

## Annex

### Austria - 3 projects (21.1 million)

#### **LIFE+ Nature (3 projects – 21.1 million)**

- **Untere March-Auen (via donau – Österreichische Wasserstraßen-Gesellschaft mbH):** The project's overall aim is to restore the Lower Moravia floodplains in the eastern part of Austria. Today the river bed is regulated, 36 oxbows to the river are cut off and 75% of the banks are reinforced. The project will restore floodplains and foster land-use practices that preserve biodiversity and endangered species and habitats.
- **Netzwerk Donau (Verbund Austrian Hydro Power AG):** The project aims to implement measures such as bypass branches, gravel structures and reconnecting existing or newly created habitats to improve the conservation status of habitats along the entirety of the Danube in Austria. A total of four Natura 2000 sites will benefit directly from the actions and all the Natura 2000 sites on the Danube in Austria will profit indirectly from the project as a whole.
- **LIFE+ Lavant (Wasserverband Lavant):** The project's overall aim is to improve the number and size of the highly endangered small fish species populations in the river Lavant: the Danube gudgeon (*Gobio uranocopus*); Danube barbel (*Barbus petenyi-Gr*); Streber (*Zingel streber*); Danube roach (*Rutilus virgo*) and Danube whitefin gudgeon (*Romanogobio vladykovi*). Specifically, the project will target a significant enlargement of the existing Natura 2000 site and the restoration of important water and forest habitats found there, as well as improvements to the river continuum.

### Belgium - 4 projects (20.5 million)

#### **LIFE+ Environment Policy and Governance (2 projects – 11.1 million)**

- **AGICAL+ (AGC Glass Europe SA.):** The AGICAL+ project proposes to implement an innovative solution, based on algae culture and biomass production, which will allow for the CO<sub>2</sub> capture of lime or glass furnace fumes and the production of biofuel that can be used within the furnaces during the production process. Direct or indirect relevance to climate change.
- **DEMETER (Flemish Land Agency / Vlaamse Landmaatschappij):** The overall objective of the DEMETER project is to foster sustainable soil and nutrient management by guiding and informing farmers on management practices that consider both nutrient and soil organic matter management simultaneously. The project is centred on the principle that sustainable nutrient and soil organic matter management not only concerns fertilisation practices, but management of the whole farm.

#### **LIFE+ Nature (1 project – 6.8 million)**

- **Ardenne liégeoise (Direction générale opérationnelle de l'Agriculture, des Ressources naturelles et de l'Environnement):** This project aims to increase and improve the connectivity between peaty and wet habitats in the Ardennes plateau chain. It will complete the restoration of the network of

### **LIFE+ Biodiversity (1 project – 2.6 million)**

- ELIA (ELIA System Operator S.A. - part of the Elia Group): The aim of the ELIA Biodiversity project is to demonstrate techniques for the creation and maintenance of ecological corridors under overhead power lines, allowing the maximisation of their potential benefits for biodiversity. Other expected benefits include: the preservation of the natural beauty of the landscape; improved attractiveness to tourists, hunters and local residents; greater acceptance by the general public of line infrastructure in the landscape; and a better public image for the transmission system operator.

### **Bulgaria - 2 projects (3.2 million)**

#### **LIFE+ Nature (2 projects - 3.2 million)**

- **BGNATURAGENEFUND (Forest Seed Control Station – Sofia):** The project's overall objective is to ensure the long-term conservation of priority forest habitats in Bulgaria, by establishing a gene bank for reproductive material and provision of plants for restoration. Specifically, the project will target an improvement in the conservation status of the two priority forest habitats of the Natura 2000 sites of Dragoman and Plana in western Bulgaria
- **Return of the Neophron (Bulgarian Society for the Protection of Birds):** This project will focus on improving the conservation status of the Egyptian vulture (*Neophron percnopterus*) in Greece and Bulgaria. It will seek to secure the protection of the remaining pairs found in 15 Natura 2000 sites in Greece and in 12 sites in Bulgaria. These Special Protection Areas (SPAs) host 76-93% of the Greek and over 90% of the Bulgarian population of the species.

### **Cyprus - 4 projects (4.7 million)**

#### **LIFE+ Environment Policy and Governance (2 projects – 2.8 million)**

- **DAIRIUS (VIVARTIA Cyprus Ltd):** The DAIRIUS project's 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 co-digestion process of EDP with other substrates and will assess the optimal physical, chemical and biochemical conditions for the anaerobic co-digestion process to maximise biogas yields.
- **CYPADAPT (Ministry of Agriculture, Natural resources and Environment):** The CYPADAPT project aims to develop a National Strategy for Adaptation to Climate Change in Cyprus in order to strengthen and increase the adaptive capacity of the country. The project will use modelling to provide insight into the likely future impacts of climate change on Cyprus and will identify the economic and social sectors that are particularly vulnerable to climate change today and in the future and assess their adaptive capacity. ***Direct or indirect relevance to climate change.***

### **LIFE+ Nature (2 projects – 2 million)**

- **OROKLINI (Game Fund - Ministry of Interior):** The project's main objective is to bring the important bird species of the Oroklini Lake site to favourable conservation status. Besides the two target species, the black-winged stilt and the spur-winged lapwing, four other species listed in Annex I of the EU Birds Directive regularly nest or have nested at the site.
- **JUNIPERCY (Department of Forests, Ministry of Agriculture, Natural Resources and Environment):** The project's primary aim is to promote and enable the long-term conservation of the endemic forests with *Juniperus spp* in Cyprus. Specifically, the project will contribute to the consolidation and dissemination of knowledge on the protection, restoration, monitoring and evaluation of this priority habitat in the country.

### **Czech Republic - 2 projects (2.8 million)**

#### **LIFE+ Environment Policy and Governance (2 projects – 2.8 million)**

- **ReStEP (Czech University of Life Sciences Prague):** The main objective of the ReStEP project is to develop, test, evaluate and distribute to the public and business sectors in the Czech Republic, a new, standardised methodology for the management of urban and regional planning in the field of proposals and assessments of energy projects. The method uses an innovative software tool – an interactive map of conditions for renewable and alternative energy sources including biofuels. *Direct or indirect relevance to climate change.*
- **MEDETOX (Institute of Experimental Medicine AS CR):** The MEDETOX project's objective is to demonstrate innovative methods to assess the possible health risk connected with the exposure of the general public to diesel exhaust particles under real-life traffic conditions in the city of Prague. This project seeks to evaluate the toxicity of engine exhaust during operating conditions typical for core urban areas, where the engine emissions are of highest concern, as the aggregate dose is the highest. It will identify the health risks related to emerging fuels and fuel additives and monitor the effects of various policy decisions.

### **Denmark - 3 projects (9.5 million)**

#### **LIFE+ Environment Policy and Governance (1 project – 2 million)**

- **Plastic ZERO (Municipality of Copenhagen - The Technical and Environmental Administration Department):** The objective of the Plastic ZERO project is to reduce the amount of plastic in waste streams, thereby saving non-renewable resources and enabling carbon neutral energy production from waste. It will do this by: establishing a road map for reducing plastic in waste streams, demonstrating measures for the prevention of plastic waste and technologies for sorting and recycling plastic waste.

#### **LIFE+ Nature (2 projects – 7.5 million)**

- **SMOOTH (Tønder Kommune):** This project targets the restoration of raised bog habitat, which is listed in Annex I of the Habitats Directive, and the management of the Annex II-listed European weatherfish (*Misgurnus fossilis*) within the Sølsted Mose habitat area in Denmark. The main objective is to contribute to the favourable conservation status of raised bog habitat through land purchase and other forms of compensation to private

- **Lille Vildmose (Danish Forest and Nature Agency):** The objective of the project is to restore the largest remaining raised bog in lowland northwest Europe, Lille Vildmose. The project will improve the conservation status of this priority habitat by facilitating re-growth of sphagnum moss and raising the water-table in areas of degraded raised bogs or in areas where peat has been excavated. These actions will result in a significant enlargement of the habitat area.

## **Estonia - 2 projects (2.8 million)**

### **LIFE+ Information and Communication (1 project – 1.7 million)**

- **BaltInfoHaz (Baltic Environmental Forum Estonia):** The overall goal of the BaltInfoHaz project is to initiate a stronger demand from society in the three Baltic States for products free of hazardous substances. The project aims to impact people's behaviour to encourage a shift from environmentally passive to active participation in environmental issues. The project also seeks to reduce the health impacts of hazardous substances by changing consumption patterns among pilot stakeholder groups.

### **LIFE+ Nature (1 project – 1.1 million)**

- **URBANCOWS (Environmental Board):** The overall goal of the project is to improve the conservation status of the coastal meadow and coastal lagoon habitats in Pärnu, as well as the species profile of these habitats. This will be achieved by managing Pärnu's coastal habitats and raising awareness among local residents and visitors about the ecological value of the site.

