

LIFE16

Resource Efficiency
Soil / Forest
Sustainability & Replicability

Brussels

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The dual nature of LIFE!!



Technical **feasibility** of the process/method/solution → **technical success**

&

Actions to safeguard sustainability and replication → **project's success**

Why replicability and sustainability are so significant?

- **Impact to wider audience, increasing the added value of the project**
- **Promotes the quality of your team's work**
- **Assists in the creation of business opportunities**
- **Maximises the impact of LIFE programme**



Projects categorisation based on topic

Wastewater

- LIFE16 ENV/ES/000375 LIFE ENRICH
- LIFE16 ENV/NL/000217 LIFE Waste2NeoAlginate

Soil, forest

- LIFE16 ENV/ES/000276 LIFE Regenerate
- LIFE16 ENV/ES/000481 LIFE SUBProducts4LIFE
- LIFE16 ENV/ES/000559 LIFETEC
- LIFE16 ENV/ES/000159 LIFE TECMINE
- LIFE16 ENV/ES/000331 LIFE+ REGROW

Other

- LIFE16 ENV/ES/000242 LIFE-2-ACID
- LIFE16 ENV/ES/000344 LIFE – HEAT-R
- LIFE16 ENV/GR/000461 LIFE DIANA
- LIFE16 ENV/IT/000307 LIFE: Force for the Future
- LIFE16 ENV/IT/000220 LIFE De-BAY
- LIFE16 ENV/ES/000192 LIFE REFIBRE
- LIFE16 ENV/IT/000389 LIFE - LIBAT

Automotive

- LIFE16 ENV/IT/000231 LIFE 4GreenSteel

LIFE16 ENV/ES/000276 **LIFE Regenerate**

Revitalizing multifunctional Mediterranean agro-silvo-pastoral systems using dynamic and profitable operational practices

- **Products:** Income enhancement of Spanish and Italian SME (mixed farms) operating in the *Quercus*-based silvo-pastoral systems of the Mediterranean basin through designing and implementing improved and site-adapted farming practices
- **Market**: SMEs (mixed farms, namely growing crops and animals) operating in the silvo-pastoral systems of the Mediterranean basin. Agricultural technicians, veterinarians. Food companies for low-input/organic products
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

Sessions to train 15 "replication agents" in Italy, Spain and Portugal. The agents will assist project replication in 8 sites in the three states, in an area of about 5,000 ha. In addition, replication of the devised best practices is foreseen in further 6,000 ha. In the after-LIFE phase the beneficiary will draft: (i) a business plan targeted to those actors intent on revitalising their farms through implementing the improved farming practices; (ii) one replication/transfer plan for future application of the practices in other areas of the EU.

LIFE16 ENV/ES/000276 **LIFE Regenerate**

Revitalizing multifunctional Mediterranean agro-silvo-pastoral systems using dynamic and profitable operational practices

Related actions:

- Action B.2: Replication of trials (Spain, Italy and Portugal)

Relevant deliverables:

- Letter of commitment by owners of the replication sites (8x) (B2 – D1)
- Design of theoretical replication plans for each site (B2 – D2)
- Report on impact of Regenerate approach in replication areas (B2 – D3)
- Replication/transfer plan for future application (B2 – D4)
- Business plan (B2 – D4)

LIFE16 ENV/ES/000276 **LIFE Regenerate**

Revitalizing multifunctional Mediterranean agro-silvo-pastoral systems using dynamic and profitable operational practices

⚠ ***Challenges:***

- ***Risks of competition from potential similar approaches existing in the market to increase land profitability***
- ***Risks of the foreseen replicability and transferability strategy (replication plan foreseen after project end)***
- ***Specific actions to ensure sustainability are foreseen after project end (business plan)***
- ***Option of marketing (and patenting) the REGENERATE application? Is there a plan to attract external investors to turn into business the project's products?***

LIFE16 ENV/ES/000481 **SUBproducts4LIFE**

Innovative circular economy concepts by reusing industrial subproducts and waste

- **Products:** Reuse of industrial subproducts and waste (coal ash and gypsum from power plants and 2 types of slags from steel production sector) for the remediation of contaminated soils and brownfield areas
- **Market**: Industries with power plants; Industries for steel production. Specialised companies for remediation of contaminated sites, such as abandoned mines and production plants for metals
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

