



LIITE

Suomi: 4 hanketta (7,8 miljoonaa euroa)

Ympäristöpolitiikan ja -hallinnon Life+ -tuki (3 hanketta: 5,9 miljoonaa euroa)

IMPERIA (Suomen ympäristökeskus): Hankkeen yleistavoitteena on tuoda ympäristövaikutusten arviointiin ja strategiseen ympäristöarviointiin hyviä käytäntöjä ja menetelmiä monikriteerisestä päätöksentekomenetelmästä, jonka hankekumppanit ovat kehittäneet ja jota nämä ovat soveltaneet laajasti. Hankkeessa pyritään myös lisäämään yhteistyötä ja tietojenvaihtoa näiden menetelmien parissa työskentelevien sekä toisaalta osallistavan suunnittelun ammattilaisten (viranomaiset, suunnittelijat, konsultit ja tutkijat) välillä kaikkialla Euroopassa. Yhteydenotot: mika.marttunen@ymparisto.fi

CITYWATER (Helsingin kaupunki): Hankkeen yleistavoitteena on panna täytäntöön ja helpottaa ympäristön kannalta oleellisia ja kustannustehokkaita vapaaehtoisia vesistönsuojelutoimenpiteitä Itämeren alueen kaupungeissa ja kunnissa, jotta rannikkovesien tilaa voidaan parantaa. Yleisiä työskentelymenetelmiä parannetaan lisäämällä ympäristöön liittyvää tiedotusta ja tietoa alueen kaupungeissa ja kunnissa, jotta voidaan taata, että työ paikallisten vesistöjen vedenlaadun parantamiseksi jatkuu. Vapaaehtoista vesistönsuojelutyötä edistetään ja tuetaan Itämeri-haasteen periaatteiden mukaisesti. Yhteydenotot: lotta.nummelin@hel.fi

Urban Oases – Keidas (Helsingin yliopisto, metsätieteiden laitos): Hankkeen tavoitteena on vähentää haittoja, joita aiheutuu joille, järville ja Itämerelle huonoista käytännöistä kaupunkimaisemien rakentamisessa ja ylläpidossa. Hankkeessa pyritään osoittamaan maisematekijöiden (kuten ojien ja pienvesistöjen) arvo ekosysteemipalvelujen tarjonnassa ja tekemään siitä kvantitatiivinen arvio. Hankkeessa seurataan vaikutuksia veden määrään (tulvien torjunta), vedenlaatuun, kasvihuonekaasujen nieluihin ja lähteisiin sekä luonnon monimuotoisuuteen. Hankkeessa demonstroidaan näitä vaikutuksia, jotta voidaan luoda kokonaisvaltainen kuva siitä, kuinka kaupunkien viheralueiden suunnittelu vaikuttaa niiden ympäristötehtäviin. Hankkeessa myös esitellään, miten tällaisilla kestäville maanrakennusvaihtoehdoilla parannetaan niiden ympäristötehtävät huomioon ottaen hoidettujen vesistöjen virkistysarvoja ja tuetaan luonnon monimuotoisuutta. Yhteydenotot: outi.m.salminen@helsinki.fi

Luonnon monimuotoisuuden LIFE+ -tuki (1 projekti: 2,0 miljoonaa euroa)

ESCAPE (Helsingin yliopisto): Hankkeen tavoitteena on luoda kansallinen geenipankki uhanalaisille kotoperäisille kasveille. Geenipankki sisältää putkilokasveja ja sammaleita. Geenipankin sisältämien yksilöiden avulla säilytetään luonnon monimuotoisuutta ja niitä käytetään parantamaan suomalaisten kotoperäisten kasvien ex situ -suojelun tasoa. Yhteydenotot: marko.hyvarinen@helsinki.fi

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Austria 1 project (0.8 million)

LIFE+ Information and Communication (1 project – 0.8 million)

Saving Danube Sturgeons (WWF Austria): The 'Saving Danube Sturgeons' project aims to stop the overexploitation of the "critically endangered" Danube sturgeons in Bulgaria and Romania and thus to ensure the long-term survival of these species with their high natural and economic value. Contact: jutta.jahrl@wwf.at

Belgium 8 projects (44.5 million)

LIFE+ Environment Policy and Governance (3 projects – 16.5 million)

BIOGASTIL (AlcoEnergy): The objective of the project is to develop an innovative means of producing biogas by treating thin stillage. The beneficiary will integrate a prototype biogas production unit into an existing biofuel production unit and prove that the technique can be applied by other bioethanol plants under similar process conditions. **Relevant to climate change.** Contact: Olivier.vanrompaey@alcogroup.com

C2CGYPSUM (Eurogypsum-Association Européenne des Industries du Plâtre): The project aims to transform the gypsum demolition waste market to achieve higher recycling rates of gypsum waste, thereby helping to achieve a resource efficient economy. To do this, it will focus on the "deconstruction" rather than demolition of end-of-life buildings. As well as demonstrating the feasibility and advantages of deconstruction versus demolition, the project will incorporate of the processed gypsum into the manufacturing process. Contact: info@eurogypsum.org

SILEX (Dow Corning Europe S.A.): The overall objective of this project is to extend the lifetime and usability of constructions made of wood and/or cement, by applying environmental friendly silicon-based water repellents. This will reduce emissions of harmful volatile organic compounds by 80-90% in comparison with state-of-the-art concrete and reduce the use of biocides in the conservation of some wood species (e.g. pine, beech). Contact: j.lecomte@dowcorning.com

LIFE+ Nature (5 projects – 28 million)

Bocages (Réserves Naturelles RNOB-Natagora): This project is focused on improving 'bocage' landscapes (mixed woodland and pasture) and extensively managed hay meadows in Belgium's Wallonia region. The project is targeting 10 Natura 2000 network sites in the Fagne-Famenne district. Contact: joelle.huysecom@natagora.be

Herbages (Réserves Naturelles RNOB-Natagora): This project aims to improve the conservation status of 400 ha of priority grasslands. LIFE funds will be used to support 11 different grassland types, including six priority habitats. Conservation work will involve increasing the surface area of these 11 habitats and improving the functionality of the project areas' ecological network. Contact: joelle.huysecom@natagora.be

Most-Keiheuvel (Vlaamse Overheid - Agentschap voor Natuur en Bos): The aim of this project is to improve the conservation status of several habitats (inland dune grasslands and heathland, mires/bogs and alluvial forests) included in Annex I of the Habitats Directive. The project will take place in "De Most" and "Keiheuvel", two nature reserves in the upper reaches of the Grote Nete river in Antwerp Province. Contact: ant.anb@antwerpen.be

Life Hageland (Natuurpunt Beheer vzw): The core aim of this project is to restore a mosaic of Annex I habitat types including: wet grasslands, dry grasslands and heaths,

woodland, mires and ponds. A number of species listed in Annex II of the Habitats Directive will benefit from the project, which is located in central Belgium (in Hageland district, east of Leuven and in the Demer lowlands, between Aarschot and Diest). Contact: Tom.debeelde@natuurpunt.be

Vochtig Haspengouw (Natuurpunt Beheer vzw): The project targets three Natura 2000 network sites in the Mombeek and Demer valley with actions aimed at improving a complex of habitats listed in Annex I of the Habitats Directive. Specific project objectives will include: the large-scale restoration of a complex ground and seepage water system of national and international importance; the restoration of 10 ha of drier habitat types; and measures to increase the breeding habitat for populations of priority for conservation bird species. Contact: Tom.debeelde@natuurpunt.be

Bulgaria 3 projects (3.7 million)

LIFE+ Nature (3 projects - 3.7 million)

Lesser Kestrel Recovery (Green Balkans - Stara Zagora): The overall objective of the project is to support and strengthen the populations of the globally endangered lesser kestrel (*Falco naumanni*) in Bulgaria through a series of direct conservation measures and wider public involvement. **Contact:** ekmetova@greenbalkans.org

Salt of Life (Bulgarian Biodiversity Foundation): The main aim of the project is to establish a functional, efficient and sustainable infrastructure for water management and the control of the coastal lagoon in Atanasovsko Lake. This will provide long-term improvements to habitat conditions and enable adaptation to the effects of climate change. Contact: radostina.tzenova@biodiversity.bg

LIFE FOR KRESNA GORGE (Fund for Wild Flora and Fauna): The project aims to restore the populations of birds of prey and other emblematic species in southwest Bulgaria by reducing the direct persecution and other indirect threats and improving their nesting conditions and food supply. Its actions will maintain and enhance the habitats of endangered birds of prey, reptiles and mammals in the "Kresna Gorge" Natura 2000 site, and also promote a positive attitude to birds of prey in key sectors. Contact: pirin@fwff.org

Cyprus 2 projects (2.3 million)

LIFE+ Environment Policy and Governance (1 project – 0.9 million)

QuaResE (Department of Environment, Ministry of Agriculture, Natural Resources & Environment): This project aims to demonstrate alternative methods for the production of bricks, ceramics and cement using waste quarry slurry as a raw material. The goal is to reduce greenhouse gas emissions and the use of virgin raw materials, providing environmental and financial benefits for the industries concerned. Contact: mesimeris@environment.moa.gov.cy

LIFE+ Information and Communication (1 project - 1.4 milion)

BIOforLIFE (Dias Publishing House Public Ltd): This project's objective is to conduct an awareness-raising campaign focusing on aspects of biodiversity in Cyprus. It aims to make the concept of biodiversity better understood among the public in general and in particular among influential policy-makers or actors whose decisions/actions have an impact on biodiversity protection. Contact: karatziasa@dias.com.cy

Czech Republic 2 projects (12.1 million)

LIFE+ Environment Policy and Governance (1 project – 8.5 million)

HOxyGas (AGC Flat Glass Czech a.s.): This project aims to demonstrate a new type of production system for automotive flat glass that has a lower carbon footprint than comparable systems in terms of reduced fossil fuel consumption and reduced greenhouse gas emissions. The project's innovative process will enable the production of glass using only hot natural gas, oxygen, and a hot oxy-combustion technology. **Relevant to climate change.** Contact: Jiri.janql@agc.com

LIFE+ Nature (1 project – 3.6 million)

LIFE CORCONTICA (Správa Krkonošského národního parku): The project aims to create suitable conditions to ensure a "favourable" conservation status for grassland habitats and two species listed in Annex I of the Habitats Directive – the dwarf gentian (*Gentianella bohemica*) and bullhead (*Cottus gobio*) – in "Krkonoše", a Natura 2000 site in the north of the Czech Republic. Contact: tjanata@kmap.cz

Denmark 4 projects (9.0 million)

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

Stream of Usserød (Fredensborg Municipality): The project aims to reduce the risk of critical floods along the Stream of Usserød in Northern Sealand, with the goal of preventing damage and the associated economic, societal and human costs of flooding. It will do this by implementing a climate change adaptation toolkit, jointly developed by municipalities within the catchment area. The tool will include a hydraulic model, a hydraulic documentation tool, water meters and a joint flood risk map. **Relevant to climate change.** Contact: mahu@fredensborg.dk

LIFE+ Nature (2 projects – 6.5 million)

LIFE LAESOE (Nature Agency – Vendsyssel): The habitats and associated species on the Jutland peninsula in northern Denmark are vulnerable and under threat. The project's overall objective is to restore birdlife and *Laesoe* habitats of EU importance by establishing a sustainable grazing system and improving the conservation status of coastal habitats, dunes, wetlands and grasslands. Contact: vsy@nst.dk

RARE NATURE (Faaborg-Midtfyn Kommune): This project will primarily target the restoration and expansion in southern Denmark of priority wetland habitat types: raised bogs, calcareous fens and petrifying springs; and alkaline fens, and Northern Atlantic wet heaths with *Erica tetralix*. Contact: cpalu@faaborgmidtfyn.dk

LIFE+ Information and Communication (1 project -0.6 million)

SMART Natura (Videncentret for Landbrug - VFL): The overall objective of the project is to ensure the smooth and cost-effective implementation of Natura 2000 action plans, thereby benefitting biodiversity, natural amenities and also the residents of Denmark's Natura 2000 network sites. To achieve this goal, the project will involve landowners actively and positively in the implementation of the action plans. Contact: caa@vfl.dk