## **Finland - 7 projects (17.8 million)**

### **LIFE+ Environment Policy and Governance (4 projects – 8.7 million)**

- **Odourless casting (Uudenkaupungin Rautavalimo Oy):** The aim of the 'Odourless casting' project is to address the problems related to the air pollution control of odorous and hazardous emissions from foundry processes. The goal is to define odorous and hazardous emissions in typical aluminium, steel and iron foundries and to demonstrate technically and economically feasible emission abatement techniques for wide-scale implementation.
- **ARIT (Finnish Environment Institute):** The ARIT project aims to establish a management system (MS) for managing the environmental risks, including ecological and health risks, caused by Finnish firing ranges, both active and disused. A risk assessment will be conducted for the prioritised sites in order to identify the magnitude, scale and targets of risk management actions. The most urgent site will be chosen for remediation and the results from the previous actions will be used to produce the management system.
- **ASROCKS (Geological Survey of Finland):** The main objective of the ASROCKS project is to provide guidelines for the exploitation of natural aggregate resources (crushed bedrock, sand and gravel) in an area with elevated arsenic concentrations in bedrock and soil. In addition, guidelines will be developed for re-use of aggregates in selected large construction areas with elevated arsenic concentration.

- **LIFEdata (Forest Research Institute):** The most important method for maintaining and improving natural resources and promoting their sustainability is to maintain, monitor and analyse the management alternatives, including the flora and fauna. Thus the LIFE-DATA project will develop and demonstrate a unique database system linking its integrated forest databases with those of other participating (LYNET) organisations. The data collected will be used to bridge the gap between data/information producers and users, enabling simple access to this integrated information.

#### **LIFE+ Nature (2 projects – 8.8 million)**

- **NATNET (Centre for Economic Development, Transport and the Environment for Lapland):** The project's overall objective is to increase ecological connectivity and establish a green infrastructure that will improve the vitality and coherence of the Natura 2000 network in south-western Lapland and raise the biodiversity of the forests in the project area. A series of actions will target the species and habitats of Community importance within the project area, to improve and restore their conservation status or, in some cases, to maintain a 'favourable' conservation status.
- **Species-rich LIFE (Natural Heritage Services of Metsähallitus):** The overall objective of the "Species-rich LIFE" project is to improve the conservation status of 19 Annex I-listed habitats of the Habitats Directive whose overall conservation status in the boreal biogeographic region of Finland was assessed as 'unfavourable-bad' or 'unfavourable-inadequate' in the Finnish country report on the Habitats Directive. In total, the project will target 59 Natura 2000 network covering 466 951 ha.

#### **LIFE+ Information and Communication (1 project – 0.4 million)**

- **Saimaan lohikalojen (Pohjois-Karjalan elinkeino-, liikenne- ja ympäristökeskus):** The project's general objective is to maintain the genetic diversity of the valuable salmon populations in Lake Saimaa and to improve their vitality with an information exchange and negotiation process that aims to promote sustainable fishing practices. The populations of various salmon species that live in the Lake Saimaa district require special attention and maintenance.

### **France - 8 projects (46.2 million)**

#### **LIFE+ Environment Policy and Governance (5 projects - 39.8 million)**

- **ICARRE 95 (Renault SAS):** The LIFE project ICARRE 95 aims to demonstrate how to recycle 95% of end-of-life vehicles (ELVs) at a regional scale - up to 30 000 ELVs per year - and to create a model that can be applied and exported to other sites and countries in France and Europe. After firstly outlining an effective process for dismantling the various parts of the recovered car, the beneficiary aims to develop a cradle-to-cradle process for recycling of non-ferrous metals, plastics, glass, foams, textiles and catalytic converters.
- **URBAN LIGHT PLAN (Communauté Urbaine - Le Mans Métropole):** The Urban Light Plan project aims to reduce light pollution from public lighting in the Le Mans area in France. The project intends to introduce more appropriate and 'soft' lighting, particularly seeking to replace lighting that does not currently meet the requirements of Energy Efficiency Certificates. It will also work to introduce more intelligent planning of lighting systems, not only significantly reducing the number of light points, but having lights

- **HARMONICA (BRUITPARIF):** The Harmonica project aims to show how an innovative, easy-to-understand, common noise index can contribute to efforts to tackle noise pollution. It seeks to combine as much noise information as possible into one portal to provide a harmonised framework for monitoring and evaluating noise pollution and the measures to reduce it. The project will harmonise the technical aspects of the use of noise monitoring systems and strategic noise maps and create a noise index based on the combination of information from these tools.
- **R-URBAN (Atelier d'Architecture Autogérée):** The R-URBAN project aims to demonstrate that networks of active citizens and associations can create alternative models of production and consumption through accelerated introduction of sustainable collective environmental practices that respond to the needs of modern cities in all of their social, cultural economic and environmental dimensions. It will implement a participative strategy to increase the ecological resilience of the town of Colombes - 83 000 inhabitants - in the north-western suburb of Paris (92).
- **FO3REST (ACRI-ST SAS):** The main objective of the FO3REST project is to refine the criteria and suggest validated thresholds for forest protection against ozone and climate change, in order to propose new standards that are more appropriate and based on the quantity of ozone absorbed by plants. *Direct or indirect relevance to climate change.*

#### **LIFE+ Nature (2 projects – 4.4 million)**

- **LIFE Continuité écologique (Syndicat Mixte du Parc Naturel Régional du Morvan):** The project objectives are based around four main axes: restoration works on degraded habitats; changes in agro-silvicultural practices along riverbanks; removing obstacles to improve connectivity; and awareness-raising. This project applies at the catchment area level the experience acquired from a previous project, LIFE04 NAT/FR/000082 "Headwater streams and associated faunistic heritage".
- **LIFE+ Rôle des genets (Ligue pour la Protection des Oiseaux):** The project's main objective is to implement actions urgently required in order to conserve and restore the French breeding population of the corncrake and the maintenance of its habitats. Specific actions will include acquisition of suitable grassland areas; implementation of concrete management and restoration actions; protection of breeding and fledgling birds; proposal of improvements to agri-environmental measures to make them more attractive to farmers; and raising awareness of the corncrake among all stakeholders.

#### **LIFE+ Biodiversity (1 project – 1.9 million)**

- **SUBLIMO (Centre National de la Recherche Scientifique):** The SUBLIMO project proposes a new approach to analysing, monitoring and reducing the loss of marine biodiversity. It will seek to identify and estimate the abundance of coastal fish species that return to colonise coastal habitats and renew the local population. It will capture small post-larvae that have a low survival rate, rear them in aquaria and release them once they have grown to a size where their survival rate is significantly improved. The project will thus analyse and reinforce biodiversity at the fish post-larvae stage.

## **Germany - 10 projects (66.3 million)**

### **LIFE+ Environment Policy and Governance (2 projects - 21.6 million)**

- **Alternative Biomass 4 Energy (European Institute for Energy Research):** This project will investigate a new approach for converting digests from biogas plants and biowaste into biochar. At the same time, the possible impacts on crop growth, cropping systems, and other impacts will be investigated. The main emphasis will be on demonstrating at pilot scale, a new carbonisation technology (BSP) for the conversion of different sources of waste and digests. This will then be put back into the biomass cropping systems and/or used for energy purposes. *Direct or indirect relevance to climate change.*
- **HWC - Jenfelder Au (Hamburger Stadtentwässerung AöR):** The HWC - Jenfelder Au project's objective is to demonstrate the technical, environmental and economic feasibility of an integrated and decentralised wastewater disposal and energy generation system for an urban housing district in Hamburg, Germany. The concept will bring together well-known technologies, as well as new and innovative prototypes – to be demonstrated for the first time on a large-scale. *Direct or indirect relevance to climate change.*

### **LIFE+ Nature (8 projects – 44.7 million)**

- **LIFE rund ums Heckengäu (Landratsamt Böblingen):** The project's overall objective is to improve the conservation status of the rare or endangered animal and plant species found in the Natura 2000 sites of Stromberg, Heckengäu and Schönbuch. Especially targeted are open landscape habitat types, semi-natural dry grasslands, scrubland facies, lowland hay meadows, as well as calcareous rocky slopes. A wide range of best practise measures such as development and optimisation, creation of alluvial forests, creation of a pond and training, will be used to create suitable conditions in the sites.
- **Allianz für Borstgrasrasen (Biologische Station im Kreis Euskirchen e.V.):** The project's main aims are the large-scale restoration of this rare and endangered habitat and the creation of a complex of interconnected Nardus grassland areas over a total area of more than 90 ha across three Natura 2000 sites. It is expected that the connectivity measures will encourage the regeneration and restoration of these rare grasslands in the highlands of the Eifel far beyond their local scope and scale.
- **KTKK HX (Kreis Höxter):** The project's overall aim is to improve the conservation status and coherence of habitat types and species found in the Natura 2000 sites located in the Weser Uplands. Amongst other measures, new management techniques, development of alternative habitats and rejuvenation and enlargement of old juniper heaths should strengthen these often isolated Natura 2000 sites.
- **Rur und Kall (Biologische Station im Kreis Düren e.V.):** The project aims to carry out improvements to the Kalltal and Ruraue Natura 2000 network sites. Habitat improvement measures are intended not only to qualitatively enhance the alluvial meadow landscapes (lakes, ponds, woodland and open countryside), but also the water courses (in the Kalltal und Nebentäler Natura 2000 site).
- **Eichenwälder bei Wesel (Biologische Station im Kreis Wesel e.V.):** The aim of this LIFE+ project is to improve the conservation status of habitats listed in Annex I of the Habitats Directive in North-Rhine Westphalia. Actions

- **Emmericher Ward (NABU-Naturschutzstation e.V.):** The project intends to construct a secondary channel to reconnect the river with its floodplain, near Emmerich; and to combine this with the establishment of a new area of floodplain forest. The works concern three Natura network sites: NSG Emmericher Ward; Rhein-Fischschutzzonen zwischen Emmerich und Bad Honnef; and Unterer Niederrhein. Extensive intensive co-operation with the river authority and other stakeholders is foreseen.
- **Wachtelkönig & Uferschnepfe (Land Niedersachsen, Niedersächsisches Ministerium für Umwelt und Klimaschutz):** The project has identified the most important breeding areas of the corncrake and the black-tailed godwit: a total of 12 project locations in Lower Saxony, covering 80 000 ha, with some 45 000 ha of grassland. Approximately half of the corncrake population of Lower Saxony and more than two-thirds of the black-tailed godwit population can be found in this comparatively small area, and thus the project will make a significant contribution to the conservation of these species.
- **Schreiadler - Schorfheide (Landesamt für Umwelt, Gesundheit und Verbraucherschutz Brandenburg):** The project aims to stop the negative population trends of the lesser spotted eagle and corncrake in eastern Germany and to contribute to the recovery of the endangered aquatic warbler (*Acrocephalus paludicola*) population. Further endangered bird species will also benefit from the planned measures, such as the black stork and the spotted crane (*Porzana porzana*).