A replicability and transferability plan is foreseen. It will identify other suitable waste materials/subproducts to be used with the proposed methodology. It will also define standard treatments for 4 business areas: Hg and metallic mines; industrial areas and civil works. In addition, the plan will identify contaminated sites for the implementation of new actions and industries/power plants able to supply materials/subproducts for these sites, to keep low operational costs. Exploitation plan and associated business models for SMEs and large industries provided with the after-LIFE Plan

neemo LIFE TEAM

European Commission | Executive Agency for Small and Medium-sized Enterprises

LIFE16 ENV/ES/000481 **SUBproducts4LIFE**

Innovative circular economy concepts by reusing industrial subproducts and waste

- **Related actions**:

- Action B.3: Implementation of Pilot Case 3. SUBPRODUCTS FOR TREATMENT OF LIQUID WASTE AND EFFLUENTS (PILOT 3a AND PILOT 3b)

- **Relevant deliverables**:

- Replicability and transferability plan (B3 – D1)

LIFE16 ENV/ES/000481 **SUBproducts4LIFE**

Innovative circular economy concepts by reusing industrial subproducts and waste

Challenges: ⚠

- ***Risks of the foreseen replicability and transferability strategy: specific actions need to be better defined***
- ***Specific actions to ensure sustainability are foreseen after project end ("exploitation plan" and associated business models for SMEs and large industries will be part of the after-LIFE plan)***
- ***No option of marketing (and patenting) the* SUBproducts4LIFE technology*? Is there a plan to attract external investors to turn into business the project'products?***

LIFE16 ENV/ES/000559 **LIFETEC**

Fighting Forest Fires Using Electronic and Communication Technologies

- **Products:** Development of a software to employ weather radars for early forest fires detection and elaboration of a data communication system based on TETRA standard
- **Market**: Companies that exploit forest resources (timber industry); weather stations, public and private; public and private organisations dealing with forest fire control
- **Competition:** European market
- **Replicability and sustainability**

Strategy:

The developed products will be shared with members of the European Meteorological Services Network which gathers the majority of the national weather agencies, in charge of operating the 250 weather radars existing in Europe. Radar operators working in forest areas will be invited from all the EU to participate in specific demonstration days to test the software and the new communication system. A replicability and transferability plan will be produced, including a study on potential market opportunities and intellectual property protection for the developed software and hardware.

LIFE16 ENV/ES/000559 **LIFETEC**

Fighting Forest Fires Using Electronic and Communication Technologies

Related actions:

- Action B.4: Acciones para facilitar la replicabilidad de los métodos de detección y comunicación

Relevant deliverables:

- Informe sobre las jornadas de puertas abiertas (B4 – D1)
- Plan de replicabilidad y transferencia (B4 – D2)

LIFE16 ENV/ES/000559 **LIFETEC**

Fighting Forest Fires Using Electronic and Communication Technologies

Challenges: ⚠

- ***Risks of the foreseen replicability and transferability strategy: More actors to be targeted, also in other EU states?***
- ***Replicability plan will be developed at project's end: Would it be better to produce it earlier?***
- ***The strategy to ensure sustainability of the project's products to be better defined: Need of a business plan***
- ***Which are the target customers for the developed software/hardware? Is there a plan to attract external investors to turn into business the project's products?***

LIFE16 ENV/ES/000375 **LIFE ENRICH**

Enhanced Nitrogen and phosphorus Recovery from wastewater and Integration in the value Chain

- **Products:** Validation of a treatment train integrating different technologies for the recovery of both Nitrogen and Phosphorus from wastewater in existing WWTPs. Identification of the optimal fertiliser mixture for crops, also with use of digested sewage sludge
- **Market**: Fertiliser industry; WWTPs
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

Assessment for replicability and transferability of the LIFE ENRICH technology in other European Countries, taking into account technical, legal and market issues in each country. Analysis of the potential market and competitors for the obtained products, definition of the target market size (in Spain), development of a business model for the production, marketing and use of the recovered products and full definition of commercial and business activities

LIFE16 ENV/ES/000375 **LIFE ENRICH**

Enhanced Nitrogen and phosphorus Recovery from wastewater and Integration in the value Chain

- **Related actions**:

- Action B.5: Definition of the business model and development of a business plan for Spain
- Action B.6: Geographical replicability and transferability of the whole value chain

- **Relevant deliverables**:

- Market and competitor analysis for nutrients recovered from WWTPs in Spain (B5 – D1)
- Business plan for the agronomic valorisation and commercialization of nutrients recovered from WWTPs in Spain (B5 – D2)
- Definition of the key characteristics of each player in the target countries (WWTP, agriculture, fertlisers and legal framework) (B6 – D1)
- Legal framework: Certification of the new products in different geographies (B6 – D2)
- Adaptation of the business model to 2-4 EU (B6 – D3)
- Replicability plan (B6 – D4)

LIFE16 ENV/ES/000375 **LIFE ENRICH**

Enhanced Nitrogen and phosphorus Recovery from wastewater and Integration in the value Chain

Challenges: ⚠

- ***Is there a risk of strong competition with similar existing technologies (recovery nutrients from waste), also in the light of the current revision of the fertiliser EU regulation? Do you have plans to patent the innovation, or for licensing it?***

- ***Is there a specific strategy to attract external investors to turn into profitable business the project's products?***

LIFE16 ENV/NL/000217 **LIFE Waste2NeoAlginate**

Demonstration of innovative alginate production from granular sludge: a paradigm change in waste water treatment

- **Products:** Production of "neo-alginate" (ALE) from granular sludge, produced in waste water treatment
- **Market**: WWTPs based on the NEREDA technology. Chemical sector. Paper and textile industries. Agricultural sector (soil improvement and plant protection). Pet food sector.
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

Neoalginate production will be demonstrated from different sources (municipal and industrial waste). Testing and benchmarking of the resulting NeoAlginate products in end-user applications such as pet food, paper and plant protection. Test cases performed in three alternative settings (Netherlands, Ireland and Portugal). A replicability and transferability plan will be produced together with a business plan

LIFE16 ENV/NL/000217 **LIFE Waste2NeoAlginate**

Demonstration of innovative alginate production from granular sludge: a paradigm change in waste water treatment

- **Related actions**:

- Action B.3: Replicability and transferability: Test cases
- Action B.4: Development of Business plan
- Action B.5: Validation bio-based products

- **Relevant deliverables**:

- Report on case study Ireland (B3 – D1)
- Report on case study Portugal (B3 – D2)
- Report on case study Houten (B3 – D3)
- Replicability and transferability plan (B3 – D4)
- Business plan (B4 – D1)
- Cost Benefit analysis (B4 – D2)
- Validation report on pet food use (B5 – D1)
- Validation report on agricultural use (B5 – D2)
- Validation report on paper applicability (B5 – D3)

LIFE16 ENV/NL/000217 **LIFE Waste2NeoAlginate**

Demonstration of innovative alginate production from granular sludge: a paradigm change in waste water treatment

Challenges: ⚠

- ***Is there risk of competition with similar existing technologies, for obtaining alginate from sewage sludges?***
- ***Do you have plans for patenting/licensing the innovation?***
- ***Do you foresee an investment plan to turn into business the project's products?***

LIFE16 ENV/IT/000231 **LIFE 4GreenSteel**

Excellent Model for High Strength PM Steel parts production by resource and energy efficiency and CO2 and REACH decrease

- **Product:** Development of an innovative High Density Powder Metallurgy route (HDPM) for the manufacturing of widely-used high performance steel components
- **Market**: Automotive sector
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

Study to assess options of certificating/patenting the project technology. The business plan will deal with the production of new press plants for the powder metallurgy sector and manufacturing of components made by PM by means of the new system. A market analysis will be carried out. Replicability and transferability aspects will be addressed during the last 12 months of the project. Potential future users will be contacted and the technology communicated through technical reports. Best Available Technique (IED compatible) will be done. Options of patenting explored

LIFE16 ENV/IT/000231 **LIFE 4GreenSteel**

Excellent Model for High Strength PM Steel parts production by resource and energy efficiency and CO2 and REACH decrease

- **Related actions**:

- Action B.5: Quali/quantitative evaluation of the project's future: Business plan and replicability and transferability plan

- **Relevant deliverables:**

- Assessment about certificating/patenting issues (B5 – D1)
- Business Plan (incl. the two business models) (B5 – D2)
- Replicability and Transferability Plan (B5 – D3)
- Market analysis (B5 – D4)

LIFE16 ENV/IT/000231 **LIFE 4GreenSteel**

Excellent Model for High Strength PM Steel parts production by resource and energy efficiency and CO2 and REACH decrease

