LIFE - Environment

2005

Projects-Projekten-Projets-Προγράμματα-Projectos-Proyectos-Projecten-Progetti-Projektit-Projekte-Projects-Projekten-Projets-Προγράμματα-Projectos-Proyectos-Projecten-Progetti

European Commission

LIFE-Environment 2005: Commission supports 89 environmental innovation projects in 17 countries with €71 million

The European Commission has approved funding for 89 environmental innovation projects in 17 countries under the LIFE-Environment programme 2005. These projects will demonstrate new methods and techniques for dealing with a wide diversity of environmental problems, thus contributing to improving Europe's environment. The projects are led by 'beneficiaries', or project promoters, based in Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Portugal, Romania, Spain, Sweden and the United Kingdom. They represent a total investment of €220 million, of which the EU will provide €71 million.

Environment Commissioner Stavros Dimas said: "LIFE-Environment supports the development of ever more efficient and innovative technologies to tackle environmental issues. These innovations also contribute to achieving the EU's competitiveness and growth goals."

LIFE-Environment in 2005

This year, the Commission received 534 proposals for funding through the LIFE-Environment programme from a wide range of public and private organisations. The Commission selected 89 of these projects, all of which will apply ground-breaking technology to solve environmental problems.

Waste management takes the lead this year in terms of the number of projects selected (31) and of the EU funding allocated (€27 million, representing 38% of the total). Minimising the environmental impact of economic activities is the second most popular theme with 22 projects (€17 million). Almost one fifth of the EU funding (€14 million) will be allocated to 17 projects dealing with the sustainable management of groundwater and surface water. Twelve projects deal with sustainable land-use development and planning and will share around €9 million (i.e. 13%) of the EU funding available. Finally, seven projects address the reduction of the environmental impacts of products and services (€5 million).

Background

LIFE is the EU's financial instrument supporting environmental and nature conservation projects throughout the EU, as well as in some acceding, candidate, and neighbouring countries. Its objective is to contribute to the development and implementation of EU environmental policy by financing specific actions. Since 1992, LIFE has co-financed some 2,500 projects, contributing €1,500 million to the protection of the environment.

LIFE-Environment, which finances innovative pilot and demonstration projects, is one of three thematic components under the LIFE programme. The other two components are LIFE-Nature and LIFE-Third Countries. LIFE-Nature focuses on contributing to the implementation of the EU directives on the conservation of wild birds and on wildlife habitats, in particular the Natura 2000 network of conservation areas established by the latter directive. LIFE-Third Countries supports countries bordering the Mediterranean and the Baltic Sea in building their capacity for environmental management.

The current LIFE programme ("LIFE III") finishes at the end of 2006. The Commission has proposed a new programme called "LIFE +", which would run from 2007-2013 with a budget of €2.19 billion. The proposal is currently under discussion in the Council of Ministers and the European Parliament.

More detailed information about each project is available at:
http://europa.eu.int/comm/environment/life/project/index.htm.

Index of projects selected in 2005

Location	Project number	Title of project
BELGIUM	LIFE05 ENV/B/00051 0TOPPS	Preventing PPP pollution
	LIFE05 ENV/B/000517 INSIMEP	Metal precipitation for cleaner groundwater
DENMARK	LIFE05 ENV/DK/000141 BIOCOVER	Giving methane cover
	LIFE04 ENV/DK/000145 Odense PRB-AgriPoM	Reducing pollution in the Odense River Basin
	LIFE05 ENV/DK/000153 BioCrete	From ashes to concrete solutions
	LIFE05/ENV/DK/000155 AGWAPLAN	Supporting good agricultural practice
	LIFE05 ENV/DK/000156 CO2REF	CO_2 cooling capacity
	LIFE05 ENV/DK/000158 RECYCLING/SYMBIOSIS	From sludge ash to stone wool
ESTONIA	LIFE05 ENV/EE/000387 ECOMAN	Mastering manure management
FINLAND	LIFE05 ENV/FIN/000530 Care4Nature	Reusing WEEE
	LIFE05 ENV/FIN/000539 WastePrevKit	Waste not
FRANCE	LIFE05 ENV/F/000053 AMELIE	A lead-free electronic supply chain
	LIFE05 ENV/F/000058 AWARE	Reducing water pollution by improving pesticides practices
	LIFE05 ENV/F/000059 PAMELA	An eco-friendly demolition of retired aircraft
	LIFE05 ENV/F/000062 GAP	Clean manufacturing of space and aeronautic panels
	LIFE05 ENV/F/000063 IDEAL 79	Incentives to reduce municipalities waste flow
	LIFE05 ENV/F/000067 SOUND SLUDGE	Reducing sludge by ultrasound
	LIFE05 ENV/F/000068 MONALISA	A new identity card for pollen in the air
	LIFE05 ENV/F/000070 METTE	A clean technology for textile conditioning
	LIFE05 ENV/F/000080 RECLIONBAT	A new life for lithium ion batteries

Location	Project number	Title of project
FRANCE	LIFE05 ENV/F/000082 DIDEM	A climate friendly process for tiles and bricks
	LIFE05 ENV/F/000083 GEAMCOS	Green electronics for the aeronautic and military sectors
GERMANY	LIFE05 ENV/D/000182 WAgriCo	Tackling water pollution in Lower Saxony
	LIFE05 ENV/D/000185 INOCAST	An eco-friendly production of engine blocks
	LIFE05 ENV/D/000193 Sludge Redox	Biogas from industrial sewage sludge
	LIFE05 ENV/D/000195 SUPERWOOL	Halogen-free production of wool yarns
	LIFE05 ENV/D/000197 LEADFREE	Training manufacturers in green electronics
	LIFE05 ENV/D/000207 HVD	Avoiding chemicals in steel production
GREECE	LIFE05 ENV/GR/000214S MAQ	Accurate assessment of atmospheric pollution loading
	LIFE05 ENV/GR/000235 SUSCON	Sustainable construction approach for Greece and Cyprus
	LIFE05 ENV/GR/000242 Elefsina2020	A greener future for Elefsina Bay
	LIFE05 ENV/GR/000245 EnviFriendly	A sustainable management plan for the Evrotas river basin
HUNGARY	LIFE05 ENV/H/000418 SUMANAS	Managing arsenic in groundwater
IRELAND	LIFE05 ENV/IRL/000500 DfAuto	Vehicle towards better compliance
	LIFE05 ENV/IRL/000501 Tyre/Wood Block	Retiring tyres
SWITZERLAND	LIFE05 ENV/IT/000801 BIOCOAL	Innovative biomass cogeneration process
ITALY	LIFE05 ENV/IT/000808I DEMS	A new environmental urban plan
	LIFE05 ENV/IT/000812 RIWAC	Recovering chrome from tannery waste
	LIFE05 ENV/IT/000839 C-DISPATCH	Sustainable distribution of goods
	LIFE05 ENV/IT/000845 TIRSAV PLUS	Recycling oil mills waste
	LIFE05 ENV/IT/000846 BATTLE	Encouraging water reuse in textile SMEs

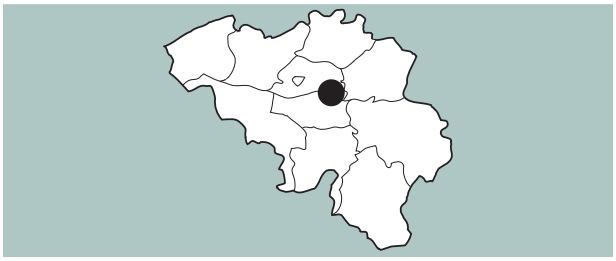
Location	Project number	Title of project
ITALY	LIFE05 ENV/IT/000868 PERBIOF	Reducing the environmental impact of water treatment plants
	LIFE05 ENV/IT/000870 CEDM	A Centre for Eco-Friendly City Freight Distribution
	LIFE05 ENV/IT/ 000874 GHERL	CO_2 reduction from landfills
	LIFE05 ENV/IT/000875 P.S.V.	Recycling ceramic polishing sludge
	LIFE05 ENV/IT/000876 NOTRE	Reducing greenhouse gases in the cooling process
	LIFE05 ENV/IT/000894 ESTRUS	Sustainable treatment of urban stormwater
	LIFE05 ENV/IT/000907 ECO BULL-NOSE	Cleaner polishing of ceramic strips
	LIFE05 ENV/IT/000911 VOC-Free Decals	A toxic-free industrial decoration
	LIFE05 ENV/IT/000937 SAPID	Pacific GMO/non-GMO coexistence
LUXEMBURG	LIFE05 ENV/L/000047 ECOSB	Eco-friendly manufacturing of wood panels
THE NETHERLANDS	LIFE05 ENV/NL/000018 NoMEPorts	Tracking noise in European ports
	LIFE05 ENV/NL/000020 HEIGHT	Climate-friendly cold stores for fruits and vegetables
	LIFE05 ENV/NL/000021 CEPE	Reducing pesticides in horticulture
	LIFE05 ENV/NL/000029 ESHA-TRR	Responsible roof-felt recycling
	LIFE05 ENV/NL/000030 R2P	From bottom ash to high-grade metal
	LIFE05 ENV/NL/000035 CLB	Potato blanching comes full circle
	LIFE05 ENV/NL/000036 EFET	Minimising the magnetic menace
PORTUGAL	LIFE05 ENV/P/000366 ECOVIA	The road to recycled roads
	LIFE05 ENV/P/000369 OILPRODIESEL	UFO fuel
ROMANIA	LIFE05 ENV/RO/000106 AIR-AWARE	Modelling metropolitan air pollution
SPAIN	LIFE05 ENV/E/000251 OZONECIP	Cleaner cleaning

Location	Project number	Title of project
SPAIN	LIFE05 ENV/E/000256 ZEROPLUS	Treating surface treatments
	LIFE05 ENV/E/000262 GESMOPOLI	Mechanisms for managing mobility
	LIFE05 ENV/E/000267 BE-FAIR	Greater value for fish
	LIFE05 ENV/E/000285 RESITEX	Fashionable styles of waste reduction
	LIFE05 ENV/E/000288 ALMOND PRO-SOIL	Late-bloomers to flower
	LIFE05 ENV/E/000289 FERTIGREEN	Nourishing irrigation
	LIFE05 ENV/E/000292 OLIVEWASTE	Treating olive oil residues
	LIFE05 ENV/E/000301 ECO-CERAMICs	Upgrading sludge
	LIFE05 ENV/E/000302 ECODIPTERA	Treating flies to manure
	LIFE05 ENV/E/000313 GEA	Getting irrigation on line
	LIFE05 ENV/E/000317 ELVES	Motor metals for motors
	LIFE05 ENV/E/000319 MICROPHILOX	Journalistic title Managing methane
	LIFE05 ENV/E/000328 PREVOC PLAN	Reducing VOC emissions
	LIFE05 ENV/E/000330 PRIORAT	Growing greener grapes
	LIFE05 ENV/E/000333 HIDRO SOLAR 21	Cooler means of cooling
SWEDEN	LIFE05 ENV/S/000401 ART	Reacting better
	LIFE05 ENV/S/000405 DME Vehicle	Heavy duty for alternative fuel
UNITED KINGDOM	LIFE05 ENV/UK/000118 TREAD	Blasting tyres
	LIFE05 ENV/UK/000121 PROMOTHE MBR	Zeroing in on sludge
	LIFE05 ENV/UK/000122 Clear	Woolly future for glass cullets
	LIFE05 ENV/UK/000124 MAD but better	Treating sludge better
	LIFE05 ENV/UK/000126 Formose	Formaldehyde to sugar

Location	Project number	Title of project
UNITED KINGDOM	LIFE05 ENV/UK/000127 QUERQUS	Taking to the river
	LIFE05 ENV/UK/000128 BioReGen	Greening brownfields
	LIFE05 ENV/UK/000131 MediSafe	Managing medical waste
	LIFE05 ENV/UK/000137 NITRABAR	Reducing nitrate contamination
	LIFE05 ENV/UK/000998 Integrated Greenhouse	Greener greenhouses

Preventing PPP pollution

LIFE05 ENV/B/000510
TOPPS



Official title

Train the operators to prevent pollution from point sources

Background

In past years, several small pilot projects have been carried out on water pollution from plant protection products (PPP), achieving reductions in PPP concentrations in some surface waters of over 90%. There has, however, been little or no coordination and exchange of experiences between these initiatives. Moreover, due to the small scale of their implementation, the methods developed are seldom directly transferable to the national or EU level.

Objectives

Through multi-stakeholder training and awareness-raising, the project will seek a significant decrease in water pollution from PPP. It will directly address PPP-users (mainly farmers), but also train key 'PPP-intermediaries' (distributors, advisors or agricultural schools, etc.), who will, in turn, inform PPP-users on the prevention of pollution from point sources.

The project aims to develop:

- best management practice guidelines for safe PPP use;
- a common training framework;
- minimal technical specifications for PPP-container rinsing instruments, filling and cleaning places, sprayers, and other related tools and practices; and
- a checklist for safe PPP use, aimed at farm managers, contractor sprayers, extension services and other actors.

Beneficiary:

Type of beneficiary
Professional organisation

Name of beneficiary
European Crop Protection Association (ECPA), Brussels

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BELGIUM
Phone +32 2 663 15 50
Fax +32 2 663 15 60
Email Stuart.n.rutherford@ecpa.be
Website http://www.ecpa.be

Name of contact person
Stuart Rutherford

Duration of project:
36 months (Nov 2005 – Oct 2008)

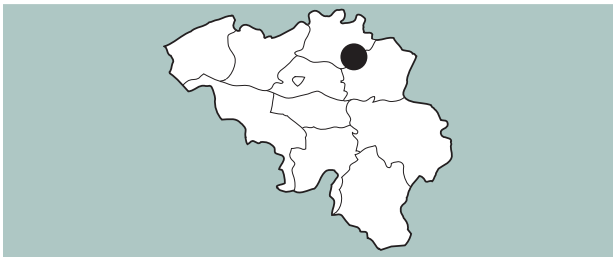
Total budget in euro:
2,603,332.00

EC contribution in euro with %:
1,259,105.00 (48.37%)

Generic Theme:
2.4. Diffuse and dispersed sources of pollution

Metal precipitation for cleaner groundwater

LIFE05 ENV/B/000517
INSIMEP



Official title

In Situ Metal Precipitation for remediation of groundwater contaminated with non ferrous metals

Background

A major part of the around 1.5 million soil-contaminated sites in Europe are polluted with non-ferrous metals. In many cases, this has led to the contamination of groundwater with metals such as zinc, cadmium, cobalt and nickel.

Currently, the best available remediation technique for groundwater contaminated by non-ferrous metals is to pump it up and clean it in wastewater treatment plants. This is a long and costly operation, which often fails to meet cleaning standards. It also often has negative effects on the local groundwater balance. Furthermore, the process involves the use of hazardous chemicals and the production of metal-containing waste sludge.

Objectives

The project seeks to prove that treating metal-contaminated groundwater on site by accelerating naturally-occurring biogeochemical processes, is a better solution than current techniques. This method, known as in-situ metal precipitation (INSIMEP), is expected to be faster, more economical and more environmentally friendly, since resulting metal concentrations in the groundwater are lower, no hazardous chemicals are required, and no solid waste is produced. The project will demonstrate the technique's long-term effectiveness and seek to bridge the gap to large-scale application by implementing the process on sites owned by the beneficiary itself.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Umicore NV

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BELGIUM
Phone +32 14 244811
Fax +32 14 245716
Email eric.vandenbroeck@umicore.com
Website http://www.umicore.com

Name of contact person
Eric Van Den Broeck

Duration of project:
45 months (Sept 2005 – June 2009)

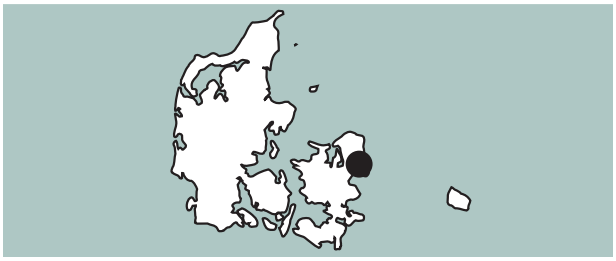
Total budget in euro:
2,764,542.00

EC contribution in euro with %:
758,236.00 (27.43%)

Generic Theme:
2.2. Water supply - Water quality - Ground water protection

Giving methane cover

LIFE05 ENV/DK/000141
BIOCOVER



Official title

Reduction of Greenhouse Gas Emissions from Landfills by use of Engineered Bio-covers

Background

Decomposing organic waste in landfills generates large quantities of methane, a greenhouse gas that contributes significantly to the global problem of climate change. Conventional technology for extracting methane for use as an energy resource is seldom cost-efficient and generally captures only 40-60% of the gas produced.

The adoption of the EU landfill directive has led to improvements in waste management practices, along with a reduction in the amount of organic waste produced. Nevertheless, Europe's existing landfills continue to generate vast quantities of methane, and improved methods are needed for its capture.

Objectives

The project's objective is to demonstrate an innovative technology for reducing methane emissions from landfills by up to 90%. This will be achieved by building a "bio-cover" with "windows" on a landfill, to increase the biological oxidation of methane and improving the collection of the gas. The approach is expected to be cheaper and more effective than current methods. The technology is to be transferred to at least four further sites in Europe, as well as two outside the EU, so as to prove its applicability under different climatic conditions.

Beneficiary:

Type of beneficiary
University

Name of beneficiary
Technical University of Denmark (DTU) - Environment and Resources Department

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Phone +45 45 251600
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Website http://www.er.dtu.dk

Name of contact person
Peter Kjeldsen

Duration of project:
39 months (Aug 2005 – Nov 2008)

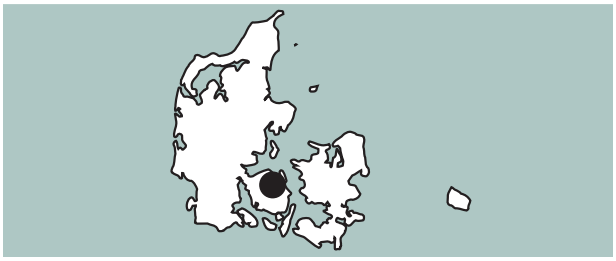
Total budget in euro:
536,511.00

EC contribution in euro with %:
256,311.00 (47.77%)

Generic Theme:
3.3: Reduction of emission of greenhouse gases

Reducing pollution in the Odense River Basin

LIFE04 ENV/DK/000145
ODENSE PRB-AGRIPOM



Official title

Odense Pilot River Basin – Agricultural Programme of Measures

Background

The Commission and the Member States agreed on a Common Implementation Strategy (CIS) in May 2001 to support the implementation of the Water Framework Directive (WFD). Amongst the activities foreseen by the strategy are the development of guidelines on technical issues and their testing and demonstration in Pilot River Basins (PRB). To date, tests have been carried out in 15 PRBs in 18 countries, including the "Odense Pilot River Basin" in Denmark.

In the context of the WFD's CIS, in June 2004 the EU Water Directors identified agriculture as a key focus area, and established an EU Strategic Steering Group to address problems related to agricultural nutrient pressure. In several Member States, these problems are an impediment to meeting the WFD objective of a good ecological status in all water bodies by 2015.

Objectives

This WFD-related LIFE project will focus on agricultural nutrient pressure and its impact on achieving the WFD objectives. Its main aim is to demonstrate the development of a cost-effective programme of measures to reduce levels of nitrogen and phosphorous originating from agricultural activities in the Odense river basin. Further goals are to prepare a Pilot River Basin management plan, to elaborate input for the EU Strategic Steering Group, as well as to demonstrate and make available the project's results to other environmental and rural development authorities and stakeholders within the EU.

Beneficiary:

Type of beneficiary
Regional authority

Name of beneficiary
Fyn County

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Oerbaekvej 100
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Phone +45 6556 1870
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Email HBM@anv.fyns-amt.dk
Website http://www.funencounty.dk

Name of contact person
Harley Bundgaard Madsen

Duration of project:
29 months (Jan 2005 - June 2007)

Total budget in euro:
514,641.00

EC contribution in euro with %:
201,841.00 (39.22%)

Generic Theme:
2.1: Water management at the scale of the river basin

From ashes to concrete solutions

LIFE05 ENV/DK/000153
BIOCRETE

Official title

Utilisation of ash from incineration of wastewater sludge (bio ash) in concrete production

Background

The concrete industry uses large amounts of fly ash from coal-fired power plants as a partial substitute for cement. Using ash reduces the need for its disposal in landfills. Furthermore, it avoids the consumption of fossils fuels that would have been needed for cement production. This saves natural resources and reduces CO_2 emissions, in line with the EU's Sixth Environmental Action Programme and the Environmental Technologies Action Plan.

Bio ash, which is currently disposed of in landfills, can also be used for concrete production, with the same environmental benefits as fly ash. However, full-scale bio-ash concrete production is still taking place in only very small quantities. A lack of documentation of environmental impacts and the technical properties of resulting concrete products, and the need for structured dissemination of existing know-how, are some of the factors impeding its more widespread use.

