of the project. However, several of the committee's tasks, (such as researching existing national and international legislation in order to propose new legislation) will be difficult to realise, given the different priorities of public and private hospitals.

A further difficulty is the lack of an efficient enforcement system. The project therefore plans to examine if 'softer' measures, such as accreditation and labelling schemes, might be more efficient than legal enforcement.

So far, the results achieved by the project are promising and it is hoped that it will continue to contribute significantly to improving the management of infectious medical waste in the Lebanon.

Project Number:

LIFE05 TCY/RL/000138

Title: Infectious Medical Waste management national network in Lebanon

Beneficiary: Arcenciel

Total Budget: € 774,000 (expected)

LIFE Contribution: € 450,000

(expected)

Period:

01-Feb-2006 to 01-Feb-2009 **Contact:** Mlle Hyam Fakhoury

Email: relex@arcenciel.org



Waste management through household recycling partnerships

A recycling scheme in the form of a public-private partnership, supported by a successful awareness-raising campaign, demonstrated the potential of integrated waste management in Cyprus.

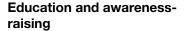
A number of factors make managing household waste a significant problem in Cyprus: the many small communities with low-density settlement patterns cause diseconomies of scale; the absence, until recently, of legislation and fiscal incentives to recycle; the lack of know-how on the part of municipal, regional and national authorities; and generally low environmental awareness. As a result, recycling activities in Cyprus are only partially developed, with the few companies working in the field focussing largely on industrial waste.

Managed by the Ministry of Agriculture, Natural Resources and Environment (MANRE), the project aimed to demonstrate the necessity of and potential for recycling by cultivating awareness, calculating costs and benefits, and establishing a pilot recycling network as a public-private partnership.

The pilot scheme was implemented over eight months in four municipalities, focusing on the collection of paper, glass, aluminium and plastic for recycling. Collection points were set up at ten sites - most of which were close to schools - and

then widely publicised. Municipalities organised the collection of the waste and its subsequent delivery to firms that were members of the Cyprus Recycling Association.

With the co-operation of the project partners, 400m3 of waste was collected and delivered to recycling companies, thereby saving a large part from being disposed in landfills. After the end of the LIFE funding, two of the participating municipalities expanded the scheme by buying additional disposal bins and continuing the separate collection of waste.



More important, however, were the effects of the project's activities on awareness-raising and education. A wide range of communication activities attracted a high level of participation among school children and parents. A comprehensive educational pack was developed in co-operation with the Cyprus Pedagogical Institute, and the training material was distributed to schools throughout the country.

The beneficiary also presented the project at national fairs. For example, waste separation was demonstrated by the project at the Cyprus International Fair in 2000 and 2001, attracting around 120,000 visitors. These efforts led to the selection of recycling as the fair's 'Innovation of the year' in 2001, with special attention placed on the project's stand.

The initiative also had an impact on national policy and legislative frame-



Integrated waste management was successfully demonstrated

work. The data and experience generated by the project was used to plan implementation of a € 3.5 million national strategic programme on recycling.

Nevertheless, although the project successfully demonstrated the potential of integrated waste management in Cyprus, much work is still needed to establish the infrastructure, support national legislation and general awareness in order to achieve major progress in the field of recycling.

Project Number: LIFE99 TCY/CY/041

Title: Household recycling partnership

Beneficiary: Ministry of Agriculture, Natural Resources and Environment, Republic of Cyprus

Total Budget: € 526,000

LIFE Contribution: € 261,000

Period: 01-Jan-2000 to 31-Dec-2001

Beneficiary's website: http://www. cyprus.gov.cy/moa/Agriculture.nsf/ index_en/index_en?OpenDocument

Contact: Costas Papastavros

Email: cpapastavros@environment. moa.gov.cy





Waste management

Improving waste management in St. Petersburg

St. Petersburg is one of the heaviest polluters on the Baltic Sea coast. A LIFE project put into place policies and practices for reducing the amount of contaminated solid waste the city produces.



Initiating separate waste collection in St. Petersburg in 2005-2006

According to the Helsinki Commission, St. Petersburg is responsible for 20% of the pollution in the Baltic Sea. One of the main sources of this pollution is municipal solid waste (MSW) contaminated with heavy metals and soluble hazardous substances. St. Petersburg produces approximately five million cubic metres of MSW per year.

Part of the problem the LIFE-TCY project initially addressed was the city's absence of selective waste collection and appropriate policies for waste minimisation, reuse and recycling. Therefore, a central objective was to draw up and implement an environmental action plan for municipal solid waste management.

Environmental action plan

The first step was to make an assessment of the amount and composition of MSW in St. Petersburg. This data formed the basis for developing an MSW management system, including modern technologies for waste treatment, the recycling of secondary materials and environmentally safe disposal. The resulting environmental action plan was then presented to the public for

endorsement before being passed on to the city authorities. The city subsequently approved a list of measures for the period 2005 to 2014.

As a second step, the project implemented a demonstration initiative to test some of the action plan's conclusions, including a trial run of a policy to separately collect waste 'at source'. This part of the pilot entailed the development of prototypes, the purchase of equipment and the production of communication material to stimulate public participation in waste separation.

The project resulted in a 30% reduction in mixed waste collected at the new collection points, allowing transportation volumes to be halved. The collection of bulky waste into special containers was also successful, reducing illegal dumping and incineration in the project area. Recyclable waste constituted 20% of the total amount of waste collected, of which 70% could then be reused, for example, as compost.

On the basis of these results and following the environmental action plan, the city authorities decided to install further separate waste collection facilities in the city. More than 4,000 containers were purchased in 2006 and plans exist to double this number by 2009; and 2,000 new sites for separate waste collection (supported by six sorting and reloading stations, and by two new landfills) were planned. Finally, private operators established some 20 separate stations for the collection of recyclable waste in 2006.

A public awareness-raising campaign – consisting of the distribution of leaf-

lets, posters, banners and booklets, the publication of the project results and the creation of a website – was central to the success of the demonstration project. In addition, presentations and training sessions carried out over the course of the project have led to greater public awareness, which is expected to increase the sustainability of the project results.

The pilot project was a catalyst for the development of a network of separate municipal waste collection points in St. Petersburg. The enduring success of the project is demonstrated by the authorities' inclusion of most measures in the city's long-term planning.



Project Number: LIFE02 TCY/ROS/039

Title: Development of the Environmental Action Plan for Municipal Solid Waste Management in St. Petersburg

Beneficiary: Committee for Nature Use, Environmental Protection and Ecological Safety St. Petersburg

Total Budget: € 634,000 (expected)

LIFE Contribution: € 379,000 (expected)

Period:

01-Feb-2002 to 30-Jun-2006

Website: http://www.gov.spb.ru/gov/admin/otrasl/ecology/news/lifegar

Contact: D. Golubev

Email: ecatsp@mail.lanck.net



Training and information centre for interregional studies in Poland

With the help of a LIFE-TCY project, a centre for training, information and education has been created in Gdansk to improve environmental management.

Following the political changes in Poland at the end of the 1980s, the Polish government introduced new laws to improve water management, and local actors were encouraged to play a greater role in water management decision-making. As part of this initiative, a permanent process of information exchange between stakeholders was established.

The need existed for a training and information centre to build capacity in the various aspects of water resource management. Consequently, the Gdansk Water Foundation (GWF) was established in May 1995 with the help of LIFE-TCY and in partnership with the International Water Office, France, and the Freshwater Centre, Denmark.

The creation of the GWF responded to the need for assistance in the implementation of new environmental legislation in the Polish water management sector. From its inception, it played an important role as an interregional (Baltic) co-operation centre, establishing links with other relevant institutions in Europe. It developed training curricula and provided training to numerous participants directly involved in water management. In addition, GWF informed decisionmakers about the likely consequences of policies, advised polluters on ways to control and minimise the negative environmental impacts of their activities, and showed local communities the role they could play in sustainable water management.

GWF has also served as an information platform on new technologies and available strategies for pollution



Since 1995, water management training has taken place at the GWF - including technical field demonstration

control. It includes a demonstration section, the 'technical platform', equipped with a technical-scale wastewater treatment plant. Publications were prepared, information material developed and regular contacts with other similar institutions around Europe have been set up.

Life after LIFE

Following completion of the project, GWF has continued its activities, thereby demonstrating the foundation's sustainability. An original aim of the LIFE project was to enhance the expertise of representatives of administration involved in the water sector. The centre has since expanded its remit to new areas and to a wider audience. Today, GWF educational undertakings and publications also deal with subjects such as sewage or solid waste management, and legislative and economic issues involving environmental protection, taking into account current environmental challenges and changes in regulations.

The 'technical platform' has been expanded through the establishment of a laboratory that examines the physicochemical properties of water and sewage, and provides analytical services. Since 2002, the GWF has run the Centre for Ecological Information and Education, which provides ecological education by training school teachers, as well as representatives of government and non-governmental organisations.

Project Number:

LIFE93 TCY/INT/6035

Title: Creation of a training and information centre and interregional studies in Poland

Beneficiary: International Office for Water

Total Budget: € 1.519,000 LIFE Contribution: € 266,000 Period: 31-Dec-1993 to 30-Jun-1996

Website:

http://www.gfw.pl/about.html

Contact: Joël Mancel

Email: oieau-dci@worldnet.net





Environmental management

Environmental audit and pollution prevention of the Syrian textile industry

The first detailed large-scale environmental audit of the Syrian textile industry aimed to help control polluting industrial activities and promote cleaner production technologies.

The Syrian Ministry of State for Environmental Affairs (MSEA) has identified pollution prevention and control of waste discharges from major industries as one of its environmental priorities. Previously, monitoring data on pollution loads and their environmental impact was lacking for most industrial sectors, including the highly waterintensive production of textiles, one of Syria's major industries. In the mid 1990s, a LIFE-TCY project carried out the first detailed large-scale environmental audit of this industry. A survey of available literature on industrial processes in the textile sector was carried out, followed by an overview of the Syrian textile industry's environmental performance. Textile mills were screened and selected for detailed environmental auditing.