Germany 11 projects (44.5 million)

LIFE+ Environment Policy and Governance (5 projects – 10.5 million)

DRIP (RWE Deutschland AG): The overall objective of the project is to reduce carbon dioxide emissions by facilitating the integration of renewable energy sources and contributing to energy efficiency in the electricity grid by taking advantage of the potential of large commercial and industrial customers to be flexible in their energy consumption. The project is based around the concept of Demand Response - adjusting electricity demand to the grid requirements at a given point of time. **Contact:** thomas.theisen@rwe.com

MARSS (Rheinisch-Westfaelische Technische Hochschule Aachen): The main objective of the project is to build a demonstration plant in Trier to prove that there is an effective way to separate and reuse the organic fraction of municipal solid waste (up to 60% of MSW) as a renewable energy fuel. The project team will extend an existing low-tech mechanical-biological treatment plant into an innovative processing and recycling plant to produce biomass fuel. **Contact:** hornsbey@ifa.rwth-aachen.de

VCD Clean Air (Verkehrsclub Deutschland e.V.): The main objectives of the project are to bring the specific knowledge of NGOs and administrations to the European level to support the monitoring of the Air Quality Directive and to build an effective network of local and regional administrations and experts from environmental and consumer protection NGOs working on best practice models to reduce air pollutants from the transport sector in cities. **Contact:** heiko.balsmeyer@vcd.org

SuM (econcept, Agency for Sustainable Design): The 'Sustainability Maker' project plans to use the enabling opportunities of new media and other innovative 'bottom up' strategies to resolve urgent sustainability problems and to implement European environmental and social policy. Its overall goal is to create an online platform and network, the 'Sustainability Maker', which aims to become a powerful initiative that helps to solve sustainability-related problems. **Contact:** u.tischner@econcept.org

Waste air treatment (INEOS Paraform GmbH & Co KG): The project aims to use the new "plasma catalytic waste air treatment technique" on a large-scale for the first time. In the longer term it is hoped that the technique can be used as the basis of a re-evaluation of the emission standards and limit values in comparable production units, using the same, or similar, materials and processes. By using the new technique in its paraformaldehyde plant, the beneficiary aims to eliminate some 60-70 tonnes/yr of emissions of ammonia, formaldehyde, methanol and malodorous substances. **Contact:** horst.schmolt@ineosparaform.com

LIFE+ Nature (6 projects – 34.0 million)

MainMuschelkalk (Bayerisches Staatsministerium für Umwelt und Gesundheit): The project area of 4 640 ha encompasses the lower Franconian Muschelkalk limestone range along the Middle Main valley and the Fränkische Saale and Wern valleys in the counties of Bad Kissingen, Main-Spessart and Würzburg. The project's overall objectives are to protect and improve the outstanding dry grasslands and cultural landscapes in the region; to improve habitat connectivity between the open grassland habitats and the adjacent lightly wooded, thermophile forests; and to thereby also help conserve biodiversity. **Contact:** harald.lippert@stmug.bayern.de

Große Hufeisennase Bayern (Landesbund für Vogelschutz in Bayern e.V.): The project's objective is to strengthen Germany's sole known population of the greater horseshoe bat (*Rhinolophus ferrumequinum*), which is found in the Upper Palatinate, in

the east of Bavaria. This will be achieved by improving the species's foraging – including enhancing the structures and corridors between habitats where it is found. The project will also make these areas more accessible and purchase and lease land in order to create grazing areas. Contact: a-v-lindeiner@lbv.de

Grassland for meadowbirds (NABU-Naturschutzstation Niederrhein e.V.): The 'Lower Rhine Area' Natura 2000 site in North Rhine-Westphalia, is a special protection area (SPA) under the EU Birds Directive. The project's overall objectives are twofold: Firstly, the aim is to increase both the number of breeding and wintering birds, as well as of the area used by meadow bird species, and thus to contribute to the maintenance of a "good" conservation status of these species in the project area. In addition, the project aims to improve acceptance and knowledge of the Natura 2000 network in the mainly agricultural parts of the project area. Contact: info@nabu-naturschutzstation.de

LIFE LIMOSA (Stiftung Naturschutz Schleswig-Holstein): The project's primary objective is to improve the reproduction success of the black-tailed godwit (*Limosa limosa*) at core breeding sites in Schleswig-Holstein, Germany. The conservation actions will focus on controlling the factors influencing the decline of the local populations of the species, i.e. habitat deterioration and predator pressure. Contact: projektentwicklung@sn-sh.de

Hannoversche Moorgeest (Land Niedersachsen): The project's overall objective is to preserve, improve and/or bring to "favourable" conservation status, the habitats and species of the Lower Saxony Natura 2000 network raised bog sites of "Helstorfer", "Otternhagener", "Schwarze Moor" and "Bissendorfer Moor". The total size of the project area is 2 243 hectares. Contact: jutta.schiecke@mu.niedersachsen.de

"Schutz der Knoblauchkröte" (NABU-Naturschutzstation Münsterland e.V.): The project's overall aim is to preserve and improve the remaining populations of spadefoot toad (*Pelobates fuscus*) in Münsterland, North Rhine-Westphalia. Contact: info@nabu-station.de

Spain 47 projects (95.2 million)

LIFE+ Environment Policy and Governance (35 projects – 66.5 million)

I+DARTS (University of Oviedo): The project aims to demonstrate the technical and economic feasibility of using best available technologies for sustainable soil remediation at full-scale, thereby providing solutions for regions undergoing industrial restructuring. It expects to deliver a decision tool that will enable the selection of the most appropriate technique for remediation of specific contaminated sites. This transferable tool will also facilitate decontamination efforts in other areas. The project plans to pilot a variety of techniques for the remediation of soils contaminated by arsenic and heavy metals. Contact: clusteremacc@uniovi.es

REACHnano (Instituto Tecnológico del Embalaje, Transporte y Logística): The project aims to provide industry and other stakeholders with easy-to-use tools to support the risk assessment of nanomaterials along their lifecycle. The project seeks to consolidate the knowledge base on nanomaterials-related risks and risk assessment and will develop a complete selection of standard testing models to be used in the risk characterisation process for nanomaterials and a complete description of the current exposure scenarios across the nanomaterials lifecycle. Contact: itneur@itene.com

BIOMOMI (Asociación de Investigación de la Industria Textil): The principal aim of the project is to validate and demonstrate a new technology that allows the real-time monitoring and quantifying of aerobic micro-organisms present in the water of a hydraulic

system, and the subsequent correct dosage and constant optimisation of an adequate concentration of biocides necessary for water treatment (dosing unit). Contact: rlopez@aitex.es

CERAMGLASS (Agencia Estatal Consejo Superior de Investigaciones Científicas):

The general objective of this project is to reduce the environmental impact caused by the thermal treatment of ceramics. It aims to demonstrate the successful application of an innovative laser-furnace technology that has already been developed by the beneficiary and which has shown excellent results on planar ceramics and glass at laboratory-scale. It will have the effect of reducing the consumption of raw materials; replacing toxic starting materials that will minimise the production of CO₂ and other greenhouse gases; as well as reducing the energy consumption of the process. **Relevant to climate change.** Contact: xerman@unizar.es

IBERWASTE (ZURKO RESEARCH S.L): The main objective of this project is to demonstrate the technical and economic feasibility of innovative and environmentally friendly disposal and valorisation systems for Iberian pig wastes, that will turn valueless wastes into inputs for agriculture. To achieve this overall goal, the project aims to design, optimise and scale-up a protocol providing instructions covering collection, classification, disposal and preservation techniques for the different sorts of pig wastes. Contact: sabina@zurkoresearch.com

ECORAE (Universidad de Vigo): The project intends to show that re-use of waste electrical and electronic goods (WEEE) is a technically, economically and environmentally feasible alternative to recycling. The project will characterise and compare the environmental impact of different finishing processes of WEEE. It will then define a process of preparing WEEE for re-use and identify the resources needed to implement this in practice. It plans to conduct four demonstrations of the process of preparing computer equipment for re-use to analyse the feasibility of the process. Contact: jvilan@uvigo.es

FoodWaste Treatment (Parque Científico y Tecnológico de Gijón): This project aims to promote and drive an innovative concept that will enable sustainable management of packed and unpacked food waste across the EU. It seeks to demonstrate and promote a new technologically and economically valid food-waste transformation process based on improved collection, separation and valorisation of fractions. It will define new strategies for the optimisation of collection and reception procedures for food waste, to be implemented at waste generation points. This will include influencing behavioural change and political will. It will then demonstrate and promote an innovative technology for de-packaging that aims to completely separate organic and inorganic fractions. Contact: a.dominguez@grupobfc.com

aWARE (Centro Tecnológico del Agua (CETAQUA)): This project aims to promote the re-use of reclaimed water within water management organisations. To this end, the project hopes to demonstrate the technical feasibility and economic and environmental advantages of two different technologies as advanced treatments for wastewater and reclamation facilities. The project proposes an innovative hybrid process using membrane bioreactors, powdered activated carbon and nanofiltration to enable re-use of wastewater. Contact: oferrer@cetaqua.com

IRRIGESTLIFE (Viveros Perica S.A): This project aims to demonstrate the effectiveness of a smart irrigation system that meets the actual needs of a city's green spaces, whilst minimising water consumption, through the avoidance of leaks, over-watering and human mistakes. The irrigation network will be improved by creating the capacity to identify anomalies in irrigation requirements and irrigation operations on site in real time through a remote management system integrated into the municipal GIS of the city. Contact: asopelana@viverosperica.net

IES (Fundació Privada Barcelona Digital Centre Tecnològic): The main objective of the project is to develop a web platform for training and supporting farmers in developing personalised irrigation schedules. This 'Irrigation Expert Simulator' aims to optimise irrigation water use by farmers and achieve the most efficient and beneficial use of fresh water. The project will develop a set of simulation and decision-support tools within a web platform that will enable farmers, technicians and experts to interact with an agronomical knowledge-base to get irrigation recommendations for case-specific scenarios. Contact: ftersa@bdigital.org

GREENROAD (Construcciones Obras Públicas San Emeterio S.A.): The project aims to provide achievable examples of how the road sector can become greener and to demonstrate sustainable programmes of public works. It specifically aims to show the technical and economic viability of using at least 90% recycled asphalt mixtures in road construction, by using eco-mixtures composed of steel slag, wastes from pilot road milling and end-of-life tyres. At the same time, it expects to revalorise industrial waste from the region that otherwise entails high environmental and economic costs. Contact: mariajose@copsesa.com

REMEMBRANE (Gestión Integral del Agua S.A. - AQUALIA): The project aims to prolong the lifecycle of membranes in the reverse osmosis method of water treatment through an innovative technology to improve membrane recovery and enable re-use. This seeks to avoid waste, reduce costs and improve the overall efficiency of the desalination process. A mobile demonstration plant will be established to develop diverse mechanical and chemical treatments for any reverse osmosis (RO) membranes recovered at end-of-life. Contact: frogalla@fcc.es

VALORLACT (Gobierno Vasco - Dirección de Innovación e Industrias Alimentarias): The project aims to demonstrate an innovative methodology for recovering and transforming whey into valuable products in a hygienic manner. It will then design a collection and processing system for whey, including a sufficient number of Basque dairies to make one or more processing plants economically viable. The project will complete an inventory of all whey generated in the target region and characterise its different types, including nutritional and sanitary parameters. It will then define an action plan to valorise all the waste whey. Contact: lj-telleria@ej-gv.es

ECOFLEXOBAG (AIDO - Industrial Association of Optics, Colour and Imaging): The project aims to reduce the negative environmental impact of bags for commercial use (e.g. plastic shopping bags) during their entire lifecycle. Its main objective is to develop and demonstrate an innovative methodology that will help manufacturers – particularly small and medium-sized enterprises – to design and produce environmentally sustainable bags. Best practices for design and production will be identified and established together with systems for monitoring these processes. The best practices will then be incorporated into an on-line tool that will allow bag manufacturers to implement them in the most effective way. Contact: otri@aido.es