Objectives

The project aims to prove the technological, economic and environmental viability of the use of ash from wastewater sludge incineration for the production of concrete. A number of demonstration projects will be carried out, and results and expertise will be collected in a handbook with guidelines for the use and quality control of bio ash in concrete.

It is expected that by the end of the project at least 50% (5,000 tons) of the Copenhagen area's total annual generation of bio ash will be used for concrete production.

Beneficiary:

Type of beneficiary
Public enterprise

Name of beneficiary
Spildevandscenter Avedøre I/S
(Avedoere Wastewater Services)

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Kanalholmen 28
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Phone +45 3634 3850
Fax +45 3634 3801
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Website http://www.spildevandscenter.dk

Name of contact person
Bo Neergaard Jacobsen

Duration of project:
30 months (June 2005 – Dec 2007)

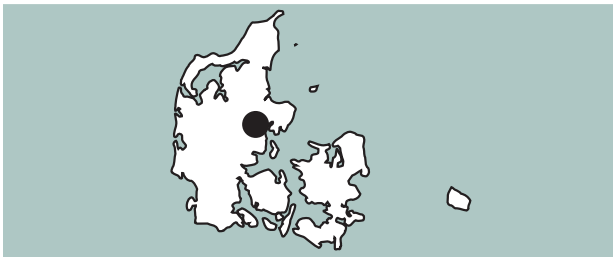
Total budget in euro:
721,772.00

EC contribution in euro with %:
303,748.00 (42.08%)

Generic Theme:
4.9: General - Waste management

Supporting good agricultural practice

LIFE05/ENV/DK/000155
AGWAPLAN



Official title

Integrated Protection of Surface and Groundwater in Agricultural Regions

Background

It is only since 1987, with the launching of the first national water management plan, that Denmark's farmers have been required to consider the environmental impacts of agricultural activities. Today, the EU Water Framework Directive (WFD) requires farmers to consider environmental impacts not only at the farm level, but also at the level of river basins. This approach is new because until now, pollution from agriculture has mainly been regulated at the national level, thereby not adequately taking regional and local conditions into account.

It is believed that the environmental objectives set by the WFD can be achieved through farmers' voluntary implementation of good agricultural practice (GAP), with the support of the Danish agricultural advisory system and environmental authorities.

Objectives

The project aims to develop and test an integrated advisory approach to the implementation of GAP. It seeks to demonstrate and quantify the impact of GAP on nitrogen and phosphorous in surface and groundwater in three pilot areas in mid-eastern Jutland. The integrated approach will be based on the participation of environmental authorities, the Danish agricultural advisory service, agricultural research institutions and farmers.

Beneficiary:

Type of beneficiary
Development agency

Name of beneficiary
Danish Agricultural Advisory Service, National Centre

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DENMARK
Phone +45 87405000
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Email jaw@landcentret.dk

Name of contact person
Irene Asta Wiborg

Duration of project:
40 months (Nov 2005 – March 2009)

Total budget in euro:
2,004,416.00

EC contribution in euro with %:
990,877.00 (49.43%)

Generic Theme:
2.4. Diffuse and dispersed sources of pollution

CO_2 cooling capacity

LIFE05 ENV/DK/000156
CO2REF

Official title

Development and demonstration of a prototype transcritical CO_2 refrigeration system

Background

Due to their low energy consumption and low leakage rates, centralised refrigeration systems are currently considered a "best available practice". Nevertheless, these systems generally use hydrofluorocarbons (HFCs) refrigerants – greenhouse gases with a global warming potential 2,000-3,000 times higher than carbon dioxide (CO_2).

For the past 10 years, research has gone into so-called transcritical CO_2 refrigeration systems, which use CO_2 as a refrigerant instead of HFCs. This technology is believed to have the potential to achieve lower costs, energy consumption and environmental impacts. Nevertheless, although smaller examples of such systems have been developed, above all for heat pumps and air conditioning units, the know-how required to build an economical transcritical CO_2 system for larger-scale use in supermarkets is still very limited.

Objectives

The project aims to demonstrate the environmental and commercial benefits of transcritical CO_2 refrigeration systems for use in supermarkets and similar areas.

Based on an assessment of existing systems and components, the project will design an optimised CO_2-based system, and then test its cooling capacity, energy efficiency, safety and functionality at a laboratory scale. The obtained results will pave the ground for the development of a full-scale prototype.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Knudsen Koling A/S

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Sandvadsvej 5
DK-4600 Koge
DENMARK
Phone +45 56 646363
Fax +45 56 646364
Email fc@knudsenkoling.dk

Name of contact person
Finn Christensen

Duration of project:
24 months (Oct 2005 – Oct 2007)

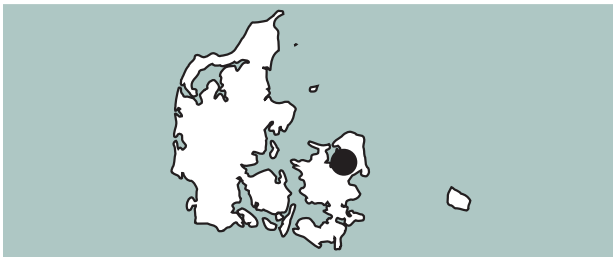
Total budget in euro:
592,196.00

EC contribution in euro with %:
166,784.00 (28.16%)

Generic Theme:
3.3: Reduction of emission of greenhouse gases

From sludge ash to stone wool

LIFE05 ENV/DK/000158
RECYCLING/SYMBIOSIS



Official title

Waste and Sewage Sludge Ash Recycling in Stone Wool Production

Background

Current production methods for stone-based mineral wool used for insulation require large quantities of energy and raw materials. At the same time, large quantities of municipal and industrial waste products are produced that could serve as raw materials and energy sources.

The LIFE project "Recycling of Waste Materials in the Production of Stone Wool for Insulation" (LIFE98 ENV/DK/000629), which was successful implemented by the current beneficiary, contributed substantially towards the development and application of relevant first generation technology.

Objectives

The project's objective is to expand the application of the existing technology for using secondary raw materials in stone wool production, so as to cover a wider range of materials and achieve higher substitution levels. The project seeks to demonstrate the use of spent pot-lining (hazardous waste), sewage sludge ash, dry sewage sludge and carbogrit for stone wool production. A further objective is to enable stone wool production units to use locally produced waste materials, as a partial substitution of current energy sources.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Rockwool International AS

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DENMARK
Phone +45 46 560300
Fax +45 46 563311
Email jens.ranloev@rockwool.com

Name of contact person
Jens Ranloev

Duration of project:
30 months (Feb 2005 – July 2007)

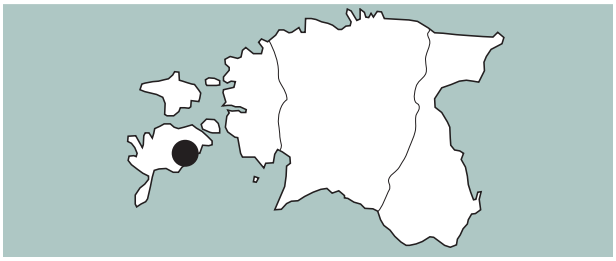
Total budget in euro:
2,743,127.00

EC contribution in euro with %:
650,288.00 (23.71%)

Generic Theme:
4.3: Hazardous waste

Mastering manure management

LIFE05 ENV/EE/000387
ECOMAN



Official title

An ecological and economic viable concept for 100% fermentation, advanced oxidation and ultra filtration of pig manure

Background

It is current practice in Europe to use pig manure as fertilizer on agricultural land. However, a third of the manure used is not absorbed by crops, causing considerable negative impacts on the environment. It endangers the quality of groundwater and leads to eutrophication of surface water. This can result in an excessive growth of algae and plants, which, in turn, has adverse effects on biodiversity and on the suitability of the water for human use.

Objectives

The project aims to demonstrate an innovative technological solution for turning pig manure into bio-gas for "green" electricity and heat, water and, in smaller amounts, solid bio-fertilizer. If successful, the system will prevent the spreading of nitrates on agricultural soil and eliminate ammonium emissions, thereby representing a clear improvement in existing best available techniques (BAT).

The proposed system consists of an anaerobic digester, a bio-gas cogeneration engine and a digester-effluent process, which includes an advanced method for oxidising ammonium, organic constituents, metals and colloidal particles.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
AS Valjala Söödatehas

Postal Address
Tehase 1
EE-94 302 Saare County, Valjala vald
ESTONIA
Phone +372 4549596
Fax +372 4549485
Email feedmill@tt.ee
Website http://www.groupmachiels.com/ecoman

Name of contact person
Raul Maripuu

Duration of project:
30 months (Jan 2005 – July 2007)

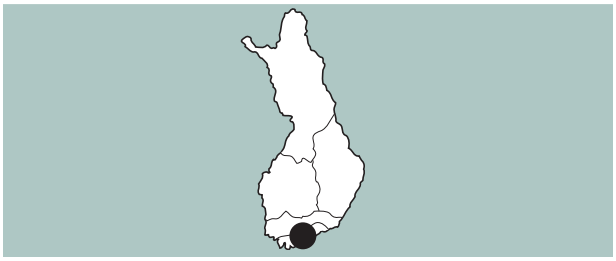
Total budget in euro:
3,490,912.00

EC contribution in euro with %:
564,648.00 € (16.17%)

Generic Theme:
4.4. Agricultural waste

Reusing WEEE

LIFE05 ENV/FIN/000530
CARE4NATURE



Official title

Recycling computers and electronic waste

Background

While waste electrical and electronic equipment (WEEE) is the fastest growing waste stream in Europe, 90% of WEEE is still disposed of in landfills without any pre-treatment, and with serious environmental and economic consequences. However, EU Directive 2002/96/EC on WEEE introduces the concept of producer responsibility and obligation to recycle electroscrap. An effective system for managing and recycling WEEE is therefore needed.

Objectives

The project's objective is to create reception points for the collection, service, storage and processing of WEEE, thereby contributing to its effective and environmentally responsible recycling. The initiative, a cooperation between the youth organisation 4H and the international corporation Fujitsu Siemens, will provide methods for training young people in recycling and environmental issues.

Young people and 4H representatives will also receive on-the-job training on how to run the reception points, thereby creating job opportunities for the young people. The collected parts will be reused, resold, or prepared for recycling and further treatment. A strong emphasis will be placed on rural areas, where due to lower population and infrastructure densities, recycling is more difficult to manage efficiently. After demonstrating the approach at 20 4H centres, the initiative will be implemented in all the organisation's 299 branches.

Beneficiary:

Type of beneficiary
NGO-Foundation

Name of beneficiary
The Finnish 4H Federation

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Phone +358 9 75124232
Fax +358 9 75124255
Email Patrik.lindfors@4h-liitto.fi

Name of contact person
Patrik Lindfors

Duration of project:
36 months (June 2005 - May 2008)

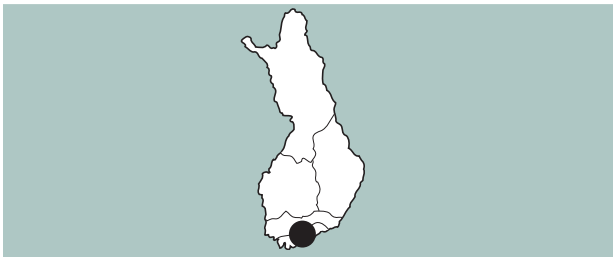
Total budget in euro:
831,377.00

EC contribution in euro with %:
373,751.00 (44.96 %)

Generic Theme:
4.7: Waste from Electrical and Electronic Equipment (WEEE)

Waste not

LIFE05 ENV/FIN/000539
WASTEPREVKIT



Official title

Waste Prevention Kit for enterprises, education and households

Background

In line with the EU strategy for waste management, actions focused on reducing waste should precede those focusing on re-use and recycling. However, many waste prevention measures must be taken before a product is even manufactured. Therefore, prevention measures are seldom considered a part of waste management, and less effort goes into waste prevention than into its re-use as material or energy, or into its final disposal.

An awareness must be achieved amongst consumers and producers, of the environmental and economic benefits to be gained by reducing the consumption of substances, along with an understanding of existing methods and tools.

Objectives

The project's objective is to significantly reduce the amount of waste produced in a test area by developing, testing and disseminating best practice-models on waste prevention. The project will promote their use in households, schools, day-care centres, vocational institutions, public administration and small enterprises.

Awareness-raising activities will cover issues such as "green" procurement, the eco-efficient use of materials, as well as everyday waste prevention measures. As part of the initiative, an existing waste benchmarking system is being further developed, to allow enterprises to assess progress made.

Beneficiary:

Type of beneficiary
Local authority

Name of beneficiary
Helsinki Metropolitan Area Council

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Email Riitta-Liisa.Hahtala@ytv.fi

Name of contact person
Riitta-Liisa Hahtala

Duration of project:
37 months (Jan 2005 - Feb 2008)

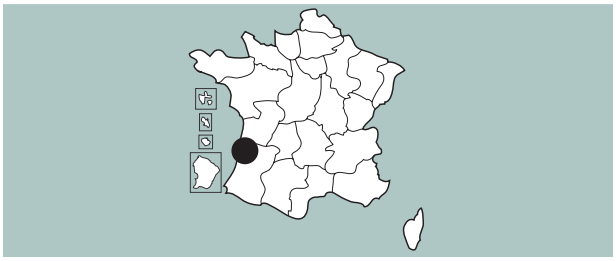
Total budget in euro:
1,078,034.00

EC contribution in euro with %:
540,017 (50.00 %)

Generic Theme:
4.9: General - Waste management

A lead-free electronic supply chain

LIFE05 ENV/F/000053
AMELIE



Official title

Reliability and industrialisation of processes and equipment in electronic assembly. Compliance with "WEEE" & "ROHS" European directives

Background

Electronic boards consist of components assembled on printed circuit boards, using solder paste. Lead content of the boards is high and, in some cases, can even be found in the component itself. Lead-based hazardous substances in electronic products present a risk through the whole life-cycle, from the design, supply chain and assembly, to the repair and recycling. An alternative to the use of lead has to be found, as two European Directives, the 2002/96/CE on Waste of Electrical and Electronic Equipment (WEEE) and the 2002/95/CE on the Reduction of Hazardous Substances (RoHS) ban the use of dangerous substances such as lead.

Objectives

The AMELIE project has three main objectives. The first one is to contribute to the design, development and validation of lead-free industrial assembly lines, integrating the whole electronic supply chain. The project will also study the reliability of new lead-free alloys in compliance with the RoHS and WEEE Directives. Finally, the project will promote the dissemination of the project's results to small and medium-sized companies and public institutions. The AMELIE project takes a problem-solving approach, ranging from dual management of with/without lead components and analysis of the environmental fall-out, through to sharing the knowledge acquired by the consortium with SMEs at local and European level.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
Association pour le Développement de l'Enseignement et des Recherches auprès des Universités, des Centres de Recherche et des Entreprises d'Aquitaine (ADERA)

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Email c.magro@cnrt.u-bordeaux.fr
Website
http://www.recherche.gouv.fr/technologie/cnrt

Name of contact person
Christophe Magro

Duration of project:
33 months (Sept 2005 – May 2008)

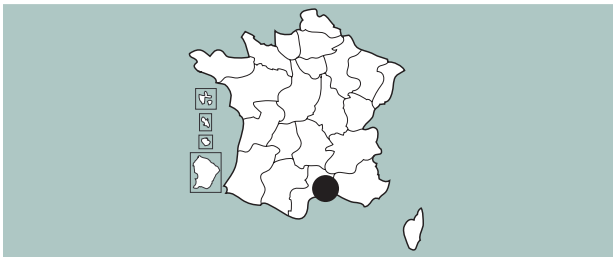
Total budget in euro:
2,543,337.00

EC contribution in euro with %:
1,160,243.00 (45.62%)

Generic Theme:
4.7: Waste from Electrical and Electronic Equipment (WEEE)

Reducing water pollution by improving pesticides practices

LIFE05 ENV/F/000058
AWARE



Official title

Reducing pesticide-related water pollution by improving crop protection practices: The use of embedded ICT technologies

Background

The 2002/60/EC water framework directive states that aquatic environments throughout the EU will have to be in good condition by 2015. Pesticides are one of the main sources of water pollution and aquatic environment degradation. At present, no affordable or simple means exist to trace pesticide application by farmers. GPS geo-referenced systems are found on the market but they are mainly focused on applications for machines such as harvesters or seeders for large-scale farming. Furthermore, current services linked to these technologies are generally limited to the delivering of business related results.

Objectives

The project will use embedded ICT technologies to develop a methodology for reducing the amount of pesticides introduced into the environment. Geo-referenced data-recorders will be embedded on sprayers to allow a monitoring of real-time pesticide use. The project will also create collective filling stations for sprayers which fulfil environmental standards and create services such as rinsing tanks and sprayers. The project aims to extent the results to other contexts by modelling pesticide transfer. This will be assessed by implementing the system in different contexts in the EU, namely in Italy and Spain. The experience will ultimately be disseminated among the stakeholders and the public.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
CEMAGREF-UMR ITAP

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Name of contact person
Bernadette Ruelle

Duration of project:
39 months (Dec 2005 – Feb 2009)

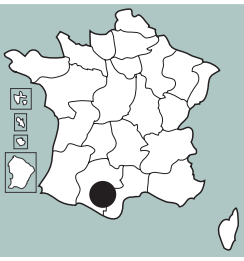
Total budget in euro:
1,276,317.00

EC contribution in euro with %:
638,753.00 (50.00%)

Generic Theme:
2.2: Water supply - Water quality - Ground water protection

An eco-friendly demolition of retired aircraft

LIFE05 ENV/F/000059
PAMELA



Official title

Process for Advanced Management of End of Life of Aircraft

Background

With the growing number of retired aircraft – more than 4,000 between 2004 and 2023 – the safe management of their end of life, both in terms of the environment and public health, has become a crucial issue. Usually, aircraft that are more than 30 years old end their life either stored on the airfield or outside the European Union. Spare parts can also be recycled and reintroduced in the market by scrap merchants or small maintenance companies. This latter option poses serious threats to the environment as it is very often conducted in an unsafe manner. Moreover the use of second-hand spare parts may induce considerable safety risks.

Objectives

Currently, there are no procedures for decommissioning aircraft in safe and environmentally responsible conditions. Hence, the project's objectives are threefold. First, it will demonstrate, by full-scale experimentation on aircrafts, that 85% to 95% of their components – instead of today's 60% aluminium recovering, the other materials being eliminated – can be easily recycled, reused or recovered. The project will also set up a new standard for safe and environmentally friendly management of End of Life Aircraft (ELA). It will cover the entire process, from storage at the pre-decommissioning phase, disassembling and dismantling, to the recycling or elimination of the materials. Finally, the project will launch a European network able to further disseminate the dismantling process.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
AIRBUS France

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Fax +33 561 185 136
Email Bruno.costes@airbus.com
Website http://www.airbus.com

Name of contact person
Bruno Costes

Duration of project:
32 months (March 2005 – Oct 2007)

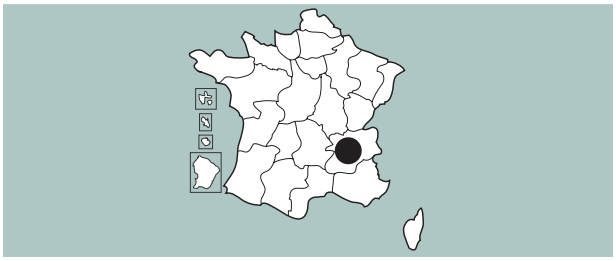
Total budget in euro:
3,242,694.00

EC contribution in euro with %:
1,159,961.00 (35.77%)

Generic Theme:
4.8: End-of-Life Vehicles (ELV's) and tyres

Clean manufacturing of space and aeronautic panels

LIFE05 ENV/F/000062
GAP



Official title

Clean alternative technology to chemical milling: demonstration of technical, environmental and economic performance of mechanical milling for the machining of complex shaped panels used in the aeronautical and space industries – GAP (Green Advanced Panels) project

Background

Complex shaped panels used in the aeronautical and space industries are made by chemical milling. This process is frequently used on double-curvature parts requiring weight reduction or in parts made from alloys of titanium, tin, nickel, cobalt and magnesium. The main environmental problem associated with this technology is the large amount of slurry it produces. These slurries are currently disposed for burning in cement kilns. The process also uses large amounts of water and solvents. An environmental alternative to the process would be mechanical milling.

