





# The sub programme for Environment

Priority area: Environment and Resource

Efficiency

Dr. Nisiforou Olympia

onisiforou@environment.moa.gov.cy

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## **Overview**

- Current situation of the environment and natural resources
- 2. The sub-programme for Environment
- 3. Priority area Environment and Resource Efficiency
- 4. Thematic priorities LIFE examples
- 5. Eligibility and award criteria











Current situation of the environment and natural resources





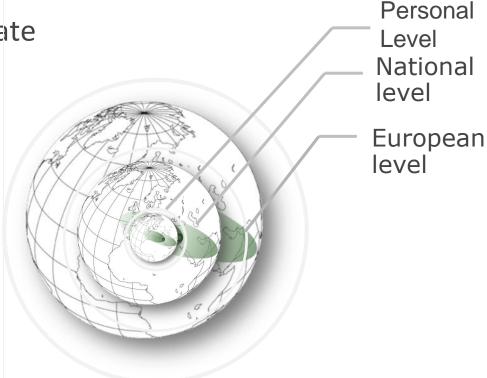
## Imperative need for a solution

Fines from the European Union

Businesses that need immediate solutions

Innovative ideas-Financing















## The sub-programme for Environment

### **Priority areas**

- A. Environment and Resource Efficiency
  - > 5 Thematic priorities
- B. Environmental Governance and Information

C. Nature and Biodiversity











- I. Water, including the marine environment
- II. Waste
- III. Resource Efficiency, including soil and forests, and green and circular economy
- IV. Environment and Health, including chemicals and noise
- V. Air quality and emissions, including urban environment



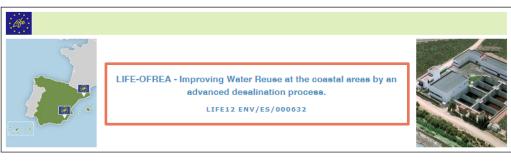






## I. Water - Example





PROJECT DESCRIPTION ENVIRONMENTAL ISSUES BENEFICIARIES ADMINISTRATIVE DATA READ MORE PRINT

#### CONTACT DETAILS:

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#### PROJECT DESCRIPTION:

#### BACKGROUND

Water scarcity is an increasingly frequent and widespread phenomenon in the European Union, due to, among other things, population growth, urbanisation and climate change. The Water Framework Directive (WFD) promotes measures for water reuse from treated wastewater as one option to help avoid over exploitation of aquifers. In coastal or island areas this can be especially problematic as groundwater sources in these areas can also suffer from contamination by salt water.

As an alternative water resource, treated wastewater can be reused for agricultural and land irrigation, industrial recycling and reuse, groundwater recharge, non-drinking urban use etc. This would reduce pressure on aquifers, especially those located in coastal areas. New technological solutions, such as forward osmosis (FO) offer opportunities to improve the effectiveness of wastewater treatment systems and processes.

#### OBJECTIVES

The main objective of the LIFE OFREA project was to increase the amount of wastewater available for reuse in areas where the salinity of fresh water is a limiting factor. This would be achieved by demonstrating the feasibility of forward osmosis (FO) technology in the production of safe and high quality water from treated wastewater for reuse, at a reasonable cost.











## II. Waste - Example





DAIRIUS - Sustainable management via energy exploitation of end-oflife dairy products in Cyprus

LIFE10 ENV/CY/000721



BENEFICIARIES ADMINISTRATIVE DATA READ MORE PRINT PDF VERSION

#### CONTACT DETAILS:

Project Manager: Antri THEODOROU Fax: +357 22 443045 Fmail: at@talos-rtd.com

#### PROJECT DESCRIPTION:

#### BACKGROUND

Agro-industries are major contributors to industrial pollution and Cyprus is no exception to the rule. These industries, which process agricultural raw materials such as milk, fruits, vegetables and meat, generate millions of tonnes of waste and unexploited by-products that end up harming the environment. The production of milk and dairy products in Cyprus and the rest of Europe has increased significantly during recent years and this has resulted in larger amounts of non-consumed, returned and expired products - and milk products in particular. Most of these end up in landfills contributing to hazardous leachate generation and uncontrolled gaseous emissions. Landfilling of these products does not comply with the EU Landfill directive (1999/31), which imposes strict limits for the disposal of biodegradable wastes. Thus, there is a clear need for the dairy industry to develop sustainable management and treatment strategies for the ever increasing quantities of expired products. Anaerobic digestion of milk products and simultaneous methane recovery as a clean renewable energy source can be a highly sustainable solution for expired milk products with environmental, financial and social benefits. Although this process is state-of-the-art in the treatment of sewage sludge and industrial wastewater, very few applications can be found for the treatment of expired products themselves.