## **Greece - 10 projects (18.7 million)**

### **LIFE+ Environment Policy and Governance (8 projects – 14.6 million)**

- **WASTEREUSE (Technical University of Crete):** The WASTEREUSE project aims to increase recycling of nutrients and water through the sustainable use of treated agricultural wastes (AW), and to combine developed technologies in integrated methodologies for the sustainable recycling of waste nutrients and water in agriculture. Specifically, the project will evaluate innovative and traditional technologies for AW treatment regarding their suitability for crop cultivation (irrigation and fertilisation) and develop alternative cultivation practices for the most widely cultivated and water demanding crops (e.g. vegetables and cereals) in the Mediterranean region.
- **CONDENSE (Iliaki Development Agency S.A.):** This project will demonstrate a manure and olive mill wastewater (OMW) Managing System, which allows the utilisation of specific characteristics of these wastes, transforming their mixture into a high-nutrient-containing end product that can be safely used in agriculture and horticulture, instead of inorganic chemical fertilisation.
- **CHARM (National Technical University of Athens):** The groundwater system of Asopos presents high concentrations of chromium and hexavalent chromium and as a result there is an increased public concern, since part of the groundwater is used for water abstraction for human

- **Athens-Bio-waste (The National Technical University of Athens – School of Chemical Engineering):** The ‘Athens-Bio-waste’ project aims to establish and promote sustainable biowaste management in Greece using the municipalities of Athens and Kifissia as case study areas. Two separate collection systems will be launched and collected material will be composted. An innovative software tool will evaluate the chain of biowaste management through lifecycle thinking in order to disseminate and evaluate the benefits of sustainable biowaste management in terms of greenhouse gas emissions. *Direct or indirect relevance to climate change.*
- **ELINA (CYCLON HELLAS S.A. - Industrial Corporation of Processing and Trading of Lubricants and Petroleum Products):** The ELINA project aims to develop the integrated management of waste oils, set up collection points, improve collection techniques and collection and transport practices, raise awareness of stakeholders and social partners and complete the necessary environmental infrastructure for closed-loop lifecycle management of waste oils. It will also set up a pilot demonstration project for the separation at source of waste oils and petroleum residues
- **ISWM-TINOS (Municipality of Tinos):** The objectives of the ISWM-TINOS project are to promote and demonstrate Integrated Solid Waste Management (ISWM) to the municipality of Tinos. The project intends to plan, design, operate and demonstrate an ISWM system that will include separate collection of recyclable materials – glass, metal, plastic and paper, as well as biowaste. It will also investigate and promote ongoing recovery operations that deliver the best overall environmental income and conduct a lifecycle assessment (LCA) of different types of biowaste treatment.
- **ArcFUEL (EPSILON International S.A.):** The ArcFUEL project will deliver a complete, up-to-date, methodology for Fuel Classification Mapping (FCM) on a Web-Geodatabase that will be based on ‘readily available’ harmonised, accessible and interoperable data according to INSPIRE principles, for the Mediterranean Region. The methodology will be demonstrated via pilot applications in Greece, Portugal, Italy and Spain.
- **WASP Tool (Harokopio University of Athens):** The WASP Tool project aims to prevent the production of waste through the development of a web-based Decision Support Tool (the WASP Tool) that will allow local authorities to select and implement the optimum waste prevention programmes for their local circumstances. The three participating municipalities (two in Greece and one in Cyprus) will use the WASP Tool on a pilot scale in order to design and implement their local Waste Prevention Strategies. The results of these pilot applications will be used to refine the tool further.

#### **LIFE+ Nature (2 projects – 4.1 million)**

- **ANDROSSPA (Municipality of Andros):** The ANDROSSPA project aims to significantly improve the management and conservation of the Natural 2000 site in Andros. The primary tools will be the drafting of a Natura 2000 site (SPA) Management Plan and four species-specific action plans.
- **Safeguard LWfG (Hellenic Ornithological Society):** The aim of the project is to implement urgent concrete conservation actions in wintering and staging grounds of the Fennoscandian population of the lesser white-

## **Hungary - 3 projects (5.4 million)**

### **LIFE+ Nature (3 projects – 5.4 million)**

- **Pásztó habitat restoration (Nimfea Nature Conservation Association):** The main aim of the project is the restoration and protection of the saline Pannonian steppe of the Pasztoi-legelo Natura 2000 site. The project also aims to establish a traditional and sustainable extensive grassland management system, a water management system, and to increase public awareness of the role of traditional landscape management in the conservation of biodiversity.
- **HELICON (MME BirdLife Hungary):** The main objective of the project is to maintain the increasing population trend of the eastern imperial eagle in Hungary by significantly reducing non-natural mortality rates.
- **HUTURJAN (Duna-Ipoly National Park Directorate):** The project aims to improve the conservation status of priority habitats and of the Hungarian meadow viper present in the southern unit of the Turjánvidék Natura 2000 site.

## **Ireland - 1 project (4 million)**

### **LIFE+ Environment Policy and Governance (1 project - 4 million)**

- **DEPOTEC (Erneside Engineering Ltd):** The DEPOTEC project proposes a depolymerisation process that will add value to waste tyres by producing products that can be used as substitute carbon filler materials in the rubber manufacturing process. This will lead to a reduction in stockpiling of tyres as they will now become valuable raw materials for the production of these products and will also offer an alternative to burning end-of-life tyres to produce tyre-derived fuel.

## **Italy - 48 projects (109.3 million)**

### **LIFE+ Environment Policy and Governance (35 projects - 82 million)**

- **NO.WA (Comune di Reggio Emilia):** The NO.WA project aims to reduce waste streams in the municipality of Reggio Emilia by working with large retailers and local authorities to produce a waste prevention/reduction action plan. This will include proposals to establishment a reuse centre. Two pilot projects will be implemented to recover urban waste classified as reusable, with special attention paid to unsold items, and waste monitoring systems will be introduced.
- **WW-SIP (Istituto Superiore di Ricerca e Formazione sui Materiali speciali per le Technologie Avanzate):** The aim of the WW-SIP project is to redefine the urban wastewater treatment plant (UWWTP) by transforming it into an integrated platform for sustainable and profitable sewage refinement. The project will create an economically, socially and environmentally sustainable wastewater refinement platform (WW-SIP) by integrating innovative technologies into the infrastructures and processes of a typical UWWTP.

- **CREWSOD (SOGESA SPA):** The LIFE CREWSOD project's main objectives focus on the introduction of a new public participation approach to minimising the amount of waste that people produce. Those that produce less waste will be rewarded by paying less for their waste collection services.
- **ZeoLIFE (Università degli Studi di Ferrara):** The ZeoLIFE project aims to test an innovative integrated zeolitic cycle that reduces the nitrogen content in livestock effluents and agricultural soils, and improves the yield and economisation of irrigation water and fertilisers, thus reducing pollution of fresh water and groundwater pollution and overexploitation of water resources.
- **RHM Pilot Plant (Politecnico di Milano):** The RHM project aims to demonstrate the technical feasibility of a pilot plant producing hydrogen and magnesium from renewable resources (solar irradiation and seawater). The project seeks to demonstrate that industrial-scale production of magnesium and hydrogen is possible through fine adjustments to, and integration of, available technologies such as (i) desalination plants; (ii) magnesium electrolysis in extractive metallurgy; (iii) solar thermal power; and (iv) water electrolysis in hydrogen production. ***Direct or indirect relevance to climate change.***
- **PURA4IPM (DOW AgroSciences Italia srl):** The aim of the PURA4IPM project is to demonstrate new approaches to combating the codling moth using low-impact technology, based on a blend of pheromones and insecticide. The pheromones and insecticide are mixed in a wax that is pasted on the upper part of the fruit tree. This approach avoids the need for the full tree or fruit to be sprayed with agri-chemicals.
- **SUSTABS (Procter & Gamble Italia S.p.A.):** The overall objectives of the SUSTABS project are to demonstrate that the new bio-based multi-layer material concept and technology for disposable feminine care pads, can meet product requirements (absorbency, dryness, flexibility, comfort, etc.), improving the cost/benefit ratio while at the same time greatly reducing the use of material and volume.
- **MED-PARTICLES (Azienda Sanitaria Locale Roma E):** The MED-PARTICLES project aims to improve understanding of the characteristics of particulate air pollution of cities in the Mediterranean area (five cities in Spain, one in France, six in Italy, two in Greece), as well as the relationship between those air pollution characteristics and public health.
- **HIA21 (Consiglio Nazionale delle Ricerche - Istituto di Fisiologia Clinica):** The HIA21 LIFE project's key objectives focus on applying Health Impact Assessment (HIA) procedures into waste cycle management systems. Integrating HIA with Local Agenda 21 (LA 21) will better enable citizens, particularly disadvantaged ones, to share in decision-making processes around the location, construction and operation of waste-handling plants, as well as waste reuse and recycling issues.
- **SASIES (Minerali Industriali SpA):** The SASIES project aims to develop and test a new process for the recovery and treatment of waste sludge from agglomerated stone cutting and processing. The project will put in place a strategy to exploit a "short production-supply chain", where the raw material, agglomerated stone, and waste material (stone sludge) are reintroduced into the production process, thereby reducing the volume of waste going to landfill and the consumption of natural resources.
- **Gy Eco (Saint-Gobain PPC ITALIA S.p.a.):** The Gy Eco project aims to develop a system for managing and processing waste plasterboard and