Objectives

DUFIEUX Industrie has made a technological leap in machine tool design that enables complex shaped panels to be mechanically manufactured with the same level of efficiency as chemical milling. In this eco-friendly process, the only by-products are aluminium chips that are recycled as secondary raw material. The project aims to demonstrate the performance of the mechanical milling with the partnership of the Airbus company.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Dufieux Industrie

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4 rue Gaston Monmousseau – BP 227
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Phone +33 476 332 610
Fax +33 476 096 744
Email info@DUFIEUX-industrie.com
Website http://www.DUFIEUX-industrie.com

Name of contact person
René Panczuc

Duration of project:
29 months (Jan 2005 – June 2007)

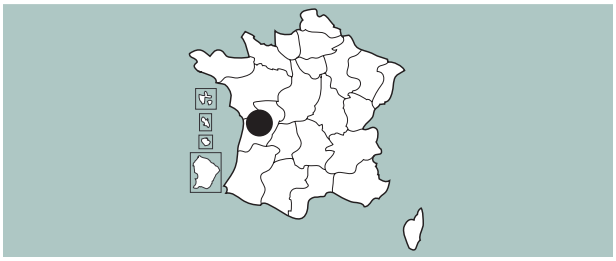
Total budget in euro:
8,160,249.00

EC contribution in euro with %:
1,903,762.00 (23.33%)

Generic Theme:
3.1: Clean technologies

Incentives to reduce municipalities waste flow

LIFE05 ENV/F/000063
IDEAL 79



Official title

Ideal Deux-Sèvres: Sustainable Initiatives and Local

Background

With the global increase of waste, municipalities have to regularly upgrade their waste treatment facilities. Despite progress in their performance and increased capacity and services, the impact of waste on the environment remains important.

Objectives

The project aims to reduce the waste flow and its impact on the environment in the Deux Sèvres Department by setting incentives at different stages of consumption to influence the public's behaviour. This will be done in conjunction with the departmental waste office and socio-economic stakeholders. The project should create a local dynamic and allow to better implement previous actions.

Beneficiary:

Type of beneficiary
Local authority

Name of beneficiary
Communauté d'Agglomération de Niort (CAN)

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Fax +33 549 240 640
Email catherine.julan@agglo-niort.fr
Website http://www.agglo-niort.fr

Name of contact person
Catherine Julan

Duration of project:
40 months (Feb 2005 – June 2008)

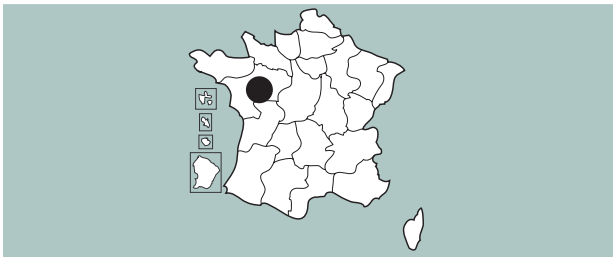
Total budget in euro:
1,996,500.00

EC contribution in euro with %:
952,500.00 (47.71%)

Generic Theme:
4.1: Municipal waste (including household and commercial)

Reducing sludge by ultrasound

LIFE05 ENV/F/000067
SOUND SLUDGE



Official title

Upgrading of wastewater treatment plants with ultrasound treatment for reducing the production of sludge

Background

The amount of sludge generated in the EU has increased dramatically, amounting to 9 million tons of dry matter in 2005, compared to 5.5 million tons in 1992. This is mainly the consequence of the implementation of the 91/271/EEC Directive on Urban Waste Water Treatment. The sludge can be exploited in agriculture, a solution that the European Commission encourages. But up to now, only 53% of the total amount of sludge has been used as fertiliser. The reasons are, in some cases, the poor quality of the sludge in terms of public health and environment or the reluctance of farmers in peri-urban zones or more using intensive practices. The remaining 43% is disposed in landfills or incinerated. Reduction of sludge has therefore become a major issue for Member States.

Objectives

The project will show the technical and economical feasibility of a new technique, based on ultrasound, to reduce the amount of sludge produced in a biological water treatment plant. The experiment will be carried out at full scale, using the total amount of the return sludge stream of a small water treatment plant (6,500 inhabitants/equivalent). The technique is expected to cut the quantity of sludge by at least 30%, therefore reducing the pressure on the environment. It should also notably reduce the amount of pollutants (nitrates and pathogens) in the discharged water. The data obtained will be used to set up a monitoring system allowing the comparison of different scenarios of sludge reduction, treatment and disposal.

Beneficiary:

Type of beneficiary
Local authority

Name of beneficiary
Communauté d'Agglomération Angers Loire Métropole (ALM)

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Phone +33 241 055 105
Fax +33 241 055 075
Email pbocquet@agglo-angers.fr
Website http://www.angersloiremetropole.fr

Name of contact person
Pierre Bocquet

Duration of project:
39 months (Oct 2005 – Dec 2008)

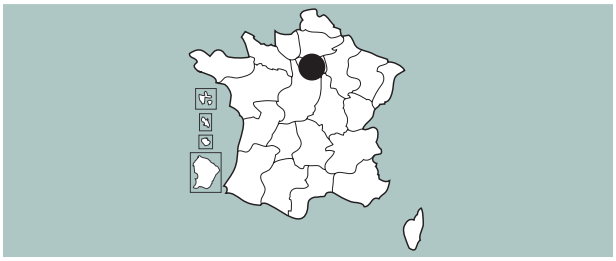
Total budget in euro:
1,375,252.00

EC contribution in euro with %:
687,626.00 (50.00%)

Generic Theme:
2.3: Waste water treatment

A new identity card for pollen in the air

LIFE05 ENV/F/000068
MONALISA



Official title

MOnitoring Network of ALlergens by Immuno-SAmpling

Background

According to the European Academy of Allergology and Clinical Immunology (EAACI), allergic disease is the most common chronic disease of childhood in EU countries and seasonal allergic rhinitis due to pollen affects up to 35% of the entire population. Having an accurate picture of the allergens in the air is of crucial importance. The current method based on counting pollen grains is not sufficient. A technique monitoring pollen and spore allergen would be much more useful. The monitoring should analyse the antigenicity and/or allergenicity, so as to able to advise the public about the risks of allergy.

Objectives

The main objective of the MONALISA project is to test an innovative air sampler, able to monitor pollen in the air by an on line antigenicity/allergenicity measurement. The air sampler is also expected to classify pollen and other microbiological particles, depending on their allergen load, as well being able to detect both pollen grains and smaller particles. To demonstrate its efficiency, the sampler will be used in seven different bio-geographical climates. The final objective is to turn this prototype into a new standard tool to monitor pollen and other small microbiological particles with potential allergenic influence.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Bertin Technologies S.A.

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Phone +33 1 39306169
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Email duval@bertin.fr
Website http://www.bertin.fr

Name of contact person
Antonin Duval

Duration of project:
39 months (Jan 2005 – Apr 2008)

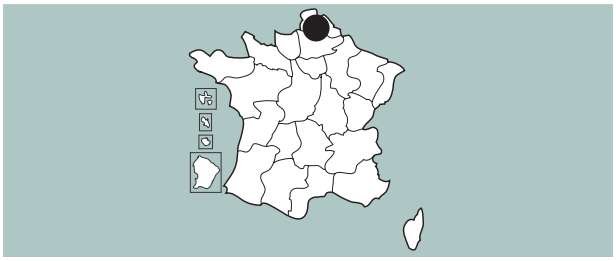
Total budget in euro:
2,261,016.00

EC contribution in euro with %:
667,362.00 (29.52%)

Generic Theme:
1.2: Air quality management and noise abatement

A clean technology for textile conditioning

LIFE05 ENV/F/000070
METTE



Official title

Appropriate Clean Technology: process of electromagnetic textile ennoblement aiming at to decrease the aqueous pollution

Background

In Europe, the sector of textile ennoblement is one of the biggest consumers of water, as much as 50 million m^3/year in France, one of the leaders in this technique. Ennoblement, a three-phase technique for conditioning textiles, uses colouring agents and polluting auxiliary products. These products, present in the waste water, are often poured directly into the environment.

Objectives

The project aims to develop a new technology based on electromagnetic energy. The technique has several environmental advantages. It drastically decreases the amount of water used and, consequently, the energy used for its treatment. It also consumes fewer expensive auxiliary products and, finally, discharges only a small amount of water.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Analysis Measure Pollution (AMP)

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Name of contact person
Eugène Peenaert

Duration of project:
28 months (May 2005 – Sept 2007)

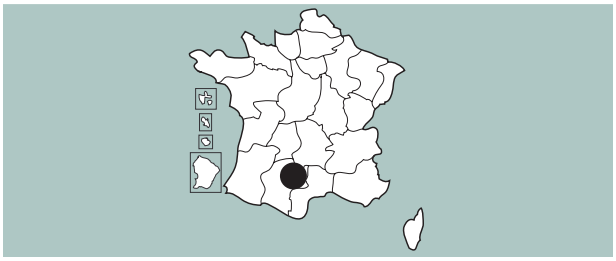
Total budget in euro:
2,272,977.00

EC contribution in euro with %:
633,874.00 (27.89%)

Generic Theme:
3.1: Clean technologies

A new life for lithium ion batteries

LIFE05 ENV/F/000080
RECLIONBAT



Official title

Innovative Pilot unit for Recycling Used Lithium Ion Batteries and recuperate heavy metals

Background

Lithium ion batteries, mainly produced in Asia, are used to power many kinds of electronic equipment, including mobile phones, portable computers, cameras and toys. Spent batteries represent a fast-growing stream of waste, totalling 4,000 tons in 2005. This waste includes 1,100 tons of heavy metal, particularly dangerous for health and environment, and 200 tons of toxic electrolytes. At present, there are no factories in continental Europe that have developed an appropriate recycling technology. The components are toxic, corrosive or explosive, posing environmental and safety-related problems, and making transportation and storage difficult.

Objectives

The purpose of the project is to demonstrate the feasibility at a pre-industrial scale of a technique, already tested in laboratory, for recycling lithium ion batteries. The project includes the deactivation and separation of the components and the recovery of heavy metals, such as cadmium and nickel. If the project confirms the competitiveness of the technique, the promoter intends to industrialise the process.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Société Nouvelle d'Affinage des Métaux

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Email patrick.archier@wanadoo.fr
Website http://www.snam.com

Name of contact person
Patrick Archier

Duration of project:
35 months (May 2005 – March 2008)

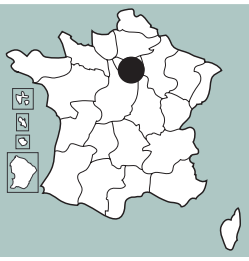
Total budget in euro:
1,486,152.00

EC contribution in euro with %:
387,120.00 (26.05%)

Generic Theme:
4.3: Hazardous waste

A climate friendly process for tiles and bricks

LIFE05 ENV/F/000082
DIDEM



Official title

Demonstration of Innovative Drying Process of Roofing Tiles & Bricks Enabling the Recovery and Reuse of Condensation Water Aiming at Reducing Greenhouse Gases Emissions

Background

The EU-wide greenhouse gas allowance trading scheme (ETS), set up since January 2005, is a first step towards the EU's commitment under the Kyoto protocol to reduce its CO_2 emissions by 8%. Under this scheme, Member States have to elaborate national allocation plans for each industrial sector involved. In France, the tile and brick sector has been allocated a limit of CO_2 emission of 1.34 million tons/year for the period 2005-2007. This means a 15% reduction in CO_2 emissions. One way to achieve this reduction is to improve the drying process, which accounts for 30% of the energy used for the production of the tiles and bricks.

Objectives

The general objective of the project is to reduce by 27-30% the amount of CO_2 emitted during the drying process of ceramic terra cotta based products. To achieve this, the project will demonstrate first in the laboratory and then on an industrial scale, the technical, environmental and economical viability of a drying process performed at high temperatures (around 100°C) and with a 100% moisture content. The project will also seek to reduce two other greenhouse gases, methane (CH_4) and nitrous oxide (N20).

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Centre Technique Tuiles et Briques (CTTB)

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Website http://www.cttb.fr

Name of contact person
Patrick Perrin

Duration of project:
39 months (Nov 2005 – Jan 2009)

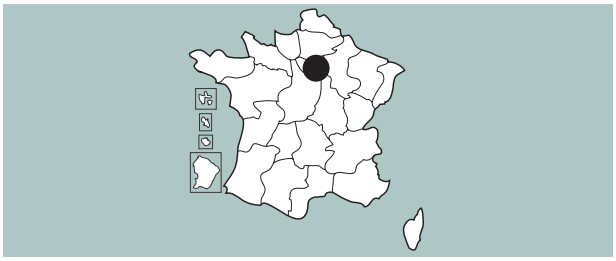
Total budget in euro:
501,780.00

EC contribution in euro with %:
150,534.00 (30.00%)

Generic Theme:
3.3: Reduction of emission of greenhouse gases

Green electronics for the aeronautic and military sectors

LIFE05 ENV/F/000083
GEAMCOS



Official title

Project of clean technologies setting up the development of Green Electronics in Aeronautical and Military Communication Systems

Background

The use of lead in electronic equipment will be banned by the 1st of July 2006, as laid down by Directive 2002/96/EC on Waste of Electrical and Electronic Equipment (WEEE), and Directive 2002/96/EC on the Reduction of Hazardous Substances (RoHS). This ban will have a particular impact on the aeronautical and military sectors, as the equipment they use has to respond to specific requirements, such as reliability, security and maintainability. The alternatives already proposed for consumer electronics are therefore not always appropriate.

Objectives

EADS is developing a demonstrator using a clean technology of lead-free soldering, able to stand up to harsh environments. The technique, using new alloys, will allow the recycling and reuse of the material. It will be transferable to other sectors who wish to increase the durability of their equipment.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
EADS CCR, Suresnes

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37, boulevard de Montmorency
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FRANCE
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Fax +33 1 46973008
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Website http://www.eads.com

Name of contact person
Isabelle Lombaert-Valot

Duration of project:
42 months (Sept 2005 – Feb 2009)

Total budget in euro:
3,321,745.00

EC contribution in euro with %:
1,580,326.00 (47.58%)

Generic Theme:
3.1. Clean technologies

Tackling water pollution in Lower Saxony

LIFE05 ENV/D/000182
WAGRICO

Official title

Water Resources Management in Cooperation with Agriculture. Compilation and Implementation of Integrative Programmes of Measures According to the WFD to Reduce Diffuse Pollution from Agriculture

Background

Lower Saxony is an important agriculture zone. The intense use of fertilisers and pesticides leads to a high level of pollution of groundwater. In some areas, the concentration of nitrate can reach 200 mg/l. These diffuse emissions mean that 60% of groundwater in Lower Saxony is polluted and urgent action is needed to bring it into line with the European Water Framework Directive.

Objectives

The project aims to set up new participation methods and technologies to reduce diffuse pollution from agriculture and to promote sustainable water resource management. It will demonstrate how the policy objectives of the Sixth Environment Action Programme can be achieved through cooperative action at the local river catchments and farm level. It will subsequently show how agricultural assistance programmes can be amended to support the implementation of the Water Framework Directive and that synergy actions can be used to increase cost-efficiency.

Beneficiary:

Type of beneficiary
Regional authority

Name of beneficiary
Niedersächsischer Landesbetrieb für Wasserwirtschaft, Küsten- und Naturschutz (NLWKN)

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Website http://www.nlwkn.de

Name of contact person
Bernhard Ohlrogge

Duration of project:
36 months (Oct 2005 – Sept 2008)

Total budget in euro:
6,895,712.00

EC contribution in euro with %:
3,447,856.00 (50.00%)

Generic Theme:
2.4. Diffuse and dispersed sources of pollution

An eco-friendly production of engine blocks

LIFE05 ENV/D/000185
INOCAST

Official title

Demonstration of environmentally friendly aluminium engine block Core Packaging Casting (CPS) using an inorganic binder

Background

In Europe, 98% of all cylinder heads and 50% of engine blocks are currently made of aluminium. Hydro engine blocks are cast in a standard process using sodium silicate (quartz sand) cores. These cores are held together by an organic binder based on a phenol resin. This technique produces quite a high level of emissions, deposits of spent core sand, filters and waste water. There is a need to demonstrate that the AWB ("Inorganic Warm-Box") process is an alternative to cold-box techniques used by most foundries. Currently, this new process has been refused by automobile manufacturer because of a lack of prototypes which can be quality tested.

Objectives

The project will show the environmental and technical effectiveness of a new inorganic binder for core package system (CPS) of aluminium engine blocks. The binder will be used together with Minsand ® to build core moulds which can be mechanically de-cored and do not need air-cleaning facilities. This "Inorganic Warm-Box" process (AWB) should reduce the current energy consumption by 30% and substantially reduce emissions, deposits and waste water. The project partner Audi will perform comprehensive quality tests on complete AWB engines.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Hydro Alucast GmbH

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Phone +49 68 31906 252
Fax +49 68 31906 0138
Email Joachim.kahn@hydro.com
Website http://www.hydro.com/en

Name of contact person
Joachim Kahn

Duration of project:
30 months (Jan 2005 – July 2007)

Total budget in euro:
4,762,281.00

EC contribution in euro with %:
1,405,130.00 (29.51%)

Generic Theme:
3.1. Clean technologies

Biogas from industrial sewage sludge

LIFE05 ENV/D/000193
SLUDGE REDOX

Official title

Transfer of the organic constituents of sewage sludge into a soluble form for an efficient production of biogas

Background

Because of its toxicity, sewage sludge from the chemical industry cannot be used in agriculture as fertiliser. Nor can it be used for the production of biogas due to the fact that it slows down the chemical reaction. Since the disposal of sewage sludge in landfills is prohibited in Germany, the chemical company Bayer has to incinerate all the accumulated sewage sludge. The ashes remaining after incineration are disposed in the in-plant hazardous waste site. The main disadvantage of this technique is the emission of a large amount of CO_2. Besides this environmental concern, Bayer does not have unlimited incineration capacities and therefore plans to reduce the amount of sludge to be burned.

Objectives

The demonstration project aims to transfer the organic constituents of sewage sludge into a soluble form able to produce biogas. The process includes alkaline hydrolysis, ozonolysis and a subsequent innovative anaerobic treatment. The production of biogas has a twofold advantage: it generates energy from a renewable resource and also reduces significantly the amount of sewage sludge that has to be incinerated. This, in turn, will reduce the amount of CO_2 emissions. The new process will be installed at the waste water plant of Leverkusen.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Bayer Industry Services GmbH + Co OHG

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Phone +49 214 3057479
Fax +49 214 3071130
Email fritz.bremer.fb@bayerindustry.de
Website http://www.bayerindustry.com

Name of contact person
Fritz Bremer

Duration of project:
27 months (July 2005 – Sept 2007)

Total budget in euro:
858,560.00

EC contribution in euro with %:
247,818.00 (28.86%)

Generic Theme:
4.2. Industrial waste (including manufacturing)

Halogen-free production of wool yarns

LIFE05 ENV/D/000195
SUPERWOOL

Official title

Sustainable, AOX-free Superwash Finishing of Wool Tops for the Yarn Production

Background

Approximately 75% of machine-washable wool is treated by the so-called Chlorine-Hercosett-Process. The process, which guarantees the felt-free superwash standard, works on the basis of chlorination and subsequent coating of the fibre material with a polyaminoamide. The process uses large amount of water as well as dangerous substances. This leads to a substantial pollution of waste water with organic halogen compounds (AOX).

Objectives

The project aims to replace the current Chlorine-Hercosett-Process by a sustainable pre-treatment of wool using plasma. Already achieved at a R&D scale, the process still needs to be improved, particularly concerning the electrode systems to ensure a reproducible treatment of wool fibres. Additionally, a suitable resin has to be selected to assure the anti-felt property of yarn.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Richter Kammgarn GmbH

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Fax +49 6428 708308
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Website http://www.richter-kammgarn.de

Name of contact person
Peter Vormbruck

Duration of project:
41 months (Sept 2005 – Jan 2009)

Total budget in euro:
2,384,342.00

EC contribution in euro with %:
704,053.00 (29.53%)

Generic Theme:
3.1. Clean technologies

Training manufacturers in green electronics

LIFE05 ENV/D/000197
LEADFREE

Official title

Demonstration and Training Lead Free Soldering for European Industry in Order to Promote Environmental Friendly Electronic Production

Background

The use of lead as solder in electronic equipment will be banned as of the 1st of July 2006, as laid down by Directive 2002/96/EC on Waste of Electrical and Electronic Equipment (WEEE). The process of lead-free soldering is technically feasible but still needs to be further developed for general applications.

Objectives

The project, LEADFREE, aims to guide a minimum of 300 electronics SMEs in manufacturing competitive green electronic products. The project will set up and run a training centre at the premises of the Fraunhofer Institute of Silicon Technology - ISIT- in Itzehoe, Germany, for a three year period. Participants will be trained on a complete demonstration production line equipped with innovative technologies for the industrial scale soldering of components on printed circuit boards. LEADFREE will operate for the first time a complete demonstration process in line with the European Integrated Production Policy (IPP) based on the whole life cycle of the product.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V.