WATOP (Centro Tecnológico L'Urederra): The main goal of this project is to develop a semi-industrial pilot plant to demonstrate a new purification system for remove pharmaceutical and personal care products (PPCPs) from wastewater, with an 82-94% removal target. The project aims to show that a membrane filled with innovative nano-resins of cross-linked cadmium and sodium polyacrylate will remove PPCPs and other pollutants from water in a highly effective and efficient way. Contact: claudio.fernandez@lurederra.es

BIOXISOIL (Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas - Ministerio de Ciencia e Innovación): The project aims to develop a new concept for soil and groundwater remediation that can achieve both reduced soil pollution and improved soil functionality. It will combine well-known soil remediation

technologies in a new way to produce a robust, efficient and environmentally friendly solution to addressing organic contamination. The project specifically plans to combine biological processes such as phytoremediation and biodegradation with in-situ chemical oxidation in a new, full-scale process to be demonstrated on contaminated industrial and military sites. Contact: olga.escolano@ciemmat.es

RIVERPHY (Dirección General de Planificación, Evaluación y Control Ambiental - Consejería de Agricultura y Agua de la Región de Murcia): The project aims to demonstrate the use of phytoextraction techniques to successfully rehabilitate a stretch of the contaminated Guadalentín River, downstream from the industrial and urban areas of Lorca. The project plans to use native accumulator plants - which will be periodically removed from the system and replaced - to absorb heavy metals and excess nutrients from the soil. In addition, techniques of bioengineering and landscape integration will be used to protect slopes and restore native communities of flora and fauna. Contact: angel.fazcano@upct.es

TERUEL BALANCE+POSITIVO (Ayuntamiento de Teruel): The project aims to tackle some of the environmental threats facing the important historico-cultural town of Teruel, particularly in the face of climate change. It hopes to achieve environmental, cultural and socio-economic benefits for the locality and provide a positive example for other historic towns in Europe. Particular focus will be on the recovery of former argyle mines that were used to build Mudéjar churches and towers and now form an unusual and important cultural landscape. The project will conduct an assessment of quarry cultural landscapes. It will also introduce cycle lanes to connect mines with the urban centre to increase the use of sustainable transport in Teruel and help mitigate climate change. Contact: florencio.conde@teruel.net

INDUFOOD (Asociación Nacional de Fabricantes de Conservas de Pescados y Mariscos - Centro Técnico Nacional de Conservación de Productos de la Pesca): The project's main objective is to reduce emissions of greenhouse gases from thermal processes in the seafood processing industry. It plans to design, develop and test a new induction system, which would provide an alternative source of heat, avoiding the use of fossil fuels. As well as building the pilot plant for the induction system, the project will develop software to calculate the carbon footprint of different functional units. **Relevant to climate change.** Contact: fsabin@anfaco.es

OPERATION CO2 (Universidad de Valladolid): The overall objective of this project is to demonstrate the economic viability and environmental validity of agroforestry carbon sequestering projects in Europe. The first pillar of this project will promote active nature conservation and carbon management in natural forests over an area of 4 500 ha. Through implementing a series of targeted forest and carbon actions, the goal is to achieve the long-term improvement of carbon sequestering in natural forests. The project thus hopes to deliver the certification of carbon credits for the forest area that will subsequently be released on the Voluntary Carbon Offsets Market. The second pillar of the project will involve the transformation of two naturally degraded areas - each covering 25 ha - into integral agroforest ecosystems. **Relevant to climate change.** Contact: opeuva@funge.uva.es

PLATAFORMA CENTRAL IBERUM (Urban Castilla La Mancha, S.L.): This project aims to create the first industrial estate in Europe to be based on the principles of sustainable development. It plans to demonstrate a new approach to the development of industrial areas, integrating all the issues involved from a sustainable development perspective, including all environmental impacts. The project will focus specific attention on a number of key issues such as: energy savings, creation of woodland areas and management of the water cycle. Contact: nmunoz@urbancm.com

MASTALMOND (Asociación de Investigación de la Industria del Juguete, Conexas y Afines): The aim of the project is to create and test at pre-industrial level new masterbatches - colour concentrates - based on biodegradable plastics and using a formula containing a high percentage of almond shell, a natural waste material. It ultimately hopes to reduce negative environmental impact from plastics. The project will focus initially on the technical requirements of two traditional industrial sectors, toys and auxiliary furniture. However, the hope is that results achieved will be extended to other industrial sectors, helping to increase sustainability. Contact: aiju.opi@gmail.com

ENERING (SEREMUR): The overall objective of the project is to demonstrate sound environmental and economically feasible solutions to reduce CO₂ emissions in industrial estates. Some work will be based on the design or adaptation of buildings. Other strategies will include use of passive, renewable and/or residual energy to meet some of the communal electricity requirements of the estates. The project will not only include individual solutions but also management actions affecting a whole industrial estate. **Relevant to climate change.** Contact: rita.lopezalascio@info.carm.es

EDUCO (Fundació CTM Centre Tecnològic): The project seeks to demonstrate that used cooking oils (UCOs) are a technically and economically feasible feedstock for bio-fuel production. Thus, it ultimately hopes to contribute to the long-term replacement of fossil fuels by bio-fuels. The main objective of the project is to design and build a pilot plant for the treatment of UCOs, which will then be used for biodiesel production through cavitation technology. Contact: international@ctm.com.es

MINAQUA (Fundació Ramón Noguera): The project aims to demonstrate experimentally that by using an integrated management system and innovative, environmentally-friendly technologies, the impact on water resources of an urban activity such as commercial car washing can be substantially reduced. The project will specifically set out to provide a technical and environmental solution that minimises consumption of clean piped water and reduces the volume and pollutant load of wastewater generated by car washes. **Contact:** comunicacio@fundaciornoguera.com

AIRUSE (Agencia Estatal Consejo Superior de Investigaciones Científicas): The overall goal of the project is to develop, demonstrate and adapt cost-effective and appropriate measures to ensure better air quality in urban areas. It aims to identify the most effective mitigation measures to reduce particulate matter levels within acceptable limits and thus to contribute to meeting current and future EU targets around air quality. **Contact:** xavier.querol@idaea.csic.es

BIOLCA (EKOTEK - Ingeniería y Consultoría Medioambiental S.L.): The main objective of the project is the demonstration of an innovative web-based tool that can identify the best options for the development of biofuel use in the transport sector. It hopes thus to favour the long-term transition from petrol to alternative fuels in the sector and contribute to achieving significant environmental and human benefits. The tool will use the lifecycle assessment methodology to analyse different scenarios of development, production and use of biofuels in transport. It will enable comparison in order to identify those options that offer a better performance in terms of environmental, social and economic impacts. **Relevant to climate change.** Contact: jagascon@ekotek.es

Wooldryscouring - WDS (Asociación de Investigación de las Industrias del Curtido y Anexas): This project aims to demonstrate an innovative process of "Wool Dry Scouring" based on closed-loop processing and total waste recovery. It hopes to demonstrate that it is possible to achieve quality improvements in clean wool at the same time as reducing wastewater generation whilst recovering wool grease (lanolin) and wool dust from raw wool. This will be done by means of solvent extraction and purification technologies in a prototype dry process. It is expected that this will improve the yield of

recovered by-products from wool treatment in comparison with traditional processes and present a cleaner wool for the aqueous scouring process. Contact: jccastell@aiica.com

ROEM-plus (Fundación Instituto Tecnológico de Galicia): The main objective of the project is to demonstrate the efficiency and viability of an innovative approach for integrated management of hydrographic basins to prevent eutrophication and algal blooms. It seeks to bring reservoir management in line with the strategic management trends that can be clearly recognised in other environments, notably regarding marine ecosystems. The project will deploy cutting-edge remote sensor networks, with high temporal and spatial resolution within the whole geographic area directly and indirectly connected to the reservoir. This will serve to quantify and localise the origin of pollutant and nutrient discharges in the whole drainage hydrographic basin and assess the impact of use of territory, forest, crop and livestock management. Contact: afidalgo@itg.es

H2ALRECYCLING (JAP Energéticas y Medioambientales S.L.): The project aims to design and construct a pilot plant to obtain hydrogen for use as an alternative clean fuel using a new more environmentally friendly process. It seeks to exploit the reaction between aluminium and waste ammonium hydroxide from other industrial processes, which generates hydrogen as a by-product. It hopes to optimise the efficiency of the process for powering a fuel cell. **Relevant to climate change.** Contact: jap@fundacioninvestigacion.org

SIRENA (Inkoa Sistemas SL): This project aims to improve understanding of risks associated with nanomaterials through the demonstration and testing of a methodology to simulate the unintended release of nanomaterials from consumer products. It will replicate different lifecycle scenarios to be adopted by a wide number of industrial sectors to get the necessary information for exposure assessment. Contact: idoia@inkoa.com

SEAMATTER (Asociación de Investigación de la Industria Textil): The project aims to demonstrate and validate the re-use of coastal algae and seaweed accumulations as raw material in the composites industry. It seeks to demonstrate and implement wet-laid technology for converting these materials into reinforcement structures for composites products. It also hopes to improve marine waste collection systems. Contact: rlopez@aitex.es

SaveCrops-LIFE (Agroalimentary Technology Centre of Extremadura): The project aims to develop a new environmentally friendly biocide from crop and whey waste emerging from the agriculture and agro-alimentary sector. It will conform with eco-design methodology, especially in the stages of procurement and production. The project will work to validate the ecological biocide on numerous types of cultivated products, especially tomato, vine and olive crops, delivering effective control against threats to plants, avoiding pollution to soil and water from traditional pesticides and valorising agro-alimentary waste products that are currently creating environmental problems from inappropriate disposal. Contact: jllerena@ctaex.com

The Autonomous Office (TSK Electrónica y Electricidad S.A.): The project aims to construct a green, energy-autonomous office building that is able to operate without the need to connect to the electricity grid. It aims to integrate principles of bioclimatic design and renewable energy technologies to minimise the environmental footprint of the construction and its users. It thus hopes to provide a sustainable model in terms of energy demand and its contribution in reducing CO₂ emissions. Contact: ricardo.gonzalez@grupotsk.com

sigAGROasesor (Instituto Técnico y de Gestión Agrícola S.A.): The main objective of the project is to help farmers and farm managers to achieve the most efficient and sustainable exploitation of their crops, putting at their disposal all the available technical knowledge, through a free and self-managed telematic online tool, capable of displaying

customised recommendations in real time for each specific area of cultivation on the basis of a series of specific variables and values. Contact: alafarga@itga.com

LIFE+ Nature (7 projects – 14.5 million)

TREMEDAL (Gestión Ambiental, Viveros y Repoblaciones de Navarra): The overall intention of this project is to improve the conservation status and resilience of the peaty and wet habitat types in the project locations. It will conduct restoration actions and look to implement good management measures to reduce the threats that negatively impact on the habitats. The project involves a group of inland wetlands in Northern Iberia that are included in the Natura 2000 network or are important for the connectivity of the network sites. Contact: asun.berastegi@gavrn.com

TAXUS (Centre Tecnològic Forestal de Catalunya): The broad aim of this project is to contribute to conservation of yew habitats in the north-east Iberian peninsula through specific forestry measures and environmental education activities. **Contact:** europa@ctfc.es

PAF NATURA 2000 SPAIN (Ministerio de Medio Ambiente, y Medio Rural y Marino): The project aims to improve the capacity for financing and managing the Natura 2000 network in Spain through the preparation and implementation of a Prioritised Action Framework. This framework will provide a coherent view of the integrated actions required for management of sites designated for the network and enable the use of different financial instruments for specific actions. **Contact:** MGPerez@mma.es