Challenges: ⚠

- ***Replicability and transferability strategy: What are the specific activities foreseen?***
- ***Replicability Plan foreseen at the end of project: Would it be better to produce it earlier?***
- ***Is there risk of strong competition with similar existing technologies?***
- ***Do you foresee an investment plan to increase business opportunities?***

LIFE16 ENV/ES/000242 **LIFE-2-ACID**

- **Product:** New technology for selective recovery of metal zinc and iron chloride from Spent Pickling Acids (SPAs) generated in galvanizing processes
- **Market**: Industrial companies working in the sector of steel surface treatment. Suppliers of the electrochemical treatment industry. Service companies working in the waste management sector. Environmental technologies companies.
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

The new SPA treatment system is easily replicable in the galvanizing traditional plants. To assure the replication and transferability at European level a specific "guide of transference" of the new process will be developed, including relevant technical and economic information, constraints and basic needs. In addition, 8 owners or managers of European galvanizing plants will be invited to visit the pilot plant. More specific actions are foreseen, also to enhance marketability of the project's products incl. IPR options.

LIFE16 ENV/ES/000242 **LIFE-2-ACID**

- **Related actions**:

- Action C.2: Replicability and transferability of the novel technological process

- **Relevant deliverables:**

- Impact on replicability and transferability (C2 – D1)
- Report on Marketing Strategy for the Product (C2 – D2)
- Private guide of transference (C2 – D3)
- Public guide of transference (C2 – D4)
- Report on Replicability Strategy (C2 – D5)

LIFE16 ENV/ES/000242 **LIFE-2-ACID**

Challenges: ⚠

- ***Are there risks of competition with similar existing technologies for recovering metals from SPAs?***
- ***Do you foresee a business plan to foster sustainability of project's products?***
- ***Will you produce an investment plan to improve business opportunities for the new developed technology?***

LIFE16 ENV/ES/000344 **LIFE-HEAT-R**

Waste heat valorisation by modular thermoelectric recovery system for resource efficiency in energy intensive industries

- **Product:** Direct conversion of waste heat into electricity by a modular unit using multiple ThermoElectrical Generation cells (TEG) associated and controlled through a patented programmable control unit based on System-on Chip (SoC) technology
- **Market**: Industrial sectors characterised by heating intensive processes. Universities, research and technology centers
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

The technology will be implemented at pilot scale in 3 different industry sectors, with high levels of waste heat emission. The testing international companies will then replicate the system in their productive plants worldwide, which will also transfer the generated knowledge and technology to other countries. Elaboration of a business strategy and market/competitor analysis are foreseen, together with a replicability and transferability plan. The beneficiary will manage any patent filing or IPR protection resulting from this project under expert counselling and supervision

LIFE16 ENV/ES/000344 **LIFE-HEAT-R**

Waste heat valorisation by modular thermoelectric recovery system for resource efficiency in energy intensive industries

Related actions:

- Action B.6: Business strategy
- Action B.7: Market/competitor analysis
- Action B.8: Replicability and transferability

Relevant deliverables:

- Business plan (B6 – D1)
- Investment and economic feasibility study (B6 – D2)
- Sales report #1& #2 (B7 – D)
- Market report #1 & #2 (B7 – D)
- Market database #1 & #2 (B7 – D)
- Market/competitor analysis (B7 – D)
- Replicability and transferability plan (B8 – D1)
- Business cases (B8 – D2)

LIFE16 ENV/ES/000344 **LIFE-HEAT-R**

Waste heat valorisation by modular thermoelectric recovery system for resource efficiency in energy intensive industries

Challenges: ⚠

- ***How to cope with possible strong competition from similar existing technologies, capable to recover waste heat from industrial processes?***
- ***How will you ensure that the private investors you have contacted will actually contribute to create a funding plan to be implemented at the end/right after project end?***
- ***How will you tackle the issue of IPR for this new technology once succesfully devised?***

LIFE16 ENV/GR/000461 **LIFE DIANA**

Development of a pilot unit for the valorization of PRS (Petroleum Refinery Sludges) to new added-value raw materials

- **Product:** Methodology for the use of PRS to develop a Valorised Sludge Mixture (VSM) through PRS integration with industrial minerals. After mixing VSM with suitable soil amendments, a stable quality "engineered soil" will be developed, ready for use in various development stages of landfill construction and restoration of abandoned quarries.
- **Market**: Petroleum refinery companies (PRS producers). Waste management companies. Landfill sites constructors. Industrial minerals companies (mining and processing sectors).
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

To assess transferability and replication potential of the project technology oil refineries location vs. minerals availability, sludges chemistry and local legislation will be studied in countries like Greece, Bulgaria, Italy, Hungary and Germany. A business plan to assess the economic feasibility of project products is foreseen. The associated business model will review all crucial factors affecting feasibility of the large scale application of the technology, such as estimation of capital investment, market opportunities and profitability.