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Phone +49 89 12052713
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Email Kw@zv.fraunhofer.de
Website http://www.life-leadfree.de

Name of contact person
Walter Krause

Duration of project:
36 months (Apr 2005 – Apr 2008)

Total budget in euro:
4,248,800.00

EC contribution in euro with %:
1,661,775.00 (39.11%)

Generic Theme:
3.1. Clean technologies

Avoiding chemicals in steel production

LIFE05 ENV/D/000207
HVD

Official title

Hydro-Mechanical Descaling Process based on High-Pressure Vacuum Technology Using Scales as Abrasive Blast Medium

Background

For decades, the finishing (descaling) of steel plate manufacturing has been performed using a complex chemical process. The scales left after first welding the steel strips together are pre-crushed and then dissolved using hot hydrochloric and sulphuric acid. Handling of hot mineral acids results in noxious contamination indoors. The process also uses large amounts of water for rinsing and cooling. A physical alternative to this heave-polluting chemical process has already been studied in an EC financed project (EUR21130) carried out in 1998-2001.

Objectives

The project will demonstrate the feasibility of the results of this previous EC. The technique to be used involves blasting abrasive particles onto the material under high pressure water jets. The scale itself is used as abrasive material. The resulting water-scale suspension is then sucked-off. After descaling, particles and water are separated and can be reused.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Aimatic GmbH, Hemer

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Phone +49 2732 500516
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Website http://www.airmatic-systeme.de

Name of contact person
Hubert Schulte

Duration of project:
42 months (Dec 2005 – May 2009)

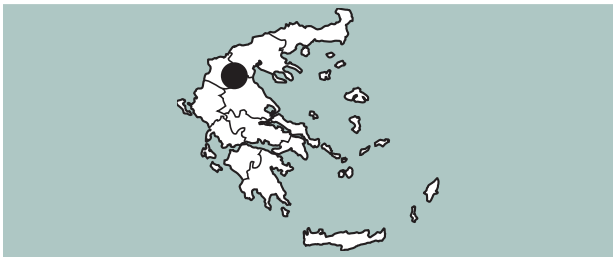
Total budget in euro:
1,907,000.00

EC contribution in euro with %:
536,100.00 (28.11.%)

Generic Theme:
3.1. Clean technologies

Accurate assessment of atmospheric pollution loading

LIFE05 ENV/GR/000214
SMAQ



Official title

Satellite-assisted Management of Air Quality

Background

The accurate assessment of the atmospheric pollution loading in European regions is necessary to comply with EU atmospheric pollution legislation (Framework Directive 96/62/EC and its daughter directives). This need becomes all the more pressing in view of recent policy developments at Community level, in particular the Environment and Health Action Plan and the EU Strategy for Countering Climate Change. An objective and scientifically rigorous method for air pollution assessment should be the basis for cost-effective pollution abatement strategies, and would contribute directly to the Thematic Strategy for Air Pollution by 2006.

Objectives

Through networked information and communications technology, the project seeks to help minimise uncertainties in decision-making on operational air pollution control and abatement in the urban environment, as well as to enhance coherence in trans-boundary environmental monitoring. Project implementation will be based on:

- the integration and assimilation of environmental data from different sources (including data from satellite-based remote sensing and ground-based air quality measurements);
- the sharing of the knowledge acquired through environmental data fusion among urban policy-makers and concerned stakeholders; and
- decision-making support for air quality management at urban and trans-boundary levels, based on multi-criteria analysis and interactive optimisation.

Beneficiary:

Type of beneficiary
University

Name of beneficiary
Technological Education Institute of West Macedonia

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Website: http://www.teikoz.gr

Name of contact person
Stergios Ganatsios

Duration of project:
42 months (Oct 2005 – March 2009)

Total budget in euro:
1,916,480.00

EC contribution in euro with %:
939,990.00 (49.05%)

Generic Theme:
1.2: Air quality management and noise abatement

Sustainable construction approach for Greece and Cyprus

LIFE05 ENV/GR/000235
SUSCON

Official title

Sustainable Construction in Public and Private Works through IPP approach

Background

The construction sector in Europe consumes more raw materials by weight than any other industrial sector in Europe. Moreover, it accounts for the largest share of greenhouse gases emissions (about 40%). Measured in terms of weight, construction and demolition activities produce Europe's largest waste stream (between 40 and 50% of total waste streams), most of which though, is recyclable. Sustainable construction is thus vital in the European context.

Objectives

The main objective of SUSCON is the adoption of a "sustainable construction" concept that could be applied by construction industries, engineering consulting companies, public authorities and suppliers of construction materials. More specifically, the project includes:

- the establishment of an Advisory Board composed of different stakeholders;
- the environmental impact assessment of construction activities in Greece and Cyprus;
- the implementation of the Life Cycle Analysis in, e.g., public building construction;
- the assessment of all the issues related to eco-design criteria;
- the production of a software tool evaluating the eco-friendly percentage of construction works;
- the evaluation of the environmental performance of participating companies;
- the creation of an online database for the construction industry; and
- the dissemination of the results to national and European stakeholders.

Beneficiary:

Type of beneficiary
University

Name of beneficiary
National Technical University of Athens,
School of Chemical Engineering

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Name of contact person
Maria Loizidou

Duration of project:
36 months (Oct 2005 – Sept 2008)

Total budget in euro:
1,110,540.00

EC contribution in euro with %:
555,110.00 (49.99%)

Generic Theme:
5.4: Sustainable building

A greener future for Elefsina Bay

LIFE05 ENV/GR/000242
ELEFSINA2020

Official title

Collaborative Environmental Regeneration of Port-Cities: Elefsina Bay 2020

Background

Elefsina Bay, a medium-sized port, is one of the most industrialised and environmentally degraded areas in Greece. The quality of life and economic development in the bay's communities suffer from pollution and hazards from port and industrial activities, as well as from an uncontrolled urbanisation that has limited communal spaces and constrained access to the sea. The situation in Elefsina is typical of many other industrial port and urban areas in Greece, South-eastern Europe and the EU in general.

Objectives

The proposed project seeks to demonstrate that the regeneration of such areas is possible, if a dedicated investment in civic infrastructure takes place and the collaborative action of stakeholders is achieved.

The project will establish a collaborative approach to the integrated socio-environmental regeneration of the urban agglomeration of the Bay of Elefsina. This will involve enhancing civic infrastructure, capacity-building measures for local authorities and the community, improving the port's environmental performance by adapting and implementing the LIFE ECOPORT project's Eco-Management and Audit Scheme (EMAS) guidelines, as well as awareness-raising activities.

The project seeks to apply, develop and disseminate a state of the art social technology called 'deliberative community visioning', which supports participatory processes in line with the EC's Thematic Strategy on the Urban Environment.

Beneficiary:

Type of beneficiary
Public enterprise

Name of beneficiary
Elefsina Port Authority SA

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Name of contact person
Athanasios Bourantas

Duration of project:
38 months (Oct 2005 – Nov 2008)

Total budget in euro:
1,921,600.00

EC contribution in euro with %:
751,425.00 (39.10%)

Generic Theme:
3.2: Integrated environmental management

A sustainable management plan for the Evrotas river basin

LIFE05 ENV/GR/000245
ENVIFRIENDLY

Official title

Environmentally Friendly Technologies for Rural Development

Background

The Evrotas river basin in Greece is a predominantly rural area with an ageing population. The watershed is considered as a "less favoured area" due to its mountainous terrain and the danger of depopulation. The watershed suffers from over-use of river water, meaning that the river can sometimes dry up completely. The area also suffers from high levels of pollution, in particular from agriculture (for example, pesticides in soil and water). To date, no studies have been conducted under the National Action Plan to allow the establishment of a management plan of the watershed area.

Objectives

The objective of the project is to integrate the results of environment-friendly technologies and socio-economic factors in an integrated management plan for the Evrotas River watershed and coastal zone. The project will produce a "toolbox" of environment-friendly technologies able to minimise diffuse pollution originating from agricultural land. The measures proposed include the installation of stations and wells allowing the identification, quantification and monitoring of pollution loads in the watershed. The project will also install and test three prototype treatment units to treat wastewater and solid waste from local olive and orange production. The project aims to lead to direct positive impacts on the environment, such as a 60-80% reduction of nitrate loads from groundwater to drainage canals. Hydrological and geochemical analysis will allow the generation of watershed and coastal zone modelling. The project will use the results of these activities, plus a socio-economic survey, to develop an integrated watershed management plan. Finally, a Local Development Observatory will be established, and should become the region's water management centre, responsible for the implementation of the Water Framework Directive.

Beneficiary:

Type of beneficiary
Regional authority

Name of beneficiary
Prefecture of Laconia

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Name of contact person
Dimitros Liakakos

Duration of project:
42 months (Dec 2005 – May 2009)

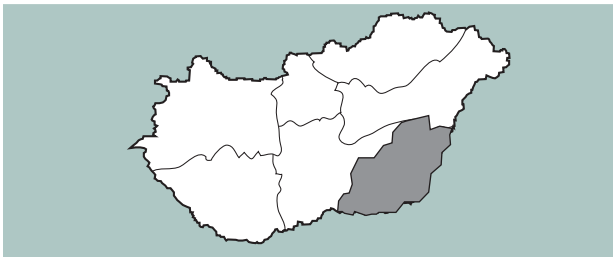
Total budget in euro:
2,193,875.00

EC contribution in euro with %:
1,096,210.00 (49.97%)

Generic Theme:
1.3: Sensitive area management (coastal, protected)

Managing arsenic in groundwater

LIFE05 ENV/H/000418
SUMANAS



Official title

Sustainable management and treatment of arsenic bearing groundwater in Southern Hungary

Background

Groundwater pollution by arsenic and associated components is a common problem in the entire Carpathian Basin. Where arsenic in groundwater is concerned, Hungary is the most seriously affected of the EU and accession states. Approximately 400 towns and villages in Hungary have arsenic levels greatly exceeding those set by EU and WHO guidelines. Within the project area, 170,000 people are supplied with drinking water derived from groundwater which contains arsenic levels 30 times higher than specified by EU norms, as well as variable amounts of methane, ammonia, iron and manganese.

The EU has determined that that water quality must be in line with EU norms by 2009.

Objectives

The project's first objective is to create a groundwater-management decision-support system, based on hydro-geological models, local needs analysis, cost aspects and best practices. Using the Gyula region of Hungary as its main test site, the project will develop a management plan for Southern Hungarian regions with high arsenic contents in groundwater. The second objective is to demonstrate an innovative arsenic-removal technology which can treat the groundwater types of Southern Hungary. Finally, the project will seek to disseminate the methodology and technology to other regions in the EU, as well as in accession countries.

Beneficiary:

Type of beneficiary
Regional authority

Name of beneficiary
Körös-vidéki örnyezetvédelmi és Vizügyi Igazgatóság (The Körös Valley District Environmental-protection and Water Directorate)

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Name of contact person
Laszlo Réti

Duration of project:
36 months (Nov 2005 – Nov 2008)

Total budget in euro:
1,658,000.00

EC contribution in euro with %:
808,514.00 € (48.76%)

Generic Theme:
2.2: Water supply - Water quality - Ground water protection

Vehicle towards better compliance

LIFE05 ENV/IRL/000500
DFAUTO

Official title

Design for Environmental Compliance in the Automotive Supply Chain

Background

An estimated 8.5 million vehicles are discarded every year in the EU, with the number expected to double by 2015. This currently results in around 8 million tonnes of waste yearly, which is generally contaminated with heavy metals, and oil and other lubricating fluids.

However, both the EC Directive on End-of-Life Vehicles (ELV) and the Directive on Waste Electrical Electronic Equipment (WEEE) are forcing the automotive and electronics sectors to take responsibility for the safe end-of-life disposal of their products. For instance, original equipment manufacturers (OEMs) selling in or to Europe are required to achieve an increase in the rate of ELV parts' re-use and recovery of 85% by 2006.

Objectives

The project's main objective is to develop a demonstration tool for designing components and sub-assemblies in the automotive sector that incorporates environmental compliance requirements, particularly with respect to the End-of-life Vehicles Directive. The tool will be integrable with most common design and manufacturing management systems. It will provide an automated advisor to design-engineers across the supply chains, enabling them to optimise legislative compliance.

It is expected that during the project, 10 suppliers in Ireland will use the tool to design products with a recyclability of materials of over 90%. Thereby, the project will prove the environmental, technical and economic benefits of the system for the targeted industrial sectors in Europe.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
Galway Mayo Institute of Technology,
GMIT (Engineering School)

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Email gerard.macmichael@gmit.ie
Website http://www.gmit.ie

Name of contact person
Gerard Macmichael

Duration of project:
28 months (Oct 2005 – Jan 2008)

Total budget in euro:
934,118.00

EC contribution in euro with %:
464,500.00 (49.73%)

Generic Theme:
4.8: End-of-Life Vehicles (ELV's) and tyres

Retiring tyres

LIFE05 ENV/IRL/000501
TYRE/WOOD BLOCK

Official title

Manufacture of Composite Pallet Blocks using Waste Wood and Tyre Derived Materials

Background

A major part of the 2,700,000 or so used tyres generated in Europe in 2002 was disposed of in landfills. However, the EU Landfill Directive now bans the landfilling of whole tyres, and will ban most shredded tyres from landfills by 2006. In addition, the EU End-of-Life Vehicle Directive requires original equipment manufacturers (OEMs) to ensure that vehicles are 95% recyclable by 2015.

A further issue addressed by the project is the significant amount of waste sawdust and wood shavings that is generated by Europe's timber processing industry, along with the Europe-wide efforts to achieve higher recycling rates for various packaging materials, including wood.

Objectives

The project's main objective is to demonstrate the environmental and competitive benefits of a pallet block that re-uses tyre-derived waste materials in combination with sawmilling residues and woodchip from discarded pallets.

A small-scale pilot process to determine the system's basic design parameters will be followed by a full-scale demonstration system. This is expected to put 300,000 pallets into service during the project's implementation. Over 5,000 tons of recycled tyre-derived waste will be incorporated, as well as a significantly greater tonnage of timber residues.

Beneficiary:

Type of beneficiary
Small and medium-sized company

Name of beneficiary
Mid-Cork Pallets and Packaging (MCP)

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Email admin@midcorkpallets.com
Website http://www.midcorkpallets.com

Name of contact person
Sean Lehane

Duration of project:
40 months (Oct 2005 – Jan 2009)

Total budget in euro:
6,617,091.00

EC contribution in euro with %:
1,175,000.00 (17.76%)

Generic Theme:
5.1: Eco-friendly products - Eco-design - Green financial products

Innovative biomass cogeneration process

LIFE05 ENV/IT/000801
BIOCOAL

Official title

Biocharbased co-generation alternative

Background

In 2001, biomass accounted for nearly 4% of the total primary energy consumption in the EU. Half of the biomass used consists of wood or wood chips. For economic reasons, biomass is generally burned in large power stations. As biomass is not often available in large quantities, it is frequently burned in combination with other fuels, such as coal. Co-firing of biomass in conventional power plants is technically feasible but quite costly. Another major impediment to the widespread use of biomass in co-firing is its low energy density in terms of volume, which makes it uneconomical to transport for long distances. One way to overcome this difficulty is to transform biomass into gaseous, liquid or solid fuel.

Objectives

The project aims to demonstrate that energy generation based on the Flash Carbonisation technology – a way to convert biomass in a solid fuel - is environmentally sustainable, safe and economically viable. This innovative technology will be used in a small co-generation plant for the mixed combustion of Biochar agglomerate (made of wood) and wood. It will validate the feasibility of safe storage, handling and transport of Biochar and the economical benefit of energy production based on Biochar.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Duferco Italia Holding SpA.

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Via Cantonale, 8
CH-6900 Lugano
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Fax +41 91 911 5963
Email piersandro.lombardi@duferco.com

Name of contact person
Piersandro Lombardi

Duration of project:
34 months (Feb 2005 – Dec 2007)

Total budget in euro:
6,680,260.00

EC contribution in euro with %:
1,373,178.00 (20.56%)

Generic Theme:
1.2. Air quality management and noise abatement

A new environmental urban plan

LIFE05 ENV/IT/000808
IDEMS

Official title

Integration and Development of Environmental Management Systems

Background

Environmental management has become a priority for municipalities. Currently, they have essentially three tools at their disposition: Eco-Management and Audit Scheme (EMAS), City and Local Environmental Accounting and Reporting (CLEAR) and ecoBudget. While each has a specific scope, they also have overlapping areas. Moreover, the European Commission, working on the new Strategy for the Urban Environment, is stating the importance of a comprehensive plan in order to tackle environmental issues in an integrated manner. Such a plan requires an adequate environmental management system and, starting from the expertise collected during the last years, the best way would be to start from the existing systems and developed them towards an integrated framework.

Objectives

The project innovatively proposes to integrate the three tools existing in environmental management, accountability and budgeting, namely EMAS, CLEAR and ecoBudget. The project would be an important contribution to the Urban Environmental Management Plan proposed by the European Commission in its Communication "Towards a Thematic Strategy on the Urban Environment". The integrated system should address some well-known environmental issues, such as integrating environmental concerns in the internal decisional process and adapting new methods for the private sector as distinct from the public sector. The project will enhance the quality of environmental themes such as public transport planning, private transportation management and waste management.

Beneficiary:

Type of beneficiary
Local authority

Name of beneficiary
Comune di Ravenna

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ITALY
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Fax +39 0544482250
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Website http://www.comune.ra.it

Name of contact person
Luana Gasparini

Duration of project:
32 months (Oct 2005 – May 2008)

Total budget in euro:
815,000.00

EC contribution in euro with %:
407,500.00 (50.00%)

Generic Theme:
3.2: Integrated environmental management

Recovering chrome from tannery waste

LIFE05 ENV/IT/000812
RIWAC

Official title

Project for recovery and reuse of industrial waters and trivalent chromium generated by tannery waste processing

Background

In Europe, tannery industrial waters are currently discharged directly to wastewater treatment plants. However, some components in the waste could be recovered for destruction or recycling, in particular ammonia, calcium sulphate and chrome. In Italy, most of the chrome-containing waste is used in agriculture as organic fertilizer, but no chrome recovery is performed.

Objectives

The innovation of the project lies in the fact that it combines two processes: destruction and recovery. The project aims first at purifying the tannery wastewater by destroying ammonia and converting it to nitrogen through a thermal catalytic system. Chrome and calcium sulphate will subsequently be recovered from the sludge.

Beneficiary:

Type of beneficiary
Small and medium sized enterprise

Name of beneficiary
SICIT 2000 S.p.A.

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ITALY
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Fax +39 0444 453812
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Website http://www.sicit2000.it

Name of contact person
Massimo Neresini

Duration of project:
36 months (Oct 2005 – Sept 2008)

Total budget in euro:
7,475,000.00

EC contribution in euro with %:
1,500,000.00 (20.07%)

Generic Theme:
2.3: Waste water treatment

Sustainable distribution of goods

LIFE05 ENV/IT/000839
C-DISPATCH

Official title

Clean-Distribution of goods in Specimen Areas at the last mile of the intermodal Transport Chain

Background

An efficient and sustainable urban freight management is one of the priorities for the European sustainable transport policy. Though a number of feasibility and pre-feasibility studies on sustainable urban freight management exist, they are not supported by actions and experiences. Today, the few existing initiatives in Italy (i.e. Vicenza, Padova, Ferrara, Parma) are in their preliminary phase.

Objectives

The project aims to develop a city logistic system including a tool for an integrated planning and control of sustainable production and transport processes. The key objective is to provide a sustainable business model for improving the efficiency of door-to-door goods transport in urban areas by providing supply and demand side information in one single environment-friendly system. The aim is to reach a reduction of 14% of commercial vehicle traffic flow, resulting in a decrease of about 10% of their gas emissions and 30% of noise emissions. Quality of life indices will be measured by ex-ante and ex-post surveys of citizens living in the pilot area.

Beneficiary:

Type of beneficiary
Regional authority

Name of beneficiary
Frosinone Province

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Name of contact person
Nicoletta PANICCIA

Duration of project:
27 months (Oct 2005 – Dec 2007)

Total budget in euro:
1,435,000.00

EC contribution in euro with %:
717,500.00 (50.00%)

Generic Theme:
1.1: Urban design - Quality of life - Transport planning

Recycling oil mills waste

LIFE05 ENV/IT/000845
TIRSAV PLUS

Official title

New technologies for husks and waste water recycling plus

Background

According to the International Olive Council, Europe produces annually 10 million tons of pomaces (pulp) and vegetation wastewater from the processing of olive oil. The problem resides not only in the difficulties of disposing of dangerous wastes, but also in the management of the production units, usually SME oil mills.

Objectives

Building on the results of a previous LIFE project (LIFE 00 ENV/IT/000223 TIRSAV), the new project will address the issue of cost-effectiveness of an innovative technology at oil-mill level through the planning and construction of a centralised recycling plant. The unit will also be able to recycle other organic wastes to produce organic fertilisers that are easy to use and acceptable for farmers. Finally, the project will promote the harmonisation of legislation at European level regarding the oil-mill wastes.