LIFE Renaix El Bosc (Generalitat Valenciana): This project ("rebirthing the forest") seeks to improve the conservation status of Mediterranean Tilio-Acerion forests in the Tinença de Benifassà and Alt Maestrat SCIs. The aim is to restore 36 plots, covering 250 ha of Tilio-Acerion habitat, including 100 ha under private ownership. Forest structure improvement actions are foreseen across 200 ha, with specific actions to reduce the density of pine forest on 33 ha. Pilot management actions will also be developed and tested over 6 ha, with the aim of identifying good practice. It is hoped that 10 ha of this habitat will regenerate naturally. Contact: marzo_ant@gva.es

DESMANIA (Fundación Biodiversidad): The main project objective is to change the negative population trend of an endemic species in the Iberian Peninsula, the Iberian Desman (*Galemys pyrenaicus*). An in-depth study of the species will underpin conservation actions in several Natura 2000 network sites designed to improve the status of the key habitats for the Iberian Desman. The involvement of the relevant administrative bodies and stakeholders will be an important element of the project. Contact: itorres@fundacion-biodiversidad.es

MedWetRivers (Sociedad Pública de Medio Ambiente de Castilla y León S.A): The project will set the basis for a coordinated management of all of the wetland/riverine Natura 2000 sites in the region. The project also intends to harmonise the implementation of EU Birds and Habitats directives with the implementation of the Water Framework Directive, to avoid duplication and overlapping of actions. Contact: teresa.gil@somacyl.es

Ordunte Sostenible (Diputación Foral de Bizkaia): The aim of the project is to restore/maintain a "favourable" conservation status for habitats and species listed in the Habitats Directive in "Ordunte", a Natura 2000 network site in the Basque Country. In particular, the project aims to restore a blanket bog, introduce livestock management guidelines for sustainable pasture use, encourage natural woodland recovery and promote more widespread public use of the area to aid socio-economic development. Contact: ordunte@ikt.es

LIFE+ Biodiversity (2 projects – 9.2 million)

bioDEHESA (Junta de Andalucía - Consejería de Medio Ambiente): This project aims to promote sustainable, integrated management of *dehesas* (an agrosylvopastoral system and cultural landscape of southern and central Spain and southern Portugal) by demonstrating and disseminating action plans that deal with the main challenges involved in their conservation. The project intends to create a network of 40 pilot sites that will trial activities and management practices to enhance *dehesa* conservation and biodiversity. Contact: dgdsia.cma@juntadeandalucia.es

CONSERVASTRAGALUS-MU (Universidad Politécnica de Cartagena): The principal objective of the project is the recuperation and conservation of Garbancillo de Tallante (*Astragalus nitidiflorus*), a priority (for conservation) plant species that is endemic to Cartagena in the Murcia Region of Spain. The beneficiary aims to increase understanding of the species, strengthen existing populations and put in place plans to ensure its long-term conservation in the region. Contact: juan.martinez@upct.es

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

Conéctate a la Red Natura (Sociedad Española de Ornitología): The main aim of the project is to improve awareness of the Natura 2000 network in Spain and contribute to the appreciation of its maintenance through targeted actions. The project also aims to provide training for key actors in the conservation of the Natura 2000 network on the legal obligations that derive from the Birds Directive and Habitats Directive. Contact: aruiz@seo.org

BIGTREES4LIFE (Fundación Félix Rodríguez de la Fuente): The general objective of this project is to improve the conservation of large trees and mature forests in the Spanish Natura 2000 network and the Spanish Network of Natural Protected Areas. These area includes 1 040 municipalities with an overall population of some 17 million (38% of the total Spanish population). **Contact:** info@cesariipalacios.com

INFONATUR 2000 (Junta de Extremadura): The project aims to further the implementation of the Natura 2000 network. Specifically it aims to spread knowledge about the Natura 2000 network, its biodiversity and natural resources through a media campaign; change attitudes among different groups affected by the Natura 2000 network; and create opportunities for the socio-economic development of Natura 2000 sites through sustainable tourism and outdoor activities. Contact: mjesus.palacios@juntaextremadura.net

France 13 projects (36.5 million)

LIFE+ Environment Policy and Governance (11 projects – 33.4 million)

Biovalsan (Lyonnaise Des Eaux France): The project aims to demonstrate how the biogas produced by a wastewater treatment plant can be separated for re-use of its components to enhance the energy efficiency of the plant, reduce greenhouse gas emissions and develop circular economic chains. It will use a cryogenic distillation technology, which it will optimise during project implementation. **Relevant to climate change.** Contact: arnaud.rostan@lyonnaise-des-eaux.fr

BIOTTOPE (Veolia Environnement Recherche et Innovation SNC): The project aims to validate an innovative wastewater treatment system combining biological processes, biological monitoring and tailored physical-chemical technologies to generate effluents free from pollutants causing biological effects. The project will implement, test and validate a

new prototype water treatment technology at semi-industrial scale based on activated carbon adsorption and on an accelerated settling step to remove micro-pollutants that are not removed by conventional treatment systems. Contact: luis.castillo@veolia.com

LOOP (Rhodia Operations S.A.S.): This project aims to recover rare earth (RE) elements in waste instead of sending them to landfill. In particular, it aims to validate the full potential of innovative, environmentally friendly recycling of the RE elements contained in phosphorescent powders of fluorescent lamps. It will aim to demonstrate that it is possible to recycle 1 500 tonnes/yr of phosphorescent powder wastes, matching the amount of this type of waste generated each year in Europe. **Contact:** frederic.carencotte@eu.rhodia.com

MAC EAU (Conseil Général de la Gironde): The project's main objective is to preserve groundwater resources by reducing pumping in the most important aquifer in the Gironde. It aims to distribute water-saving equipment kits to households and public buildings and to gain a better understanding of the rationale for consumption by studying the impact this equipment has on consumption patterns. The project will carry out actions to optimise performance of drinking-water distribution networks and it will inform and involve stakeholders, households and local authorities, to encourage them to change consumption patterns, thus preserving water resources. Contact: n.briche@cg33.fr

SeineCityPark (Conseil général des Yvelines): This project aims to demonstrate how the socio-economic development of an urbanised territory of 1 700 ha can be combined with the improvement of local environmental conditions through the creation of green urban infrastructure. It will seek to rehabilitate a neglected quarry and restore it as green open space by creating a 113 ha ecological and recreational park called Bords de Seine Park. It will create an active 1.4 km strip where an ecological transition will be implemented between park and city. Contact: ichatoux@yvelines.fr

WASTE ON A DIET (Syndicat de Besançon et sa région pour le traitement des déchets): The project aims to deploy solutions to facilitate full implementation of a "pay-as-you-throw" scheme in Besançon. It aims to address the particular challenges of collective housing and rural areas to reduce quantities of waste and increase local treatment and recycling of organic waste. The project will establish a team to assess waste management practices at the entrances of each collective housing residential block. They will investigate quantities of waste, standards of cleanliness and extent of poor waste practices. The team will suggest ways and tools by which the city council, landlords, waste collection and composting organisations can improve their interventions to have the most positive impact on household waste management practices. Contact: christine.sautenet@sybert.fr

CDW-recycling (Sud Est Assainissement): The project aims to use innovative technologies to find solutions to the problems currently limiting the recycling and re-use of construction and demolition waste (CDW) materials. It will establish a pilot plant that should be capable of sorting CDW pieces of 8-30 mm and of 30-80 mm at industrial scale. The new process should effectively demonstrate that it is possible to recover large quantities of CDW and with less environmental impact than using traditional management techniques. Contact: jean-charles.berard@veolia-proprete.fr

ZENITTHYS (Thomson Broadcast): The project aims to develop and demonstrate an innovative "green" hybrid telecoms-broadcast transmitting station concept that capitalises on the recent advances in electronic devices, signal processing and renewable technologies to achieve major environmental gains. The project aims to reduce drastically the carbon footprint of telecoms-broadcast transmitting stations by reducing energy consumption, using renewable energy sources and reducing the number of relay stations. **Relevant to climate change.** Contact: jerome.david@thomson-broadcast.com

WEEELIBS (CRITT Matériaux Alsace): The project will use laser technology (LIBS) to analyse waste electrical and electronic equipment (WEEE) to enable it to be sorted and separated so that suitable materials can be reclaimed for recycling. A demonstration plant will be set up to validate the efficiency of the system. The project will set out to show that laser technology provides an excellent means of separating materials from small electronic parts, thin wire and thin-plating materials, where existing techniques are not effective. Contact: m.boudinet@critt.fr

SUSTAIN-ICT (Pôle Numérique): The project aims to provide energy-saving solutions to landlords and residents of urban areas by means of ICT systems that are designed to reduce energy use, decrease water consumption and reduce the carbon footprint from urban commuting. The project will aim to create a large, overall broadband IT system that allows deployment of a range of ICT services through a portal called "the kiosk". **Relevant to climate change.** Contact: wtoma@pole-numerique.fr

Move4earth (RHODIA OPERATIONS S.A.S.): The project will demonstrate an integrated process for recycling and re-using silicone-coated polyamide fabrics into new materials with no significant loss in material properties. The first objective will be to validate this new process and demonstrate its feasibility at pre-industrial scale, which means achieving acceptable final product quality and unit productivity. The second objective will be to increase the economic and environmental performance of the technology by investigating appropriate ways of re-using the silicone coating, a by-product of the recycling process, which represents 10% of the polyamide fabrics. Contact: richard.bourdon@eu.rhodia.com

LIFE+ Nature (1 project – 2.1 million)

LIFE FRENCH NATUR 2MIL (Conservatoire Rhône-Alpes des Espaces Naturels): This project aims to carry out restoration and protection measures for various habitats supporting bat, gull and raptor species within four Natura 2000 network sites in south-east France - Chambaran and Mont Caume (SCIs) and Garrigues and Aspretto (SPAs). A key aspect of this habitat and species conservation work will involve integrating Natura 2000 conservation issues into the management and use of military land. **Contact:** nicolas.greff@espaces-naturels.fr

LIFE+ Information and Communication (1 project – 1.0 million)

COLLECT + (Distribution CASINO France): The project will engage in targeted communications campaigns about the management of waste electrical and electronic goods and batteries and accumulators. The project plans to encourage customers of the Casino supermarket chain in France to return waste of these kinds to the appropriate boxes at participating stores for more efficient recycling. Consumers will also be informed on the impact of this behaviour on both the environment and their health. Contact: taouizerate@groupe-casino.fr

Greece 8 projects (13.7 million)

LIFE+ Environment Policy and Governance (6 projects – 10.0 million)

MECM (Hellenic Ministry of Defence): With the aim of improving the environmental and energy performance of Greek military services and installations, the project will implement an Energy Management System in three main military facilities: the naval station at Souda Bay, the Larissa airbase, and the Triantafilidi army camp in Xanthi. **Relevant to climate change.** Contact: liasmanolis@hotmail.com

oLIVE-CLIMA (Development Agency of Eastern Thessaloniki's Local Authorities - ANATOLIKI S.A.): The main aim of the project is to trial the introduction of new cultivation practices for tree crops in order to find a cost-effective means of mitigating and adapting to climate change. The project will focus specifically on olive-producing areas in Greece, investigating the potential of these areas to increase carbon sequestration by soils, and to reduce greenhouse gas emissions. **Relevant to climate change.** Contact: environment@anatoliki.gr

Waste2Bio (National Technical University of Athens): The aim is to design, develop, test, optimise and evaluate an innovative pilot-scale plant for the production of bioethanol from biowaste via bioconversion. This pilot plant will be able to convert more than 70% of the biowaste feed into second-generation bioethanol. Contact: mloiz@chemeng.ntua.gr

Recycling@Home (Municipal Development Company of Amaroussion): The project will promote the sustainable management of Municipal Solid Waste by fostering recycling and re-use at home. It will do this by developing and testing an innovative, prototype system for the separate collection and minimisation of the volume of recyclable household waste, and the production of clean recovered materials of high quality that can be reintroduced in the market. The proposed technology is expected to minimise the storage and transportation of recyclable waste, thus reducing both greenhouse gas emissions and the environmental risks related to unsustainable waste management practices. Contact: european@maroussi.gr