The DAIRIUS project's overall objective is to demonstrate an environmentally and financially sustainable solution for the management and treatment of returned Expired Dairy Products (EDP). It aims to achieve this through the development and testing of a two-phase anaerobic codigestion process of EDP with other substrates. The project will analyse the specific details of the EDP generation by the dairy industry in Cyprus.

http://www.dairiusproject.com/









# III. Resource Efficiency - Example







PROJECT DESCRIPTION ENVIRONMENTAL ISSUES BENEFICIARIES ADMINISTRATIVE DATA PRINT PDF VERSION

#### CONTACT DETAILS:

Contact person: VERÓNICA SANTALLA DEL RÍO Tel: 3498618658 Email: veronica@uvigo.es

#### PROJECT DESCRIPTION:

#### BACKGROUND

Forest fires can cause significant damage that reduces the resilience of ecosystems. Impacts include changes in biodiversity and loss of connectivity, effects on soil and water, air pollution, and economic losses.

Some 80% of forest fires in Europe occur in Spain, Portugal, Italy, Greece and France [Forest Fires in Europe 2014, European Commission]. Data shows that Spain had the most fires and the largest burnt area. Over half of the forest fires in Spain occurred in the north-west of the country.

The 1992 EU Regulation on the protection of forests against fire led to the establishment of the European Forest Fire Information System (EFFIS). In the fight against forest fires, early detection is critical for reducing response times, along with improved communication and coordination. The response time is directly related to the final burned area. Improving EFFIS will produce a more efficient tool for assessing measures to protect against forest fires and to better understand their causes.

At national level, state and regional prevention and defence plans against forest fires are aimed at minimising their environmental, social and

http://lifetec.uvigo.es/



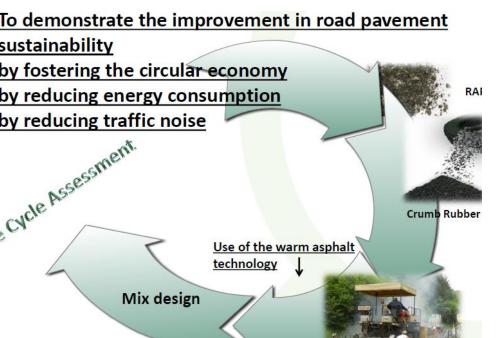


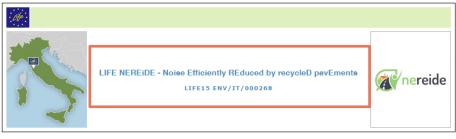






# IV. Environment and Health, including chemicals and noise - Example





BENEFICIARIES ADMINISTRATIVE DATA READ MORE

#### CONTACT DETAILS:

Contact person: Pietro LEANDRI Tel: 390502218298 Email: pietro.leandri@ing.unipi.it

#### PROJECT DESCRIPTION:

BACKGROUND

Noise pollution is a growing environmental concern. The Environmental Noise Directive requires the adoption of action plans to prevent and reduce environmental noise. Urban noise is, in fact, one of the main problems reported by citizens, and the World Health Organisation has repeatedly pointed out the health risks associated with exposure to noise. The Noise in Europe 2014 report highlights road traffic as the most dominant source of environmental noise, with an estimated 125 million people affected by noise levels greater than 55 dB(A). One of the most popular solutions for mitigating noise pollution in urban areas is the use of prorous asphalt pavements that are soundprofes.

OBJECTIVES

The overall LIFE NEREIDE objective is to demonstrate the use of new porous asphalt pavements and low noise surfaces made of recycled asphalt from pavements and particles of rubber from scrap tyres. These materials will be mixed with binders to produce pavements with the following specific benefits:

http://www.nereideproject.eu/en/











## V. Air quality and emissions, including urban environment - Example





PROJECT DESCRIPTION ENVIRONMENTAL ISSUES BENEFICIARIES ADMINISTRATIVE DATA READ MORE PRINT PDF VERSION

CONTACT DETAILS:

Contact person: Anastasios YIANNAKI Tel: +357 22 405623 Fax: +357 22 663788 Email: director@dli.mlsi.gov.cv

#### PROJECT DESCRIPTION:

#### BACKGROUND

Air quality is a major environmental problem in Europe, especially in urban conglomerates. For Mediterranean and Balkan countries, and Cyprus in particular, the semi-arid climate with dry summers, sparse vegetation, open-cast mines and uncovered soils are conducive to wind entrainment of dust. Long-distance transport from North Africa and the eastern shore zones of the Mediterranean also has an important impact on air quality. Dust management measures must take into account the relative importance of these different sources. In Cyprus, the heterogeneity of pollutant sources, the relatively large contribution from natural sources, as well as the impact of transboundary transport pose complexities and difficulties to the formulation of control measures.