Beneficiary:

Type of beneficiary
Park – Reserve Authority

Name of beneficiary
Ente Parco Nazionale del Cilento e Vallo di Diano

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Website http://www.pncvd.it

Name of contact person
Antonio Feola

Duration of project:
51 months (Oct 2005 – Dec 2009)

Total budget in euro:
4,886,944.00

EC contribution in euro with %:
1,061,380.00 (21.72%)

Generic Theme:
2.3: Waste water treatment

Encouraging water reuse in textile SMEs

LIFE05 ENV/IT/000846
BATTLE

Official title

Best Available Technique for water reuse in TextiLE SMEs

Background

The main impact of the textile sector on the environment is related to primary water consumption (80-100 m^3/ton of finished textile) and wastewater discharge, characterised by large amounts of organic chemicals and colouring agents, low biodegradability and high salinity. Currently, no company implements an integrated full-scale recovery of effluents for reuse in production, notwithstanding the fact that several successful research projects and pilot experiences have encouraged it. Moreover, SMEs do not reuse their water but still use fresh high quality water in all the production processes. According to the IPPC Directive, the best available technologies (BATs) for the textile sector described in the reference document BREF, should be implemented by all big companies and by SMEs with a production capacity of over 10 tons/day. The textile BREF contains several BATs for production processes, but only general advice on wastewater treatment and reuse.

Objectives

The project aims to configure and apply a new BAT for low impact water management in the textile industry. Feasibility and efficiency of the BAT will be shown in a representative medium-sized textile finishing enterprise, Stamperia di Martinengo. The new BAT proposed aims at designing innovative water schemes for effluent reuse. This design will be obtained by the application of a methodology which integrates the different aspects involved in reuse (on-line characterisation, stream segregation, final effluent treatability evaluation and impact control, reclaimed water reusability and costs analysis).

Beneficiary:

Type of beneficiary
National Authority

Name of beneficiary
Ente Nazionale per le Nuove tecnologie, l'Energie e l'Ambiente (ENEA)

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Website http://www.enea.it

Name of contact person
Maurizio Casarci

Duration of project:
36 months (Dec 2005 – Nov 2008)

Total budget in euro:
2,055,344.00

EC contribution in euro with %:
965,899.00 (46.99%)

Generic Theme:
3.1: Clean technologies

Reducing the environmental impact of water treatment plants

LIFE05 ENV/IT/000868
PERBIOF

Official title

A new technology for treating municipal and/or industrial wastewater with low environmental impact

Background

Waste water treatment plants face recurrent problems such as sludge production and the toxicity of treated effluents. Technological solutions have already been tested at research scale with significant results, particularly in terms of sludge production. When the technology was applied to municipal wastewater, the results showed a drastic reduction of organic load. The process also managed to remove a high percentage (nearly 90%) of suspended solids, leaving a negligible volume of sludge.

Objectives

The project aims to develop at demonstration scale an innovative technology for treating municipal and/or industrial wastewater. The following results are expected: a greater conversion capacity (up to 6-10 times) and lower reaction volumes (this means smaller plants with lower environmental impact); a reduction of sludge production by up to 10 times in the case of municipal wastewater and up to 40 times for tannery wastewater; a 50% reduction in treated effluent toxicity; and finally, a 40% saving of operative costs, increasing the competitiveness of potential industrial stakeholders (even SMEs) that will adopt such a new technology.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
Istituto di Ricerca sulle Acque (IRSA) - Consiglio Nazionale delle Ricerche

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Website http://www.irsa.rm.cnr.it

Name of contact person
Antonio Lopez

Duration of project:
36 months (Nov 2005 – Nov 2008)

Total budget in euro:
624,784.00

EC contribution in euro with %:
294,714.00 (47.17%)

Generic Theme:
2.3: Waste water treatment

A Centre for Eco-Friendly City Freight Distribution

LIFE05 ENV/IT/000870
CEDM

Official title

Centre for Eco-Friendly City Freight Distribution

Background

In the last ten years, major efforts have been carried out by European cities to tackle traffic congestion and related pollution. Access restriction to city centers has become a common practice based on specific transport schemes and innovative infrastructure. However, no such effort has been paid to the urban goods distribution process which is one of the major sources of energy consumption, noxious gas emissions and noise levels in urban areas. The main reason for this lack is the multiplicity of actors involved in the process.

Objectives

The aim of the project is to implement a number of measures (at regulatory, organisational and technological levels) to launch the Center for Eco-Friendly City Freight Distribution in the historical centre of Lucca. These measures will be based on city logistics schemes integrated in the broader context of mobility and transport measures. This will allow Lucca to achieve high standards of energy efficiency and environmental quality, thereby acting as a model for other European cities. The project will demonstrate innovative models focusing on the cooperation of the different actors within the logistics chain, such as freight transport operators, eco-friendly fleets for city deliveries, local authorities and mobility operators.

Beneficiary:

Type of beneficiary
Local authority

Name of beneficiary
LUCCA Municipality – Environment Safeguard Sector

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Website http://www.comune.lucca.it

Name of contact person
Mauro di Bugno

Duration of project:
30 months (Nov 2005 – Apr 2008)

Total budget in euro:
1,423,205.00

EC contribution in euro with %:
711,602.00 (50.00%)

Generic Theme:
1.1: Urban design - Quality of life - Transport planning

CO_2 reduction from landfills

LIFE05 ENV/IT/ 000874
GHERL

Official title

Greenhouse effect reduction from landfill gas

Background

Solid waste disposal on land, accounts for about 2.4% of total EU greenhouse gas emissions. The two main gases emitted are carbon dioxide (CO_2) and methane (CH_4) due to the biodegradation of carbon compounds by anaerobic methanogenic bacteria. The rate of CO_2 and CH_4 emission increases with the amount of biodegradable waste going to landfills.

Objectives

The main objective of the project is to reduce the greenhouse effect resulting from biogas emissions from a municipal solid waste landfill. The reduction will be achieved by means of CO_2 capture from landfill gas in a final stable and solid form. This final solid compound can be a simple scrap, which can then be disposed in the landfill itself. It could also be a product used as input in the chemical industry or agriculture.

Beneficiary:

Type of beneficiary
University

Name of beneficiary
Dipartimento di Energetica "Sergio Stecco" – Università degli Studi di Firenze

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Name of contact person
Ennio Carnevale

Duration of project:
30 months (Dec 2005 – May 2008)

Total budget in euro:
217,497.00

EC contribution in euro with %:
107,949.00 (49.63%)

Generic Theme:
3.3: Reduction of emission of greenhouse gases

Recycling ceramic polishing sludge

LIFE05 ENV/IT/000875
P.S.V.

Official title

Polishing Sludge Valorisation

Background

The production of fire-clay in Europe and in the rest of the world is developing exponentially, leading to equally huge amounts of waste. Polishing of ceramic and stone materials is a wet process which produces great quantity of sludge. The sludge is not reusable and is currently disposed of in landfills. The cooperative Ceramica d'Imola has carried out research in order to develop new products using the sludge. These new products could be used in buildings as an effective barrier against thermal and acoustic transmission and even against electromagnetic fields.

Objectives

The project aims to implement a clean process for recycling and on-site valorisation of the sludge coming from polishing and/or smoothing of ceramic and similar materials such as marble and granite. It will demonstrate an innovative process using the abrasive powders (SiC) as expanding agents active at high temperature. The product will be an innovative insulated-refractory material to be used for building or industrial installations.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Cooperativa Ceramica d'Imola Soc. Coop. a r.l., Imola

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Name of contact person
Billi Franco

Duration of project:
36 months (Oct 2005 – Sept 2008)

Total budget in euro:
9,436,000.00

EC contribution in euro with %:
1,832,175.00 (19.42%)

Generic Theme:
3.1: Clean technologies

Reducing greenhouse gases in the cooling process

LIFE05 ENV/IT/000876
NOTRE

Official title

Novel Technology to Reduce Greenhouse Gas Emissions

Background

In the refrigeration sector, the control of temperature and relative air humidity during storage and transport of goods, consumes large amounts of energy. In fact, when applying best available technologies (BATs) to control temperature and relative humidity of air, important amounts of electrical energy is needed because water vapour in air causes ice formation on the cold surfaces of evaporators (typically at –25°C) which lowers their efficiency and forces to use expensive defrosting cycles. As food transport accounts for 3 to 4 % of EU total CO_2 emissions, new efforts are made to improve the energy performance of equipment and to develop new refrigerants with lower environmental impact.

Objectives

The project aims to demonstrate the environmental, technical and economic viability of a technology able to minimise the formation of ice on evaporator surfaces of traditional vapour compression refrigeration cycles in refrigerated trucks and storage cells. It will assess the reduction of CO_2 emissions, due to less electrical energy used, of refrigerants due to the higher efficiency of evaporators and the reduction of electrical energy used by BAT-refrigeration equipment. The Results will be disseminated among EU universities, major industries and industrial associations.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
GVS S.p.A.

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Email sng@gvs.com
Website http://www.gvs.com

Name of contact person
Gaeta Soccorso

Duration of project:
24 months (Oct 2005 – Sept 2007)

Total budget in euro:
1,340,389.00

EC contribution in euro with %:
402,117.00 (30.00%)

Generic Theme:
3.3: Reduction of emission of greenhouse gases

Sustainable treatment of urban stormwater

LIFE05 ENV/IT/000894
ESTRUS

Official title

ENhanced and SUstainable TReatment for URban Stormwater

Background

Pollution resulting from storm water runoff in urban areas has been identified as one of the major causes of the deterioration of the quality of water collected. The first flush rain is the most polluted. First flush detention tanks have been successfully tested but the system presents some problems not easy to be solved, such as the availability of space. In addition, the system requires very sophisticated numerical models. Distributed Treatment Solutions (DTSs) have been recently proposed as an alternative. Pollutants are removed from storm water by trapping them directly in the gully-hole or the initial pipe of the drainage network by means of appropriate hydraulic and/or chemical/physical devices. This last solution is quite promising and cost-effective, although full-scale applications are still scarce and validation of the technology will require further testing.

Objectives

The project aims to demonstrate the sustainability and cost-effectiveness of Distributed Treatment Solutions (DTSs) for storm water runoff in harbour infrastructures and industrial sites. In these areas, traditional treatment solutions, such as first flush detention tanks, are too costly or unfeasible due to lack of space. The innovative component of the ESTRUS project consists of a full-scale treatment solution (hydraulic and chemical/physical) which has been so far tested in laboratory.

Beneficiary:

Type of beneficiary
Local authority

Name of beneficiary
Comune di Genova-Assessorato alle Politiche Ambientali

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Name of contact person
Vittoria Sivero

Duration of project:
36 months (Oct 2005 – Sept 2008)

Total budget in euro:
1,394,339.00

EC contribution in euro with %:
673,673.00 (48.31%)

Generic Theme:
2.3. Waste water treatment

Cleaner polishing of ceramic strips

LIFE05 ENV/IT/000907
ECO BULL-NOSE

Official title

Abrasive-abraded sludge transformation into "abrading paste", to be re-inserted in the bull-nose manufacturing cycle, by means of an innovative, self-feeding and environmental-friendly "polymeric passive wheel" system

Background

The polishing of skirting boards or ceramic strips to complete flooring or wall covering produces large amount of sludge. The sludge is a mixture of abrasive particles (diamond, silicone carbonate) from the grinding wheels particles removed from the boards, and the water used to minimise dust and cool the tools. This sludge cannot be recycled, as it is difficult to easily separate the particles.

Objectives

The aim of the project is to drastically reduce the production of sludge from polishing of ceramic strips for bull-nose production. An innovative polishing system will be developed, where removed particles and abrasive particles will be re-used in the production of ceramic tiles. This will require the replacement of grinding wheels with polymer discs able to exert strong contact pressure on the piece being worked on, placing into the bull-nose interstice the dust produced during the initial stages of the production cycle. At the same time, the consumption of water will be drastically reduced.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Tecnoceramica s.r.l. - Maranello

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Name of contact person
Francesco Gualdi

Duration of project:
36 months (Oct 2005 – Sept 2008)

Total budget in euro:
756,500.00

EC contribution in euro with %:
217,125.00 (28.70%)

Generic Theme:
4.2. Industrial waste (including manufacturing)

A toxic-free industrial decoration

LIFE05 ENV/IT/000911
VOC-FREE DECALS

Official title

Volatile Organic Compounds Free Decals – Eliminating toxic, harmful and/or dangerous chemical substances from the manufacturing of industrial decal transfers

Background

Due to its high quality, the 'decal transfer' is the most commonly used process for industrial decoration of inert goods such as pottery, dishes, ceramic tiles, glasses and auto panels. However, this process is very polluting as the vanishes and glazes used are highly toxic, dangerous for the environment and/or easily flammable.

Objectives

The project's main objective is to completely remove the use of toxic, harmful and/or dangerous chemicals in the industrial decal transfer process. The innovative production process will use non dangerous dyes and water-based mediums (such as acrylates, natural resins and ethylene oxide). Due to the fact that these substances have lower technical performances, new physical treatments will need to be integrated into the manufacturing process.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
DECAL-TILE S.r.l.

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Name of contact person
Gastone Mazzonni

Duration of project:
33 months (Oct 2005 – June 2008)

Total budget in euro:
623,034.00

EC contribution in euro with %:
176,410.00 (28.31%)

Generic Theme:
3.1. Clean technologies

Pacific GMO/non-GMO coexistence

LIFE05 ENV/IT/000937
SAPID

Official title

Strategy for agricultural products identify defence. Wide area protection of agriculture products identify from Gmo pollution

Background

Diffusion of genetically modified organisms (GMOs) into the environment through so-called "genic-flux" is inevitable. A zero tolerance policy of contamination of traditional crops by GMOs is therefore not applicable and it is possible only to apply limits of tolerance. Moreover, the rate of contamination depends on many factors (species, territory, etc.) which have not yet been studied in depth. As imported GMO are present in the food chain, agri-food processors have to guarantee GMO-free products to consumers with a certain degree of tolerance. Current standard allows a GMO presence equivalent to 0.9%.

Objectives

The project intends to demonstrate that lower GMO levels than the current standard of 0.9% in food chain is achievable. The objective is to attain a minimum 0.1% presence of GMOs in traditional crops, the ultimate goal being a 0.01% contamination. The project will define monitoring methods to identify the genetic flow on fields, the level of contamination risk and critical areas. It will also identify analytical methods to avoid accidental contamination that could be applied to all fields. The project involves public authorities who have to elaborate co-existence plans for GMO/non-GMO cultivations, 90-120 farmers, trainers, and covers a 1,000 ha area.

Beneficiary:

Type of beneficiary
Public enterprise

Name of beneficiary
ASSAM - Agenzia Servizi Settore agroalimentare Marche, Ancona

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Website http://www.assam.marche.it

Name of contact person
Fabio Cecconi

Duration of project:
42 months (Nov 2005 – Apr 2009)

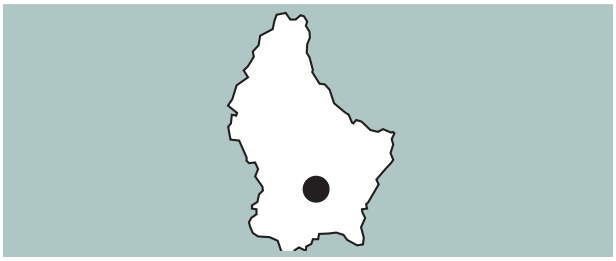
Total budget in euro:
811,750.00

EC contribution in euro with %:
400,000.00 (49.28%)

Generic Theme:
3.5. Risk assessment – Pollution control

Eco-friendly manufacturing of wood panels

LIFE05 ENV/L/000047
ECOSB



Official title

New and environmentally friendly OSB panels

Background

Oriented strand boards (OSB) are wood-based panels, built up of three layers of strands bonded with a resin. OSB boards are used mainly in construction, roofing or as packaging material. The current technology used to manufacture these panels is responsible for high volatile organic compounds (VOCs) emissions during the production process as well as during the use of the panels. These emissions mainly come from resin and wood used, and vary according to the wood species and its growing conditions.

Objectives

The project aims to implement a new environmentally-friendly production process for engineered wood-based panels. The process, which is based on an innovative drying system, will allow a substantial reduction of volatile organic compounds (VOCs) emissions during the production and use phases and will therefore have a positive impact on the whole lifecycle of the product. In addition, its implementation will lead to significant reduction of carbon dioxide (CO_2) and carbon monoxide (CO) emissions during the production phase.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Kronospan Luxembourg S.A.

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Website http://www.kronospan.lu

Name of contact person
Marko Becker

Duration of project:
30 months (Jan 2005 – July 2007)

Total budget in euro:
1,875,343.00

EC contribution in euro with %:
417,103.00 (22.24%)

Generic Theme:
3.4. Reduction of emission of air pollutants

Tracking noise in European ports

LIFE05 ENV/NL/000018
NOMEPORTS

Official title

Noise Management in European Ports

Background

Two EU projects, HARMONOISE and IMAGINE, have respectively developed a new method to measure noise and a noise database. However, these projects did not cover the specific noise situation in a port, which is a source of a combination of industrial and traffic noise.

Objectives

The project NoMEPorts will elaborate a noise mapping and management system specifically designed for port industrial areas. According to the noise maps, the project will propose action plans to reduce noise annoyance. The results will be disseminated among the participants of the EcoPorts, a network of more than 150 ports. The project will also develop a good practice guide on efficient noise mapping and management for port industrial areas. The final objective is to create a level playing field by promoting the use of a uniform guideline, to be integrated in the European Noise Directive 2002/49/EC.

Beneficiary:

Type of beneficiary
Local authority

Name of beneficiary
Amsterdam Port Authority

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Phone +31 20 5234 522
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Website http://www.amsterdamports.nl

Name of contact person
Ton Van Breemen

Duration of project:
42 months (March 2005 – Aug 2008)

Total budget in euro:
1,503,490.00

EC contribution in euro with %:
707,645.00 (47.07%)

Generic Theme:
1.2. Air quality management and noise abatement

Climate-friendly cold stores for fruits and vegetables

LIFE05 ENV/NL/000020
HEIGHT

Official title

HM de Jong – Energy –efficient by Innovative Geometry and HFC-replacing Technology

Background

In Europe, fruit and vegetables are commonly kept in cold stores. These stores are very energy intensive – in the EU, refrigeration accounts for 10-15% of all industrial electricity use - and this results in a high CO_2 emissions. The stores also leak refrigerants, which are extremely powerful and long-lived greenhouse gases (HCFC).

Objectives

The aim of this project is to reduce CO_2 equivalent emissions of conventional cold stores by 70%. This reduction will be achieved by doubling the height of cold stores, installing an innovative air distribution system to guarantee a micro climate in the store and a 100% automated internal management and, finally, by switching from HCFC to CO_2 refrigerant.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
HM De Jong Koel- en Vrieshuis b.v.

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Name of contact person
Teun Vermetten

Duration of project:
36 months (Feb 2005 – Feb 2008)

Total budget in euro:
6,566,554.00

EC contribution in euro with %:
640,000.00 (9.75%)

Generic Theme:
3.3. Reduction of emission of greenhouse gases

Reducing pesticides in horticulture

LIFE05 ENV/NL/000021
CEPE

Official title

Reduction of pest control impact of horticulture on ground and surface water through a system of constant crop monitoring, early diagnoses, prevention and early treatment

Background

The use of pesticides in horticulture is widespread. A large part of these chemicals end up in ground and surface water. In order to use pesticides in an optimal way it is necessary to know when and in what quantity these have to be applied, and for how long. Currently, application decisions for soil born diseases are made by the grower based on visible crop characteristics. This is a very rough and inaccurate method which is usually wrongly timed (too late). In order to apply pesticides in an optimum way it is necessary to be able to determine the actual threat and act accordingly. Countering the threat of a disease at an early stage is easier than curing a full-blown disease and it will take significantly fewer pesticides.

Objectives

The project aims to introduce an alternative to current pesticide practices in horticulture. It will allow early detection of diseases as well as an early solution by combining existing techniques and knowledge. The project will identify the 10 most common diseases in samples of roots, and water in which plants grow, by means of existing DNA techniques. By doing this on a regular basis, diseases can be avoided or cured at an early stage, preventing massive use of pesticides. A database will be created providing quick diagnoses and advices to the grower.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
Praktijkonderzoek Plant en Omgeving BV

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Website http://www.ppo.dlo.nl

Name of contact person
Eric Kiers

Duration of project:
24 months (Oct 2005 – Sept 2007)

Total budget in euro:
1,444,386.00

EC contribution in euro with %:
409,382.00 (28.34%)

Generic Theme:
2.2. Water supply – Water quality – Ground water protection

Responsible roof-felt recycling

LIFE05 ENV/NL/000029
ESHA-TRR

Official title

Total Roof Recycling – New Ways for old bitumen

Background

Until recently, no technically satisfactory or commercially feasible method existed for recycling old roofing felts made of bitumen, an oil derivative. In the Netherlands alone, 70,000 tonnes of roofing felts is incinerated or deposed of in landfills each year. Recently, however, a breakthrough was achieved, and new ways for treating bituminous waste were developed and tested on a small scale.