The audits finally covered a sample of ten textile mills and assessed the pollution produced by these mills, focussing on wastewater discharge on receiving

Project Number: LIFE96 TCY/SYR/37

Title: Environmental audit and pollution prevention and control of the Syrian textile industry

Beneficiary: Syrian environmental technologies (Envirotech – Middle

Total Budget: € 247,000 **LIFE Contribution:** € 246,000

Period:

22-Feb-1997 to 30-Apr-1998

Beneficiary's website: http://www.envirotech-int.com

Contact: Dima Khartabil **Email:** set-env@net.sy

water resources. Textile mills use a wide variety of chemicals and dyes to transform fibres (mainly cotton and wool) into fabrics. The LIFE project established that mills processing mainly cotton fibres use approximately 65-81m³ of water per tonne of finished product, whereas for wool, 150-189m³ of water are used. Accordingly, wastewater generation for cotton is 41-73m³ per tonne of finished product, and for wool about 140m³.

The audits also included an assessment of conformity with the requirements of the EU's Eco-Management and Audit-Scheme (EMAS). Ten technical reports documented findings, the results of chemical analysis and the audits' conclusions. On this basis, seminars to discuss recommendations for remedies were carried out at each of the ten mills.

Pollution prevention and control programmes were developed, tailored to each individually audited firm, including prevention and treatment methods that will ultimately help control polluting industrial activities and promote cleaner production technologies. Information and data from the audits were compiled in a final report which was presented during a seminar to the stakeholders, including among others, the MSEA, the minster of industry, and the head of the General Organisation for the Textile Industry.

Successful introduction of environmental management

Two factors were given special attention and proved to be critical for the project's success: (a) government



LIFE-TCY project team visits a textile mill (Rawaa Al Saadi, Mohamed Kayyal, Marwan Saba, Tawfik Mourad, Bashar Al-Masri)

support and (b) acknowledgement by the mills' senior management of the importance and benefits of environmental auditing, as better environmental performance can give companies a competitive edge.

The technical, institutional, regulatory and socio-cultural measures recommended in the auditors' reports fulfilled the primary objective of the study, which was to provide proposals for pollution prevention and control in order to assist the Syrian textile industry to comply with local and international standards by gradually improving its environmental performance. It is worth noting that the stakeholders expressed their positive support for the implementation of a number of these practical measures.

In addition to these concrete results, detailed data from the environmental audits were provided in the form of a database to the MSEA for integration into the national environmental information system. Furthermore, the results of the study were to be used by the MSEA staff to develop guidelines for pollution prevention and control programmes for the entire textile industry.

Promoting EMAS principles

Several LIFE-TCY projects successfully promoted the principles of the EC's Eco-Management and Audit Scheme (EMAS) in potential new Member States and other neighbouring countries.

EMAS has been conceived for any private or public organisation wishing to identify, assess, manage and improve its environmental performance. Based on a voluntary commitment, EMAS' purpose is to introduce a credible method for managing environmental issues.

A number of LIFE-TCY projects aimed to disseminate EMAS principles. These included:

- A 1999 project that introduced and applied EMAS to Cyprus, contributing to the country's preparation for EU accession;
- · A 1999 project that assisted the Lebanese Ministry of Environment (MoE) in reinforcing the system of permits, monitoring and evaluation in the industrial sector; and
- · A 2003 Russian project aimed at building environmental capacity in municipal enterprises through EMAS implementation.

With the help of LIFE-TCY, the Cypriot authorities made EMAS a driving force behind the improvement of the environmental performances of companies and a lever for increasing their competitiveness as the country prepared to join the EU. The project1 helped to speed up the harmonisation of legislation and to set up the institutional mechanisms needed to apply EMAS. It further devised a national action plan targeted at co-ordinating EMAS introduction and implementation. At the end of the project, four pilot companies had an eco-management system and a documented EMAS procedure. In particular, the project supported Cypriot industries in meeting the requirements for best available techniques (BAT), thus hel-

> 2 LIFE98 TCY/RL/102 3 LIFE03 TCY/ROS/000068

ping them to comply with European environmental rules as provided for in the EMAS Regulation. Finally, a farreaching campaign to disseminate the project's results was launched.

The Lebanese LIFE project SPASI2 aimed to assist the MoE in reinforcing the system of permits, monitoring and evaluation in the industrial sector. To guarantee the viability of these reforms, two strategies were formulated that focused on existing industrial plants through a compliance action plan, and on future establishments through new ministerial decisions. The project published 13 national standards for environmental quality and a national manual for environmental auditing containing tables of the major pollutants of industrial sectors and the limit values allowed for existing and future installations. On this basis, the project organised a highly diversified awarenessraising campaign, which underlined the need to produce two other evaluation manuals for hotels and hospitals. The project also made it possible to devise a national model for eco-management. leading, for example, to an agreement between the MoE and the Association of Lebanese Industrialists in February 2002 on joint action to increase industrial competitiveness and the quality of export articles.

The Russian MEEMAS project3 aimed to address Kaliningrad's low environmental performance by introducing EMAS in some units of its large water and heating supply companies. The project's objectives included strengthening local authority capacity and providing guidance for the deve-



Some units of Kaliningrad's large water and heating supply companies participated at the MEEMAS project

lopment of environmental action programmes with regard to EMAS. The project also aimed to increase environmental awareness through local authority initiatives in public enterprises. To this end, strategic partnerships among municipal enterprises and a helpdesk for the local public sector/local community have been created. In October 2006, a pre-audit carried out on EMAS standard compliance gave a good evaluation of the work done by the municipal enterprises. After a final audit conducted by the external verification company EUROCERT, EMAS and ISO 14001 certifications were successfully obtained by two municipal enterprises, Kaliningradteploset and Vodocanal - the first companies in Russia to be certified under the EMAS regulation.

For more project information, please see project list at page 54.

1 LIFE99 TCY/CY/102



LIFE-TCY Capacity building

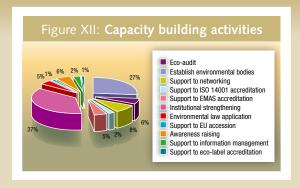
Capacity building is a constant feature of the LIFE-TCY programme. Indeed, for more than a third of LIFE-TCY projects, it is the principal objective. Generally, these projects do not focus on specific environmental issues but aim at enabling government, private sector and not-for-profit institutions to develop the knowledge and resources required to implement environmental policies and comply with environmental requirements.

In many of the capacity building projects, the organisation targeted for institutional strengthening is the beneficiary or one of the project partners. Often, this is a country's ministry of the environment itself. Another important group of projects is that aiming at the transfer of knowledge to a wide range of target groups - often small or medium sized enterprises (SMEs) or small municipalities. These projects are often carried out by a ministry of the environment or an umbrella organisation.

More than a quarter of the projects aiming explicitly at capacity building comprise the establishment of environmental structures, and most of these, such as the ECATs or the environmental units set up within a ministry or national agency, continue to function to this day. It can be seen as a sign of sustainability that many of the beneficiaries of capacity building projects continue activities after the end of LIFE funding, towards further achievements such as the accreditation of a laboratory¹ or certification according to ISO 9001 or 14001².

In most capacity building projects, the transfer of knowledge and experience by organisations and individuals from the EU to counterparts in beneficiary countries is an important aspect. For example, the National Technical University of Athens (NTUA) has been a partner to many Cypriot projects³, the internationally renowned German Geoforschungszentrum Potsdam (GFZ - National Research Centre for Geosciences) was involved in a geo-environmental information management project in Morocco⁴, and a Spanish organisation supporting the leather industry (INESCOP) is currently providing technical assistance to improve the environmental performance of Tunisian and Egyptian leather manufacturers⁵.

It may be seen as an indicator of the flexibility of the LIFE programme that this technical assistance is not limited to beneficiaries in EU partner states. International orga-



nisations may also be beneficiaries of or partners in LIFE projects, and the programme also supports partnerships with third organisations from the same or other TCY countries. In Turkey and Croatia, for example, many cases exist in which national consultants or universities provide knowledge to ministries or municipalities in the context of the LIFE programme⁶. Another example is the case of an Israeli wastewater project that relied on the technical capacity of a Turkish partner, the Technical University of Istanbul⁷.

LIFE-TCY capacity building projects include initiatives in the fields of networks, administrative structures and institutional strengthening; helping countries in their EU accession process; and enhancing regional co-operation through international projects.

¹ For example: LIFE00 TCY/TR/010

² For example: LIFE02 TCY/INT/034 or LIFE00 TCY/TN/016

³ LIFE03 TCY/CY/000018

⁴ LIFE03 TCY/MA/000050

⁵ LIFE04 TCY/TN/000063 and LIFE04 TCY/ET/000045

⁶ Like the Turkish environmental consultancy Ekodenge, partner to three capacity building projects, LIFE98 TCY/TR/016, LIFE03 TCY/TR/000064 and LIFE04 TCY/TR/000004.

⁷ LIFE03 TCY/IL/000035



Regional agency for integrated waste management in Albania

This LIFE project was the first project to focus on capacity building in the waste management sector in Albania. One of its achievements was the establishment of a regional agency on waste management planning.

The generation of large quantities of urban waste has led to several serious environmental problems in Albania. Low environmental awareness of the problem by institutions and public alike, as well as the difficulty of applying national legislation at the local level due to weak institutional capacity were identified by the National Environment Action Plan (NEAP) as the underlying causes for these problems.

Based on this analysis, the 2003 LIFE-TCY project aimed to:

- Improve the waste management and planning capacity of local administrations;
- · Increase public awareness of environmental issues: and
- Attract more external financial support for the establishment of waste treatment plants.

A specific project objective was to set up a regional agency on waste management planning.

Managed by the Regional Administration of Vlora, a dedicated project team composed of Albanian and Italian experts achieved all the project's objectives. The main result was the establishment of a regional agency for integrated waste management (IWM), which functioned throughout the project and was officially approved by the regional government in January 2006. Within the agency, a consultancy service in the field of waste management has been set up to support new business ideas for recycling activities.

By training technicians, tourist operators and other regional actors in the waste sector on a range of waste issues, the project has also strengthened local planning and management capacities for waste management.

Regional waste management

Although not initially foreseen by the funding proposal, the project developed a regional plan for integrated waste management, which represented an entirely new concept for Albania. Listing urban waste production in the region, forming the basis for a waste monitoring system and presenting a method for decisionmaking on the location of waste treatment plants, the well-crafted plan is considered of regional (Balkan) interest.