#### OBJECTIVES

The PM3 project aimed to support the competent Cypriot authorities in preparing efficient and cost-effective plans for particulate matter (PM) management, by implementing state-of-the art forecasting and scenario analysis software. The project aimed to enhance data collection and processing capacities through the integration of remote-sensing technologies into the existing monitoring network. Regional modelling and PM10 source apportionment will be combined with stakeholder participation to establish management scenarios and models, incorporating technical and regulatory information as well as socio-economic factors. Specific objectives included the development and implementation of a methodology for identifying PM sources to quantify the relative contributions of long-range versus local sources, and natural versus man-made sources, and the











# B. Environmental Governance and Information

## Thematic priorities

- information, communication and awareness-raising campaigns in line with the priorities of the 7th Environment Action Programme;
- activities in support of effective control process as well as measures to promote compliance in relation to Union environmental legislation, and in support of information systems and information tools on implementation of Union environmental legislation

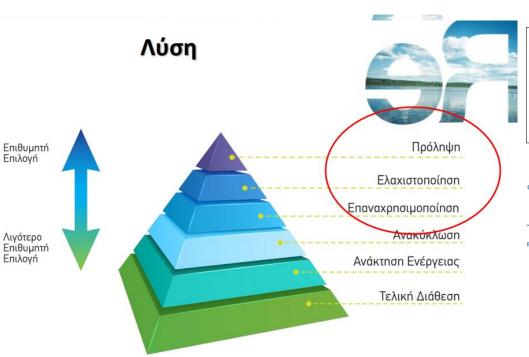








# I. Environmental Governance and Information - Example





#### CONTACT DETAILS:

Project Manager: Ioannis NEOPHYTOU Tel: + 357 22362437

Email: loannis.neophytou@cybc.com.cy

#### PROJECT DESCRIPTION:

#### BACKGROUND

About 252 million tonnes of municipal waste is generated each year in the EU (2010 statistics), of which 37% are landfilled, 24% recycled, 14% composted and the rest incinerated with or without energy recovery.

Although the EU has built a strong set of waste legislation, adequate implementation is still missing in many parts of the EU. The most important deviation from the EC waste management policies is the failure to practically adopt the waste hierarchy: reduction, re-use, recycling, energy recovery and disposal

In Cyprus, the per capita generation of municipal waste is one of the highest in the EU (i.e. in 2011, 772 kg/ capita, while the EU average is 525 kg/ capita. Furthermore, municipal waste production in the country increased by 10% in the last decade, while the EU average decreased by almost 1% in the same period. Some 80% of the produced municipal waste in Cyprus is landfilled in more than a hundred unregulated landfills or dumosites, resulting in significant environmental impacts.

Recycling accounts only for 16% and composting for four per cent of the produced municipal waste. Cyprus shows one of the largest gaps in the implementation of EU waste management policies and severe deficits in all criteria including waste prevention and reuse policies. It seems that











## Eligible project types

### A. Environment and Resource Efficiency

- Pilot projects apply a technique or method that has not been applied or tested before, or elsewhere, that offer potential environmental or climate advantages compared to current best practice and that can subsequently be applied on a larger scale to similar situations.
- Demonstration projects put into practice, test, evaluate and disseminate actions, methodologies or approaches that are new or unknown in the specific context of the project, such as the geographical, ecological, socioeconomic context, and that could be applied elsewhere in similar circumstance









## Eligible project types

- B. Environmental Governance and Information
  - Information, awareness and dissemination projects are projects aimed at supporting communication, dissemination of information and awareness raising









## Eligibility and award criteria

- Technical coherence and quality
- Financial coherence and quality

### EU added value:

- Extent and quality of the contribution to the specific objectives of the priority areas
- Synergies and transnationality
- Sustainability (continuation, replication, transfer potential)













## Thank you for your attention

Olympia Nisiforou

onisiforou@environment.moa.gov.cy

7<sup>th</sup> May, 2018, Nicosia