Objectives

The project aims to demonstrate a technically and economically feasible alternative to incinerating old roofing felts or depositing them in landfills. The approach proposed involves the establishment of three fully operating production lines to recycle the material into products such as new roof felts, civil waterproofing solutions or binder for road asphalt. After its first three years, the project expects to achieve a recycling rate of 50,000 tonnes of old roofing felts per year, using a technology that can be easily transferred to other countries in Europe.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Esha Group B.V.

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Phone +31 50 5516411
Fax +31 50 5515521
Email dommele@esha.nl
Website http://www.esha.nl

Name of contact person
http://www.esha.nl

Duration of project:
42 months (May 2005 – Nov 2008)

Total budget in euro:
5,740,060.00

EC contribution in euro with %:
1,250,000.00 (21.78%)

Generic Theme:
4.2: Industrial waste (including manufacturing)

From bottom ash to high-grade metal

LIFE05 ENV/NL/000030
R2P

Official title

Residue to Products demonstration project: converting bottom ash into high grade products

Background

Many municipal solid waste incineration (MSWI) companies in Europe use a dry process to convert bottom ash into low-grade granulate. In the Netherlands and Germany, this granulate is recycled as road fill. Elsewhere in Europe, it is usually simply disposed of in landfills.

Objectives

The project will build a demonstration plant that applies a wet process to convert dry bottom ash into clean sand, granulate and metals for the cement, calcium-silicate brick and metallurgical industries. The wet process has a twofold advantage. Firstly, it converts the ash into sand and granulate that are suitable for high-grade recycling. Secondly, high-grade metals such as aluminium, copper, lead and zinc can be fully retrieved.

By closing the raw material cycle, the system will avoid the environmental impacts of mining primary raw materials, as well as of using bottom ash as road fill or depositing it in landfills.

Beneficiary:

Type of beneficiary
Local authority

Name of beneficiary
Afval Energiebedrijf Amsterdam

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THE NETHERLANDS
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Website http://www.afvalenergiebedrijf.nl

Name of contact person
Wil Sierhuis

Duration of project:
47 months (Feb 2005 – Dec 2008)

Total budget in euro:
6,214,070.00

EC contribution in euro with %:
1,356,546.00 (21.83%)

Generic Theme:
4.2. Industrial waste (including manufacturing)

Potato blanching comes full circle

LIFE05 ENV/NL/000035
CLB

Official title

Demonstration of a closed loop blanching system for the potato processing industry

Background

The hot-water blanching of potatoes is a standard procedure in the production of chips (french-fries), and other potato-based products. The process is necessary to inactivate enzymes, gelatinise starch and reduce sugar content. The beneficiary currently processes 1.4 million tonnes of potatoes, using 0.35 million m^3 of water for potato blanching, as well as 88,200 GJ (gigajoule) of energy to heat the water.

Current blanching techniques neither recycle water nor recover heat from the water, emitting both water and heat to wastewater treatment plants instead. Furthermore, around 10-30% of potato solids are leached out during the process, resulting in an unwanted loss of 50,400 tonnes of raw material a year, in the form of potato sludge.

Objectives

The project will seek to demonstrate a closed-loop blanching technology that avoids the negative environmental impacts, and loss of raw materials, that are a characteristic of existing techniques. A pilot blanching system will be constructed and operated that will use selective de-sugaring to prevent browning, while avoiding the loss of valuable potato mass. Furthermore, wastewater will be processed and reused for blanching, thereby minimising water consumption.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
AVIKO

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Website http://www.aviko.nl

Name of contact person
Derk Somsen

Duration of project:
36 months (Jan 2005 – Dec 2007)

Total budget in euro:
1,007,627.00

EC contribution in euro with %:
302,288.00 (30.00%)

Generic Theme:
3.1: Clean technologies

Minimising the magnetic menace

LIFE05 ENV/NL/000036
EFET

Official title

Demonstration of a new environmentally friendly high voltage overhead line

Background

There is growing concern that long-term exposure to low magnetic fields emitted by high-voltage overhead lines may cause leukaemia. Many European countries are introducing legislation reducing the acceptable levels of magnetic field strength to around 0,4 µT (micro-Tesla). However, to limit magnetic fields at ground level to 0.4 µT, conventional high-voltage pylons would need to be over 100 metres tall.

Objectives

This project will demonstrate a new combination of high voltage line and pylon that emits much lower magnetic field strengths, thereby reducing negative impacts on health and the environment.

The configuration of the electrical phases is designed in such a way that the magnetic field is much lower than that resulting from a traditional configuration. New technology enables overhead conductors to be placed closer to each other and to the mast, thereby further decreasing the magnetic field's strength. Other expected results include the use of composite materials for the pylons, which will decrease maintenance costs and allows them to be recycled after their life span. Finally, the new overhead masts are lower than conventional pylons and therefore have less visual impact on the landscape.

Beneficiary:

Type of beneficiary
Public enterprise

Name of beneficiary
TenneT B.V.

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Website http://www.tennet.org

Name of contact person
Peter Ligtvoet

Duration of project:
20 months (Jan 2005 – Sept 2006)

Total budget in euro:
2,443,022.00

EC contribution in euro with %:
732,907.00 (30.00%)

Generic Theme:
3.1: Clean technologies

The road to recycled roads

LIFE05 ENV/P/000366
ECOVIA

Official title

ECOVIA - Ecological Road

Background

The quantity of municipal solid waste in Europe (415 Kg per capita in 2000) continues to grow, while in many European countries recycling rates are still very low. The main impediments to an increase in recycling are low collection rates, the high costs compared to virgin materials and restricted market opportunities for secondary materials. Additionally, the sometimes low quality of some recycled products makes them unsuitable for certain uses.

The main challenges are the development of new and competitive products, as well as in the creation of solid and sustainable markets for recycled products.

Objectives

The project seeks to offer solutions to waste management problems in Portugal caused by plastics, rubber and beverage cartons. This will be done by creating new composite materials from these substances, from which lane-dividers, guardrails, anti-glare systems, road signs and other roads-related articles can be produced. Awareness will be raised among relevant actors of the benefits of these articles, as opposed to conventional products from non-recycled material. Furthermore, a 'green mile' of motorway will be built, within which all building material and infrastructure will be of recycled substances.

Beneficiary:

Type of beneficiary
Large enterprise

Name of beneficiary
BRISA Auto-Estradas de Portugal, S.A.

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Website http://www.brisa.pt

Name of contact person
Jorge Manuel SALES GOMES

Duration of project:
42 months (Nov 2005 – Apr 2009)

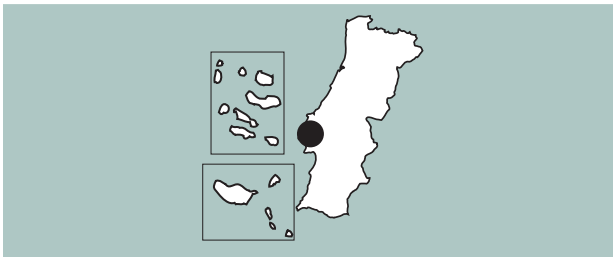
Total budget in euro:
1,240,454.00

EC contribution in euro with %:
617,727.00 (49.80%)

Generic Theme:
4.1: Municipal waste (including household and commercial)

UFO fuel

LIFE05 ENV/P/000369
OILPRODIESEL



Official title

Integrated Waste Management System for the Reuse of Used Frying Oils to Produce Biodiesel for Municipality Fleet of Oeiras

Background

At present, most Used Frying Oils (UFO) are considered to be waste materials and are discharged into wastewater systems where they cause severe problems in wastewater treatment plants, or are disposed of in landfills.

At the same time, EU Directive 2003/30/EC states that Member States should, by the end of 2008, ensure a minimum proportion of 5.75% of bio-fuels and other renewable fuels in transport.

Through an adequate collection and treatment of UFO, bio-diesel can be gained as an alternative fuel, at the same time reducing the environmental problems caused by current UFO disposal practices.

Objectives

The project's main objective is to develop an integrated and innovative UFO waste management system that responds to existing market demands. It will promote a more efficient UFO collection from industry and private households to avoid waste disposal in landfills or wastewater systems. The project will evaluate the opportunities for reusing the residue from bio-diesel production. Finally, it will promote the use of bio-diesel as an alternative fuel to diesel. The project will demonstrate the energetic and economical benefits of bio-diesel on a municipal transport fleet.

Beneficiary:

Type of beneficiary
Professional association

Name of beneficiary
Instituto de Soldadura e Qualidade (ISQ)

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PORTUGAL
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Website http://www.isq.pt

Name of contact person
Norberto Duarte

Duration of project:
30 months (Oct 2005 – Apr 2008)

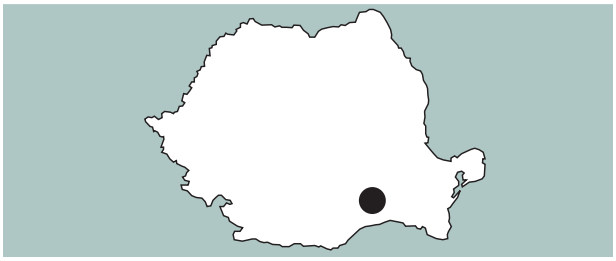
Total budget in euro:
1,203,663.00

EC contribution in euro with %:
598,500.00 (49.72%)

Generic Theme:
General - Waste management

Modelling metropolitan air pollution

LIFE05 ENV/RO/000106
AIR-AWARE



Official title

Air Pollution Impact Surveillance and Warning System for Urban Environment

Background

Bucharest is one of Romania's most polluted cities. Sixty percent of the city's cars are over eight years old and the intense traffic is one of the main causes of air pollution. Bucharest's urban area is expected to continue growing at a significant rate until 2010. Air pollution from road traffic will increase accordingly, contributing to increased incidences of airborne lung diseases.

Objectives

The project responds to the Community's Air Quality Framework Directive by developing a set of indicators and calibrating them by the co-relation between air pollution and public health.

Its overall aim is to assist spatial planning decision-making, traffic management and pollution control in the Bucharest metropolitan area by predicting the health and environmental impacts of air pollution. The project plans to promote a cross-institutional data sharing system, to develop a set of indicators, and to construct a mathematical model of air pollution based on a geographic information systems (GIS) platform.

Beneficiary:

Type of beneficiary
National authority

Name of beneficiary
National Administration of Meteorology (NAM)

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Fax +40 21 2307762
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Website http://www.inmh.ro

Name of contact person
Constantin Ionescu

Duration of project:
36 months (Nov 2005 – Oct 2008)

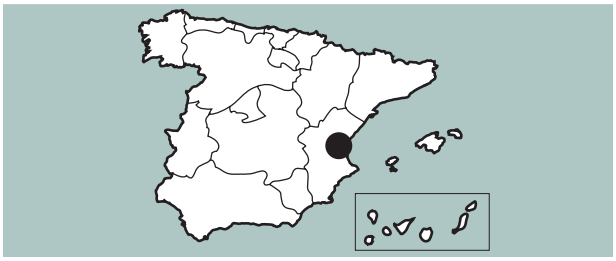
Total budget in euro:
1,113,477.00

EC contribution in euro with %:
460,239.00 (41.33%)

Generic Theme:
1.2: Air quality management and noise abatement

Cleaner cleaning

LIFE05 ENV/E/000251
OZONECIP



Official title

Ozone clean in place in food industries

Background

Clean In Place (CIP) systems are closed processes in which a recirculation cleaning solution is used to disinfect food processing plants. Though these cleaning and disinfection methods are essential to maintain hygienic conditions, their high water consumption and the highly polluted wastewater they produce have significant environmental impacts. Hazardous disinfection by-products are a further serious environmental consideration.

Objectives

The project seeks to contribute to a reduction in the environmental impact of cleaning operations in food processing plants. An innovative, environmentally friendly and efficient technique will be demonstrated that uses ozone as an alternative cleaning agent.

CIP is already considered a Best Available Technique (BAT) by the European reference documents (BREFs). However, the 'Ozone CIP' technique is even more advanced. Ozone is a more efficient antimicrobial agent and it leaves no residues at all, since it breaks down into oxygen after disinfecting. The new technique should result in a significant saving of water and an increase in wastewater quality.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
AINIA (Instituto Tecnológico Agroalimentario)

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Website http://www.ainia.es

Name of contact person
Andrés Pascual

Duration of project:
36 months (Dec 2005 – Dec 2008)

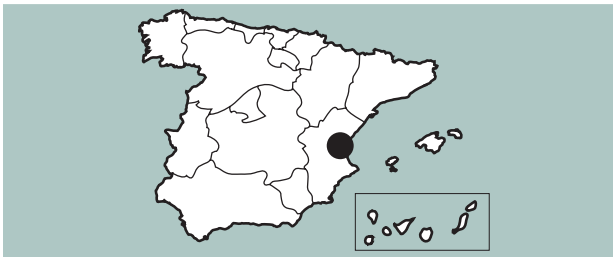
Total budget in euro:
811,348.00

EC contribution in euro with %:
394,924.00 (48.67%)

Generic Theme:
3.1: Clean technologies

Treating surface treatments

LIFE05 ENV/E/000256
ZEROPLUS



Official title

Integral liquid residuals management model for surface treatment industries through BAT's

Background

The surface treatment of metal products is a significant industrial activity in Europe. A number of liquid wastes are generated by surface treatment processes such as degreasing, acid pickling, alloy baths or lacquering. Many of these procedures form part of other products' manufacturing processes. This can lead to an 'invisible' generation of pollution which is often neglected when designing preventive and corrective policies.

Objectives

The project's main objective is to define a model for managing liquid wastes created by the surface treatment industry. This is to be done through the integrated application of existing Best Available Techniques (BATs).

The integral management model will be implemented under real-life conditions in a typical electroplating plant, to demonstrate its suitability for achieving zero liquid-waste discharge.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
Asociación de Investigación de la Industria Metalmecánica, Afines y Conexas

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Website http://www.aimme.es

Name of contact person
Manuel SÁNCHEZ DE LA ASUNCIÓN

Duration of project:
36 months (Dec 2005 – Nov 2008)

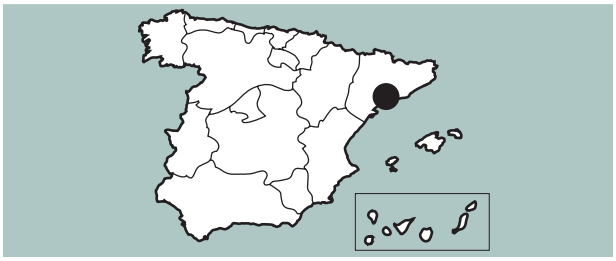
Total budget in euro:
2,567,609.00

EC contribution in euro with %:
1,277,862.00 (49.77%)

Generic Theme:
4.2: Industrial waste (including manufacturing)

Mechanisms for managing mobility

LIFE05 ENV/E/000262
GESMOPOLI



Official title

Integral mobility management in industrial estates and areas

Background

Many regions in Europe, especially those with a long industrial history, have a high density of industries and employees in particular zones. In the majority of cases these industrials estates were developed without concern for car transport or mobility issues.

Transport is a key factor in today's economies, and a modern transport system must be sustainable from an economic and social as well as an environmental point of view.

In Europe, current transport trends are not sustainable, due, largely, to the high number of daily commuters. Furthermore, traffic accidents are the main cause of industrial injuries, as well as labour mortality in industrials estates. Clearly, a comprehensive transformation of transport models towards more sustainable mobility patterns is needed in industrial estates.

Objectives

The aim of the project is to promote sustainable mobility in six industrial parks by establishing management mechanisms and through the active participation of the institutional, economic and social agents involved in these estates.

Having identified the main mobility problems, a consensus will be sought amongst all stakeholders on the proposals made for sustainable mobility. Based on this, a management system for sustainable mobility will be set up, and awareness will be created to promote behavioural change by the workers and managers in industrial estates. The project will seek to transfer the management expertise gained to other industrial estates and areas.

Beneficiary:

Type of beneficiary
Regional authority

Name of beneficiary
Diputació de Barcelona

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Fax +34 93 4022493
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Website http://www.diba.es

Name of contact person
Domènec Cucurull Descàrrega

Duration of project:
36 months (Nov 2005 – Oct 2008)

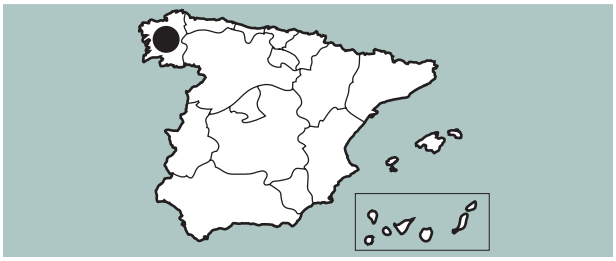
Total budget in euro:
1,441,310.00

EC contribution in euro with %:
720,655.00 (50.00%)

Generic Theme:
1.1: Urban design - Quality of life - Transport planning

Greater value for fish

LIFE05 ENV/E/000267
BE-FAIR



Official title

Benign and environmentally friendly fish processing practices to provide added value and innovative solutions for a responsible and sustainable management of fisheries

Background

The global harvesting of marine products has increased from an annual average of 17 million tons in the 1950s to a current 85 million tons. The United Nations Food and Agriculture Organisation (FAO) predicts an increasingly serious imbalance between the supply and demand of marine products, that will lead to yet further increases in fishing. At the same time, the FAO estimates that an annual average of 27 million tons of undesired by-catch is thrown back into the sea. This means that more than a third of the fish volume captured every year is wasted. The large amounts of organic waste thrown into the sea have severe adverse effects on the ecological equilibrium of marine communities.

Objectives

The project seeks to develop and implement efficient and integrated waste management and processing practices, both on-board and on shore (e.g. at fish auctions), to recycle and reuse waste and by-catch produced by the fishing industry.

A pre-industrial waste processing plant will be constructed to demonstrate the methods used for processing waste to products and chemicals for the food and pharmaceutical industries.

Beneficiary:

Type of beneficiary
Research institute

Name of beneficiary
Consejo Superior de Investigaciones Científicas-Instituto de Investigaciones marinas (IIM-CSIC)

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Website http://www.iim.csic.es

Name of contact person
Antonio ÁLVAREZ ALONSO

Duration of project:
36 months (Nov 2005 – Nov 2008)

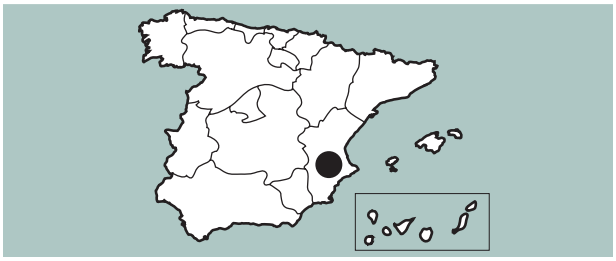
Total budget in euro:
1,858,552.00

EC contribution in euro with %:
909,248.00 (48.92%)

Generic Theme:
4.2: Industrial waste (including manufacturing)

Fashionable styles of waste reduction

LIFE05 ENV/E/000285
RESITEX



Official title

Alternatives for waste volume reduction in the textile sector through the application of minimisation measures in the production process and in the consumption

Background

Small and medium-sized enterprises (SMEs) are well positioned to serve niche markets and can react flexibly to changing styles in fashion. However, though they play a central role in Europe's textile-finishing industry, they lag behind in their environmental performance. For instance, over 70% of Spanish enterprises have no waste-reduction plan or management system.

The situation results principally from SMEs' limited capacity for investing in the research and development of new, environmentally friendly technologies. It is also due to a resistance to change caused by a lack of awareness of the benefits of existing technologies and practices.

Objectives

In line with EU Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC), the project seeks to contribute to a reduction in the quantity of waste generated by the textile sector. It will develop and demonstrate an efficient and effective waste management procedure that will be applicable to all textile sub-sectors. Best available techniques (BATs) will be assessed for applicability to the SME textile sector and introduced on a pilot scale.