AgroStrat (National Agricultural Research Foundation-Soil Science Institute of Athens): This project will develop and demonstrate an integrated approach for the sustainable management of intensively cultivated areas in the Mediterranean, such as the pistachio producing areas on the island of Aegina. It will identify and characterise practices that contribute to soil degradation; define soil quality indicators; and develop a software tool so that farmers and farmers' networks can monitor soil quality. Contact: mdoula@otenet.gr

FLIRE (National Technical University of Athens): The aim of the project is to introduce a combined, effective and robust risk-assessment and management system for both flash floods and forest fires, using state-of-the-art tools, technologies and methods, and taking into account prevention, adaptation and interaction issues. To this end, the project will develop near real-time flood and forest fire risk assessment and management tools that are linked to a Weather Information Management Tool, include an early warning system and provide a common decision-support system for integrated flood and forest fire management. Contact: mimikou@chi.civil.ntua.gr

LIFE+ Nature (2 projects – 3.7 million)

Lesser Kestrel Thessaly (University of Thessaly): The overall project objective is to achieve a 15% increase in the population of the lesser kestrel (*Falco naumanni*). Three SPA sites in Greece account for more than 75% of the country's total population of this endangered raptor and 6% of the estimated EU population. In Thessaly, the species is threatened in particular by the degradation of foraging areas, which in turn reduces the amount of food and, therefore, breeding success. Contact: asfoug@agr.uth.gr

FOROPENFORESTS (Hellenic Society for the Protection of Nature (HSPN)): The main aim of the project is to implement a conservation management system for the forests and forest openings in the two mountainous Natura 2000 network sites in central Greece: the National Forest Park of Oiti, "Ethnikos Drymos Oitis", and "Oros Kallidromo". Contact: president@eepf.gr

Hungary 2 projects (13.6 million)

LIFE+ Nature (2 projects - 13.6 million)

Steppe lake grazing (Hortobágy Nature and Gene Conserving Non-profit Ltd.):

The primary objective of the project is to eliminate processes having an unfavourable and detrimental impact on 3 616 ha of important habitats in the Hortobágy area. These processes include: draining of natural rainfall; diversion and blocking the direction of the flow of natural water bodies; a dramatic decline in the size of the steppe pans; physical barriers that divide and decrease the size of continuous open habitats leading to predation pressure; loss of biodiversity; decline in numbers of grazing domesticated animals; and a lack of grazing with a conservation purpose. **Contact:** juhaszt@hortobagy.eu

REDFOOT (MME BirdLife Hungary): The project seeks to establish the long-term sustainable conservation management of nesting and feeding sites of the red-footed falcon (*Falco tinnunculus*) in the Carpathian basin. It also aims to prevent the extinction of the species in Slovakia by improving nesting and feeding opportunities and reducing the impact of negative factors and to create suitable conditions in Slovakia for the species to spread from Hungary and enable the connection of populations. **Contact:** palatitz.peter@mme.hu

Ireland 1 project (2.2 million)

LIFE+ Environment Policy and Governance (1 project – 2.2 million)

Burren Tourism (Clare County Council): The project aims to strengthen the integration of tourism and natural heritage, reconciling tourism development with conservation of biodiversity and cultural heritage in the Burren area of Ireland (an internationally renowned karst limestone area that supports a rich and diverse selection of flora and fauna, archaeological monuments and traditional cultural practices). **Contact:** cgleeson@burren.ie

Italy 41 projects (78.1 million)

LIFE+ Environment Policy and Governance (24 projects – 42.4 million)

Low resources Low energy (Majorca S.p.A.): The objectives of the project are to drastically reduce the use of non-renewable resources by manufacturing a new family of ceramic-tile-like wall and floor coverings. The project will implement a process capable of recycling waste, such as exhausted lime and to convert waste into coverings using an innovative waterless recycling practice for glass-based waste, lime and natural stone cuttings. This process will help to reduce water and energy consumption in the manufacturing of wall and floor coverings. **Contact:** corrado.m@majorca.it

COSMOS-RICE (Centro Servizi Multisetitoriale e Tecnologico): The project will develop a method for treating fly ash. It will derive silica gel from rice husk ash, and it will use the gel to make fly ash from municipal solid waste inert, via a chemical process. In this way it will demonstrate that using rice husk ash as a precursor for silica leads to lower environmental impacts and economic costs, and that the silica gel can be used to treat fly ash. It will also evaluate the performance of the new materials obtained by the treatment, and the markets for the end products. **Contact:** a.turano@csmt.it

CALEIDOS (Istituto di Ricerche Farmacologiche Mario Negri): The aims of the project are to provide practical guidance to the users of non-animal test methods such as QSAR, for the evaluation of chemicals under REACH. The project will also organise a statistically sound evaluation of the results of 25 QSAR methodologies, by using them to predict the properties of chemicals registered under REACH. Finally it will develop and make freely available a web tool for predicting chemical properties. Contact: emilio.benfenati@marionegri.it

PERHT (Azienda Consorzio Trevigiano Trasporti SpA): This project aims to transform parking facilities in the pilot area into "hubs for green urban mobility", thereby reducing the impact of car traffic on the environment and health. Improved management of parking services, including flexible parking schemes and better city logistics will be incorporated into the city of Treviso's overall urban mobility management scheme. The project will also integrate parking services with public transport and other collective mobility services and promote the take-up of electric mobility for both people and goods. Contact: dallagnolm@actt.it

MuSAE (Comune di Perugia): The objectives of this project are to provide small municipalities with a simplified and shared energy-environment planning tool. This will have a positive impact on the development of renewable sources (including solar thermal and photovoltaic, wind power, hydro power, biomass and geothermal) and on the reduction of energy consumption, with associated environmental benefits. The project also aims to raise awareness among municipal officials, citizens, local businesses and other stakeholders of the specific character of their area in terms of energy consumption, energy sources and the market penetration of renewable energy. Contact: g.demicheli@comune.perugia.it

WATERSTORE (Veneto Agricoltura): The project will demonstrate the effectiveness of an innovative process designed to maximise and optimise the use of groundwater in rural coastal areas. The project will analyse the different subsystems in coastal areas, including Natura 2000 network sites, agricultural areas and areas used for tourism and recreational purposes. The process will enable the efficient management of available freshwater, diverting it to different locations based on the water's quality (particularly the degree of salinity) and the priorities established by stakeholders. Contact: lorenzo.furlan@venetoagricoltura.org

CRESIM (AFROS Spa): This project will demonstrate an innovative pilot process for the production of CFRP composites from recycled carbon fibre. The innovative solution will combine a series of technologies that have been already tested in a pre-industrial prototype plant, and will bridge the gap to full market uptake. The project aims to show how lightweight materials can be used in a wide range of applications, including civil engineering, sports equipment, biomedicine and high-end audio components and musical instruments, whilst achieving considerable environmental benefits for society. Contact: mcorti@afros.it

HEO (Whirlpool Europe s.r.l.): The project's objectives are to demonstrate the feasibility of an innovative enamelling technology for electric ovens, by upscaling for the first time a pre-industrial pilot line, which will be tested and monitored. This will reduce oven energy consumption by some 30% relative to state-of-the-art electric ovens. Furthermore the enameling technology will eradicate completely the use of nickel, a toxic substance, and cobalt, a carcinogen, both of which are found in traditional enamels. Contact: Teresa_vitale@whirlpool.com

WASTE2LIFE (Vinyloop Ferrara Spa): This project will redesign and scale up the cPVC recycling process, and demonstrate for the first time at industrial scale how it can overcome remaining bottlenecks. The project will also conduct a lifecycle assessment to

demonstrate that the process offers a recycling blueprint that can be promoted and replicated across the EU. Contact: francesco.tarantino@solvay.com

SOREME (Institute of Chemistry of Organometallic Compounds): The project will demonstrate the use of an innovative sorbent for the removal of mercury from gas streams from different industrial production cycles. The sorbent will be produced from sulphur-impregnated activated carbon derived from waste tyres. **Contact:** bramanti@pi.iccom.cnr.it

W-LAP (Ceramica Fondovalle SpA): The main objectives of this project are to reduce more than threefold water consumption in tile finishing, and to minimise the production of levigation sludge, a waste product. The project will do this through the controlled application of a polymer-based layer on tile surfaces, which will enable tile manufacturers to achieve the same aesthetic result that is produced by ceramic tile surface grinding and polishing, whilst simultaneously sealing the tiles. **Contact:** info@fondovalle.it

BIOREM (Institute for Ecosystem Studies of the National Research Council): The main objective of this project is to demonstrate an innovative integrated methodology for the restoration and biochemical monitoring of degraded soils, which can be restored by combining revegetation with the addition of exogenous organic matter. In terms of soil monitoring, the project promises faster, more thorough, dynamic monitoring of soil conditions. This will aid the development of precisely targeted restoration and development strategies and policies. **Contact:** grazia.masciandaro@ise.cnr.it

BLUE AP (Comune di Bologna): The main goal of the project is to provide Bologna with a Local Adaptation Plan, to make the town more resilient in the face of climate change. The project will learn from and disseminate the best EU experiences in adaptation planning at the town level; consolidate a governance and planning model that can be used by the large number of Italian municipalities already signed up to the Covenant of Mayors; establish a comprehensive and innovative information system (integrating environmental with social data) that will produce new information about climate change risks and vulnerability in Bologna; and offer "start up" support to local stakeholders, with the aim of designing and launching some of the measures and actions defined by the Local Adaptation Plan. **Relevant to climate change.** Contact: giovanni.fini@comune.bologna.it

ReQpro (Centro Ricerche Produzioni Animali SpA): The project will contribute to the protection of water resources through efficient re-use of treated wastewater for irrigation of agricultural land, thus replacing the use of surface water and groundwater resources. This objective will be achieved by developing a model of water reclamation and re-use for irrigation of high quality crops. **Contact:** m.ligabue@crpa.it

MAKING GOOD NATURA (Consorzio Universitario per la Ricerca Socioeconomica e per l'Ambiente): The general objective of the project is to establish and demonstrate innovative procedures and approaches to solve an environmental problem, taking a strategic approach based on the concept of ecosystems services. The project's specific objectives include: Identifying and evaluating the ecosystems services provided by Natura 2000 network sites; creating and demonstrating innovative models for funding the implementation of Natura 2000 management plans and conservation measures; identifying innovative financing models that will be used during the next programming period of the Common Agricultural Policy (2014-2020); and creating and demonstrating models for better governance in conservation management and for the socio-economic development of local communities. **Contact:** davidemarino@cursa.it

LIGHT PET (Società Industrializzazione Progettazione e Automazione SpA): The main goal of this project is to establish a new process and plant for the production of food containers made from PET. The new plant will consist of modules for both the production of the preforms and for their shaping into bottles. The main innovation will be in the

stretching-blowing process. In this way the project will reduce the consumption of PET by reducing container weight and using a greater share of recycled PET; reduce energy consumption by optimising the configuration of the PET bottle plant, and changing from a two-stage to a one-stage process; and eliminate the use of hydraulic oil by using an injection-compression production process. **Contact:** life.plus@zoppas.com

RELIFORMED (Regione Siciliana - Assessorato Regionale delle Risorse Agricole e Alimentari - Dipartimento Azienda Regionale Foreste Demaniali): The project's broad aim is to preserve forest ecosystems in the face of the risks related to climate changes, by promoting naturalisation processes and biodiversity increase, and by improving the resilience of ecosystems to environmental stress. The specific objective of the project is to implement a regional forest policy that will increase the resilience of Sicilian forests and favour biodiversity conservation. **Contact:** lsaporito@regione.sicilia.it

RII (Regione Emilia-Romagna): The project's specific goals are to introduce, test and demonstrate the usefulness of innovative territory management strategies and water course intervention techniques, based on key concepts within the Water Framework and Floods directives, in order to manage hydraulic critical points and the ecological quality of the networks of drainage basins and watersheds; and innovative economic-legal management tools to support flood risk management and territory ecological restoration. The project will also demonstrate restoration works in selected creeks and contribute to an improvement in the ecological quality of the minor drainage network located in a heavily urbanised strip close to the hillside, thus reducing local and downriver flood risk. **Contact:** fricciardelli@regione.emilia-romagna.it