The objective of attracting more external financial support for investment in the waste sector was not fully achieved during the project period, but the regional waste management plan prepared is expected to help attract external funding and several contacts with potential donors and investors have been established. A number of demonstration projects on recycling and waste separation techniques were realised in various coastal towns and along beaches. Finally, the project raised public awareness on waste issues at the local level through educational activities at schools, TV broadcasts and a public campaign on waste separation. An attractive website in Albanian, English and Italian contributes to the dissemination of the project's results.



Training of future staff assigned to the new IWM agency included a practical stage that took place in Italy

One particular strength of the project is the high degree of sense of ownership by the regional administration over the process and its results. It clearly contributed to building up local capacities, implementing the Albanian decentralisation policies (each regional administration is responsible for its own waste management) and introducing and developing EU environmental policy concerning waste management in Albania. The project has a high demonstration value and can be replicated relatively easily in other regions.

Project Number: LIFE03 TCY/AL/000002

Title: Regional agency for an integrated waste management

Beneficiary: Region of Vlore

Total Budget: € 434,000 (expected)

LIFE Contribution: € 270,000

Period: 01-Jan-2004 to 31-Dec-2005

Contact: Vladimir Haxhi Email: pmu@iwm-vlore.org





Networks, administrative structures and institutional strengthening

ECATs promoting sustainable development

In the early 1990s, Environmental Centres for Administration and Technology (ECATs) were set up as a new style of technical assistance and exchange that could supplement and promote existing international environmental co-operation.



ECAT-Kaliningrad stand at the Euro-Environment Aalborg, September 1998

The common feature of all ECATs was a staff comprised of an equal number of Western and Eastern European experts working in a team. ECATs focussed on the development of human resources, the direct transfer of environmental know-how and the promotion of administrative and technological methods for protecting the environment. Additional tasks included policy advice, clearing-house functions and the definition, preparation and implementation of projects. The individual centres adjusted their specific activities according to respective local needs and environmental priorities.

The ECATs have proved to be costeffective and efficient tools for supporting sustainable development at
a local level. Their conceptual design
enabled them to achieve strong
co-operational links with cities and
administrations from the EU, and
have allowed for an efficient transfer
of know-how. They largely contributed to the improvement of the common environment by identifying and
implementing projects with a particular emphasis on awareness raising
and public participation.

The first centres were established in 1993 in Riga and St. Petersburg as joint co-operative projects with LIFE-TCY's support. The success of the experience led to two TCY projects in 1995 to establish centres in Kaliningrad and Tirana. These ECATs, along with the others that were set up, had to survive independently after the start-up period of typically three to four years, and most centres achieved a form of autonomy after LIFE funding had ended.

ECAT-Riga¹ was the result of the joint efforts of the Senate for Environmental Protection of the city of Bremen (Germany) and the Ministry of Environmental Protection and Regional Development of Latvia. Officially closed in June 1996, the project was succeeded by the Latvian Environmental Consulting and Monitoring Centre (ECMC), which in 2000 became part of the Latvian Environmental Geological and Meteorological Agency².

The setting up of **ECAT-St. Petersburg**³ became possible through the co-operation of the Senate for Environmental Protection of the city of Hamburg (Germany) and the Department for Environmental Protection of the Mayoralty of St. Petersburg. In 1995, the ECAT itself implemented a LIFE project developing and implementing a clinical waste management plan in St Petersburg⁴.

ECAT-Kaliningrad⁵ became operational when the environmental author-

1 LIFE92 TCY/D/018 2 http://www.vidm.gov.lv/eng/par_ ministriju/padotas_institucijas/?info=3 3 LIFE92 TCY/D/022 4 LIFE95 TCY/ROS/0871 5 LIFE94 TCY/ROS/0577 ities of the city and region agreed to a partnership with their twin cities of Aalborg (Denmark) and Bremerhaven (Germany). Since its establishment, ECAT-Kaliningrad has developed more than 28 projects⁶. It was followed up in December 2001 by the creation of the municipal institution ECAT-Kaliningrad, which aims to implement the city's common environmental policy in the sphere of environmental protection and nature management. Currently, its staff consists of 18 people.

ECAT-Tirana7 came into being when the Albanian Environmental Agency became the partner of the German State of Thuringen, the Centre for International Migration and the City Administration of Terni (Italy). In 1997 it was registered as an independent non-profit organisation. Since August 2003, the centre has served as an advisory and consultative body for the Albanian Ministry of the Environment, mostly through the implementation of projects. For example, ECAT has acted as the beneficiary in seven LIFE-TCY projects and a partner in five. (A recent example is an ongoing project aimed to raise awareness of traffic-related pollution issues and to stop air pollution becoming a serious threat to human health in Tirana8). In Albania, no other agency can currently play a similar role or mobilise similar expertise.

6 For example: LIFE06 TCY/ROS/000269 7 LIFE94 TCY/D/0981. www.ecat-tirana.org. 8 LIFE04 TCY/AL/000018

For more project information, please see project list at page 54.



Networks, administrative structures and institutional strengthening

Environmental capacity building in the Lebanon

For several years LIFE-TCY projects have been helping to raise environmental awareness in the Lebanon, encouraging better environmental policies and building up the country's capacity to tackle ecological problems.

Years of civil conflict and government instability have produced serious environmental damage in the Lebanon. To achieve environmental improvement, substantial changes in the implementation of basic governmental policies were necessary. Many of the Lebanese LIFE-TCY projects therefore strengthen the Ministry of the Environment (MoE) that was established in 1994. The ministry works with other agencies to co-ordinate and implement environmental measures. It is a small ministry, with fewer than 50 employees, but over the years, and also with the support of the LIFE-TCY programme, it has acquired the structures, the management capabilities and the specific knowledge necessary to fulfil its remit. It may be perceived as the final outcome of 13 years of fruitful support by subsequent LIFE projects that the MoE in the Lebanon has now developed an internal quality management system and is ready to be certified according to the ISO 9001 standard1.

One particular LIFE-TCY project, Technical Assistance to Reinforce Governance in Environmental Tasks, developed the Lebanese Environment and Development Observatory (LEDO). The observatory has improved understanding of environmental development and the economic cost of environmental degradation. It also provided the necessary data for analysis and decisionmaking on environmental projects and strengthened the MoE's capacity for co-ordinating activities and introducing coherent environmental policies.

Through LEDO, the project has been able to help the MoE to identify areas where more research is needed and to develop several environment-development indicators for monitoring environmental issues. It also set up an information system for managing environmental data and created a monitoring network made up of organisations engaged in gathering environmental information of all kinds in the Lebanon.

Another successful LIFE-TCY project in the Lebanon² focussed on establishing an institution that will offer comprehensive services and advice on cleaner production, the Lebanon Cleaner Production Centre (LCPC).

The project laid the foundations of the LCPC to achieve four main results:

- 1. Establish an operational team to promote cleaner production;
- 2. Increase awareness of cleaner produc-
- 3. Conduct several in-plant demonstrations on the applicability of the cleaner production approach; and
- 4. Train a group of national experts in the developiment and application of cleaner production in industry.

LEDO and LCPC can be seen as aspects of a broad initiative to bolster the infrastructure of the country. Parallel to these, another TCY project3 helped to develop a permanent Environmental Awareness Unit at the MoE, aiming to increase cooperation with NGOs. One of the key aspects of the project was the updating of the list of NGOs which has been published on the MoE website. It also provided a fact sheet on the fields of expertise of the NGOs; a training course for 24 NGOs covering project planning, management and fund raising; the publication of a guidance manual for NGOs on the requirements and procedures for establishing and running NGOs, and guidelines for administrative and financial management.

For more project information, please see project list at page 54.

LIFE-TCY projects contributing to institutional strengthening and capacity building for MoE in the Lebanon LIFE93 TCY/INT/6054 METAP preparation of environmental strategy LIFE95 TCY/INT/1207 METAP capacity building for line ministries (Lebanon) LIFE98 TCY/RL/102 Strengthening the permitting and auditing system for industries LIFE98 TCY/RL/136 Lebanese environment and development observatory LIFE00 TCY/INT/021 Strategic environmental assessment and land use planning in LIFE00 TCY/INT/065 An enhancement of the permanent environmental awareness unit LIFE00 TCY/RL/020 Establishment of the Lebanon cleaner production centre LIFE02 TCY/INT/034 Technical assistance to reinforce governance in environmental tasks LIFE02 TCY/RL/032 Strengthening the environmental legislation development and application system in Lebanon LIFE03 TCY/RL/000044 Stable institutional structure for protected areas management

¹ An achievement to which the project LIFE02 TCY/INT/034 contributed. 2 LIFE00 TCY/RL/020 3 LIFE00 TCY/INT/065





Helping countries in the accession process

Implementation of nature conservation legislation in Estonia

As the first LIFE-TCY project focussed on helping a country to prepare its accession process, one Estonian project contributed to the implementation of legislation on biodiversity conservation and environmental auditing in the country.



Conserving Estonia's flora and fauna

Improving biodiversity conservation and environmental auditing were necessary for Estonia to comply with its accession obligations and for the implementation of Estonia's Act on Sustainable Development. These initiatives would also enable it to meet the requirements of the Convention on Biological Diversity and relevant EU legislation.

The project, which began in 1995, was divided into two sub-projects that were implemented simultaneously. The Biological Diversity and Habitats sub-project aimed to familiarise Estonian officials and those in neighbouring countries with the contents of the EU Habitats and Birds conservation Directives, the principles of the Natura 2000 network and their implementation requirements. Project activities were based on the Estonian Act of Sustainable Development (February 1995) and the Act on Protected Nature Objects (June 1994), taking

into account the respective EU directives as well as other relevant international legal instruments.

Activities included four training courses for nature conservation officials and experts (that attracted on average around 50 participants) and presentations on implementing legislation that formed part of eight study visits by Estonian environmental officials to EU Member States. Pilot management plans were developed for two very different protected areas (the Oisu Landscape Reserve and the Alam-Pedja Nature Reserve), and a system to develop these management plans for protected areas in Estonia was also initiated. Finally, core structures were developed for a specific nature conservation GIS (geographical information system) to be used by managers of protected areas.

Implementing environmental auditing

The second sub-project focussed on introducing internationally recognised environmental auditing procedures to officials and potential auditing clients. The first groups of 35 auditors in Estonia received training before being certified capable of conducting audits and running environmental auditing training in the country. The Estonian **Environmental Auditors Chamber was** also established, taking responsibility for the procedure of auditor certification in Estonia. A compilation of auditing guidelines for audit clients was produced and training audits were carried out in co-operation with foreign experts at 36 enterprises.