Beneficiary:

Type of beneficiary
Research institution

Name of beneficiary
AITEX (Asociación de Investigación de la Industria Textil)

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Website http://www.ainia.es

Name of contact person
Rosa López

Duration of project:
24 months (Dec 2005 – Dec 2007)

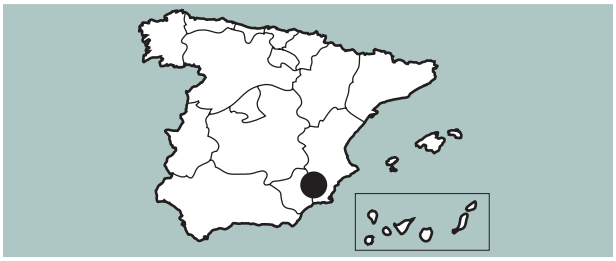
Total budget in euro:
374,655.00

EC contribution in euro with %:
187,327.00 (50.00%)

Generic Theme:
4.2: Industrial waste (including manufacturing)

Late-bloomers to flower

LIFE05 ENV/E/000288
ALMOND PRO-SOIL



Official title

Soil protection in Mediterraanean areas through cultivation of new varieties of almond tree

Background

With its major environmental, economic and social consequences, soil degradation is an increasing problem in Europe. Seventeen percent of EU land area is already seriously eroded, and nearly 75% of soil in Southern Europe is low on organic matter content and biodiversity. Soil erosion is particularly severe in Mediterranean regions areas, due to the prevalence of steep slopes, dry periods followed by heavy precipitation and, in some cases, inappropriate farming practices.

Almond trees are typical of the Mediterranean landscape. They require little water and soil, and are highly resistant to extreme heat and aridity. They have, however, a low resilience to late frost. This, along with a shortage of bees for pollination, limits their widespread growth. To be able to use almond trees widely for soil protection purposes, these issues need to be addressed.

Objectives

The project's goal is to prove the viability of growing almond trees obtained through crossbreeding local varieties with foreign species. As late bloomers with improved reproductive characteristics, these new varieties would be suitable as a means of soil protection.

The project will determine best farming practices for the trees, as well as analyse the approach's possible technical and socio-economic implications at the regional, national and European level. Results will be disseminated to other high-risk areas of the Mediterranean Basin.

Beneficiary:

Type of beneficiary
Regional authority

Name of beneficiary
Instituto Murciano de Investigación y Desarrollo Agrario y Alimentario - Consejería de Agricultura y Agua de la Región de Murcia

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Website http://www.imida.es

Name of contact person
Eulogio Molina

Duration of project:
36 months (Oct 2005 – Sept 2008)

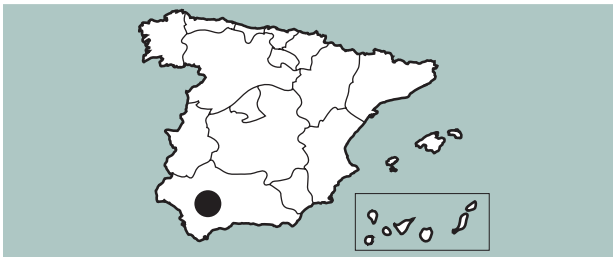
Total budget in euro:
1,653,845.00

EC contribution in euro with %:
918,000.00 (49.46%)

Generic Theme:
3.6: Site rehabilitation - Decontamination

Nourishing irrigation

LIFE05 ENV/E/000289
FERTIGREEN



Official title

Sustainable management of water reducing environmental impact using new fertirrigation methods

Background

Conventional agricultural practices in EU Member States currently result in a fertilizer consumption of 2,000-2,500 kg/ha/year. This has considerable negative consequences for soil and water pollution in Europe.

Recent studies suggest that adding carbon dioxide and oxygen to water used for irrigation (a system known as "fertirrigation") increases both yield and crop quality, while reducing soil and groundwater pollution. Though first studies have proven highly promising, fertirrigation has not yet been tested on a large scale.

Objectives

The project seeks to demonstrate the technical and economic viability of fertirrigation, as well as several other new agricultural techniques. Applied to large-scale intensive crops, this approach will aim to contribute to a reduction in soil and groundwater pollution. The fertirrigation technology will be applied in six cut-flower producers' greenhouses. The project will seek to optimise the technique and develop a standard procedure for its widespread implementation.

Beneficiary:

Type of beneficiary
Mixt enterprise

Name of beneficiary
CITAGRO S.A.

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Fax +34 95 4460470
Email nchavrier@citagro.es
Website http://www.citagro.es

Name of contact person
Nathalie Chavrier

Duration of project:
36 months (Aug 2005 – Aug 2008)

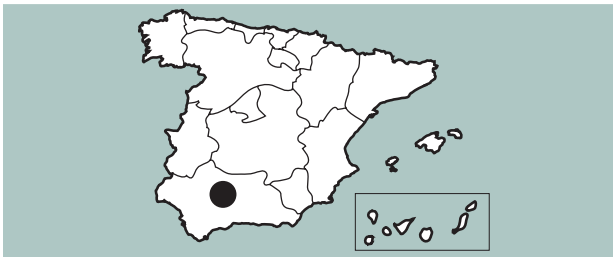
Total budget in euro:
572,794.00

EC contribution in euro with %:
281,386.00 (49.13%)

Generic Theme:
2.4. Diffuse and dispersed sources of pollution

Treating olive oil residues

LIFE05 ENV/E/000292
OLIVEWASTE



Official title

Sustainable management of water reducing environmental impact using new fertirrigation methods

Background

Olive production is a significant economic sector in southern Member States, especially in Spain, Italy, Greece and Portugal. However, the extraction process involved in olive oil production generates non-biodegradable phytotoxic waste, and is therefore a significant source of pollution. Despite the introduction in the 1990s of improved separation systems that reduce both water use and the quantities of liquid residues produced, the problems of waste toxicity, high energy consumption and the disposal of final residues remain.

Objectives

The project's main goal is to demonstrate the environmental advantages, as well as the economic and technical viability, of a new system for treating waste from olive oil production. The system is based on a three-step procedure comprising the separation of solid residues, an evaporation and condensation process, and a final water treatment. After prototypes have been developed for each of these stages, a pilot plant will be constructed to convert the waste to liquid and solid fertilisers and irrigation water.

Beneficiary:

Type of beneficiary
Development agency

Name of beneficiary
Centro de Automatización, Robótica y Tecnologías de la Información y de la Fabricación (CARTIF)

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Website http://www.cartif.es

Name of contact person
José Ramón Perán González

Duration of project:
40 months (Nov 2005 – March 2009)

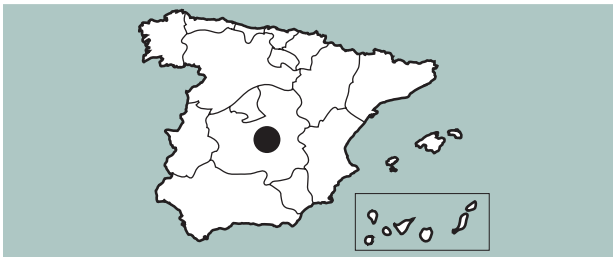
Total budget in euro:
4,524,560.00

EC contribution in euro with %:
2,065,585.00 (45.65%)

Generic Theme:
4.2. Industrial waste (including manufacturing)

Upgrading sludge

LIFE05 ENV/E/000301
ECO-CERAMICS



Official title

Ecological ceramics optimization. Alternative to sludge disposal

Background

Over the past 15 years, ambitious city wastewater purifying programmes have been implemented across Europe. This has led to a considerable increase in the sludge generated by sewage treatment plants, which is either deposited in landfills or incinerated. Increasingly, it is also processed to produce fertiliser. However, sludge generally contains heavy metals and organic substances, and the environmental and health impact of its use as fertiliser has not yet been fully investigated.

Objectives

The project will demonstrate a new sludge management concept, introducing a method that will involve reusing it as material for the structural ceramics industry. During the process, the organic substances in the sludge are eliminated through burning, while the heavy metals are safely bound. Furthermore, since sludge itself is burnable, energy is saved during the ceramic production process. The project also addresses the issue of sludge transport from wastewater treatment plants to industrial sites.

Beneficiary:

Type of beneficiary
Regional authority

Name of beneficiary
CMA-JCCM - Consejería de Medio Ambiente de la Junta de Comunidades de Castilla-La Mancha

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Website http://www.jccm.es

Name of contact person
Mariano Martínez Cepa

Duration of project:
36 months (Dec 2005 – Nov 2008)

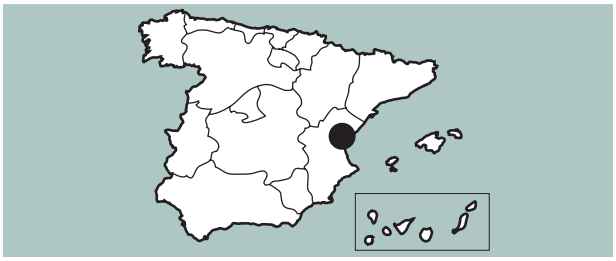
Total budget in euro:
1,023,647.00

EC contribution in euro with %:
511,823.00 (50.00%)

Generic Theme:
2.3. Waste water treatment

Treating flies to manure

LIFE05 ENV/E/000302
ECODIPTERA



Official title

Digestion project and later decrease of swinish dung by use of the dipterans fly

Background

The huge volume of pig manure generated across Europe, and its customary use as fertiliser for agriculture, is the cause of serious environmental problems. These include the leaching of high nitrogen, which causes an excess nutrient enrichment of soil and water, and the emission of odours and greenhouse gases. Furthermore, the use of manure for fertiliser can result in the spreading of pathogenic micro-organisms that can be transferred from animals to people, being spread through air and water.

Objectives

The project's main objective is to demonstrate a novel method of treating pig manure. Insects (mainly flies) are used to decompose the waste and transform it into high quality fertiliser that can be applied without negative impacts on environment or health. The compost will be used to fertilise parks, gardens and green areas of the surrounding towns, thereby supporting a campaign to raise awareness of the benefits of the new, environmentally friendly technique.

Beneficiary:

Type of beneficiary
Regional authority

Name of beneficiary
Diputación Provincial de Valencia

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Avenida Dr. Peset Aleixandre, 63
E-46009 Valencia
SPAIN
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Fax +34 963 883075
Email emilio.sanchis@diputacion.m400.gva.es
Website
http://www.dva.gva.es/diputacion.asp?portada

Name of contact person
Emilio Sanchis Moll

Duration of project:
36 months (Dec 2005 – Nov 2008)

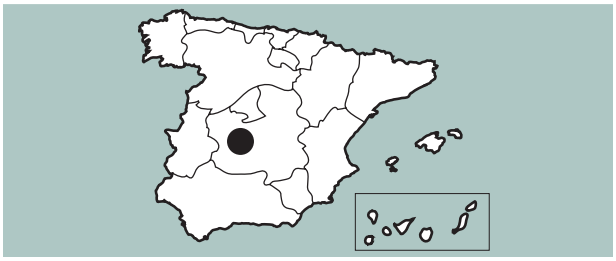
Total budget in euro:
1,595,266.00

EC contribution in euro with %:
791,633.00 (49.63%)

Generic Theme:
4.4. Agricultural waste

Getting irrigation on line

LIFE05 ENV/E/000313
GEA



Official title

Excellence in irrigation water management

Background

Mediterranean countries use around 70% of their water for irrigation. The average loss of water in the region is extremely high, with often less than half the water foreseen for irrigation actually reaching the crops. The mismanagement of this resource poses a particular problem in a region already suffering from a lack of water reserves. However, considerable potential exists for improving the efficiency of irrigation systems, and as most water is used for this purpose, a small increase in irrigation efficiency would result in a major water saving.

Objectives

The project will demonstrate the use of an interoperable management platform called "gEa" in the El Vicario community in Guadiana, Spain. The online system supports decision-making by offering the automated and real-time reading of meters, control of water quality, regulation of water consumption, and detection of leaks. Considerable water savings are expected, along with a better control of salinity levels and exploitation of nutrients.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Soluziona Consultoría y Technología S.L.

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Av. Arteixo, 171
E-15007 A Coruna
SPAIN
Phone +34 91 2102000
Fax +34 91 2114563
Email sescribanot@soluziona.com
Website http://www.soluziona.com

Name of contact person
Santiago Escribano Testaut

Duration of project:
18 months (Sept 2005 – Feb 2007)

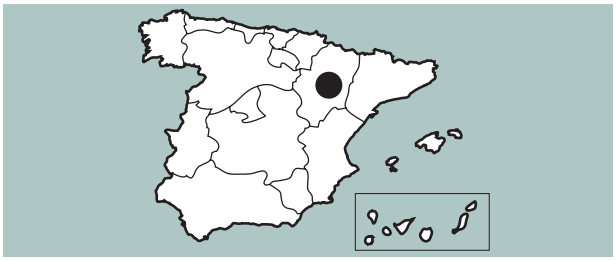
Total budget in euro:
671,406.00

EC contribution in euro with %:
200,687.00 (29.89%)

Generic Theme:
2.1. Water management at the scale of the river basin

Motor metals for motors

LIFE05 ENV/E/000317
ELVES



Official title

Development of a System for High-Quality Separation of Metal Alloys from End-of-Life-Vehicle Engines and its Reuse in New Engines and Components for Automotive Sector

Background

In the EU, between 10 and 11 million vehicles reach the end of their useful lives every year. This generates around 9 million tons of waste, which is generally contaminated with heavy metals, as well as oil and other lubricating fluids.

However, the EC Directive on End-of-Life Vehicles (ELV) requires all metal components from ELVs to be separated and decontaminated for reintroduction in the automobile industry. Nevertheless, a number of countries in Europe are having difficulties in complying with EC legislation, due to a lack of the facilities needed for reusing ELV materials.

Objectives

The project's main objective is to demonstrate the technical and economic feasibility of a new high-capacity process for separating metal alloys with degrees of purity of over 99%. The system will use a combination of magnetic separation techniques, Foucault currents, granulometry and flotation to separate iron, aluminium and heavy metals from ELV engines for reuse in new vehicle motors. The project prototype is expected to process 650 tons/week of used engines. The project will also address the logistics network between the firms who process the old engines and the car manufacturers who use the recycling materials.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
RECIEDER, S.L.

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Paseo Independencia, 4 - 1°D
E-50004 Zaragoza
SPAIN
Phone +34 976 400160
Fax +34 976 400170
Email recieder@telefonica.net

Name of contact person
Gotzon Armendariz

Duration of project:
27 months (Jan 2005 – Apr 2007)

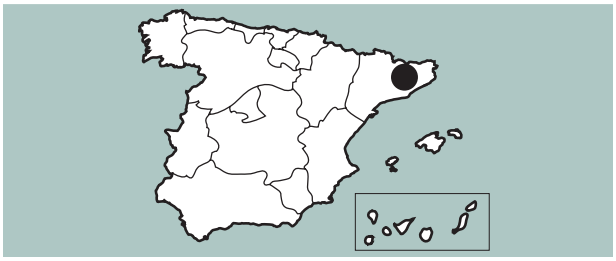
Total budget in euro:
4,941,041.00

EC contribution in euro with %:
756,271.00 (15.31%)

Generic Theme:
4.8. End-of-Life Vehicles (ELV's) and tyres

Journalistic title Managing methane

LIFE05 ENV/E/000319
MICROPHILOX



Official title

Energy recovery from landfill's biogas by the use of microturbines and biological removal of hydrogen sulphide and siloxanes

Background

Decomposing organic waste in landfills generates large quantities of methane (CH_4) and carbon dioxide (CO_2), greenhouse gases that contribute significantly to the global problem of climate change. Methane is, however, a biogas that can be used for generating power and heat. Nevertheless, conventional technology for extracting biogas for use as an energy source is seldom cost-efficient, generally only managing to capture about half the gas produced.

Objectives

The project aims to demonstrate a system for recovering biogas from landfills in which biogas production is too low to apply conventional technology. Two pilot plants will be built for the biological reduction of hydrogen sulphide and siloxanes, which are corrosive and must be removed to avoid damage to equipment during combustion. The plants will be integrated with a system of micro-turbines, which will produce electricity and heat from the landfill biogas.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Cespa Gestión de Residuos S.A.

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Gran Vía de Les Corts Catalanes, 657
E-08010 Barcelona
SPAIN
Phone +34 93 3435470
Fax +34 93 3435479
Email e.jimenez@cespa.es
Website http://www.cespa.es

Name of contact person
Elena Jimenéz Coloma

Duration of project:
42 months (Oct 2005 – March 2009)

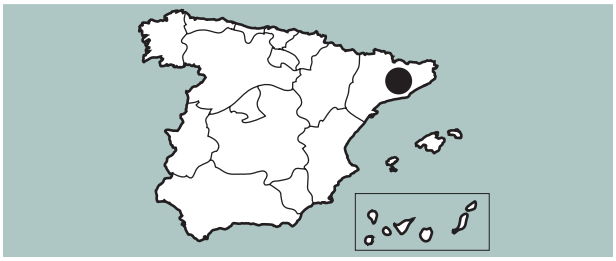
Total budget in euro:
1,294,113.00

EC contribution in euro with %:
581,806.00 (44.96%)

Generic Theme:
Reduction of emission greenhouse gases

Reducing VOC emissions

LIFE05 ENV/E/000328
PREVOC PLAN



Official title

Pilot Demonstration Plant for Reduction of VOC Air Emissions

Background

Great quantities of volatile organic chemicals (VOCs) are used as solvents in products such as paints, varnishes, wax, degreasers, and cleaning agents by Europe's manufacturing and surface treatment industries. Exposure to VOCs can cause health problems such as headaches, nausea, and damage to the liver, kidney and central nervous system. Furthermore, some VOCs are known or suspected carcinogens.

Current technologies for controlling VOC emissions, such as active carbon absorption, catalytic oxidation and thermal incineration, have difficulties in efficiently treating varying chemical products with differing levels of VOC concentration. Equipment is therefore often built to cope with peaks in concentration, leading to oversized systems and excess energy consumption in operational phases with only a low concentration of organic components.

Objectives

The project's objective is to build and run a demonstration plant that uses an innovative system for reducing VOC emissions from surface treatment factories. The system is based on a regenerative thermal oxidiser plant for gas emissions, with a zeolite molecule filter at the inlet that permits the removal of potential peak solvent concentrations. The system is expected to achieve a significant reduction in energy consumption and in carbon dioxide (CO_2) emissions.

Beneficiary:

Type of beneficiary
Development agency

Name of beneficiary
Alkor Draka Ibérica S.A.

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Phone +34 938 484012
Fax +34 938 673051
Email eugenio.solina@solvay.com
Website http://www.alkor.es

Name of contact person
Eugenio Solina Fierro

Duration of project:
29 months (Jan 2005 – June 2007)

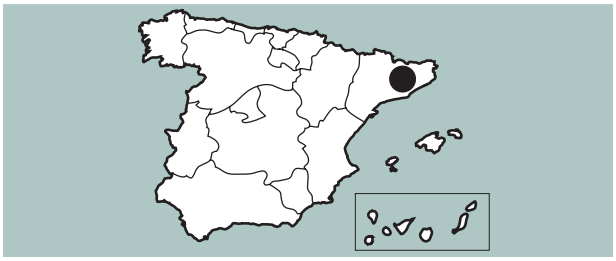
Total budget in euro:
1,413,808.00

EC contribution in euro with %:
483,654.00 (34.21%)

Generic Theme:
3.1. Clean technologies

Growing greener grapes

LIFE05 ENV/E/000330
PRIORAT



Official title

Making compatible mountain viticulture development with European Landscape Convention objectives

Background

A significant economic sector in many European countries, viticulture has a number of adverse effects on the environment. The terracing of vineyards is a major intervention in the natural landscape. The elimination of herbaceous surfaces on the generally steep slopes, along with the application of inappropriate irrigation systems, leads to erosion and a loss of organic matter in the soil, and therefore a loss of fertility. Furthermore, soil is often contaminated by the excessive use of fertilisers and chemical products.

Objectives

The project will demonstrate the potential of a mountain viticulture sustainable management system to reduce the sector's environmental impacts, while still producing wines of outstanding quality. A series of new techniques will be tested at three vineyards in Spain and France. The project will seek to achieve a reduction in landscape alteration and visual impact of terracing; an increase in vegetation cover leading to a rise in organic matter in the soil; a reduction in the use of pesticides, herbicides and fertilisers; and a decrease in water consumption by means of subsurface drip irrigation systems.

Beneficiary:

Type of beneficiary
NGO-Foundation

Name of beneficiary
Fundació Fórum Ambiental (FFA)

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Fax +34 93 2332496
Email cmendienta@forumambiental.org
Website http://www.forumambiental.org

Name of contact person
Carles Mendieta

Duration of project:
40 months (March 2005 – June 2008)

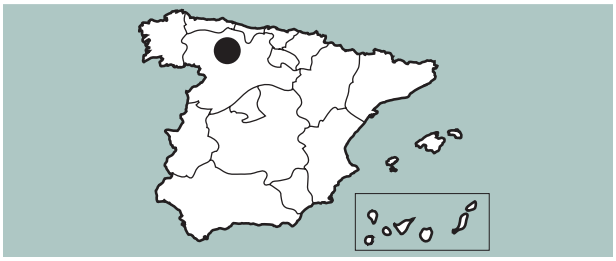
Total budget in euro:
729,812.00

EC contribution in euro with %:
286,905.00 (39.31%)

Generic Theme:
3.2. Integrated environmental management

Cooler means of cooling

LIFE05 ENV/E/000333
HIDRO SOLAR 21



Official title

Building demonstration based in solar cooler and hydrogen conversor of renewable energies

Background

Within the framework of the Kyoto Protocol, Europe has committed itself to reduce its greenhouse gas emissions to 8% below 1990 levels by 2008-2012. Lighting and air-conditioning of buildings account for a substantial proportion of Europe's carbon dioxide (CO_2) emissions and energy consumption.