- **ECOFATTING (Consiglio Nazionale delle Ricerche -Istituto di Chimica dei composti Organo-metallici):** The ECOFATTING project aims to demonstrate the use of an innovative technology for the fattening phase of the leather tanning process, with the goal of producing new or existing products with a significantly higher eco-sustainability profile.
- **Sustainable Cruise (Costa Crociere SpA):** The Sustainable Cruise project aims to demonstrate the potential and the technical and economic viability of the large-scale introduction of promising solutions for waste prevention, recovery and recycling on a cruise ship, focusing on the detection, testing, evaluation and dissemination of best available techniques and approaches for three on-board waste streams: packaging; biodegradable waste; and paper.
- **LOWaste (Comune di Ferrara):** The project will work on lifecycle thinking, eco-design and the development of recycling markets, with the aim of reducing urban waste by developing a local market for recycled or reused materials, the existing green public procurement schemes in local authorities through a "cradle-to-cradle" approach, and by promoting waste prevention and spreading awareness of reused/recycled products to consumers.
- **AQUOR (Provincia di Vicenza):** The AQUOR project aims to develop an adaptive strategy to climate change to support the sustainable governance of upper Vicenza's groundwater resource. It will rebalance the area's water budget, make better use of the water resource and improve infiltration processes. It will do this by developing a GIS information system for the hydro-geological and territorial system of the upper Vicenza plain. *Direct or indirect relevance to climate change.*
- **INTEGREEN (Comune di Bolzano):** The main objective of the INTEGREEN project is to demonstrate a system that will provide the public authorities in Bolzano with distributed correlated traffic/environmental information, as the basis for eco-friendly traffic management policies. In order to do this, the INTEGREEN system will integrate dynamic traffic and environmental data provided by vehicles, with static environmental data collected by the city's environmental network stations.
- **DIAPASON (CNR- Istituto di Scienze dell'Atmosfera e del Clima):** The DIAPASON project will formulate an upgraded, innovative, robust and user-oriented desert dust detection methodology, the DIAPASON-dddM. This will allow to measure the amount of desert dust in the air before comparing concentrations of particulate matter (PM) in air to the relevant limit values. To this end, prototypes of affordable remote sensing devices will be designed and produced by the project.
- **IDENTIS WEEE (Hera S.p.a.):** The IDENTIS WEEE project aims to significantly improve the separate collection of domestic and municipal Waste Electrical and Electronic Equipment (WEEE) using innovative new methods for intercepting, collecting, separating and optimising this waste stream. These will include innovative and diversified prototypes/containers, designed to collect different categories of WEEE and to be placed on roads and squares, or inside points of sale such as retail outlets, service centres and waste collection facilities. A technical system that can trace WEEE collection will also be developed.
- **WARBO (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale):** The WARBO project will facilitate the regulation of artificial

- **H-REII DEMO (Turboden SRL):** The H-REII DEMO project aims to develop and study a heat recovery system, completely integrated into a fume extraction plant, by using water in a closed loop for cooling waste fumes, and operating at a higher temperature and pressure than traditional methods. This is expected to lead to a significant reduction in total power consumption and an improvement in the performance of the fume depuration plant in energy intensive industrial applications (iron and steel industries, cement, glass, etc.). *Direct or indirect relevance to climate change.*
- **EMoNFUr (ERSAF Lombardia - Ente Regionale per i Servizi all'Agricoltura e alle Foreste):** The EMoNFUr project will develop a monitoring system for assessing the status of artificial and natural urban and periurban forests, and to measure the adaptability of the new lowland forests to climate change. The project will provide parameters of ecological and environmental relevance, such as plant and animal biodiversity in lowland forests, carbon dioxide sequestration capacity and the ability to mitigate air temperatures. *Direct or indirect relevance to climate change.*
- **New Life (M.C.M. Ecosistemi S.r.L):** The New Life project will demonstrate an innovative method based on the mechanical and chemical treatment of infertile soils. This combines soil mixing (exhausted soils mixed with other solid matrices) and soil disintegration processes with a subsequent reconstruction phase, resulting in an aggregate that has agronomic value. The technique will stabilise the organic matter in reclaimed soil by injecting humic and fulvic acids.
- **ECO Courts (Comune di Padova):** The ECO Courts project aims to reduce the ecological footprint and resource consumption of urban families living in apartment blocks by promoting radical lifestyle changes, stimulating collective action, and the adoption of small-scale and smart technologies and lifecycle thinking.
- **QUADMAP (Università di Firenze - Dipartimento di Meccanica e Tecnologie Industriali):** The main objective of the QUADMAP project is to develop a harmonised methodology for the selection, quantitative and qualitative assessment management of urban quiet areas (QAs). A harmonised approach will lead to a completely new monitoring tool, which will make it possible to monitor the QA management of Member States on the basis of common QA indicators.
- **Waste3 (Ceramica Fondovalle S.p.A.):** The Waste3 project's aim is to convert primary copper metallurgical waste into heating elements and semi-conductive enamels for residential applications. To do this, a small-scale pilot production line, able to process 200 kg/day of slag, will be constructed. The project also aims to develop new materials for residential use from the slag.
- **B.R.A.V.E. (Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna):** The project aims to support the full integration of EMAS (and of other voluntary certification schemes, such as the EU Ecolabel) in the environmental legislation of EU Member States. This will facilitate EMAS implementation by all organisations and remove, reduce and simplify the administrative burdens for EMAS-registered

- **LEAD-COLOURED LEAD-FREE (Ceramiche Ascot SpA):** The main objective of the LEAD-COLOURED LEAD-FREE project is to eliminate lead compounds from the production of glazes with high aesthetic and technical value. This will be achieved by using a two-stage melting process, replacing lead with boron, while minimising boron volatilisation.
- **Clash Oil (Argo Tractors SpA):** The main objective of the Clash Oil project is to demonstrate the complete replacement of synthetic lubricants, currently used for the pre-treatment of transmissions and gearings, with much more environmentally friendly solid state graphite lubricant and by fluid bio-lubricants. The project will set up a manufacturing cycle that produces very little waste, reduces the consumption and dispersion of lubricants and has a low carbon footprint. *Direct or indirect relevance to climate change.*
- **NOW (Cantiere Autolimitazione Cooperative Sociale a.r.l.):** The NOW project aims at promoting the prevention, recovery and recycling of waste in organised large-scale distribution, paying particular attention to its organic part, thus contributing to reducing CO<sub>2</sub> emissions from food waste. *Direct or indirect relevance to climate change.*
- **TyRec4LIFE (Provincia di Torino):** The TyRec4LIFE project will develop the use of “open-graded” and “controlled texture” bituminous mixtures, also containing scrap tyre rubber and will demonstrate that they offer good technical solutions for pavement construction and maintenance.
- **LCA4PORTS (Capo d’Anzio S.p.A.):** The LCA4PORTS project’s objective is to develop the port of Anzio on the coast of Lazio, Italy, as a model of lifecycle assessment (LCA) application and eco-design. Through the use of the LCA it will minimise the negative environmental impacts during the site construction, port management and completion stages and involve stakeholders fully in all stages from port design to port management.
- **PODEBA (Agenzia nazionale per le nuove Tecnologie, l’Energia e lo Sviluppo economico sostenibile (ENEA)):** The PODEBA project will demonstrate the eco-sustainability of using poultry manure for the ‘bating phase’ of leather tanning – a process whereby the hides for high quality leathers are treated with enzymes to soften them. It will provide the environmental benefits of recycling waste (poultry manure) normally associated with high environmental problems in management and disposal and produce significant reductions in the negative impacts from tannery wastewater by using a natural product instead of chemical products traditionally used in the ‘bating’ process.
- **UNIZEO (Gruppo Minerali Maffei S.p.A.):** The UNIZEO project aims to demonstrate that coating urea-based nitrogen fertiliser with zeolite is a technically and economically viable technology to allow the slow release of fertiliser (depending on the demands of a specific plant) to significantly reduce the release of unused nitrates into the environment. This should avoid in particular, groundwater pollution, but also reduce air pollution from ammonia emissions.
- **GREEN SITE (Azienda Lavori Lagunari Escavo Smaltimenti):** The GREEN SITE project’s overall aim is to demonstrate the effectiveness of innovative technologies for the reclamation of sediments from the excavation of the canals located in the industrial area of Porto Marghera, Venice. In particular, the new technologies involve the use of fluids at the super-critical state (SCF state) for the extraction and/or use of super-critical