The implementation of environmental auditing at a higher scale aimed to contribute to the sustainable management of environmental resources, control environmental pollution and damage, reduce risks in industrial production, change production patterns to lessen their environmental impact and meet environmental requirements.

According to the Estonian Ministry of Environment's report "Estonian National Biodiversity Strategy and Action Plan", this LIFE project was an important step towards safeguarding national biological resources and was one of the most valuable initiatives for training officials and specialists – an essential aspect of biological diversity protection¹.

1 http://www.envir.ee/orb.aw/class=file/ action=preview/id=1995/Estonian+ National+Biodiversity+Strategy+and+ Action+Plan.pdf

Project Number:

LIFE95 TCY/EE/0889

Title: Implementation of the convention on biological diversity and the act on sustainable development in Estonia

Beneficiary: Ministry of the Environment Republic of Estonia

Total Budget: € 345,000 **LIFE Contribution:** € 340,000

Period:

01-Jan-1996 to 31-Aug-1998

Contact: Jaak Tambets

Email: jaak.tambets@mail.ee



Transposing the Seveso-Directive into Turkish law

This Turkish LIFE-TCY project aimed to complete the transposition of the Seveso-Directive into Turkish legislation, thereby improving control over major accident hazards.

In 2002, a MEDA1 report entitled "Environmental Legislation for Turkey" identified a substantial difference between EC and Turkish legislation on the prevention of major accident hazards involving dangerous substances covered in the EU by the Seveso II Directive2. The Turkish state plan neither covered all the requirements of the Seveso-Directive, nor was it legally binding. As a result, it was recommended that Turkey draw up new regulation that meets all the Seveso requirements. The drafting of such a regulation was the aim of this 2003 LIFE-TCY project implemented by the Turkish Ministry of Environment and Forests.

To transpose the Seveso-Directive into Turkish law, the project prepared a regulation on the control of major industrial accidents hazards, which included a significant number of elements from other regulations. Guidelines that clarify all the legal details for the implementation of this new regulation were established in the form of four main communiqués.

1 The Euro - Mediterranean Partnership. http://ec.europa.eu/comm/external relations/euromed/meda.htm 2 Council Directive 96/82/EC, Directive on the control of major industrial accidents involving dangerous substances



E-government prototype

To prepare the ground for the regulation's introduction, a Directive Specific Implementation Plan (DSIP) was issued, taking into consideration the main requirements of the Seveso-Directive. The project also developed prototype e-government software that informs industries and the public about developments, enables online registration and notification of enterprises, and manages submitted data. This information system is an innovative tool that facilitated industry's contribution to the regulation's implementation, as well as its control and enforcement by the ministry.

The project also focused on institutional capacity building in Turkey. In the five major cities where most industrial accidents occur in Turkey, industries were given training on the directive and the use of the e-government portal.

While the outcomes of the DSIP formed the basis for environmental strategy, the e-government prototype was a suitable tool for implementing the Turkish Seveso regulation. At the end of the project, larger enterprises were obliged to prepare a safety report containing at least the information in Annex II of Seveso-Directive. The enterprises also needed to prepare internal emergency action plans and provide the responsible authority with the information required for the preparation of external emergency action plans.

The Turkish regulation is expected to enter into force in 2007. It represents an important step forward towards the implementation of the EU envi-



Presenting the e-government prototype - a tool that will help implement the Turkish Seveso regulation

ronmental acquis. The final detailed studies regarding the communiqués were nearing completion in early 2007. To ensure the sustainability of the project, the Ministry of Environment and Forests employed five new staff members to support the relevant department. It is envisaged that short and long-term measures to minimise major accidents hazards will produce a positive effect on decreasing pollution levels and increasing public safety.

Project Number: LIFE03 TCY/TR/000064

Title: Approximation of Seveso-II Directive in Turkey

Beneficiary: Republic of Turkey, Ministry of Environment and Forests

Total Budget: € 410,000 (expected)

LIFE Contribution: € 276,000

(expected) Period:

02-Jan-2004 to 01-Jan-2006

http://seveso.cevreorman.gov.tr

Contact: Musa Demirbaș

Email: ayildirim@cevreorman.org.tr



Helping countries in the accession process

Managing pig waste in Cyprus

The lack of pig waste management plans has posed a serious pollution problem in Cyprus, but a LIFE-TCY project aimed to meet this need and bring this issue in line with EU directives.

Pig waste is a source of serious annoyance and environmental pollution in Cyprus. Areas with high concentrations of pig farms suffer from odour problems, deterioration of the quality of surface and ground water and soil, and restrictions on the use of land.

A LIFE-TCY project was implemented to tackle the lack of proper handling of pig waste and, in particular, the disposal of wastewater. Its main objectives were to:

- Promote instruments and tools for environmental protection and pollution prevention due to pig farm waste in Cyprus;
- Promote sustainability of pig farming in the national policy of Cyprus;
- Identify pig farm waste management techniques suitable under local conditions; and
- Disseminate information and train competent authorities in the sustainable management of pig farming wastes, in compliance with EU directives.

Through collaboration with Greek and Danish experts, the project was successful in meeting these objectives.

LIFE-TCY PIGWASTEMAN project team



Responding to suggestions by the competent Ministry of Agriculture, Natural Resources and Environment (MANRE), the project recommended best available techniques (BAT). These practices take into account the following factors: the size of the pig farm, land cover by the unit (especially regarding smaller scale pig farms, which may not have sufficient space for evaporation facilities), the pig farm's location (e.g. its proximity to inhabited areas), and the possible collaboration of several pig farms. Taking local environmental and social conditions into consideration, an optimal solution was sought for each of the three main problems concerning pig waste: nitrogen content, odour and salinity.

Much work, however, remains to be done to encourage pig farmers to adopt new techniques. Furthermore, policy at the national level must take into account the general financial weakness of the pig farmers, who have been hit by a tripling in the price of animal fodder and a decrease in pork meat prices following the country's accession to the EU.

A final conference in 2006 publicising the results of the project included high-quality presentations by the beneficiary, partners and MANRE. A workshop for competent authorities and one for farmers were also held at the end of 2006. Although attendance at the workshops was low, the most important stakeholders were represented: MANRE, the municipality of Aradippou (one of the two areas with the highest concentration of pig farms), the provincial administration of Nicosia (responsible for the Kato Moni-Orounta area), as well as pig farmers



Apparatus of the two pilot BATs that were tested

representing the two areas with the greatest number of pig farms.

Such co-operation, along with similar initiatives to develop appropriate environmental policy and action plans in accordance with EU practice, helped pave the way to Cyprus's accession to the EU.

Project Number: LIFE03 TCY/CY/000021

Title: Guidelines to the Cyprus Competent Authorities for Policy Formulation for Sustainable Management of pig-farming wastes in Compliance with EU Practice

Beneficiary: Agricultural Research

Total Budget: € 563,000 (expected) **LIFE Contribution:** € 377,000

(expected)

Period:

01-Jan-2004 to 31-Dec-2006

Website: www.ari.gov.cy

Contact: loannis Papadopoulos **Email:** papado@arinet.ari.gov.cy



Enhancing regional cooperation through international projects

Preparing for oil spills in the Mediterranean

Two LIFE-TCY projects have introduced measures for tackling oil spills in the Mediterranean. The benefits of these initiatives were demonstrated a couple of years ago when two oil tankers collided off the coast of Egypt.



Clean-up operation training

The environmental impact of the resulting spillage of over 1,000 tonnes of crude oil was considerably reduced thanks to the LIFE-TCY project1 "Development of oil spill response capabilities of Cyprus, Egypt and Israel" realised by the Malta-based Regional Marine Pollution Emergency Response Centre (REMPEC). The centre, which, with the help of LIFE funding, had supported the three countries involved in implementing the developed contingency plan for the south-eastern Mediterranean, was able to respond swiftly to the accident on 4 February 2005, involving the Marshall Islands-registered GenMar Kestrel and the Singapore-flagged Trijata.

1 LIFE96 TCY/INT/08

For more project information, please see project list at page 54. Officials initially feared that wind would drive the oil slick towards Port Said at the entrance to the Suez Canal. However, at the request of the Egyptian authorities, REMPEC immediately transmitted a report of the incident to the authorities in Israel and Cyprus.

Developing expertise in the Mediterranean region

Through REMPEC, the International Maritime Organisation (IMO) has been developing expertise in the Mediterranean region with the help of the contingency plan project and other LIFE-TCY projects. One successful project² concerned the development of a national system for preparedness and response to accidental marine pollution in the Syrian Arab Republic, an oil producing and exporting country that is situated on the eastern shore of the Mediterranean.

Several oil refineries, heavy industries and power plants using heavy fuel oil are also located along the 180km shore. In addition, the Syrian coast is near major tanker routes starting in the Gulf of Iskenderun in Turkey. Syrian territorial waters and the Syrian coastline are therefore exposed to a serious risk of oil pollution, both from maritime traffic-related sources and from landbased facilities.

The LIFE-TCY project helped draw up a national contingency plan, including a fund to provide oil pollution equipment, and foreseeing compensation claims in the case of

2 LIFE99 TCY/INT/017

pollution. The national plan, which was supported by three area contingency plans and two contingency plans for the main Syrian oil terminals, included a risk assessment, an identification of required equipment, allocation of responsibilities in the case of an oil pollution incident, and sensitivity maps covering the whole Syrian coastline. Another result of the project was the drafting of a proposal for the establishment of a national oil pollution response

Five training courses were organised for all the officials in the Syrian authorities that would be called into action in the event of an oil pollution incident. The project also organised an exercise involving a simulated spill, the deployment of response equipment and an off-shore clean-up operation (SYREX 2003), and finalised a proposal for a training programme that identifies the remaining training needs of the Syrian authorities.

Preparations on board for deployment of response equipment







Enhancing regional cooperation through international projects

Conserving Mediterranean wetlands and their habitats

Once a rich source of biodiversity, wetlands in the Mediterranean basin have suffered a great deal of damage over the course of the last century. Regional co-operation can contribute to reversing the process of degradation. A long-term initiative, MedWet, implemented a LIFE-TCY project to establish a regional programme for the sustainable use of wetland.