ECOREMED (Centro Interdipartimentale di Ricerca Ambiente - Università degli Studi di Napoli Federico II): The project's main aims are to define an operative protocol for agriculture-based bioremediation of contaminated agricultural soils in the "Litorale Domitio-Agro Aversano" and to demonstrate the effects of this protocol in specific polluted areas in three municipalities. Furthermore the project will support farmers with regulatory and financial tools aimed at improving the reclamation of degraded agricultural soils, thus restoring agronomic fertility and improving the landscape. **Contact:** fagnano@unina.it

PRISCA (Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna): The main objective of the 'PRISCA' project is to reduce the flow of bulky waste sent to landfill in the areas covered by the project. The project will also attempt to reduce waste such as packaging that is classified as bulky waste, but which should be recovered or re-used. For this end it will set up two re-use centres, in Vicenza (northern Italy) and San Benedetto del Tronto (central Italy). **Contact:** frey@sssup.it

CLEAN-ROADS (Provincia Autonoma di Trento): The overall objective of the project is to reduce the environmental problems related to the widespread use of de-icing/anti-icing chemicals (mainly salt) during the winter road maintenance in Bolzano in South Tyrol, northern Italy. The project will provide for more efficient use of salt during winter road maintenance operations through the introduction of a pilot low energy road weather information system (RWIS), which will provide real-time road conditions data and through the implementation of short-term weather forecasts. **Contact:** gestione.strade@provincia.tn.it

Lambro vivo (Parco Regionale della Valle del Lambro): The project's main objectives are to develop an agreed, joint strategy for actions to address the water risk/pollution problems and to devise a model for similar future interventions in the Lambro river basin. The quality of surface water will be improved by creating filter ecosystems, based on water phytoremediation techniques; removing pollution sources in the three minor 'affluent' watercourses; and creating a permanent wet area between Inverigo and Nibionno. **Contact:** daniele.giuffre@parcovallelambro.it

BIOSUR (Consorzio Cuoidepur Spa): The project is aiming to demonstrate the economical and environmental sustainability and technical applicability of an innovative technology for the removal of hydrogen sulphide (H₂S) from gaseous streams. The technical feasibility will be demonstrated through the design, set up and operation of a pre-industrial scale prototype of a biotrickling filter. The novelty of the technology is the coupling of the biotrickling filter with rotating supports. **Contact:** gualtierio.mori@cuoidepur.it

IPNOA (West Systems): The main goal of the project is to decrease N₂O emissions from agricultural activities in Tuscany by at least 20% by the end of the project (2016), using 1990 as the reference year. It will do this by developing two prototypes for monitoring N₂O fluxes and for measuring N₂O emissions from soil. It will also identify the best agro-ecosystem management practices to reduce agriculture emissions and will produce a scenario analysis at the regional scale to identify the measures to be used as financial incentives for N₂O mitigation. **Relevant to climate change.** **Contact:** s.mori@westsystems.com

LIFE+ Nature (14 projects – 31.5 million)

ONE DEER TWO ISLANDS (Provincia del Medio Campidano): This LIFE Nature Project aims at the conservation and expansion of the population of the Corsican red deer (*Cervus elaphus corsicanus* – Annex II Habitats Directive priority species), a sub-species of the European red deer that is found in eight Natura 2000 sites in Sardinia and Corsica. This will be done through translocation of animals, habitat restoration, capacity building and the raising of public awareness. **Contact:** cgarau@provincia.mediocampidano.it

GESTIRE (Regione Lombardia): The project's overall objective is to develop a regional management programme and a Prioritised Action Framework for the 241 Natura 2000 network sites in Lombardy. **Contact:** antonio.tagliaferri@regione.lombardia.it

Un Falco per Amico (Municipality of Gravina in Puglia): Murge Appulo-Lucane (south-eastern Italy) is one of the most important breeding areas for the lesser kestrel (*Falco naumanni*) in the EU. The project's overall aim is to strengthen the presence of the lesser kestrel in the project area. **Contact:** comunicazione@comune.gravina.ba.it

MED-WOLF (Istituto di Ecologia Applicata): This project has two main objectives: to reduce conflicts between the needs of large carnivores and human activities; and to promote the stable presence of wolves in rural areas in Western Mediterranean Europe, by restoring cultural habits that allow coexistence between people and wolves. **Contact:** valeria.salvatori@gmail.com

Pelagic Birds (Università degli studi di Palermo - Dipartimento DEMETRA): The island of Linosa is home to more than 60% of the Italian Cory's shearwater (*Calonectris diomedea*) population and over 20% of the European population. The main objectives of this project are to protect the breeding population of the species on Linosa, which is threatened by black rat predation, and to restore the natural condition of the island's ecosystems by eliminating the most invasive alien species. **Contact:** Zoolappl@unipa.it

FAGUS (Ente Parco Nazionale del Cilento e Vallo di Diano): The general objective of this project is to ensure the long-term conservation of Apennines beech forests habitats in two Italian national parks: Cilento and Vallo di Diano, and Gran Sasso Laga. The project aims to enhance the biological value and biological diversity of beech forests habitats in the Apennines without having a detrimental economic impact on the local population. **Contact:** direttore@cilentoediano.it

LIFE AUFIDUS (Provincia di Barletta, Andria, Trani): The main aim of the project is to restore two coastal Annex I-listed Habitats Directive priority for conservation habitats: 'Coastal lagoons' and 'Dunes with *Juniperus spp.*', within the Natura 2000 site "Fiume Ofanto - Lago di Capacciotti", along the Apulia coast. The core actions consist of restoring

silted lagoons through the excavation of channels, placing of embankments and planting of native species. **Contact:** ing.orsino@gmail.com

TEN (Provincia Autonoma di Trento): The overall objective of this project is to plan an integrated long-term management system and restoration programme that targets the Natura 2000 network under the jurisdiction of the province of Trento. The new management programme will encourage local responsibility, participation and integration. **Contact:** claudio.ferrari@provincia.tn.it

CON.FLU.PO (Regione Lombardia - DG Agricoltura): This project is dedicated to conserving the Adriatic surgeon (*Acipenser naccarii*), an anadromous migratory fish species that is endemic to the fluvial basin bordering the upper Adriatic Sea. The core project actions will involve the building of fish passes and the reintroduction and reinforcement of target species, as well as the removal of invasive alien species. **Contact:** alberto_lugoboni@regione.lombardia.it

CARABUS (Ermenegildo Zegna Holditalia SpA): Olympia's ground beetle (*Carabus olympiae*), is a beetle species at risk of extinction. It is included in the EU Habitats Directive as priority for conservation. The beetle is only found in two neighbouring localities in Sella dell'Alta Valle Sessera in the mountainous Piedmont region of northern Italy. The objective of the project is to reduce the risk of its extinction through habitat restoration. **Contact:** massimo.curtarello@zegna.com

Leopoldia (Università degli Studi di Catania - Facoltà di Agraria): The general objective of the project is to re-establish and protect the sand dune habitats that are most suitable for the conservation and spread of *Muscari gussonei* (or *Leopoldia gussonei*), a priority (for conservation) plant species endemic to Sicily, particularly the Camarino-Pachinense area. The species, which is confined to dune habitats, is mainly restricted at the regional level to sites in Mocconi di Gela, Cava Randello and the Natura 2000 site "Vallata del fiume Ippari". **Contact:** gitomas@unict.it

LIFE PRATERIE (Via del Convento – Assergi): The project aims to restore the quality of several habitats listed in Annex I of the Habitats Directive – i.e. mountain grassland habitats – as well as benefit related species (*Vipera ursini*, *Triturus carnifex*, *Rupicapra ornata*) that have been affected by tourism, excessive grazing or the abandonment of grazing on the southern slope of the Gran Sasso mountain massif, which is located in the Natura 2000 site Gran Sasso. **Contact:** pina.leone@gransassolagapark.it

MIPP (Corpo Forestale dello Stato): The project aims to develop an official protocol, approved by the region of Lombardy, based on the methods that have been implemented to monitor populations of insects listed in annexes II and IV of the Habitats Directive. The monitoring work will be performed and tested in several SCIs overlapping four state nature reserves managed by the Italian National Forestry Corp in central/northern Italy. **Contact:** fmason@tin.it

SOS Tuscan Wetlands (Consorzio di Bonifica del Padule di Fucecchio): The project's overall objective is to improve the conservation status of the wetland habitats and species in four Natura 2000 sites in northern Tuscany: "Lago di Sibolla"; "Palude di Pardi"; "Bosco di Chiusi e Paduletta di Ramone"; and "Palude di Fucecchio". All the sites are seriously threatened by the presence of invasive alien fauna and flora species (e.g. Coypu (*Myocastor coypus*) and the invasive shrub species, *Amorpha fruticosa*). **Contact:** direttore@paduledifucecchio.it

LIFE+ Biodiversity (2 projects – 3.3 million)

LIFE STRADE (Regione Umbria): This project aims to develop and disseminate new tools for the management of traffic-wildlife collisions in three Italian Regions (Umbria, Tuscany and Marche). A new interactive system will be developed and implemented to

simultaneously warn drivers and deter wildlife from crossing roads at critical moments. The system will be tested on 150 km of provincial roads. Contact: cacciapesca@regione.umbria.it

BIOAQUAE (Ente Parco Nazionale Gran Paradiso): The project's overall aim is to improve the biodiversity of high altitude aquatic ecosystems in rivers, streams and lakes and the conservation of the Habitats Directive Annex II-listed marble trout (*Salmo marmoratus*) in the Gran Paradiso National Park. Contact: bruno.bassano@pngp.it

LIFE+ Information and Communication (1 project – 0.8 million)

Safe Haven for Wild Birds (Lega Italiana Protezione Uccelli): The overall objective of this project is to reduce illegal killing of protected wild birds in three EU Mediterranean countries: Italy, Greece and Spain. It will do this by raising awareness in key stakeholder groups (local communities, local authorities, hunters and the general public) about the migratory flyways of the species affected by illegal activities and the effects of illegal bird killing on local and European biodiversity; changing socio-cultural attitudes towards illegal killing in the younger generation; and improving law enforcement, through increased awareness and better coordination among law enforcement authorities. Contact: elena.dandrea@lipu.it

Latvia 2 projects (2.9 million)

LIFE+ Environment Policy and Governance (1 project – 1.3 million)

ISRNM (Valsts akciju sabiedrība "Latvijas dzelzceļš"): The goal of the project is to demonstrate a new means of reducing rail noise pollution and to adapt and apply the Dutch "Reken en Meetvoorschrift Railverkeerslawaaï '96" method for estimating noise from Europe's railways. The technical activities of the project will be implemented in an urban environment, thus ensuring an acoustically favourable living environment for residents near rail lines in Riga. **Contact:** maris.riekstins@ldz.lv

LIFE+ Nature (1 project – 1.6 million)

NAT-PROGRAMME (Nature Conservation Agency): This project aims to draft guidelines for the management of each terrestrial habitat type within Latvia's Natura 2000 network. It will prepare a National Conservation and Management Programme that will be designed to inform and complement the forthcoming 2014-2020 Latvian Rural Development Programme. The project will target all 325 of Latvia's terrestrial Natura 2000 network sites. These include a total of 55 Annex I-listed habitats. The project will ensure a coordinated and programmed approach to safeguarding the long-term conservation and management of Latvia's Natura 2000 network sites. **Contact:** inga.kabanova@daba.gov.lv

Luxembourg 4 projects (19.8 million)

LIFE+ Environment Policy and Governance (2 projects – 16.0 million)

Factory of the Future (Kronospan Luxembourg S.A.): The goal of the project is to attain a fully self-sufficient plant with no environmental impact. To this end, the beneficiary aims to combine innovative technologies and best practices on its existing oriented strand board and medium-density fibreboard production lines. Additional installations, such as a combined heat and power unit and rain capturing units will be integrated in the production lines. Where necessary, changes to the production lines will

be carried out to further improve the plant's environmental performance. **Relevant to climate change.** Contact: m.becker@kronospan.lu