- **RECOIL (AZZEROCO2):** The AZZEROCO2 project aims to recover the energy from waste cooking oil (WCO) by creating a network for its collection. This will help to reduce its release into the environment. Following collection and storage, the oil will be mechanically treated to remove impurities (food waste, water, etc...) and to produce a fuel for use in an internal combustion engine in a combined heat and power plant in Italy (in the province of Grosseto). **Direct or indirect relevance to climate change.**
- **LIFE+ Nature (9 projects – 20.2 million)**
- **RARITY (Ente Tutela Pesca del Friuli Venezia Giulia):** The project has two overall objectives: Firstly, to combat the spread of the highly invasive alien species, (IAS) *P. clarkii*, which is threatening native crayfish species, biodiversity, and even, in some cases, human health; and secondly, to improve the populations of the native crayfish species, *A. pallipes*.
- **TIB - TRANS INSUBRIA BION (Province of Varese):** The general objective of this project is to increase the functionality of the ecological corridor between Campo dei Fiori and the Ticino River Park, an area covering some 15 000 ha and including 14 Natura 2000 network sites. This will be achieved through the improvement of environmental quality and the removal of problems related to the crossing of artificial barriers.
- **LIFE MAGREDI GRASSLANDS (Regione Autonoma Friuli Venezia Giulia):** The general objectives of the project are to stop the degradation of the habitat 'Eastern sub-Mediterranean dry grasslands' in the 'magredi' of the Friuli lowlands and to improve its extension through the transformation of cultivated lands and scrubland.
- **ST.e.R.N.A. (Comune di Stintino):** This project aims to improve the conservation status of two priority habitats and four bird species included in the Birds Directive (*Egretta garzetta*, *Himantopus himantopus*, *Sterna albifrons* and *Sterna hirundo*), in Sardinia, Italy. It will purchase 5.1 ha of the Casaraccio coastal lagoon, restore the two priority habitats and construct artificial islands for nesting birds.
- **VAL.MA.CO.(Associazione Agraria di Civitavecchia):** The objective of the project is to preserve the avifauna of Community interest in the northwest area of the Natura 2000 site Comprensorio Tolfetano-Cerite-Manzianate. This project aims to improve the habitats of a total of 12 bird species included in Annex I of the Birds Directive.
- **MC-SALT (Consorzio del Parco Regionale del Delta del Po dell'Emilia-Romagna):** This project targets six Natura 2000 sites in coastal salt meadows in Italy, France and Bulgaria. It aims to improve the conservation status of coastal and dunes habitat types (in particular, coastal lagoons) and breeding bird species (greater flamingo, as well as various tern, wader and gull species listed in Annex I of the Birds Directive).
- **MAESTRALE (Comune di Campomarino):** The overall objective of the project is the conservation of both dune habitats and humid brackish areas, as well as the protection of flora and fauna species in the coastal habitats of Molise.
- **IBRIWOLF (Provincia di Grosseto - Dipartimento Sviluppo Sostenibile):** The project focuses on a relatively recently recorded threat to wolf conservation, namely interbreeding with domestic dogs. The project aims to identify and remove all the hybrids from two pilot areas in Tuscany; and

- **C.I.SPI.VE.HAB (Parco Regionale Spina Verde):** The project's main goal is to improve the conservation status of forest, rocky, and lake habitats of European importance found in the Spina Verde Natura 2000 network site.

#### **LIFE+ Biodiversity (2 projects – 3.7 million)**

- **Zelkov@zione (Regione Siciliana - Dipartimento dell' Ambiente):** The main goal of the project is to ensure the survival of *Z. sicula* through in-situ and ex-situ conservation actions. These actions will limit threats to the species and develop management measures in order to reinforce the present populations and establish novel populations in ecologically suitable sites.
- **SHARKLIFE (Centro Turistico Studentesco e Giovanile):** In line with the European Plan of Action for Cartilaginous Fishes, which was approved in 2009, this project aims to contribute to the conservation of cartilaginous fishes, particularly basking sharks and pelagic stingrays, in Italian seas by reducing the mortality rate caused by commercial and leisure fishing.

#### **LIFE+ Information and Communication (2 projects – 3.4 million)**

- **SHOWW (Universita' di Firenze):** The SHOWW project aims at facilitating the dissemination and replication of wastewater treatment and management solutions that already proved successful in previous LIFE projects, increase the knowledge and awareness about these solutions among policy-, decision- and opinion-makers, technical and industrial advisors, professionals and consultants both in the municipal and industrial wastewater treatment sectors and provide an interactive environment where proven solutions can interface with needs and expectations, individuating the best fitting solutions to connect LIFE solutions with emerged needs and requirements.
- **FA.RE.NA.IT (Centro Turistico Studentesco e Giovanile):** The overall project aim is to support the implementation of EU biodiversity policy and the 2020 target and strategy, by increasing awareness, understanding and support among stakeholders and people living and/or working in agricultural/rural areas of the Natura 2000 network as a means for their further involvement in biodiversity protection. All the Italian regions will be involved in the project.

### **Latvia - 2 projects (1.8 million)**

#### **LIFE+ Nature (2 projects – 1.8 million)**

- **FOR-REST (Nature Conservation Agency):** The project's main objective is to establish a long-term forest habitat restoration and management programme for selected priority species and habitat types, to test and demonstrate innovative habitat inventory methods and implement the best practice habitat restoration measures in the Gauja NP Natura 2000 site.
- **HYDROPLAN (Nature Conservation Agency):** The project's main objective is to establish a hydrological restoration programme and to carry out hydrology restoration measures within three different ecosystems found at the Kemeru National Park.

### **Lithuania - 1 project (0.6 million)**

### **LIFE+ Nature (1 project – 0.6 million)**

- **Buveinių tvarkymas (Salantų regioninio parko direkcija):** The project's main aim is to restore and conserve 11 habitats types of Community interest ( juniperus, heaths, grassland, meadows, inland dunes, ...) of the Salantai and Kurtuvenai regional parks, including the Vijurku meadows (Dubysa river valley).

## **Malta - 4 projects (4.5 million)**

### **LIFE+ Environment Policy and Governance (1 project – 1.9 million)**

- **DemoEV (Ministry for Resources and Rural Affairs):** The DemoEV project will conduct the first demonstration action deploying electric vehicles in Malta, distributing a sample of vehicles to volunteers. The test drivers will be carefully monitored to generate data that will enable the assessment of the potential for carbon savings in comparison with standard mobility habits and trends. *Direct or indirect relevance to climate change.*

### **LIFE+ Nature (1 project – 0.9 million)**

- **MALTA SEABIRD PROJECT (BirdLife Malta):** This new LIFE+ project is the logical progression of the EU LIFE Yelkouan Shearwater project and uses the roadmap to address the designation of Marine Special Protection Areas for three important bird species: P.yelkouan, (Cory's Shearwater) C.diomedea, and storm petrel (H. pelagicus), across multiple colonies, through the identification of Marine Important Bird Areas.

### **LIFE+ Information and Communication (2 projects – 1.7 million)**

- **Investing in Water (Malta Business Bureau):** The Investing in Water project aims to raise awareness on issues related to the water scarcity problem in Malta and the importance of water conservation among the target economic sectors. This will also serve as an example to other sectors to adopt similar measures, thereby helping reduce pressure on groundwater resources. This will be achieved by implementing a two-and-a-half-year awareness-raising campaign aimed at target economic sectors.
- **InfoNitrates (Ministry for Resources and Rural Affairs):** The project aims to communicate to farmers and stock-breeders their key obligations under the Nitrates Action Plan; the potentially harmful effects on health resulting from improper management of manure; and the way to reduce groundwater contamination. It will train farmers to change their farming practices so that nitrogen levels in soil are reduced and train livestock breeders in the proper management of animal manure so that nitrogen levels in soil are reduced.

## **Spain - 29 projects (85.8 million)**

### **LIFE+ Environment Policy and Governance (22 projects – 40.8 million)**

- **WET-COMP (Asociación de Investigación de la Industria Textil):** The WET-COMP project aims to exploit solid textile wastes and some specific paper and wooden packaging wastes by means of wetlaid technology. This technology will be applied to wastes from the textile and clothing industry to make non-woven textile structures suitable for uses as reinforcements in the composites industry. The project will try to obtain a global procedure, which can be applied to the different sub-sectors of the textile and clothing industry.