In 1994, the EC supported initiative MedWet implemented a LIFE-TCY project to establish a regional programme for the sustainable use of wetlands. The proposed project aimed to test and apply the tools for conservation and the responsible use of the Mediterranean that were developed by a previous MedWet wetlands project in five non-EU countries (Albania, Algeria, Croatia, Morocco and Tunisia)1. National reports for each of the states were drafted to establish the basis for an integrated implementation of these tools and methods. Awareness of the issues surrounding wetlands was raised among decision-makers and the results of the national reports were shared with stakeholders at seminars. Undertaking capacity-building initiatives in the five countries, the LIFE project was an important step towards encouraging policies and practices that safeguard biodiversity. Moreover, the project strengthened much-needed co-operation within the wetland conservation network.

Wetlands habitats

The Mediterranean wetlands have also been targeted by initiatives that focus on the species that they accommodate. BirdLife International, a global partnership of conservation organisations, initiated a LIFE-TCY project² in 2004 to improve the conservation status of migratory birds in key countries

1 LIFE94 TCY/INT/0988 2 LIFE04 TCY/INT/000054: http://www.birdlife.org/action/change/sustainable_hunting/index.html along the western Paleartic flyway (Europe, Middle East, and Africa).

The management of bird hunting in the Mediterranean third countries, however, is a more complex issue, characterised by poor legal regulation in some countries and the need for more effective law enforcement, combined with a lack of resources and capacity among governmental and non-governmental organisations, poor awareness of the impact of hunting, and the lack of regional agreement on action to better protect migratory birds.

Addressing some of these issues, the LIFE-TCY project focusses on Tunisia, which has around 12,000 registered hunters, and the Lebanon, which had around 14,000 in the last registration in 1994. In both countries, government capacity to effectively enforce hunting legislation and design and implement sustainable hunting models is insufficient. However, the project also has a strong regional component and works with six other countries in the region (Algeria, Egypt, Jordan, Morocco, the West Bank and Gaza and Syria) to develop a more coordinated approach to the management of hunting.

The project aims to review information on the hunting of migratory birds, to produce regional guidelines for the sustainable hunting of migratory birds and a code of best practice for hunters, to promote sustainable hunting behaviour, to improve public awareness, to develop improvements for enforcing hunting legislation, to resolve conflicts and build partnerships between differ-



Agricultural reclamation in the Neretva Delta, Croatia

ent stakeholders, and is working on strengthening compliance with international agreements and the phasing out of lead shot as well as producing a regional action plan and disseminating project results.

The Spanish Society of Ornithology, a partner of BirdLife international, also implemented a LIFE-TCY project3 to set up a centre in Morocco for wetland conservation in close co-operation with the government departments of water and forests. The project also reinforced the management and co-ordination of the Moroccan forestry administration, fostering the sustainable use of natural resources in wetlands and promoting the participation of local populations. Other initiatives included the encouragement of eco-tourism, the promotion of environmental education and the raising of public-awareness.

3 LIFE02 TCY/INT/069

For more project information, please see project list at page 54.



Enhancing regional cooperation through international projects

Capacity building to manage the Sava river basin

Several LIFE-TCY projects have helped improve infrastructure in Croatia for the management of river basins. Projects have implemented management plans for the Posavina part of the Sava river basin, and protected the unique landscape and biodiversity of other regions along the river.

The middle stretch of the Sava flows through Lonjsko Polje Nature Park (Posavina), which covers 506km2 of floodplain. A public service was set up in 1998 to protect the site's seven habitats and 89 species in accordance with the Habitat Directive. While the World Conservation Union (IUCN) has showcased the site as a best practice of conservation planning in rural areas, the management capacities of the park were not sufficient to meet its goals. Capacity building, training and the wider participation of stakeholders were needed to further implement international and national policies in the nature park.

Boosted capacity

Consequently, a LIFE-TCY project1 was launched in 2000 by the Lonjsko Polje nature park public service to develop and improve its Ramsar 'Wise-Use' approach by building its own management capacity and raising the awareness of other stakeholders. During the project period, the Lonjsko Polje Nature Park's permanent staff increased from six to nine, and the institutional capacity of the park was strengthened through training and the upgrading of equipment. The project also established a basic network of visitor and information centres throughout the park, and delivered many lectures aimed at local schools, students, farmers and experts. The number of park visitors increased significantly during the project's lifetime.

Expertise at the park was also boosted through seminars and study tours on ecology, communication, interpretation (quiding) and monitoring, which resulted in the publication of a handbook for rangers and interpreters. Although improving wider participation in these initiatives was difficult, the project was successful in establishing, for the first time in a Croatian protected area, a stakeholder committee and generating co-operation among a range of actors including the public institutions Croatian Waters and Croatian Forests. nature conservation and environmental protection inspectors, the police, building services, livestock breeders and regional politicians.

In order to raise awareness among the public, the project produced a video, an interactive CD-ROM and several bilingual bulletins, and also received favourable media coverage. In 2006, the beneficiary began a follow-up LIFE project2 to build on its results and to further the development of an integrated management approach for the Central Sava basin. Expected results of the second project include a management programme for Central Posavina.

In addition, the IUCN itself initiated a LIFE-TCY project on the Sava river. This project3, implemented in both Croatia and Bosnia-Herzegovina, seeks to:

- · Identify, protect and manage floodplains of importance for the landscape and biodiversity by implementing the Birds and Habitats Directives;
- Design a coherent cross-border eco-



Conservation of biodiversity and the unique landscape along the Sava River was the aim of several LIFE-TCY projects

logical network of core areas, buffer zones and corridors;

- Identify floodplain areas capable of storing floodwater;
- · Build capacities for implementing the Birds and Habitats Directives;
- Introduce land-use practices that support the protection of landscape and biodiversity;
- Support the development of rural tourism: and
- · Raise awareness of the need to protect and manage the unique landscape and biodiversity along the Sava through cross-border co-operation.



For more project information, please see project list at page 54.

2 LIFE05 TCY/CRO/000111 3 LIFE06 TCY/INT/000246

1 LIFE00 TCY/CRO/076



Comprehensive list of LIFE-TCY projects

The table below presents all LIFE-TCY projects funded since 1992. For further information on individual projects, visit the online LIFE database at: http://ec.europa.eu/life.

Project Number	Title
Albania*	
LIFE06 TCY/AL/000202	Capacity building for sustainable tourism development
LIFE04 TCY/AL/000018	Sustainable Traffic Development in Tirana
LIFE03 TCY/AL/000002	Regional Agency for an integrated waste management
LIFE03 TCY/AL/000004	Capacity Building on conservation of Albanian wetland ecosystems (ALWET)
LIFE00 TCY/AL/090	Sustainable Traffic Development in Tirana, Albania
LIFE98 TCY/AL/154	Development of healthcare waste management plan for Tirana, Albania
LIFE96 TCY/AL/02	Organisation of the urban waste management in 6 main Albanian municipalities: a model applicable towns of other developing countries
LIFE95 TCY/AL/0927	General Plan of hydrical sources and water restoration of the territory of the Republic of Albani (**Project selected but not implemented**)
Algeria*	
LIFE03 TCY/DZ/000007	Mise en place d'une structure consultative et opérationnelle pour la définition des standards et de protocoles de sécurité et d'hygiène pour la prise en charge de la problématique amiante en Algérie des risques génères
LIFE00 TCY/DZ/015	Creation of a centre for information, awareness, training and dissemination of an environmental culturand policy
LIFE99 TCY/DZ/136	Réhabilitation, valorisation, dévelopment of Zemmouri ecosystem, including the coastal zone
Bosnia and Herzegov	rina
LIFE05 TCY/BIH/000102	Capacity Building in Integrated Pollution Prevention and Control in Bosnia and Herzegovina
LIFE02 TCY/BIH/006	Establishment and Institutional Strengthening of Bosnia and Herzegovina Water Works Association (BHWWA)
LIFE02 TCY/BIH/009	Setting up and Operational Unit under the Environmental Steering Committee
LIFE00 TCY/BIH/041	LICENSE: Local Institutional Capacity Development in Environmental Sensitive Areas
LIFE00 TCY/BIH/042	INFRA RED: INstitutional FRAmework for Regional Environmental Development
LIFE00 TCY/BIH/043	Capacity Building on Cleaner Production in Bosnia and Herzegovina
LIFE00 TCY/BIH/044	Strengthening of Diffuse Source Pollution Control in the Federation of Bosnia and Herzegovina
LIFE99 TCY/BIH/035	Development of a new management policy for the Hutovo Blato wetlands, Bosnia-Herzegovina
LIFE98 TCY/BIH/052	Institutional strengthening of MAP Office for Bosnia and Herzegovina
LIFE98 TCY/BIH/165	Sustainable rehabilitation of urban environmental systems
Croatia	
LIFE05 TCY/CRO/000105	Development of the Croatian soil monitoring programme with a pilot project
LIFE05 TCY/CRO/000108	Strengthening of public-private partnership in order to improve wastewater management in Croatia
LIFE05 TCY/CRO/000111	Central Posavina - Wading toward Integrated Basin Management
LIFE05 TCY/CRO/000114	Development of sustainable construction and demolition waste management system for Croatia
LIFE04 TCY/CRO/000028	Guidelines Development for starting implementation of Waste Management Plan in the Republic Croatia
LIFE04 TCY/CRO/000029	Capacity building for Implementation of the United Nations Framework Convention on Climate Changand the Kyoto Protocol in the Republic of Croatia
LIFE04 TCY/CRO/000030	Establishing institutional capacities for protection of river Mura landscape