PLD (PAUL WURTH S.A.): The project aims to 'de-oil' the sludge and mill scales from metal industries through an environmentally-friendly process. It is expected that the process will have a de-oiling efficiency of less than 0.1% of total organic compounds and will produce lower CO₂, and NO_x emissions; lower energy consumption, reduction of greenhouse gases and a positive effect on air pollution. **Contact:** michel.houbart@paulwurth.com

LIFE+ Nature (2 projects – 3.8 mnillion)

Resto-unio (Fondation Hëllef fir d'Natur): The project targets the thick shelled river mussel (*Unio crassus*), which is found in two Natura 2000 network sites in Luxembourg, the rivers Our and Sûre. Actions will be aimed at improving the quality of the river habitats and at strengthening the two surviving populations of this freshwater mussel species. **Contact:** secretariat.commun@luxnatur.lu

LIFE Eisleck (Fondation Hëllef fir d'Natur): The project's overall objective is to restore the mosaic of wetland habitats within 11 Natura 2000 network sites in Eisleck, and to improve the conservation status of three target species, namely the violet copper butterfly and the bird species, whinchat and red-backed shrike. **Contact:** secretariat.commun@luxnatur.lu

Malta 1 project (1.0 million)

LIFE+ Nature (1 project – 1.0 million)

Project MIGRATE (Malta Environment and Planning Authority): The project's main objective is to identify the relevant marine areas for the loggerhead turtle and the bottlenose dolphin, in order to designate marine SCIs within Malta's 25 nautical miles Exclusive Fishing Zone. **Contact:** funding@mepa.org.mt

The Netherlands 7 projects (21.1 million)

LIFE+ Environment Policy and Governance (3 projects – 5.4 million)

E-mobility 3 cities NL (Gemeente Amsterdam): The project aims to boost electric transport within and between the cities of Amsterdam, Rotterdam and Utrecht by improving the electric vehicle charging infrastructure so that there are fast and frequent charging points. The project will demonstrate the functioning of different types of charging points in various circumstances and aims to show that if sufficient charging infrastructure is available the use of electric transport will increase. Market research into how and why people do or do not use electric vehicles will form an important part of the project. Contact: M.van.Casteren@IVV.amsterdam.nl

CENIRELTA (Waterschap Hollandse Delta): The project will demonstrate a new technology for wastewater treatment plants based on anaerobic treatment of the water with anammox (ANAerobic AMMonium OXidation) bacteria. This technique works at low temperatures and low nitrogen concentrations in wastewater. The project will test the technology through a pilot installation on a scale large enough to extrapolate to full scale. First estimates of repeat potential indicate that more than 1 000 wastewater treatment plants in the EU could benefit from implementing the technique. **Contact:** o.duin@wshd.nl

Hydrochip (Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek): The project aims to demonstrate a new measuring device called Hydrochip, which will provide an opportunity to monitor the implementation of the Water Framework Directive with regard to the ecological parameters phytobenthos and phytoplankton in an innovative way, using molecular biomarkers. **Contact:** marco.jaspers@tno.nl

LIFE+ Nature (4 projects -15.7 million)

Blues in the Marshes (Vereniging Natuurmonumenten): This project aims to restore the habitat of two highly threatened butterfly species in Europe, the scarce large blue [*Phengaris (Maculinea) teleius*] and dusky large blue [*Phengaris (Maculinea) nausithous*]. Both butterfly species are listed in Annexes II and IV of the Habitats Directive and the project is aiming for a significant improvement in the resilience of their populations. The project area is located within the "Vlijmens Ven, Moerputten and Bossche Broek" Natura 2000 site. **Contact:** a.stoker@natuurmonumenten.nl

Amsterdam Dune project (Waternet Foundation): The project's overall aim is to restore and improve the characteristic and priority habitat types listed in the Habitats Directive that are part of the "Kennemerland Zuid" Natura 2000 site. The recovery of the area will be encouraged by actions targeting the effects of desiccation and eutrophication, such as the removal of the nitrogen-rich top layer of soil and of invasive species; by restoration of ponds; and by mowing, grazing, and other nature management measures. **Contact:** jack.wright@waternet.nl

Floodplain development (Vereniging Natuurmonumenten): The main objectives of the project are to enlarge the area of characteristic riverine Natura 2000 site habitats along the river IJssel and to create biotopes for species associated with these habitats and to improve water safety by buffering and preventing the effects of climate change (e.g. high flood risks, but also drying out). In order to restore these habitats and create a more robust ecosystem, land purchase is crucial. Therefore, a total of 83 ha will be purchased (61 ha at Velperwaarden and 22 ha at Koppenwaard). **Contact:** a.stoker@natuurmonumenten.nl

Peelvenen (Dienst Landelijk Gebied): The project's main aims are to restore, conserve and improve the ecological functioning of the valuable Habitats Directive (Annex I) bog habitat types of the "Deurnsche Peel" and "Mariapeel" Natura 2000 sites and to halt the loss of biodiversity by increasing the natural quality and diversity of wildlife over a surface of more than 2 400 ha. **Contact:** e.p.l.camps@minlnv.nl

Poland 16 projects (39.3 million)

LIFE+ Environment Policy and Governance (6 projects – 10.5 million)

MOREENERGY (Instytut Mechanizacji Budownictwa i Górnictwa Skalnego): The main objective of this project is to demonstrate an innovative technology using 'micronisation' methods for generating pollutant-free energy from waste biomass. A full-scale prototype demonstration installation will be designed and built to test and document the performance of 'micronisation' techniques in biomass energy production under different operational parameters. **Relevant to climate change.** **Contact:** r.podgorzak@imbigs.org.pl

GeoPyrz ("Geotermia Pyrzyce" Spółka z ograniczoną odpowiedzialnością): The general objectives of the project involve finding feasible solutions to help Poland source more energy from its geothermal reserves and so contribute to national, EU and global climate action targets. This will be achieved by demonstrating and disseminating

information about new methods for improving absorption of energy from geothermal reserves by using different acid-based approaches to remove or dissolve impurities that impede the energy flow. **Relevant to climate change.** Contact: geotermia@inet.pl

Spalarnia pirolityczna OS (FU-WI Spółka z ograniczoną odpowiedzialnością): The main objective of the project is to verify and to promote an innovative technology for treating sewage sludge using a thermal pyrolysis boiler. Findings from previous laboratory-scale tests that combined waste silica with sewage sludge will be up-scaled and applied to demonstrate the potential of a more 'market-ready' boiler installation. **Contact:** tadeuszurowicz@fuwi.pl

OZERISE (EC BREC Instytut Energetyki Odnawialnej Sp. z o.o.): This project aims to develop and demonstrate practical tools for planning and adjustment of small-scale renewable energy sources (RES) on farms. A web-based decision-support tool will be tested by a cluster of farmers to enable the effective integration and management of various RES with their energy consumption needs (both for agricultural production and household appliances) to provide the best possible ecological impact and socio-economic benefits. **Relevant to climate change.** Contact: gwisniewski@ieo.pl

EKOHEMPKON (Instytut Włókien Naturalnych i Roślin Zielarskich): The main aim of this project is to develop cultivation methods and systems of crop rotation that will enable the rehabilitation of former mining areas. Land remediation will be conducted on the basis of the cultivation of two pioneer crops: an industrial hemp yielding a high biomass and alfa-alfa that is able to assimilate nitrogen by the symbiosis with the nodule bacteria. The accelerated agricultural remediation will be conducted on a 25 ha site of a disused lignite strip mine. The project also aims to develop a novel, environmentally-sound technology for hemp straw processing and to disseminate its results in Poland and other EU countries. **Contact:** jerzy.mankowski@iwnirz.pl

HESOFF (Instytut Lotnictwa): The project aims to integrate new technologies with innovative methods for forest cultivation. It will test the effectiveness of phosphites as elicitors of trees' resistance against invasive phytopathogens belonging to genera of *Phytophthora*. It will also implement and put into practice new methods for assessing the state of forests and the effectiveness of cultivation through the use of images provided by Stratospheric Long Endurance Unmanned Aerial Vehicles (SLE UAV). **Contact:** bohdan.naumienko@ilot.edu.pl

LIFE+ Nature (7 projects – 24.3 million)

Capercaillie Protection (Nadleśnictwo Ruszów): This project aims to conserve two of the four remaining populations of capercaillie (*Tetrao urogallus*) in the "Bory Dolnośląskie" and the "Augustowska forest" Natura 2000 sites. Its actions will be carried out by local foresters who will be encouraged to adopt 'simple' conservation methods, such as improvement of habitat and changes in forestry management practices, in combination with the release of individual birds bred in captivity. **Contact:** ruszow@wroclaw.lasy.gov.pl

Ochrona obszaru PKOG (Województwo Śląskie - Zespół Parków Krajobrazowych Województwa Śląskiego): The project's main objectives are to preserve and protect the valuable habitats of the Czestochowska Upland in four Natura 2000 sites, to form a network of landscape and natural ecological corridors; and to gain the active support of the local community of the need to protect and preserve the region's typical natural features. **Contact:** dor@zpk.com.pl

LIFEGALLINAGO (Polskie Towarzystwo Ochrony Ptaków): The project's main objective is to halt the decrease and enhance the population of the great snipe (*Gallinago media*) in the upper Narew valley, the second most important site for the species in Poland. **Contact:** dmusial@ptop.org.pl

Górna Biebrza (Biebrzański Park Narodowy): The project's overall objective is to increase the biodiversity of the upper Biebrza Valley through the restoration and maintenance of a mosaic of natural and semi natural wetland habitat types. The actions targeting the conservation of the habitats will also benefit a host of rare EU flora and fauna species. **Contact:** m.silakowski@biebrza.org.pl

Niebieski korytarz Regi (Zachodniopomorski Zarząd Melioracji i Urządzeń Wodnych w Szczecinie): The overall project objective is to increase the biodiversity of the water ecosystems protected by the Natura 2000 sites in the Rega basin, by linking them with an ecological corridor. An additional objective is to restock the salmon population in the project area. **Contact:** regalife@zzmiuw.pl

"Ostoja Wigierska" (Wigierski Park Narodowy): The main objective of this project is to protect endangered species and habitat types of the "Ostoja Wigierska" Natura 2000 site in north-east Poland. Project actions will target a reduction in invasive species; land purchase and wetland restoration; improvement of river water quality; and the channelling of visitors in sensitive areas. These actions will be accompanied by monitoring and educational activities. **Contact:** krzysztofiak.lech@gmail.com

AlkFens_PL (Klub Przyrodników): This large-scale project will focus on the protection of the Annex I habitat type, alkaline fens in 35 Natura 2000 sites located in northern Poland. Potentially, the project is of high importance because it incorporates some 70% of the total area of alkaline fens in northern Poland. Actions will be targeted at preventing the fens' degradation and ensuring that they achieve or maintain "favourable" conservation status. **Contact:** robert.stanko@onet.eu

LIFE+ Information and Communication (3 projects – 4.5 million)

Roads for Nature (Fundacja EkoRozwoju): The main objective of the project is to preserve and restore tree avenues, which play an important role as habitats and components of traditional European landscapes. The proposed project is a continuation of a pilot project 'Roads for Nature', which has been carried out in some Polish regions since 2008, so as to cover all of Poland. **Contact:** Roads.for.Nature@gmail.com

N-M (Fundacja Wspierania Inicjatyw Ekologicznych): The principal objective of this project is to raise public awareness and knowledge of the functioning of the Natura 2000 network, while at the same time contributing to the better implementation of EU environmental legislation in Poland. **Contact:** sowyfwie@gmail.com