LIFE16 ENV/GR/000461 **LIFE DIANA**

Development of a pilot unit for the valorization of PRS (Petroleum Refinery Sludges) to new added-value raw materials

- **Related actions**:

- Action C.2: Business model development and transferability evaluation

- **Relevant deliverables:**

- Market Analysis (C2 – D1)
- Business plan- Business model (C2 – D2)
- Transferability and replication activities (C2 – D3)

LIFE16 ENV/GR/000461 **LIFE DIANA**

Development of a pilot unit for the valorization of PRS (Petroleum Refinery Sludges) to new added-value raw materials

Challenges: ⚠

- ***Which are the specific activities will you carry out to ensure replicability and transferability of the foreseen Valorised Sludge Mixture?***
- ***Are similar methodologies available in the market? Do you envisage a potential competition with the expected project's products?***
- ***Will you develop an investment plan to increase business opportunites?***
- ***Do you intend to patent the results of the project, or to address anyway the issue of IPR?***

LIFE16 ENV/IT/000307 **LIFE: Force of the Future**

New circular business concepts for the predictive and dynamic environmental and social design of the economic activities

- **Product:** Dynamic monitoring of environmental, economic and social impacts of a ceramic company by integrating sustainable issues into the existing production data stored in the company's Enterprise Resource Planning (ERP). The (software) tool will integrate the outcomes of Life Cycle Assessment, Life Cycle Costing and Social Life Cycle Assessment. It is expected to enhance overall sustainability of the ceramic products.
- **Market**: Ceramic sector. Suppliers of input materials: mining companies; glaze, colours and inks producers; machinery and equipment producers; service-providers.
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

Strategic partners (companies of ceramic sector) identified in 4 EU states will be targeted by specific dissemination events. Identification of one suitable licensing agreement to allow replication by other companies (competitors) is foreseen. For transferability, three new items (roof tiles) will be produced according to the project approach and checked the feasibility of their transfer to companies of the brick manufacturing sector. Final Repl. & transf. plan drafted at the end of the project. Business plan for both the sectors

LIFE16 ENV/IT/000307 **LIFE: Force of the Future**

New circular business concepts for the predictive and dynamic environmental and social design of the economic activities

Related actions:

- Action B.7: Replicability of the dynamic model and transferability to another type of production

Relevant deliverables:

- Preliminary Replicability and Transferability Plan (for the ceramic sector) (B7 – D1)
- List of the strategic partners involved and of the actions planned for the ceramic sector (B7 – D2)
- Preliminary Marketing and Business Plan (B7 – D3)
- List of the strategic partners involved and of the actions planned for the brick sector (B7 – D4)
- Report on replicability and transferability activities performed (B7 – D5)
- Final Marketing and Business Plan (B7 – D6)
- Validation of the dynamic model on roof tiles (B7 – D7)
- Final Replicability and Transferability Plan (with a section related to the ceramic sector, one to the brick manufacturers sector and the last to other industrial sectors) (B7 – D8)

LIFE16 ENV/IT/000307 **LIFE: Force of the Future**

New circular business concepts for the predictive and dynamic environmental and social design of the economic activities

Challenges: 

- ***Are there in the market other similar and potentially competitive approaches to enhance overall sustainability of the ceramic products?***

- ***Do you foresee an investment plan and specific activities to protect IPR while ensuring replication in the very competitive ceramic sector (Italy, Spain, France and Germany)?***

LIFE16 ENV/IT/000220 **LIFE De BAY**

ELV DEPOLLUTION BAY - equipped island for the management of materials and components for end of life vehicles

- **Product:** Equipment line that will recover ELV (lubricating) fluids and materials (i.e., glass, plastics, filters) 80% faster and at a higher recovery rate than conventional ELV dismantling lines.
- **Market**: SMEs working as ELV dismantlers, material recyclers (2nd raw material markets).
- **Competition:** ELV dismantlers at European/Global market
- **Replicability and sustainability**

Strategy:

Demonstrate reduced processing time and economic benefits for SMEs in ELV dismantler sector. Already working on the sector and having a wide range of business contacts (e.g. agents, distributors, clients). Markets both in EU and out of EU. Outside EU (e.g. Brazil, Australia, USA), it will pursue licensing agreements of the entire line/system in order to reduce investment costs to a minimum and thus be competitive. Business plan exists, will be updated to reflect changing market conditions. Work on appropriate business model, commercialisation plan, and funding schemes as well.