- **EWsolutions4OLDhousing (Asociación para la Investigación y Desarrollo de los Recursos Naturales):** This project aims to establish a standard methodology for the sustainable retrofitting of social housing. The project will identify new technologies, products and innovative building systems for the retrofitting of social housing and demonstrate the feasibility of their application when tailored to the physical, economic and social conditions of each building or type of housing. It will look at how existing building materials can be used in the construction of more sustainable housing.
- **UNIDIGES (Centro Tecnológico Lurederra):** The objective of the UNIDIGES project is to demonstrate the successful management of manure at the level of the individual livestock farm. It aims to develop a pilot demonstration plant based on the anaerobic digestion of manure from a single, medium-sized farm, achieving reduced pollution risks and a commercial end product. The new system will be tested on different farms and on several types of manure. The project will also develop and demonstrate a market for the digestate, for use as an agricultural fertiliser. *Direct or indirect relevance to climate change.*
- **ECOGLAUCA ÉRGON (Ayuntamiento de Enguera):** The ECOGLAUCA ÉRGON project aims to examine, demonstrate and evaluate the benefits of cultivating *Nicotiana glauca* on land that is currently abandoned. The project will seek to generate biomass and other commercial products, and demonstrate the plant's contribution to fighting soil erosion and climate change. *Direct or indirect relevance to climate change.*
- **MEDICOOL (Hermandad Farmacéutica del Mediterráneo, S.C.L.):** The MEDICOOL project aims to develop and demonstrate an innovative solar technology solution for the heating and cooling of medicine storage warehouses in Spain. It will develop a prototype solar-based cooling system, which will be installed in a pharmaceutical storage centre and demonstrate that it is a technically feasible solution for reducing energy demand for cooling by more than 70%. The project will also seek to facilitate the transfer of the process to other areas. *Direct or indirect relevance to climate change.*
- **REC-POLYOLEFIN (Fundación Lurederra):** The main objective of the Rec-Polyolefin project is to design and develop a demonstration plant for the separation of mixtures of used polyolefin films. Using electrostatic and pneumatic techniques, the new plant will sort plastic that cannot currently be separated after waste collection. The project will treat 15 000 kg of used polyolefin mixtures, targeting a recovery rate of 10% to 55% of waste polyolefins, and a separation capacity of 1 000 kg/hour.
- **AGROWASTE (Centro de Edafología y Biología del Segura):** The AGROWASTE project aims to design an integrated management system for fruit and vegetable wastes (FVW) for the Region of Murcia, Spain. It will promote environmentally friendly technologies that convert current FVW into resources for subsequent use. It will also adapt and demonstrate proposed technologies for delivering economically useful end products for specific waste types.
- **HTWT (Consellería de Medio Ambiente, Agua, Urbanismo y Vivienda de la Comunidad Valenciana):** The HTWT project aims to develop a comprehensive management plan for the collection and treatment of waste screens and displays. It will develop an industrial prototype for the treatment of LCD, LED, plasma displays and photovoltaic panels. The project will collect samples of the different kinds of screen and display and conduct

- **Crops for better soil (Transati S.L):** This project aims to demonstrate that the application of organic farming techniques can make cultivation of semi-arid land economically viable. The project therefore aims to demonstrate an alternative to current erosive farming practices and land abandonment in areas with vulnerable dry soil types by examining optimal combinations of methodologies (crop rotation; fertilisation with compost; and re-introduction of traditional crops) to achieve the best soil and crop quality results for specific soil and climate conditions.
- **NITRATES (Gestión Ambiental, Viveros y Repoblaciones de Navarra S.A.):** The NITRATES project aims to improve the knowledge of the impact of farming and cattle raising on nitrate contamination of waters and to define and promote best practices to reduce it. The project will look specifically at the effects of cattle raising activity and the nitrate inputs and outputs derived specifically from cattle waste management and examine the contamination of both surface waters and groundwater. It will then develop new simulation models for quantifying the contamination of groundwater by nitrates from farming sources.
- **BREAD4PLA (Asociación de Investigación de Materiales Plásticos y Conexas):** The main objective of the BREAD4PLA project is to demonstrate the technical and economic viability of using waste products from the bakery sector in the fabrication of a 100% biodegradable film. The project will establish and operate a continuous pilot plant at pre-industrial scale for the synthesis of Polylactic Acid (PLA) from bakery waste products.
- **RECYSLURRY (Asociación de Investigación de Industrias de la Construcción):** The main objective of the RECYSLURRY project is the development and demonstration of a pilot process for the recycling and valorisation of slurries produced during the industrial processing of natural stone products and turning them into usable material. It aims to overcome technical challenges in recycling this slurry and demonstrate the economic viability of the new process. Its target is to be able to successfully treat and reuse 50% of the slurries produced annually in the Novelda area.
- **Agrolca-Manager (NEIKER - Instituto Vasco de Investigación y Desarrollo Agrario S.A.):** The Agrolca-Manager project aims to support agro-food companies in the primary sector - and especially small and medium-sized enterprises - to minimise the environmental impact of their products' life cycles. It aims to make the companies more sustainable through improved management of the main environmental impacts from their use of resources and from the generation of waste. It will do so by providing specialised software to enable agro-industrial companies to conduct lifecycle assessments (LCAs) in their sector.
- **People CO2Cero (Ayuntamiento de Soria):** The main objective of People CO2Cero is to strengthen the engagement of the local community in efforts to improve the environmental performance of the city of Soria. At the same time, it aims to link citizen mobilisation with economic objectives, creating approaches that facilitate the involvement of businesses and banks in the overall project of sustainable urban development and job creation.
- **CO2ALGAEFIX (Ayuntamiento de Sevilla la Nueva):** The key objective of the CO2ALGAEFIX project is to demonstrate, at a one hectare surface scale, an efficient way to capture CO<sub>2</sub> from stationary sources – a power plant that uses natural gas. It hopes to show that the emissions can be used as a substrate for biomass algae production. The process will include

- 2, and especially
- to make use of the latter for developing cultures of microalgae. **Direct or indirect relevance to climate change.**
- **EUTROMED (Diputación Provincial de Granada):** The purpose of the Eutromed project is to develop and demonstrate a best practice method for the reduction of nitrogen levels in surface flow of agricultural lands in the Mediterranean climate zone. The project will install state-of-the-art buffer technology on a demonstration drainage area of 250 hectares in the basin of the Cubillas river, monitoring and documenting the effectiveness of different models of nitrogen filters.
  - **RECYTRACK (ACCIONA Infraestructuras S.A.):** The overall objective of the Recytrack project is to demonstrate the successful use of an elastomeric material made of end-of-life tyres blended with resin in industrial applications within the railway industry. It will technically design products (i.e. isolated blocks and mats) that are used within the railway industry. The project will conduct a lifecycle assessment for the tyres. This will take into account the energy consumption and emissions associated with original production and the collection, transport, processing and use of the material at the end of its life as a tyre.
  - **NEW JERSEY (Dirección General de Carreteras):** The aim of the New Jersey project is to demonstrate and validate a new generation of eco-friendly Jersey safety barriers made from recycled rubber from tyres, recycled plastics and concrete. It aims to show that these materials are not only more environmentally friendly, but show improved impact absorption performance in case of traffic accidents.
  - **POLYMIX (University of Cantabria):** The aim of the POLYMIX project is to demonstrate new environmentally friendly asphalt mixes, using polymer wastes for modifying mixes. The project will work with several types of polymeric wastes: polyethylene; polystyrene; and polypropylene as well as end-of-life tyres and will create several asphalt mixes modified with recycled polymeric waste at laboratory scale. The project will select the most appropriate mixes for industrial use and design the up-scaling process.
  - **AQUAENVEC (Centro Tecnológico del Agua (CETAQUA)):** The main objective of the project is to provide decision-making tools to optimise eco-efficiency in the urban water cycle, through environmental and economic lifecycle analysis (LCA). It thus seeks to provide for more sustainable management of the urban water cycle. The project will work to assess all the major environmental impacts of the lifecycle of urban water systems, including on: global warming; terrestrial and water toxicity; eutrophication; acidification; and depletion of resources.
  - **AQUATIK (Centro Tecnológico del Agua (CETAQUA)):** The main objective of the AQUATIK project is to implement and test new methods and techniques for the monitoring of selected priority pollutants in water. It seeks to develop a new automated prototype to measure pollutants discharged in wastewater effluents and related spills in quasi-real time that can be used on a wide scale as a routine monitoring tool covering sampling, filtering, concentration and detection steps for operators, decision-makers, regulatory agencies and different stakeholders.
  - **URWASTECH (LEITAT):** The overall objective of the URWASTECH project is the more efficient and sustainable treatment of the existing rest fraction from sorted urban solid wastes. It aims to integrate treatment of this fraction with wastewater management to create a highly innovative integrated pilot plant providing valorisation of urban waste.

### **LIFE+ Nature (3 projects – 37.7 million)**

- **HUMEDALES DE LA MANCHA (Consorcio Alto Guadiana):** The project targets the recovery of the Mediterranean salt steppes, a priority habitat of the Habitats Directive, in the 27 La Mancha wetlands' Natura 2000 network sites. The main actions will focus on the purchase of agricultural land surrounding the wetlands to halt their degradation and desiccation, and restore/ recover their hydrological properties. These actions will benefit numerous bird species included in Annex I of the Birds Directive.
- **Iberlince (Consejería de Medio Ambiente. Junta de Andalucía.):** This transnational project (Spain-Portugal) aims at restoring the historical distribution of the Iberian Lynx across areas of Spain (Andalusia, Castilla-La Mancha, Extremadura) and Portugal. The project will work to reinforce existing populations, and establish new populations in areas identified as appropriate.
- **PRO-Izki (Diputación Foral de Álava):** The PRO-Izki project's overall objective is the long-term favourable conservation of the Pyrenean oak forest and all the habitats and species of community and regional interest that depend on this ecosystem in Izki Natural Park.