Two technologies are currently considered to have a great potential for contributing to a reduction in the CO_2 emissions of buildings. "Solar cooling" uses excess solar energy to cool buildings during the hottest hours of the day, while "hydrogen conversion" allows the storage of energy in form of hydrogen. Both technologies have been developed and successfully tested by the project partners at an experimental scale.

Objectives

The project seeks to demonstrate how renewable energy obtained from solar cells and wind turbines can, through solar cooling and hydrogen accumulation, effectively and economically supply lighting and cooling for a 2,400m^2 building. The project will develop pre-industrial prototypes of the two technologies, before integrating them into the existing public building. Power production, storage and use will be completely free of CO_2 emissions, saving 95 tons of CO_2 per year.

Beneficiary:

Type of beneficiary
Development agency

Name of beneficiary
Asociación Plan Estratégico de Burgos (APEBU)

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Website http://www.burgosciudad21.org

Name of contact person
Juan Carlos Aparicio Pérez

Duration of project:
36 months (Dec 2005 – Nov 2008)

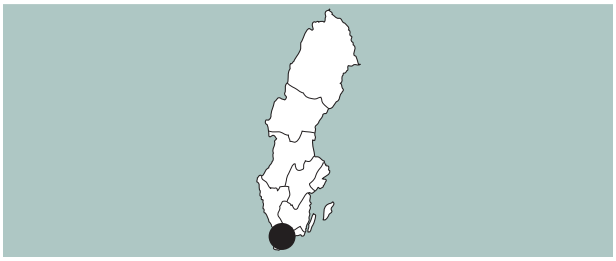
Total budget in euro:
3,283,930.00

EC contribution in euro with %:
1,499,224.00 (45.65%)

Generic Theme:
5.4. Sustainable building

Reacting better

LIFE05 ENV/S/000401
ART



Official title

Advanced Reactor Technology for Sustainable Production in the Chemical Industry

Background

For the chemical industry, Europe's third largest manufacturing sector, finding safer, cleaner and more energy-efficient manufacturing processes is an urgent challenge. In the sector, standard production equipment is often poorly suited to the chemical transformation undertaken. This results in inefficient energy use, poor product quality and the creation of undesired by-products. It therefore poses a major obstacle to more environmentally adequate solutions for the production of chemicals.

Objectives

The project's objective is to demonstrate an innovative continuous reactor technology, to be used for synthesis and other chemical reactions. Advanced Reactor Technology (ART®) combines many of the attributes of micro-reactors, plate heat exchangers and tube reactors. The pilot-scale reactor is expected to surpass current Best Available Techniques (BAT), achieving a 50-70% reduction in energy use, an over 80% reduction or suppression of potentially dangerous reactants, a significantly lower volume of waste, as well as improved product quality, efficiency and safety.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Alfa Laval Corporate AB

Postal Address
Rudeboksvägen 1
S - 22100 Lund
SWEDEN
Phone +46 46 366 682
Fax +46 46 367 191
Email Tommy.Noren@alfalaval.com
Website http://www.alfalaval.com

Name of contact person
Tommy Norén

Duration of project:
27 months (Jan 2005 - Apr 2007)

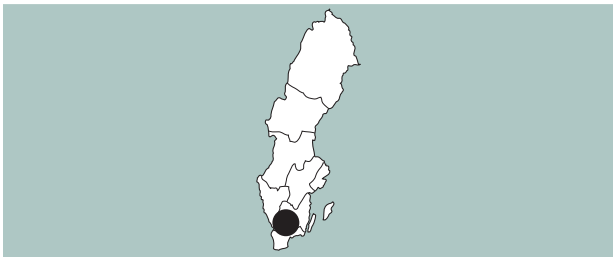
Total budget in euro:
3,977,800.00

EC contribution in euro with %:
1,017,240.00 (25.57 %)

Generic Theme:
3.1. Clean technologies

Heavy duty for alternative fuel

LIFE05 ENV/S/000405
DME VEHICLE



Official title

Demonstration of DiMethyl Ether Vehicle for Sustainable Transport

Background

Under the Kyoto Protocol, the EU has committed itself to reducing its greenhouse gas emissions to 8% below its 1990 level by 2008-2012. Today, over 97% of transport related energy comes from crude oil, with heavy vehicles generally running on diesel. However, the EC is seeking to substitute 20% of conventional fuels with alternative road fuels by the year 2020.

Currently, dimethyl ether (DME) is the alternative fuel with the best 'well-to-wheel' energy efficiency. Furthermore, if produced from biomass, it is almost carbon dioxide (CO_2) neutral. It is therefore considered one of the most promising fuel options for the future.

Objectives

Under the Kyoto Protocol, the EU has committed itself to reducing its greenhouse gas emissions to 8% below its 1990 level by 2008-2012. Today, over 97% of transport related energy comes from crude oil, with heavy vehicles generally running on diesel. However, the EC is seeking to substitute 20% of conventional fuels with alternative road fuels by the year 2020.

Currently, dimethyl ether (DME) is the alternative fuel with the best 'well-to-wheel' energy efficiency. Furthermore, if produced from biomass, it is almost carbon dioxide (CO_2) neutral. It is therefore considered one of the most promising fuel options for the future.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Volvo Powertrain AB

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S-40508 Gothenburg
SWEDEN
Phone +46 31 66 59 94
Fax +46 31 66 55 20
Email Henrik.landalv@volvo.com
Website http://www.volvo.com

Name of contact person
Henrik Landälv

Duration of project:
23 months (Jan 2005 - Dec 2006)

Total budget in euro:
1,814,605.00

EC contribution in euro with %:
907,302.00 (50.00 %)

Generic Theme:
3.3: Reduction of emission of greenhouse gases

Blasting tyres

LIFE05 ENV/UK/000118
TREAD

Official title

Tyre Recycling for Environmental ADvantage

Background

In Europe, an estimated 3 billion waste vehicle tyres are currently stockpiled, posing a great hazard to the environment. While the stream of waste tyres is predicted to grow significantly across the EU in the coming years, the EU Landfill Directive now bans the landfilling of whole tyres, and will ban most shredded tyres from landfills by 2006. The effective management of waste tyres therefore poses a great logistical, technical and environmental challenge.

Objectives

The project aims to demonstrate how a technology called "ultra high-pressure water blasting" (UHP) can be used to convert waste tyres into their component materials. Feasibility studies have already shown UHP's potential to achieve the complete reduction of waste tyres to clean rubber crumbs and steel. Through this project, a demonstration facility will be designed and built with an initial capacity of 750,000 tyres per year, to prove the method's feasibility on a large scale.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Aquablast Holdings Limited

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South Denes Road
UK-NR30 3PR Great Yarmouth, Norfolk
UNITED KINGDOM
Phone +44 1493 330140
Fax +44 1493 330139
Email andrewwatt@aquablast.co.uk
Website http://www.aquablast.co.uk

Name of contact person
Andrew Watt

Duration of project:
18 months (Sept 2005 – Mar 2007)

Total budget in euro:
2,604,335

EC contribution in euro with %:
568,150.00 (21.82%)

Generic Theme:
4.8: End-of-Life Vehicles (ELV's) and tyres

Zeroing in on sludge

LIFE05 ENV/UK/000121
PROMOTHE MBR

Official title

PROcess water recycling with a THErMOphile Membrane Bio Reactor installation for treatment of high temperature waste water, containing recalcitrant cod, with almost zero waste (sludge) production

Background

Numerous industries in Europe produce wastewater containing bio-degradable organic compounds. The most common way to process such waste is through aerobic treatment. This natural biological degradation and purification process involves optimising the supply of oxygen to micro-organisms that break down the waste's organic components. However, treatment of the sludge resulting from the process requires a large amount of chemicals and energy, and entails serious environmental impact and risks.

Objectives

The project aims to demonstrate the effectiveness of a "thermophile operated membrane bioreactor", for treating high-temperature wastewater containing recalcitrant organic compounds. The operation seeks to achieve a near zero sludge production, and a high COD (Chemical Oxygen Demand) and TSS (Total Suspended Solids) removal efficiency.

The new sludge processing technology is expected to result in a significant reduction in both energy and chemical consumption. The project's pilot system will treat approximately 500,000 m^3 of wastewater per year, with an average COD-level of 5,400mg/l.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Norit UK Ltd (NAC)

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45 Clydesmill Place
UK-G32 8RF Glasgow
UNITED KINGDOM
Phone +44 141 641 8841
Fax +44 1416410742
Email hogg.robert.bg@norit.com
Website http://www.norit.com

Name of contact person
Robert Hogg

Duration of project:
35 months (Jan 2005 – Dec 2007)

Total budget in euro:
2,231,001.00

EC contribution in euro with %:
417,500.00 (18,71%)

Generic Theme:
2.3: Waste water treatment

Woolly future for glass cullets

LIFE05 ENV/UK/000122
CLEAR

Official title

Project to demonstrate a system to increase Cullet Leverage for Environmentally Attractive Recycling

Background

In recent years, new legislation has contributed to an increase in glass recycling across the EU. Much of this increase has been observed in the glass manufacturing industry, where recycled glass cullet has increasingly been used as feedstock. This saves using virgin raw materials, and also reduces the glass industry's energy consumption, as well as carbon dioxide (CO_2), particulate and nitrogen oxide (NOx) emissions.

However, the types of glass cullet that can be economically recycled are limited, since the composition and contamination of many types, such as cullet from end-of-life vehicles (ELV), television screens, lighting products and building scrap, negatively impact on final product quality. These types of waste glass are therefore removed before processing, and are generally disposed of in landfills.

Objectives

The project's principal objective is to demonstrate an innovative combination of technologies for significantly increasing the proportion and the variety of waste glass used for the manufacture of glass fibre insulation products. The project will seek to prove the recyclability of glass that is currently unsuitable for most glass manufacturing processes.

The applied system is expected to surpass current EU Best Available Techniques (BATs), aiming to increase the percentage of contaminated waste glass used in glass fibre production from currently around 15% to over 60%.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Knauf Insulation Ltd

Postal Address
Stafford Road 10
UK-WA10 3NS St Helens, Merseyside
UNITED KINGDOM
Phone +44 1744 766810
Fax +44 1744 766799
Email roger.jackson@knaufinsulation.com
Website http://www.knaufinsulation.co.uk/

Name of contact person
Roger Jackson

Duration of project:
24 months (Sept 2005 – Sept 2007)

Total budget in euro:
2,737,908.00

EC contribution in euro with %:
518,417.00 (18.93%)

Generic Theme:
4.2: Industrial waste (including manufacturing)

Treating sludge better

LIFE05 ENV/UK/000124
MAD BUT BETTER

Official title

The demonstration of high rate enzyme hydrolysis as the safest and most environmentally friendly way to treat sewage sludge for land recycling

Background

Implementation of the EC Directive on Urban Wastewater Treatment, with its stricter requirements for managing wastewater, has lead to a dramatic increase in the production of sewage sludge throughout Europe in the past 15 years. Compared to a mere 5.5 million tonnes in 1992, nearly 9 million tonnes of dry matter will be produced in 2005. This figure will continue to grow as the number of households connected to sewers increases and new sewage treatment works are built.

Current sewage sludge treatment technologies are either inefficient or polluting, and managing its continuously growing supply is a major problem in the EU, especially in the new Member States.

Objectives

The project's overall aim is to demonstrate that a process known as "High Rate Enzyme Hydrolysis" is the safest and most efficient means of treating sewage sludge for land recycling. The soil conditioner or fertilizer resulting from the process is expected to exceed the strictest current and predicted European safety standards. The project will also demonstrate that the Enzyme Hydrolysis technology can easily be retrofitted to existing wastewater treatment plants.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
United Utilities PLC

Postal Address
Dawson House, Great Sankey
UK-WA5 3LW Warrington
UNITED KINGDOM
Phone +44 1925 23 7230
Fax +44 1925 23 6760
Email steve.whipp@uuplc.co.uk
Website http://www.unitedutilities.com/

Name of contact person
Steve Whipp

Duration of project:
29 months (Jan 2005 – June 2007)

Total budget in euro:
8,228,422.00

EC contribution in euro with %:
1,446,648.00 (17.58%

Generic Theme:
2.3: Waste water treatment

Formaldehyde to sugar

LIFE05 ENV/UK/000126
FORMOSE

Official title

The demonstration of the environmental benefits of a new chemical process (Formose), capable of 100% reduction of formaldehyde from industrial effluent waste streams

Background

Formaldehyde (HCHO) is used to manufacture a wide range of products such as glues, wood products, preservatives, permanent press fabrics, paper product coatings and insulation materials. However, increasing evidence is emerging of the negative effects of formaldehyde on human health. Recently, the International Agency for Research on Cancer (IARC) classified formaldehyde as carcinogenic to humans (category 1), and the EC has expressed its concern about the use of formaldehyde in the Europe.

Objectives

The project's objective is to showcase a new processing technology known as formose, by which formaldehyde is converted into non-toxic sugars. This results in a complete elimination of formaldehyde pollutant in effluent wastewater. The technology can offer a cheap and thoroughly effective solution to EU chemical companies seeking to prevent formaldehyde-contaminated discharges into surface waters.

Beneficiary:

Type of beneficiary
International enterprise

Name of beneficiary
Solutia UK Ltd

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Corporation Road
UK-NP19 4XF Newport
UNITED KINGDOM
Phone +44 01633 754526
Fax +44 01633 754298
Email saburg@solutia.com
Website http://www.solutia.com/

Name of contact person
Stephen Burge

Duration of project:
26 months (Jan 2005 – March 2007)

Total budget in euro:
1,186,668.00

EC contribution in euro with %:
258,602.00 (21.79%)

Generic Theme:
3.1: Clean technologies

Taking to the river

LIFE05 ENV/UK/000127
QUERQUS

Official title

Maintaining Quality Urban Environments for River Corridor Users and Stakeholders

Background

In Europe's cities, green spaces along river corridors often suffer from neglect, the illegal dumping of waste, pollution and security problems. Many local authorities are reluctant to implement measures towards environmental improvement within their urban river corridors for fear that investments will be nullified through vandalism. As a consequence, as well as for safety reasons, many rivers are fenced off or hidden from local people. This, in turn, leads to further neglect and environmental degradation.

Objectives

The project seeks to demonstrate how the 'designing out crime' model used in housing estate development can be applied to riverside environmental projects. The approach involves creating a network of usable public spaces of high environmental quality and with good access for pedestrians, cyclists and wheelchair users. An important aspect is the continual use and oversight of these areas by local people, so as to minimise opportunities for crime and vandalism. The approach will be applied to three urban river corridors with similar problems, but of varying size and environmental and social characteristics.

Beneficiary:

Type of beneficiary
Local authority

Name of beneficiary
The London Borough of Lewisham

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5th Floor Laurence House
1 Catford Road, Catford
UK-SE6 4RU
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Phone +44 20 8314 2034
Fax +44 20 8314 2128
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Name of contact person
Martin Hyde

Duration of project:
42 months (Apr 2005 – Sept 2008)

Total budget in euro:
8,671,213.00

EC contribution in euro with %:
1,891,492.00 (21.81%)

Generic Theme:
1.1: Urban design - Quality of life - Transport planning

Greening brownfields

LIFE05 ENV/UK/000128
BIOREGEN

Official title

Biomass, Remediation, Re-Generation: Re-using brownfield sites for renewable energy crops

Background

Across Europe, increasing quantities of no longer used industrial land, so-called "brownfields", are potentially available for re-development. However, these ex-industrial sites are often contaminated by metals, making them unsuitable for human use and posing a threat to groundwater.

Current on-site remediation practices are energy-intensive and costly. Therefore, the soil is often excavated and removed from the site as hazardous waste – a method that merely relocates the polluted soil, leaving the problem of its decontamination unsolved.

Objectives

The project seeks to demonstrate how certain plants can act as bio-accumulators of particular metals contained in the soil in which they are grown, thereby offering a cost-effective option for the remediation of contaminated brownfields. Some of the plants in question can also be used as biomass crops to generate heat and power, thereby contributing to the mitigation of climate change. The project will demonstrate the approach's viability on an industrial scale, applying the method to a variety of contaminated sites.

Beneficiary:

Type of beneficiary
University

Name of beneficiary
University of Teesside

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Name of contact person
David Prat

Duration of project:
53 months (Dec 2005 – Apr 2010)

Total budget in euro:
1,236,877.00

EC contribution in euro with %:
610,415.00 (49.35%)

Generic Theme:
3.6: Site rehabilitation – Decontamination

Managing medical waste

LIFE05 ENV/UK/000131
MEDISAFE

Official title

Concept for the Management of Clinical Waste based on environmentally sound policies, providing economic benefits and making Medical waste Safe and reusable as a raw material for manufacturing recycled products

Background

EU legislation prohibits the depositing of infectious waste in landfills. Therefore, medical waste is either sterilised or incinerated prior to disposal. Sterilisation is not always effective, sometimes failing to destroy all dangerous bacteria. Meanwhile, for incineration, clinical waste usually needs to be transported great distances to special incineration plants. This generally also requires a certain degree of sterilisation prior to transport, greatly increasing costs. Both current methods are expensive, have negative environmental impacts and result in the loss of valuable materials.

Objectives

The project aims to demonstrate a novel method for the recovery of materials from clinical waste, based on a system known as "rotating autoclave technology". This will include the application of patented densifying equipment, which will dry and reduce the volume of the recovered materials, thereby preparing them for recycling into new products. The project will establish demonstration plants in the UK and Latvia, and the process applied will be developed to meet the ISO 14001 quality assurance standard.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
Filtermedia Limited

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Name of contact person
Peter Aylmore

Duration of project:
21 months (Sept 2005 – June 2007)

Total budget in euro:
3,322,330.00

EC contribution in euro with %:
706,299.00 (21.26%)

Generic Theme:
4.3: Hazardous waste

Reducing nitrate contamination

LIFE05 ENV/UK/000137
NITRABAR

Official title

Remediation of agricultural diffuse nitrate polluted waters through the implementation of a permeable reactive barrier

Background

Nitrate contamination of surface waters resulting from agricultural practices continues to pose a major environmental problem. Nitrate levels in 68% of Europe's rivers exceed natural amounts, and in many European countries it is estimated that, unless farming practices are changed, by 2100 a significant proportion of water bodies will have levels above 50mg/l. This situation is leading to increasing adverse effects on the biodiversity of surface waters, their recreational and tourist value, the productivity of fisheries and the cost of treating drinking water.

Objectives

The project aims to demonstrate a technological solution based on a biological process that helps protect surface waters from diffuse nitrate contamination arising from agricultural practices. Using readily available material such as organic waste and clay, the cost-effective system is expected to achieve a reduction of at least 85% in nitrate contamination in water originating from agricultural land within the first six months of operation.

The project will bring together an international consortium of eight partners from four Member States, and will seek to achieve a widespread dissemination of the obtained results across Europe.

Beneficiary:

Type of beneficiary
University

Name of beneficiary
University of Oxford

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Name of contact person
Simon Jackman

Duration of project:
40 months (Dec 2005 – March 2009)

Total budget in euro:
1,489,298.00

EC contribution in euro with %:
740,957.00 (49.75%)

Generic Theme:
2.4. Diffuse and dispersed sources of pollution

Greener greenhouses

LIFE05 ENV/UK/000998
INTEGRATED GREENHOUSE

Official title

Integrated greenhouse and other buildings utilising sustainable design, construction and operation

Background

In Europe today, greenhouses are often built and operated using unsustainable methods. Furthermore, the practices associated with the commercial horticulture that greenhouses are generally used for often goes against the principles of a responsible environmental stewardship.

Objectives

Seeking to demonstrate the advantages of designing, constructing and operating environmentally sustainable greenhouses, the project focuses on the environmental benefits of integrating greenhouses with other structures, e.g. office buildings. The initiative will consider all phases of the building life cycle, including greenhouse design, integration with other buildings, assembly, building materials and energy consumption. It will also establish the potential for reducing the environmental impacts of the horticultural production taking place within the greenhouses.

Beneficiary:

Type of beneficiary
Small and medium-sized enterprise

Name of beneficiary
The Living Rainforest

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Name of contact person
Karl Hansen

Duration of project:
48 months (Jan 2005 – Dec 2008)

Total budget in euro:
4,486,562.00

EC contribution in euro with %:
2,243,281.00 (50.00%)

Generic Theme:
5.4: Sustainable building

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