Project Number	Title
LIFE03 TCY/CRO/000014	New pet collecting and recycling scheme in Croatia
LIFE02 TCY/CRO/012	Building-up the national ecological network as a part of the Pan-European Ecological network & the Natura 2000 network
LIFE02 TCY/CRO/014	Conservation and management of Wolves in Croatia
LIFE02 TCY/CRO/015	CORINE Land Cover Database for Croatia
LIFE00 TCY/CRO/076	Towards wise use in Lonjsko Polje Nature Park, Croatia
LIFE00 TCY/CRO/084	Sustainable development of Croatian capacity in CHP (combined heat and power) sector
LIFE00 TCY/CRO/086	Reconstruction of national emission inventory system and enforcement of its implementation
LIFE95 TCY/CRO/0973	Establishment of the Long-Term Environmental Policy Plan and Priority Actions (**Project selected but not implemented**)
Cyprus	
LIFE03 TCY/CY/000018	Development of best management systems for high priority waste streams in Cyprus
LIFE03 TCY/CY/000019	Capacity building for enabling the incorporation of urban sustainability parameters in Spatial Urban development and planning policy and practices through the use of indicators in Cyprus
LIFE03 TCY/CY/000021	Guidelines to the Cyprus Competent Authorities for Policy Formulation for Sustainable Management of pig-farming wastes in Compliance with EU Practice
LIFE02 TCY/CY/018	Preparation of the Cyprus competent Authorities for the design and Implementation of a noise policy in Cyprus
LIFE02 TCY/CY/019	Development and Implementation of an Integrated System for the Control and Monitoring of the Urban Wastewater Treatment Plants in Cyprus
LIFE00 TCY/CY/051	Legislation and policy options for reduction of traffic emission in Cyprus
LIFE99 TCY/CY/041	Household Recycling Partnership
LIFE99 TCY/CY/102	Introduction and pilot application of Emas in Cyprus (European Council Regulation 1836/93)
LIFE99 TCY/CY/111	The River Valleys Project, Cyprus
LIFE98 TCY/CY/167	Integrated control of industrial pollution and chemical substances in Cyprus
LIFE98 TCY/CY/172	Special areas of conservation (Directive 92/43/EEC) in Cyprus
LIFE97 TCY/CY/077	Cycle networks in Cyprus towns
LIFE96 TCY/CY/47	Medact, the Aphrodite project
LIFE95 TCY/CY/0868	Development of an Integrated Monitoring and Early Warning System to sustain the Quality and Multi-functionality of Surface Water
LIFE94 TCY/CY/0970	Project: Green Awareness (An action programme to sensitise Cypriots to conservation and environmental protection)
LIFE94 TCY/CY/0977	Mining waste management on Cyprus: Assessment, strategy development and implementation
LIFE92 TCY/CY/004	Laona project - a scheme to promote sustainable development among rural communities bordering the proposed Akamas National Park, Cyprus
Estonia*	
LIFE95 TCY/EE/0884	Baltic Municipal Environmental Audit
LIFE95 TCY/EE/0889	Implementation of the convention on biological diversity and the Act on sustainable development in Estonia
LIFE92 TCY/EE/020	Training of Estonian officials in environmental matters
Egypt*	
LIFE06 TCY/ET/000226	Italian-Egyptian Capacity Building in the Integrated Water Supply and Sanitation
LIFE06 TCY/ET/000232	Flash Floods in Egypt: protection and management
LIFE04 TCY/ET/000043	Integrated Solid Waste Management for Al Fayoum and Etsa
LIFE04 TCY/ET/000045	Demonstration of clean technologies in tanning processes



Project Number	Title
LIFE99 TCY/ET/072	Integrated industrial solid waste management in Egypt
LIFE98 TCY/ET/152	Action plan for the site location and the development of design, operation and environmental impact assessment methods of solid waste sanitary landfills in Egypt governorates
Germany	
LIFE94 TCY/D/0981	Environmental Centre for Administration and Technology (ECAT) - TIRANA
LIFE92 TCY/D/018	Environmental Centre for Administration and Technology (ECAT) in Riga
LIFE92 TCY/D/022	Environmental Centre for Administration and Technology (ECAT) in St. Petersburg
Israel	
LIFE06 TCY/IL/000240	Protecting trans-boundary groundwater sources from pollution: research, training and guidelines for Israeli and Palestinian municipalities
LIFE05 TCY/IL/000130	The Sources of the Jordan River, Humans and Nature
LIFE05 TCY/IL/000131	Capacity Building for Creating Sustainable Communities in Israel according to Local Agenda 21 principles
LIFE04 TCY/IL/000027	Southern Arava Sustainable Waste Management Plan
LIFE03 TCY/IL/000035	Sakhnin Centre as a Model for Environment Education and International Cooperation on Advanced Wastewater Treatment (A-WWT) in Rural Areas
LIFE99 TCY/IL/009	Conservation of Endangered Birds of Prey in Israel
LIFE97 TCY/IL/038	Restoration and conservation in the re-flooded Hula wetland habitat in northern Israel
LIFE97 TCY/IL/044	Restoration of the rivers in Israel's coastal plain
LIFE97 TCY/IL/047	The Galicomp project: centralised treatment of organic waste
LIFE97 TCY/IL/048	Municipal solid waste management: a demonstration project
LIFE95 TCY/IL/0969	Development of multi-scheme urban refuse treatment methodology
Jordan*	
LIFE05 TCY/HKJ/000132	Development of methods and tools for the establishment of good environmental performance in the tourist accommodation sector in Jordan - Implementation of pilot studies
LIFE04 TCY/HKJ/000058	Integration of economic instruments and voluntary agreements in the environmental policies of Jordan and Syria
LIFE02 TCY/HKJ/026	Hazardous Material in Jordan, Environmental and Legislative Dimensions
LIFE00 TCY/HKJ/049	Creation of the Natural Touristical Park of Jerash Province, Jordan
LIFE98 TCY/HKJ/110	Environmental law enforcement in Jordan
Latvia	
LIFE94 TCY/LV/0579	Rare and endangered species of plants and animals (Red Data Book of Latvia)
Lebanon*	
LIFE05 TCY/RL/000138	Infectious Medical Waste management national network in Lebanon
LIFE04 TCY/RL/000040	Alleviating Barriers to Quarries Rehabilitation in Lebanon
LIFE03 TCY/RL/000044	Stable institutional structure for protected areas management
LIFE02 TCY/RL/032	Strengthening the Environmental Legislation Development and Application System in Lebanon
LIFE00 TCY/RL/020	Establishment of the Lebanon cleaner production centre
LIFE00 TCY/RL/022	Towards a sustainable mechanism for forest fire fighting in Lebanon
LIFE98 TCY/RL/102	Strengthening the permitting and auditing system for industries
LIFE98 TCY/RL/136	Lebanese environment and development observatory (LEDO)
Lithuania	
LIFE95 TCY/LT/0875	Implementation of Cleaner Production (CP) Projects in Lithuanian Textile Industry

Project Number	Title
Malta	
LIFE03 TCY/MT/000047	Setting up the first coastal nature reserve in Malta
LIFE00 TCY/M/036	MALSIS, a soil information system for the Maltese Islands
LIFE99 TCY/M/034	Pilot air quality monitoring project for Malta
LIFE99 TCY/M/095	Integrated management of specially protected coastal areas in Malta
LIFE97 TCY/M/071	Introduction in Malta of systems compatible with EEC Regulation 1836/93
LIFE96 TCY/M/06	Evaluation of pollution risk and prevention measures in Malta
LIFE94 TCY/M/0983	Maritime environmental risk management system (Malta)
LIFE93 TCY/M/6040	Financial support to the Government of Malta for an Eco-Audit and preparation of an environmental action plan
Morocco*	
LIFE06 TCY/MA/000254	Management and Valorisation of Solid Domestic Waste for the Small Urban Communities inn Morocco
LIFE06 TCY/MA/000256	Wastewater treatment and reuse for irrigation: demonstration, management and administrative capacit building for sustainable water use and environmental protection
LIFE05 TCY/MA/000141	Design and Application of an Innovative Composting Unit for the Effective Treatment of Sludge an other Biodegradable Organic Waste in Morocco
LIFE04 TCY/MA/000065	Development of a pilot model of eco-efficient industrial estate adopted to the Morocco situation throug the establishment of an internal expert team for the technical assistance to companies in introducin waste water treatment and reuse
LIFE04 TCY/MA/000070	Marrakech Environmental Management Audit Scheme
LIFE03 TCY/MA/000050	Système de gestion d'information scientifique dans la région de Sahel-Doukkala, Maroc
LIFE02 TCY/MA/029	Protection of biodiversity and water resources in the Moulouya River Basin (MRB)
LIFE99 TCY/MA/084	Creation of an environmental Centre for the towns of Meknes and Fes
LIFE99 TCY/MA/091	Establishment of an experimental centre for domestic waste sorting in Rabat
LIFE98 TCY/MA/088	Environment: assistance in management of risk
LIFE97 TCY/MA/035	Environment: Legal and institutional technical assistance project
LIFE96 TCY/MA/24	Evaluation of pollution risks and prevention measures in Chefchaoun and Tetouan (Morocco)
LIFE94 TCY/MA/0955	Training in the management of pollution from hydrocarbons and similar pollutants
LIFE93 TCY/MA/6061	National guidelines for dicontamination of liquids
Poland*	
LIFE93 TCY/PL/6026	Lower Oder Valley Nature Park
Russia (Kaliningrad a	and St. Petersburg regions)
LIFE06 TCY/ROS/000267	Integrating Geological Information inn City Management to Prevent Environmental Risks
LIFE06 TCY/ROS/000269	Kaliningrad Air Pollution induced by traffic: modelling system design, installation and validation
LIFE05 TCY/ROS/000143	Promotion of Integrated environmental and safety management practices for industry in Kaliningrad
LIFE04 TCY/ROS/000049	Narva Groundwater Management Plan
LIFE04 TCY/ROS/000050	Bringing Regional Protected Areas of the Leningrad region (Russian Federation) into European Context
LIFE04 TCY/ROS/000051	Information and Communication Technologies to Strengthen Sustainable City Management
LIFE03 TCY/ROS/000068	Building environmental capacity in municipal enterprises through EMAS implementation (MEEMAS)
LIFE02 TCY/ROS/039	Development of the Environmental Action Plan for Municipal Solid Waste Management in St. Petersburg
LIFE00 TCY/ROS/066	Capacity building of Kaliningrad City Hall in the environmental performance
LIFE00 TCY/ROS/071	Development and Strengthening of the Regional Co-ordination Council's activity of the Implementation of Helcom decision in the Russian Baltic Sea Region
LIFE99 TCY/ROS/018	Comprehensive Action Programme Elaboration for the Conservation of Biodiversity: CAPE Biodiversity