### **LIFE+ Biodiversity (3 projects – 5.6 million)**

- **LAMPROPELTIS (Gestión y Planeamiento Territorial y Medioambiental, S.A.U.):** The main aim of the LAMPROPELTIS project is to reduce the density and abundance of Californian kingsnakes on Gran Canaria so as to minimise the impact of this exotic species on native biodiversity. The project hopes to contribute to the eventual eradication of this invasive alien species from the island.
- **SOIL-Montana (Neiker - Instituto Vasco De Investigación y Desarrollo Agrario, S.A.):** The main objective of the SOIL-Montana project is to demonstrate the viability of an innovative methodology for the conservation of soil and vegetation biodiversity in mountain and bottom valley grazing areas, based on the application of an Agro-ecosystem Health Card.
- **INVASEP (Dirección General del Medio Natural. Consejería de Industria, Energía y Medio Ambiente. Junta de Extremadura.):** This project's global objective is to halt the loss of biodiversity associated with invasive alien species on the Iberian peninsula and in particular in the Tagus and Guadiana river basin districts. Involving co-operation between Spain and Portugal, this is the first trans-boundary project launched in the EU to tackle invasive alien species.

### **LIFE+ Information and communication (1 project – 1.6 million)**

- **LANDLIFE (XARXA DE CUSTODIA DEL TERRITORI):** The project aims to convey the value of land stewardship among biodiversity conservation stakeholders at European level (especially the Western Mediterranean Arch), and to encourage its use and application. That means making land stewardship an attractive mechanism for conservation bodies, landowners, and local and regional governments, linking with new opportunities for rural development, marketing of local products, boosting of ecotourism and other benefits.

## **The Netherlands - 3 projects (18.8 million)**

### **LIFE+ Environment Policy and Governance (2 projects – 16.5 million)**

- **PST (ARN Recycling B.V.):** The PST project's main objective is to reach an end-of-life vehicles recycling rate of 95% by the end of 2014. It plans to do this by demonstrating and optimising a post-shredder technologies plant using the VW-SiCon process in the Dutch province of Gelderland.
- **OMZET (Waterschap Vallei en Eem):** The main objective of the OMZET project is to develop a new approach to wastewater treatment that will demonstrate net energy production, optimal recovery of phosphates and economic viability. Its main innovation will be to implement an extra denitrification process for the reject water coming from the sludge dewatering.

### **LIFE+ Nature (1 project – 2.3 million)**

- **Wuthering heaths (Vereniging Natuurmonumenten):** The main objective of the project is to enlarge and/or improve the area of sand drifts and dry and moist heathlands in the north-western Veluwe. The project aims to connect different sub-areas with a view to enhancing the dispersion of target species and increasing populations. The implementation of the project actions will contribute to the enlargement and restoration of habitats and associated species in the project area.

## **Poland - 7 projects (18.9 million)**

### **LIFE+ Environment Policy and Governance (2 projects – 4.1 million)**

- **BIOREWIT (Research Institute of Vegetable Crops):** The main goal of the BIREWIT project is to develop innovative technologies for new soil improvers and soil-less substrates for greenhouse cultivation applied in comprehensive agricultural research, through the use of natural fibrous wastes and their application in the cultivation of vegetables on demonstration plots and on experimental fields.
- **DIM-WASTE (Institute of Mechanised Construction and Rock Mining):** The main objective of the DIM WASTE project is to demonstrate the operation of an innovative technology for waste management of selected groups, including sewage sludge, for the production of various lightweight aggregate products.

### **LIFE+ Nature (2 projects – 9.7 million)**

- **Niebieski korytarz Iny (Zachodniopomorski Zarząd Melioracji i Urządzeń Wodnych w Szczecinie):** The project aims to conserve and improve biodiversity in the Ina basin's water ecosystems that are located in Natura 2000 sites. It will achieve this mainly by linking them within a blue ecological corridor. An additional objective involves restocking salmon populations in the Ina basin.
- **ActiveKPN (Kampinoski Park Narodowy):** The project objectives are to improve the conservation status of the many important European species found in the Kampinoski National Park (including beaver (*Castor fiber*), otter (*Lutra lutra*), Eurasian lynx (*Lynx lynx*), various amphibians and reptiles, the corncrake (*Crex crex*), crane (*Grus grus*), bittern (*Botaurus stellaris*) and the scarce large blue butterfly (*Maculinea teleius*) and large copper butterfly (*Lycaena dispar*)) and to reduce the pressure from urbanisation on the purchased land.

### **LIFE+ Information and Communication (3 projects – 5.1 million)**

- **Kampania anty-azbestowa (Green Federation GAJA Association):** The Kampania anty-azbestowa project has the objective of strengthening the awareness of institutions and citizens of Poland about the harmfulness of asbestos and its negative impact on health; increasing the individual involvement of institutions and citizens in solving the problem of removal of asbestos in Poland; and promoting “good practices” related to the removal of asbestos from the environment.
- **Poznaj swoją Naturę (Generalna Dyrekcja Ochrony Środowiska):** The main goal of the project is to improve awareness and appreciation of the Natura 2000 network among Polish citizens. This will lead to enhanced co-operation between key stakeholders, such as environmental NGOs and local authorities, in Natura 2000 areas. Lessons learnt during the project will be widely disseminated to help trigger multiplier effects that further strengthen the credibility of Natura 2000 in Poland.
- **BEST FOR BIODIVERSITY (Centrum Koordynacji Projektów Środowiskowych):** The general objective of the project is promotion of best practices related to biodiversity protection in forests, especially in Natura 2000 sites.

## **Portugal - 2 projects (3.7 million)**

### **LIFE+ Nature (1 project – 0.6 million)**

- **ECOTONE (QUERCUS – ANCN):** This project is targeting the conservation of alder alluvial forests in two Portuguese rivers, in order to increase the populations of three species of dragonfly (*Oxygastra curtisii*, *Gomphus graslinii* and *Macromia splendens*). The project also sets out to improve the conservation status of two species of water pearl mussels (*Margaritifera margaritifera* and *Unio crassus*).

### **LIFE+ Biodiversity (1 project – 3.1 million)**

- **BRIGHT (Fundação Mata do Bussaco):** The project aims to control and eradicate the invasive alien species that are threatening biodiversity in the Bussaco National Forest. The project also aims to recover local habitats by implementing a set of integrated conservation actions: control/eradication of alien species, propagation/plantation of autochthonous flora that is characteristic of the original habitats, and the active involvement of stakeholders (such as schools, local communities, visitors, and families and employees of local businesses committed to social/environmental policies).

## **Romania - 6 projects (6.7 million)**

### **LIFE+ Environment Policy and Governance (5 projects – 5.4 million)**

- **ELSYS (Romanian Ministry of Environment and Forests):** The project aims to digitise the processing of tracking movements of waste into, within and out of Romania by replacing paper-based applications and forms within an electronic system for waste operators, the Romanian authorities and other states. The electronic system for exchanging data on shipments of waste will reduce administrative labour and speed up information exchange between waste operators and state authorities.
- **VAL-C&DV (Buzau County Council):** The VAL-C&DV project aims to develop a functional and effective demolition waste management system through detailed knowledge of the current situation in terms of generation, collection, recovery and disposal of construction and demolition waste at the

- **EcoWASTES (University “Constantin Brâncuși” Targu Jiu):** The project aims to obtain ceramic composites from the fly ash and building materials from drilling fluids and slag, and to use them in the impermeable layers of roads. It aims to demonstrate the viability of this alternative technology – i.e. the recycling of fly ash, drilled solid wastes and steelmaking slag and that the use of natural resources and energy can be significantly reduced through harnessing the potential of the targeted wastes. ***Direct or indirect relevance to climate change.***
- **MEDWASTE (National Research and Development Institute for Nonferrous and Rare Metals):** The project aims to demonstrate the feasibility of microwave technology to treat medical waste. It will design and adopt a prototype to process the medical waste into products that are non-infectious and safe for disposal with no special handling. By applying the developed technology at a larger scale it is expected to reach a disinfection rate of 6 000 tonnes/yr of medical waste in Romania and 3 000 tonnes/yr in Bulgaria.
- **ALGAE-GHG (The National Institute for Research and Development in Chemistry and Petrochemistry):** The overall objective of the ALGAE-GHG project is to develop a demonstration integrated photosynthetic system based on the sequestration of greenhouse gases (GHG) in algal biomass. These will be used as raw materials for value-added bio-products such as lipids; as an alternative source for biofuels and horticulture oils; as proteins for feed additives; and as plant bio-stimulants, fertilisers and soil enhancers. ***Direct or indirect relevance to climate change.***

#### **LIFE+ Nature (1 project – 1.3 million)**

- **Iron Gates wetlands (Environmental Protection Agency Caras-Severin):** The purpose of the project is to provide a long-term “favourable” conservation status for priority species and their habitats at the Danube water course Bazias – Iron Gates site, by implementing and disseminating state-of-the-art conservation measures. The project will restore river habitats, as the nesting, resting and feeding habitats of bird species.