AGROSAFE (Wyższa Szkoła Środowiska): The main aim of this project is to educate farmers and to broaden their knowledge about eutrophication and other environmental consequences of agricultural practices. This should lead to the wider implementation of good farming practices and a reduction in the use of fertilisers and consequently to improvement of the aquatic environment, most notably in the area covered by the project. Overall it will help to reduce Poland's contribution to the eutrophication of the Baltic Sea, in line with the HelCom Recommendation described in the Baltic Sea Action Plan. **Contact:** rektor@wss.edu.pl

Portugal 1 project (1.2 million)

LIFE+ Nature (1 project – 1.2 million)

LIFE Maciço Montanhoso (Direcção Regional de Florestas - Secretaria Regional do Ambiente e Recursos Naturais): The goal of this project is to facilitate the

regeneration and conservation of the fragile natural ecosystem of the Natura 2000 network site - Maciço Montanhoso Oriental, including the recovery of plant, snail and bird communities within selected areas of the habitats. These include several endemic Madeiran species, 13 of which are listed in the Birds and Habitats directives. **Contact:** luisagouveia.sra@gov-madeira.pt

Romania 4 projects (9.7 million)

LIFE+ Nature (3 projects – 9.2 million)

CARPATHIA Restoration (Fundatia Conservation Carpathia): The project's main objective is to purchase and then ensure the protection and/or restoration of 1 600 ha of forests inside the "Muntii Fagaras" Natura 2000 site in the upper Dambovita Valley. The target area includes four Annex I forest habitats and two Annex I fluvial habitats. Various Annex II species will benefit indirectly. **Contact:** barbara@clcp.ro

NORTHWESTGORJ (Environmental Protection Agency Gorj): The objective of this project is to restore two of the degraded habitats of the "Nordul Gorjului de Vest" Natura 2000 site and to establish conservation measures to secure their survival and long-term future. The targeted habitats are 'Bushes with *Pinus mugo* and *Rhododendron myrtifolium*'; and 'Castanea sativa woods', both of which are included in Annex I of the Habitats Directive. **Contact:** elisabetaj@yahoo.com

FOR-MARSH (Fundatia Carpati): This project aims to improve the conservation status of three habitats listed as priority for conservation in Annex I of the Habitats Directive in two Natura 2000 sites in central Romania - "the Forest and Eutrophic Marshes of Prejmer" and "Dealul Cetatii Lempes - Harman Marshes". **Contact:** titi@icaswildlife.ro

LIFE+ Information and Communication (1 project – 0.5 million)

EME Natura2000 (ProPark - Foundation for Protected Areas): The main objective of the project is to build the capacity of Natura 2000 site managers in Romania. It will do this by providing comprehensive training programmes (including in how to communicate about Natura 2000), and to support improved territorial planning in Romania that incorporates biodiversity concerns by providing guidance to the most important economic sectors using land and natural resources on how to contribute actively to the development of regional territorial plans. The project is focused on the Natura 2000 sites, at national level, in Romania. **Contact:** office@propark.ro

Slovakia 3 projects (4.4 million)

LIFE+ Environment Policy and Governance (2 projects – 2.6 million)

Hydro-climate recovery (People & Water NGO): The project aims to establish environmentally sustainable hydrological conditions via interventions such as the re-cultivation of logging roads and other connecting paths, construction of flow control barriers, water retention ponds and rainwater gardens, and other measures for the prevention of excess rainwater run-off from land. This integrated approach to rainwater protection will have numerous positive effects such as preventing flooding, drought and erosion and mitigating the negative effects of climate change. **Relevant to climate change.** **Contact:** danka@ludiaavoda.sk

KRASCAVE (Statny geologicky ustav Dionyza Stura Bratislava): The project's objective is to reduce the risk of contamination of a key drinking water source in the

ecosystem of the Krásnohorská Cave. This will be achieved through the implementation of innovative activities that contribute to the requirements of the Water Framework Directive at a local level. It will achieve this through: water sampling and modelling; developing and testing a prototype facility for securing drinking water supplies for the population; and drawing up of a set of management rules for individual environmentally sensitive sites in order to help reduce risks to the fragile karst ecosystem. **Contact:** peter.malik@geology.sk

LIFE+ Nature (1 project – 1.8 million)

STERNASK (Slovenská ornitologická spoločnosť/BirdLife Slovensko): The project aims to conserve the populations of the common tern (*Sterna hirundo*) in five Natura 2000 SPAs in the western and northern part of Slovakia, reversing population decreases. The goal is to increase the population of this species, which is listed in Annex I of the Birds Directive, by 15% on 2010 figures and increase breeding success by 20%. **Contact:** demko@vtaky.sk

Slovenia 2 projects (6.1 million)

LIFE+ Nature (2 projects-6.1 million)

SI Natura2000 Management (Ministrstvo za okolje in proctor): The main objective of the project is to prepare the 2014-2020 Natura 2000 Management Programme for Slovenia, which will be adopted by the government. **Contact:** mladen.berginc@gov.si

LIVEDRAVA (DOPPS - BirdLife Slovenia): The project aims to preserve and enlarge populations of species listed in Annex I of the Birds Directive and Annex II of the Habitats Directive (fishes and beetles) by managing alluvial forest habitats (Annex I, Habitats Directive) along the Lower Drava River in Slovenia. The project also aims to improve cooperation between the most important stakeholders along the river and to inform the public about the natural value of these Natura 2000 sites and the importance of their conservation. **Contact:** damijan.denac@dopps.si

Sweden 7 projects (26.6 million)

LIFE+ Environment Policy and Governance (5 projects – 15.9 million)

NOISUN (Municipality of Lerum): The main objective of this project is to demonstrate innovative noise barriers that produce solar energy for distribution to local district heating systems. This will be achieved by installing and evaluating specially adapted solar collectors at major road and rail thoroughfares. **Contact:** henrik.bengtsson@lerum.se

SUNCOOL (ClimateWell AB): The overall objective of the project is to demonstrate the beneficiary's patented solar thermal collectors with a zero electricity heat pump and energy storage for sustainable heating and cooling. A complete and fully functional installation of 'SunCool' technology will be made at a warehouse in Helsingborg. The system will provide the building with air-conditioning, heating and possibly also hot water. **Relevant to climate change. Contact:** per.olofsson@climatewell.com

BUCEFALOS (Skåne Regional Council): The project's main objective is to demonstrate a holistic approach to regional coordination for sustainable resource management of aquatic biomass. To do this it will demonstrate innovative methodologies and technological applications for cultivating and harvesting mussels. It will also restore wetlands and establish algae cultivation sites with a view to cleaning freshwater and providing efficient yields of biomass for biogas. **Contact:** bo.fransman@skane.se

BIAS (Swedish Defence Research Agency): The overall goal of the project is to ensure that the introduction of underwater noise is at levels that do not adversely affect the marine environment of the Baltic Sea. To this end the project will establish and implement standards and tools for the management of underwater noise in accordance with the Maritime Strategy Framework Directive in the marine region of the Baltic Sea; produce soundscape maps showing the underwater noise generated by commercial vessels; and implement a user-friendly planning tool to enable management of human-induced underwater noise in a straightforward way. **Contact:** peter.sigray@foi.se

RenewPACK (Xylophane AB): The main objective of this project is to demonstrate the suitability of a new patented material, 'Xylophane', as a barrier material in food packaging. This material is based on a natural polysaccharide derived from agricultural by-products (grain husks) and is therefore renewable and biodegradable. The project will also demonstrate the many possible recycling options for Xylophane and its advantages over existing materials, as well as constructing a prototype pilot plant that will serve as a model for future full-scale plants in Europe. **Contact:** lisa.bindgard@xylophane.com

LIFE+ Nature (2 projects – 10.8 million)

SandLIFE (County Administrative Board of Skåne): The overall objective of the project is to restore, maintain and improve biodiversity in 23 Natura 2000 network sites on sandy soils in southern Sweden. The project will use already developed methods to restore to a "favourable" conservation status a number of Natura 2000 habitat types and ensure positive development for species linked to sandy soils. **Contact:** maria.sandell@lansstyrelsen.se

RECLAIM (The County Administrative Board in Örebro County): The main aim of this project is to reverse the degradation of the "Tysslingen lake" and "Venakarret fen" Natura 2000 sites and to create favourable conditions for continued and sustainable management of targeted habitats and species. The focus will be on enabling good continued management after the end of the project. **Contact:** jesper.pietsch@lansstyrelsen.se

United Kingdom 8 projects (20.5 million)

LIFE+ Environment Policy and Governance (3 projects – 9.2 million)

UP&FORWARD COMS (Greater Manchester Waste Disposal Authority): The project will demonstrate how waste policy can be more effectively implemented by municipalities through changing behaviour using targeted communications in specific low-performing areas identified by waste collection data and local demographic statistics. The project will help understand how to evaluate, monitor and develop policies that can only be delivered by active engagement with the public. **Contact:** peter.davies@gmwda.gov.uk

CSP (WWF UK): The CSP project will support the implementation of EU environmental and maritime policy, using a stakeholder-led approach to contribute to the development of marine strategies, particularly under the Marine Strategy Framework Directive, for the achievement of good environmental status of marine waters. The project will develop appropriate stakeholder engagement mechanisms and build stakeholders' capacities to enable them to support delivery of integrated management; to reduce conflicts between coastal and marine-resource users; and to enhance the environmental, economic and social sustainability of the Celtic Seas Marine Region. **Contact:** peter.davies@gmwda.gov.uk

ACUMEN (Environment Agency of England & Wales): This project will demonstrate how methane from expired and non-operational (closed) landfill sites can be captured.

Economic and technical uncertainties have so far hampered the wide take-up of new technologies to manage methane emissions from closed landfill sites. 'ACUMEN' will show how these can be overcome through a combination of innovative technologies and techniques, and will establish the technical and economic viability of capturing, using and mitigating methane from closed landfill sites. **Relevant to climate change. Contact:** neil.davies@environment-agency.gov.uk

LIFE+ Nature (4 projects -10.6 million)

N2K Wales (Countryside Council for Wales): The aim of the project is to develop a programme for the management and restoration of all Natura 2000 network sites in Wales. The project would gather information on the current risks to Natura 2000 in Wales, evaluate existing management practices, identify new management approaches, evaluate current and potential new funding arrangements, and prepare Natura 2000 Action Plans, the sum of which constitutes the Natura 2000 Programme. The implementation of the programme would be coordinated via an After-LIFE Implementation Plan. Various communications tools would ensure a proper dissemination of the findings. **Contact:** c.price@ccw.gov.uk

IPENS (Natural England): This project will develop a programmed approach for achieving target conservation status on all Natura 2000 network sites in England. It will work with key stakeholders at national and regional levels, in the public, private and voluntary sectors, to help them adopt and implement this strategic approach. **Contact:** NEexternalfunding@naturalengland.org.uk

Scilly rat removal (The Royal Society for the Protection of Birds): The overall purpose of the project is to maintain and enhance the conservation value of the "Isles of Scilly" Natura 2000 site by removing brown rats from two key islands within this SPA. The main target species, storm petrels and the Manx shearwater (*Puffinus puffinus*), are a key component of the internationally important seabird assemblage on the isles. **Contact:** nick.folkard@rspb.org.uk

PIP GB (Scottish Natural Heritage): This project aims to safeguard the future of the most important freshwater pearl mussel (*Margaritifera margaritifera*) populations in Great Britain, by tackling threats and implementing best practice conservation methods. The project plans to restore the habitat of freshwater pearl mussels and salmonids in selected river catchments within Great Britain; to secure the long-term survival of existing freshwater pearl mussel populations and prevent their further degradation; and to raise awareness at local, national and international level of freshwater pearl mussel conservation issues. **Contact:** iain.sime@snh.gov.uk

LIFE+ Information and Communication (1 projects -1.6 million)

Securing the stone-curlew (The Royal Society for the Protection of Birds): The project plans to deliver a comprehensive, integrated suite of communications actions, aimed primarily at farmers and other land managers, to encourage the adoption of management practices beneficial to the stone-curlew (*Burhinus oedicnemus*). The overall objective of the project is to secure the future of the species in the UK by making it much less dependent on conservation work than at present, and therefore much more self-sustaining. **Contact:** nick.folkard@rspb.org.uk