Project Number	Title
LIFE99 TCY/ROS/022	Systems for establishing effluent limits based on best available technology in accordance with Helcom recommendations as a basis for improved environmental conditions
LIFE99 TCY/ROS/024	LenFauna, for the conservation of wild fauna and natural habitats in the Leningrad Region
LIFE99 TCY/ROS/047	Strengthening of Eco-Auditing Structure in Saint Petersburg
LIFE98 TCY/ROS/029	S.O.S. Forests: Survey and Observation System for Forests
LIFE98 TCY/ROS/095	Prevention of Baltic Sea pollution by dumps leachate in St Petersburg (Russia)
LIFE97 TCY/ROS/032	Life forecast (FORests' ECological ASsessment Tool)
LIFE97 TCY/ROS/054	Sustainable traffic development in Kaliningrad City, Russia
LIFE97 TCY/ROS/093	Coastal conservation and local agenda 21, a pilot project for Russia
LIFE96 TCY/ROS/07	Ecotourism and nature protection in the Kaliningrad Region
LIFE96 TCY/ROS/56	Reducing Baltic Sea heavy metal pollution in Saint Petersburg
LIFE95 TCY/ROS/0871	Development of a clinical waste management plan and first implementation including setting up of a pilot treatment facility in St Petersburg
LIFE94 TCY/ROS/0577	Environmental Centre for Administration and Technology (ECAT) in Kaliningrad
LIFE94 TCY/ROS/1640	Preventing accidental oil spills and development of oil pollution abatement services in St Petersburg
Slovenia	
LIFE94 TCY/SLO/0979	Establishment of Notranjski Park and Unesco Mab Reserve Notranjski Kras
LIFE93 TCY/SLO/6046	Financial support to the Republic of Slovenia for technical assistance in drafting environmental regulation for solid waste management
Syria*	
LIFE06 TCY/SYR/000271	Building Sustainable Municipal Waste Management in Syria
LIFE04 TCY/SYR/000023	Promotion of concerted sustainable local development planning in Syria
LIFE00 TCY/SYR/072	Environmental management systems in the Syrian enterprises
LIFE97 TCY/SYR/006	Integrated medical waste management plan in Syria
LIFE96 TCY/SYR/37	Environmental audit and pollution prevention and control of the Syrian textile industry
Tunisia	
LIFE06 TCY/TN/000275	Network for water quality monitoring
LIFE05 TCY/TN/000150	Capacity building for an early assessment system of drought in three countries of the south shore of the Mediterranean sea: Algeria, Morocco and Tunisia
LIFE04 TCY/TN/000063	Demonstration of wastewater treatment in Tunisian tanneries
LIFE03 TCY/TN/000051	Instauration d'un ecolabel tunisien
LIFE02 TCY/TN/043	Institutional support to the Tunisian Ministry of Environment and land use in the field of environmenta education
LIFE00 TCY/TN/016	ISO EMA SME 2000: Pilot programme to implement EMAS and ISO 14001 in a group of Tunisian SMEs
LIFE00 TCY/TN/018	Implementation of pilot systems to monitor the desertification in two countries of the southern coast of the Mediterranean: Tunisia and Morocco
LIFE98 TCY/TN/127	An Agenda 21 for the basin slope of north-west Tunisia
LIFE97 TCY/TN/055	Conservation and rehabilitation of fragile insular ecosystems
LIFE95 TCY/TN/0928	Technical assistance project for setting-up a Decision Aid System for natural resources and environmental management in Tunisia (SAIDE projet)
Turkey	
LIFE06 TCY/TR/000282	Sustainable Management of Istanbul Local E-waste
LIFE06 TCY/TR/000283	Development of a GIS based decision support system for urban air quality management in the city of Istanbul
LIFE06 TCY/TR/000284	Preservation of Thermal Water Resources and Sustainable Exploitation for Therapeutic Tourism

Project Number	Title
LIFE06 TCY/TR/000292	Improvement of Industrial Hazardous Waste Management in Turkey
LIFE05 TCY/TR/000164	Promoting Climate Change Policies in Turkey
LIFE04 TCY/TR/000004	Establishment of an Information System for Turkish SMEs on EU Environmental Approximation
LIFE04 TCY/TR/000012	Supporting Education for Sustainable Development in Turkey - Turkish Green Pack
LIFE03 TCY/TR/000061	Exploitation of Agricultural Residues in Turkey
LIFE03 TCY/TR/000064	Approximation of Seveso-II Directive in Turkey
LIFE02 TCY/TR/061	Preserving the Marine Environment of Oludeniz Lagoon
LIFE00 TCY/TR/009	Odorous emissions and immissions management policy in Turkey
LIFE00 TCY/TR/010	Strengthening environmental control in Turkey, reinforcing the National Reference Laboratory of Gölbasi
LIFE00 TCY/TR/011	Capacity building for solid waste management in Turkey
LIFE00 TCY/TR/054	Integrated Healthcare Waste Management in Istanbul
LIFE99 TCY/TR/065	Ecosystem Conservation and Management for Threatened Plant Species
LIFE99 TCY/TR/086	Establishing a sustainable network for Lake Management in Turkey
LIFE99 TCY/TR/087	Cukurova Delta biosphere reserve: determination of biological diversity and initiation of a programm for sustainable development
LIFE98 TCY/TR/011	Risk assessment of the ports of Mersin and Iskenderun, Turkey and associated capacity building for state of readiness and for response to marine pollution
LIFE98 TCY/TR/013	Support for the environmental management of organised industrial zones in Turkey
LIFE98 TCY/TR/016	Bodrum solid waste management project
LIFE97 TCY/TR/015	Ecological risk analysis and management planning for Lake Manyas (Lake Bird)
LIFE97 TCY/TR/016	Implementation of EMAS (Eco Management and Audit Scheme) in Turkey
LIFE97 TCY/TR/037	Demirtas waste dump gas recovery project
LIFE96 TCY/TR/21	Coastal Management and tourism in Turkey
LIFE96 TCY/TR/38	Rehabilitation of open dump sites: towards sustainable land use
LIFE95 TCY/TR/1166	Turkish Environment and Development Observatory - Preparatory Phase
West Bank and Gaza	
LIFE05 TCY/GA/000115	Environmental action for the sustainability of natural resources through recycling of water and sludg from marble production
LIFE05 TCY/GA/000121	Environmental Sustainability for a Better Life: An integrated approach for localizing Agenda 21 in the Bethlehem District
LIFE02 TCY/GA/071	Strengthening of the Palestinian Environmental Action Programme (SPEAP)
LIFE00 TCY/GA/089	Palestinian Integrated Rural Environmental Protection
LIFE99 TCY/GA/014	Gaza Coastal and Marine Environmental Action Plan
LIFE99 TCY/GA/141	Policy Guidelines for Wastewater Management in the Gaza Strip
LIFE96 TCY/GA/59	Inventory of the soil resources of West Bank and Gaza Strip, Palestine
International	
LIFE06 TCY/INT/000246	Protection of Biodiversity of the Sava River Basin Floodplains (Bosnia and Herzegovina, Croatia)
LIFE06 TCY/INT/000250	Development of Strategies for Sustainable Tourism Investments in the Mediterranean Nations (Algeria Morocco, Tunisia)
LIFE04 TCY/INT/000054	Building Capacity for Sustainable Hunting of Migratory Birds in Mediterranean Third Countries (Leba non, Tunisia)
LIFE03 TCY/INT/000031	Protection et Développement Durable des Zones Humides en Afrique du Nord (Algeria, Morocco, Tunisia)
LIFE02 TCY/INT/069	Wetlands Moroccan Centre
LIFE02 TCY/INT/034	Technical Assistance to Reinforce Governance in Environmental Tasks (Lebanon)



Project Number	Title
LIFE00 TCY/INT/021	Strategic environmental assessment and land use planning in Lebanon (Lebanon)
LIFE00 TCY/INT/063	DELTA Phase III: Environmental upgrading of enterprises in Maghreb and Mashrek countries (Algeria, The West Bank and Gaza, Jordan, Lebanon, Syria, Turkey)
LIFE00 TCY/INT/065	An Enhancement of the Permanent Environmental Awareness Unit at the Ministry of Environment in the Lebanon (Lebanon)
LIFE00 TCY/INT/069	Improving Coastal Land Degradation Monitoring in Lebanon and Syria (Lebanon, Syria)
LIFE99 TCY/INT/017	Development of the national system for preparedness and response to accidental marine pollution in Syrian Arab Republic (Syria)
LIFE99 TCY/INT/019	Med-Delta 2000: Eco-efficiency within companies (Algeria, The West Bank and Gaza, Jordan, Morocco, Lebanon, Syria)
LIFE97 TCY/INT/051	Envimed II Medcities (Cyprus, Israel, Lebanon)
LIFE96 TCY/INT/08	Development of oil spill response capabilities of Cyprus, Egypt and Israel (Cyprus, Egypt, Israel)
LIFE96 TCY/INT/14	Indicators for sustainable development in the Mediterranean region (Albania, Croatia, Cyprus, Algeria, Egypt, The West Bank and Gaza, Jordan, Israel, Malta, Morocco, Lebanon, Syria, Tunisia, Turkey)
LIFE96 TCY/INT/20	Integrated pollution control in Aleppo, training and consultancy package (Syria)
LIFE95 TCY/INT/0848	Development of port state control capability in Southern/Eastern Mediterranean countries (Cyprus, Algeria, Egypt, Israel, Malta, Morocco, Lebanon, Syria, Tunisia, Turkey)
LIFE95 TCY/INT/1204	METAP Protection of Coastal Lagoons and Wetlands in the Hammamet Gulf (Tunisia)
LIFE95 TCY/INT/1207	METAP Capacity Building for Line Ministries (Lebanon)
LIFE95 TCY/INT/1211	METAP National Environmental Action Plan (Jordan)
LIFE94 TCY/INT/0962	ENVIMED (Medcities I) (Albania, Bosnia and Herzegovina, Croatia, Cyprus, Algeria, Egypt, Israel, Malta, Morocco, Lebanon, Syria, Tunisia, Turkey)
LIFE94 TCY/INT/0988	MEDWET: Conservation and wise use of wetlands in the Mediterranean Basin (Albania, Croatia, Algeria, Morocco, Tunisia)
LIFE94 TCY/INT/1692	NEAP/Environmental Policy Support (Algeria)
LIFE94 TCY/INT/1694	Cost-Benefit Analysis of Environmental Action (Tunisia)
LIFE94 TCY/INT/1695	Strengthening of Environmental Management Unit in Ismailia (Egypt)
LIFE94 TCY/INT/1696	EIA Unit (Phase II) (Morocco)
LIFE94 TCY/INT/1698	Establishment of Regional Environmental Management Units (Syria)
LIFE93 TCY/INT/6027	Development of management plans for coastal lagoons and wetlands in the Baltic Sea region (Estonia, Lithuania, Latvia, Lebanon, Russia)
LIFE93 TCY/INT/6035	Creation of a training and information centre and interregional studies in Poland
LIFE93 TCY/INT/6037	Guidelines for the control of the pollution load to the Baltic Sea (Estonia)
LIFE93 TCY/INT/6041	METAP Cairo sludge disposal study (Egypt)
LIFE93 TCY/INT/6052	METAP Integrated coastal zone management (Albania)
LIFE93 TCY/INT/6053	METAP Environmental impact assessment unit (Algeria)
LIFE93 TCY/INT/6054	METAP Preparation of environmental strategy (Lebanon)
LIFE93 TCY/INT/6062	METAP Creation of an environmental impact assessment unit (Syria)
LIFE92 TCY/INT/005	Mediterranean environment observation function (Cyprus, Egypt, Morocco, Syria, Tunisia, Turkey)
LIFE92 TCY/INT/007	Sub-regional system for combating major marine pollution accidents affecting, or likely to affect, the territorial sea, coasts and related interests of Cyprus, Egypt and Israel (Cyprus, Egypt, Israel)
LIFE92 TCY/INT/008	Development environment systemic and prospective approach for the Syrian coastal regions (Syria)
LIFE92 TCY/INT/016	METAP Albania (Water supply and sewerage management), Turkey (Istanbul environment project) (Patara cultural heritage), Tunisia, Algeria (Meps) (Albania, Algeria, Tunisia, Turkey)

^{*} Please see also the international project section for other projects solely implemented in this country.