### **Slovakia - 4 projects (7.9 million)**

#### **LIFE+ Environment Policy and Governance (1 project – 0.4 million)**

- **Geohealth (Štátny geologický ústav D. Štúra):** The objective of the Geohealth project is to reduce the negative impact of the geological environment on the health status of residents in the Slovak Republic. An environmental assessment will be conducted to at first identify the areas. Then limits of chemical elements/compounds present in soil and groundwater will be defined and measures to reduce the negative impact of geological environment on human health will be proposed and implemented.

#### **LIFE+ Nature (2 projects - 6 million)**

- **Natura 2000 BA (Regional Association for Nature Conservation and Sustainable Development):** The main objective of this transnational nature project is to establish a functional network of Natura 2000 areas in the trilateral border region close to Bratislava (Slovakia) and to secure a favourable conservation status for the habitats of European interest found

- **PANNONICK (Daphne - Institute of Applied Ecology):** The project plans to contribute to the conservation of priority habitats and strengthening of the Natura 2000 network in the project area, through the active protection of endemic Pannonic halophytic and psammophytic habitats of Community importance. The project actions will be implemented in 15 Natura 2000 sites located within the Danubian Plain of Slovakia.

#### **LIFE + Biodiversity (1 project – 1.5 million)**

- **APUS & NYCTALUS (Regional Association for Nature Conservation and Sustainable Development – Bratislava):** The project's main objectives are (i) to halt the recent decline of the common swift (*Apus apus*) and noctule bat populations in Slovakia, and to (ii) protect their nesting/roosting habitats – especially in urban areas – by the introduction of suitable management practices aimed at improving the conservation status of the species.

### **Slovenia - 6 projects (4.3 million)**

#### **LIFE+ Information and Communication (4 projects – 2.6 million)**

- **SEPARATE COLLECTION (SLOPAK D.O.O):** The SEPARATE COLLECTION project's overall objective is to raise awareness that the separate collection of municipal waste creates environmental benefits; increase the amount of separately collected household packaging and biodegradable waste, electric and electronic equipment waste, waste tires, waste phytopharmaceuticals, waste medicines and batteries; and disseminate information on the infrastructure for separate collection of municipal waste. The beneficiary will do this through communication campaigns, demonstration activities, contests involving prizes and debates.
- **REBIRTH (Slovenian National Building and Civil Engineering Institute (ZAG)):** The REBIRTH project will contribute to the increased and better recycling of industrial waste and construction/demolition waste in the construction sector. This will be promoted through communication and open dialogue activities and emphasis will be placed on: disseminating best practice through practical demonstrations of existing technical possibilities; information on successful administrative measures and tools, such as green public procurement, environmental taxes and charges from other EU countries; and through channels of communication open to professionals, national and local authorities and the general public.
- **Slovenia WEEE campaign (ZEOS, ravnanje z elektricno in elektronsko opremo, d.o.o.):** The Slovenia Waste Electrical and Electronic Equipment (WEEE) campaign project aims to raise awareness concerning the manufacture and use of WEEE and WEEE handling, treatment and recovery (including reuse and recycling), with a special emphasis on households and school children in Slovenia.
- **AQUAVIVA (LUTRA, Inštitut za ohranjanje naravne dediščine):** The project's main objective is to improve public awareness in Slovenia about the importance of protecting and conserving freshwater ecosystems. This will help implementation of relevant EU legislation, including the Habitats, Birds and Water Framework directives. Integrated Water Resources Management (IWRM) methods will be promoted using the European otter as an ambassador of freshwater habitats and biodiversity.

### **LIFE+ Nature (2 projects – 1.7 million)**

- **SIMARINE-NATURA (DOPPS – BirdLife Slovenia (Društvo za opazovanje in proučevanje ptic Slovenije)):** This project aims to significantly improve knowledge of the distribution, population densities, flight routes and seasonal dynamics of Mediterranean shag in the Slovenian sea, in order to identify a new marine IBA. It also aims to improve protection of the local population of Mediterranean shag from accidental oil spills by preparing expert guidelines.
- **Ljubljanica connects (University of Ljubljana):** The project aims to improve the coherence of Natura 2000 sites by restoring the functionality of the Ljubljanica River as a corridor linking two sites. It will achieve this by removing barriers to fish migration, enhancing and restoring habitats, improving the water management infrastructure, and putting in place a water monitoring system. The target fish species are Danube roach, Danube salmon and striped chub.

### **Sweden - 7 projects (27.5 million)**

#### **LIFE+ Environment Policy and Governance (5 projects – 14.4 million)**

- **SLIDE IN (Lund University):** The SLIDE IN project will demonstrate how greenhouse gas emissions and air pollution can be reduced through the introduction of a unique SLIDE IN concept for public transport. This concept will be demonstrated on a specially equipped bus using new technology that enables charging the batteries while driving the vehicle - while “sliding in”. The bus will be charged by driving along electric lines currently used by a couple of trolleybuses in Landskrona. ***Direct or indirect relevance to climate change.***
- **PVCFreeBloodBag (Jämtland County Council/Jegrelius Institute for Applied Green Chemistry):** The objective of the PVCFreeBloodBag project is to demonstrate that public healthcare organisations and private plastics manufacturers can co-operate in removing barriers to a PVC-free blood bag. Another objective is to offer a material that manufacturers can use to replace PVC in other blood contact applications as well as in other medical applications.
- **Wastetofuel (Nordvästra Skånes Renhållnings AB):** WASTETOFUEL’s main objective is to demonstrate a holistic approach that used landfill biogas for the production of Liquified BioGas (LBG). It will use an innovative “CO<sub>2</sub> Wash” technology that enables the detection, extraction and conversion of landfill gas to LBG without contamination and driving quality issues. The project will also establish a user-friendly LBG filling station and LBG heavy vehicle tests and operations. ***Direct or indirect relevance to climate change.***
- **HYPER BUS (Business Region Goteborg AB):** The main objective of the HYPER BUS project is to demonstrate a pilot fleet of innovative public transport vehicles (buses) with outstanding performance in low energy consumption per passenger km and which will contribute in cutting emissions from public transport. This will be achieved by using hybrid buses with a newly developed plug-in technology, making it possible to run the majority of city bus lines in electrical mode. ***Direct or indirect relevance to climate change.***
- **HYDROFLUSS (SAKAB AB):** The HYDROFLUSS project will recycle hazardous waste in the form of filter cakes into a valuable and useful commodity, thereby lowering the demand for raw material by 50%. This will

### **LIFE+ Nature (2 projects – 13.1 million)**

- **ReMiBar (Swedish Transport Administration):** The overall aim of the project is to minimise migratory barriers in five larger water systems in the northern part of Sweden, where road crossings and dams have been some of the causes of decreasing populations of the targeted species. The conservation status of the Natura 2000 habitats and species will be improved, or maintained, through increased connectivity.
- **UC4LIFE (County Administrative Board of Skåne):** The conservation status of the thick shelled river mussel (*Unio crassus*) has been classified as 'unfavourable' at nine of the 12 project sites, according to the Article 17 assessments of the Habitats Directive (2001-06); the species is extinct at the other three sites. This project aims to strengthen the conservation status of this endangered freshwater mussel species and improve the ecological status of the rivers where it is found in Sweden.

### **United Kingdom - 5 projects (17 million)**

#### **LIFE+ Environment Policy and Governance (4 projects – 13.1 million)**

- **LiveWell for LIFE (WWF-UK):** The 'LiveWell for LIFE' project aims to reduce GHG emissions from the EU food supply chain. This will be achieved by demonstrating sustainable diets for EU Member States, promoting a supportive policy environment, developing tangible pathways for the implementation of sustainable diets, and disseminating this knowledge widely across the EU. Pilot actions in France, Sweden and Spain will help to improve and consolidate existing knowledge about links between food consumption and environmental sustainability, particularly with respect to climate change. *Direct or indirect relevance to climate change.*
- **EQual (Environment Agency):** By increasing industry's ability to produce, and consumer confidence to use, quality waste-derived products EQual will increase the range and volume of waste materials that undergo recycling in Europe and will support the creation of new waste markets. It will also demonstrate a methodology for making end-of-waste decisions by developing a new End of Waste e-tool and implementation guide designed to enable businesses to make their own end-of-waste decisions.
- **SEWeb (Scottish Environment Protection Agency):** This SEWeb project aims to develop an advanced environmental information system that will be used to expand access to the European Shared Environmental Information System (SEIS); improve the effectiveness of policy development and the targeting of environmental measures in order to maximise the delivery of environmental, social and economic benefits; and engage the public in the protection of the environment, thereby improving public understanding of environmental issues.
- **CLEAR Info (The Environment Agency of England and Wales):** The CLEAR Info project will improve the knowledge base for environmental policy by transforming disparate site and subsidiary data into influential information on parent companies operating across Europe and globally. The project will allow European regulators to share data across regulatory boundaries and build an understanding of corporate performance.

#### **LIFE+ Information and Communication (1 project – 3.9 million)**

- **Futurescapes (The Royal Society for the Protection of Birds - RSPB):**  
The main objective of the project is to encourage the development and implementation of landscape-scale conservation initiatives, involving many partners, in 34 priority areas across the UK. These areas, known as 'Futurescapes', cover a total area of 2.18 million ha and include populations of 3.83 million people.