Available LIFE publications

LIFE-Focus brochures

A number of LIFE publications are available on the LIFE website:

LIFE and Europe's rivers - Protecting and improving our water resources (2007 - 52pp. ISBN 978-92-79-05543-0 - ISSN 1725-5619)

http://ec.europa.eu/environment/life/ infoproducts/rivers/rivers_Ir.pdf

LIFE and Energy - Innovative solutions for sustainable and efficient energy in Europe (2007 - 64pp. ISBN 978 92-79-04969-9 - ISSN 1725-5619) http://ec.europa.eu/environment/life/ infoproducts/energy/energy_lr.pdf

LIFE and the marine environment

(2006 - 54pp. ISBN 92-79-03447-2- ISSN 1725-5619)

http://ec.europa.eu/environment/life/ infoproducts/marine/marine_lr.pdf

LIFE and European forests (2006 - 68pp. ISBN 92-79-02255-5 - ISSN 1725-5619) http://ec.europa.eu/environment/life/ infoproducts/forests/forest_lr.pdf

LIFE in the City - Innovative solutions for Europe's urban environment (2006. 64pp. - ISBN 92-79-02254-7 - ISSN 1725-5619)

http://ec.europa.eu/environment/life/ infoproducts/urban/urban_lr.pdf

Integrated management of Natura 2000 sites (2005 - 48 pp. - ISBN 92-79-00388-7) http://ec.europa.eu/environment/life/ infoproducts/managingnatura_highres.pdf

LIFE, Natura 2000 and the military (2005 - 86 pp. - ISBN 92-894-9213-9 - ISSN 1725-5619)

http://ec.europa.eu/environment/life/ infoproducts/lifeandmilitary_en.pdf

LIFE for birds - 25 years of the Birds Directive: the contribution of LIFE-Nature projects (2004 - 48 pp. - ISBN 92-894-7452-1 - ISSN 1725-5619) http://ec.europa.eu/environment/life/ infoproducts/lifeforbirds_en.pdf

The air we breathe - LIFE and the European Union clean air policy (2004 - 32 pp. - ISBN 92-894-7899-3 - ISSN 1725-5619) http://ec.europa.eu/environment/life/ infoproducts/focusair/lifeair_hr_en.pdf

LIFE-Nature: communicating with stakeholders and the general public - Best practice examples for Natura **2000** (2004 - 72 pp. – ISBN 92-894-7898-5 - ISSN 1725-5619) http://ec.europa. eu/environment/life/infoproducts/naturecommunicating_lowres_en.pdf

the European Union waste policy (2004 - 28 pp. - ISBN 92-894-6018-0 - ISSN 1725-5619) http://ec.europa.

A cleaner, greener Europe - LIFE and

eu/environment/life/infoproducts/lifewaste en.pdf

Alien species and nature conservation in the EU - The role of the LIFE programme (2004 - 56 pp. - ISBN 92-894-6022-9 - ISSN 1725-5619) http://ec.europa.eu/environment/life/ infoproducts/alienspecies_en.pdf

Industrial pollution, European solutions: clean technologies - LIFE and the Directive on integrated pollution prevention and control (IPPC Directive) (2003 - 32 pp. - ISBN 92-894-6020-2 - ISSN 1725-5619) http://ec.europa.eu/environment/life/

infoproducts/cleantechnologies_en.pdf

LIFE and agri-environment supporting Natura 2000 - Experience from the LIFE programme (2003 - 72 pp. – ISBN 92-894-6023-7 - ISSN N° 1725-5619) http://ec.europa.eu/environment/life/ infoproducts/agrienvironmentreport_ en.pdf

LIFE for Natura 2000 - 10 years implementing the regulation (2003 - 108 pp. - ISBN 92-894-4337-5)

http://ec.europa.eu/environment/life/ infoproducts/lifepournatura2000_en.pdf

A sustainable approach for the environment - LIFE and the Community **Eco-Management and Audit Scheme** (EMAS) (2003 - 32 pp. - ISBN 92-894-

http://ec.europa.eu/environment/life/ infoproducts/emas_en.pdf

Water, an essential resource - LIFE and the new European water policy (2002 - 28 pp. – ISBN 92-894-0538-4) http://ec.europa.eu/environment/life/ infoproducts/water_en.pdf

Other publications

Best LIFE-Environment Projects 2005-2006 (2006, 40 pp.-ISBN 92-79-02123-0) http://ec.europa.eu/environment/life/ infoproducts/bestlifeenv/bestenv_0506_lr.pdf

Best LIFE-Environment Projects 2004-2005 (2005, 44 pp. - ISBN 92-79-00889-7) http://ec.europa.eu/environment/life/ infoproducts/bestlifeenv/bestenv.pdf

LIFE-Environment 1992 - 2004 "Demonstrating excellence in environmental innovation" (2005, 124 pp. - ISBN 92-894-7699-3 - ISSN 1725-5619) http://ec.europa.eu/environment/life/ infoproducts/bilanlife/lifeenv1992_ 2004_en.pdf

LIFE-Environment in Action. 56 new success stories for Europe's environment (2001 -131 pp. - ISBN 92-894-0272-5) http://ec.europa.eu/environment/life/ infoproducts/successstories2001 en.pdf

LIFE-Environment Projects 2006 compilation (2006, 56 pp.-ISBN 92-79-02786-7) http://ec.europa.eu/environment/life/ infoproducts/lifeenvcompilation_06.pdf

LIFE-Nature Projects 2006 compilation (2006, 67 pp. – ISBN 92-79-02788-3) http://ec.europa.eu/environment/life/ infoproducts/lifenatcompilation_06.pdf

LIFE-Third Countries Projects 2006 compilation (2006, 20 pp. - ISBN 92-79-02787-5) http://ec.europa.eu/ environment/life/infoproducts/lifetcy compilation_06.pdf

LIFE-Environment Projects 2005 compilation (2005, 97 pp.-ISBN 92-79-00104-3) http://ec.europa.eu/environment/life/ infoproducts/lifeenvcompilation_05_ lowres.pdf

LIFE-Third Countries Projects 2005 compilation (2005, 19 pp. - ISBN 92-79-00103-5) http://ec.europa.eu/ environment/life/infoproducts/lifetcycompilation_05_lowres.pdf

A number of printed copies of certain LIFE publications are available and can be ordered freeof-charge at: http://ec.europa.eu/ environment/env-informa/

Name LIFE ("L'Instrument Financier pour l'Environnement" / The financial instrument for the environment)

Type of intervention co-financing of actions in favour of the environment in the twenty-seven Member States of the European Union, in the candidate countries who are associated to LIFE and in certain third countries bordering the Mediterranean and the Baltic Sea.

LIFE is made up of three thematic components: "LIFE-Nature", "LIFE-Environment" and "LIFE-Third Countries".

Objectives

- with a view to sustainable development in the European Union, contribute to the drawing up, implementation and updating of Community policy and legislation in the area of the environment;
- explore new solutions to environmental problems on a Community scale.

Beneficiaries any natural or legal person, provided that the projects financed meet the following general criteria:

- they are of Community interest and make a significant contribution to the general objectives;
- they are carried out by technically and financially sound participants;
- they are feasible in terms of technical proposals, timetable, budget and value for money.

Types of project

- Eligible for LIFE-Environment are innovative pilot and demonstration projects which bring environment-related and sustainable development considerations together in land management, which promote sustainable water and waste management or which minimise the environmental impact of economic activities, products and services. LIFE-Environment also finances preparatory projects aiming at the development or updating of Community environmental actions, instruments, legislation or policies.
- Eligible for LIFE-Nature are nature conservation projects which contribute to maintaining or restoring natural habitats and/or populations of species in a favourable state of conservation within the meaning of the "Birds" (79/409/EEC) and "Habitats" (92/43/EEC) Community Directives and which contribute to the establishment of the European network of protected areas - NATURA 2000. LIFE-Nature also finances "co-op" projects aiming to develop the exchange of experiences between projects.
- Eligible for LIFE-Third countries are projects which contribute to the establishment of capacities and administrative structures needed in the environmental sector and in the development of environmental policy and action programmes in some countries bordering the Mediterranean and the Baltic Sea.

Implementation

Every year, the Commission publishes a call for proposals of projects to be co-financed. The Commission evaluates these proposals and selects those that will be co-financed. It closely monitors these projects and supports the dissemination of their results.

Period covered (LIFE III) 2000-2006.

Funds from the Community approximately EUR 638 million for 2000-2004 and EUR 317 million for 2005-2006.

Contact

European Commission D6 Environment E4 (LIFE Unit) B-1049 Brussels Internet: http://ec.europa.eu/life

LIFE Focus / LIFE-Third Countries 1992-2006: Supporting Europe's neighbours in building capacity for environmental policy and action

Luxembourg: Office for Official Publications of the European Communities

2007 - 64p - 21 x 29.7 cm ISBN 978-92-79-05694-9 ISSN 1725-5619

Publications Office Publications.europa.eu

KH-78-07-042-EN-C