LIFE16 ENV/IT/000220 **LIFE De BAY**

ELV DEPOLLUTION BAY - equipped island for the management of materials and components for end of life vehicles

- **Related actions**:

- Action B4: Business plan, Sustainability and project continuation

- **Relevant deliverables:**

- Training Plan (B4 – D1)
- Final report on Market Scenario and Business Plan (B4 – D2)
- Commercialisation Plan (B4 – D3)
- Stakeholders Involvement Plan (D1)

LIFE16 ENV/IT/000220 **LIFE De BAY**

ELV DEPOLLUTION BAY - equipped island for the management of materials and components for end of life vehicles

Challenges: ⚠

- ***A preliminary analysis on the requirements for the potential end users in other EU target markets and extra-EU markets (USA, Brazil, Chile and Australia) risks to be too ambitious as it might not be enough to understand the regulatory framework for these markets***

- ***Shouldn't you focus on one market or two rather on many more at the same time?***

- ***How to offer a business package (licensing of technology + financing) for promoting the project solution out of EU (huge market / high diversity / different cultures and & regulatory regimes)? Treat USA market the same way as the Brazilian?***

LIFE16 ENV/ES/000192 **LIFE REFIBRE**

High value asphalt pavements with glass fibre from sustainable recycling of wind powered generator blades

- **Product:** Methodology for conversion of waste plastic reinforced with fiber glass from wind powered generator blades into a second life cycle for a high added value application: its incorporation to asphalt pavements
- **Market**: Industrial sectors from the asphalt pavements. Universities, research and technology centers
- **Competition:** European/global market
- **Replicability and sustainability**

Strategy:

The technology will be implemented at pilot scale, and the design of an industrial plant is one of the outputs of the project in order to facilitate its replication at large scale. The replication and sustainability of the project is developed in task B5, when the technical, environmental and economic viability of the methodology will be assessed and the supply chain will be studied

LIFE16 ENV/ES/000192 **LIFE REFIBRE**

High value asphalt pavements with glass fibre from sustainable recycling of wind powered generator blades

- **Related actions**:

- Action B.5: Viability study for the industrial implementation

- **Relevant deliverables:**

- Action Plan for the creation of a supply chain of recycled fiber glass (B5 – D1)
- LIFE REFIBRE exploitation plan (B5 – D2)
- Viability study on the industrial implementation of the process of recycling wind powered generator blades (B5 – D3)
- Project replication and expansion plan (B5 – D4)
- IPR Strategy document (B5 – D5)

LIFE16 ENV/ES/000192 **LIFE REFIBRE**

High value asphalt pavements with glass fibre from sustainable recycling of wind powered generator blades

Challenges: 

- ***How old are the wind powered generator parks nowadays running? When do you foresee that they will be dismantled or renewed? Does it match with the project timeline?***
- ***Can you use the fiber glass recycled in other products other than asphalt, to enlarge its reuse?***
- ***Do you think that the fiber glass producers will be a barrier for your product in the market? There are only very few fiber glass producers in the world, with high power on the market: Have you studied them?***
- ***Will you produce a business plan and an investment plan for increasing business chances for the devised methodology?***

LIFE16 ENV/ES/000331 **LIFE+ REGROW**

Reclamation of olive oil waste abandoned lagoons using bio-recovering strategies in a circular economy scenario

- **Product:** Mixed strategies for bio-recovering of abandoned lagoons/ponds of olive mill wastewaters. The target area will be re-vegetated for recreational-educational services with artificial wetland, bird watching, etc.
- **Market**: Olive oil companies; olive mills, at small and industrial scale. Companies for waste management. Municipalities related to olive and olive oil production
- **Competition:** European market
- **Replicability and sustainability**

Strategy:

The bio-recovering methods will be implemented in a pilot site, but the outcomes will be replicated through a network of strategic partners, among public authorities and private companies. Replication and sustainability of the project is developed in Task B3, with training activities for replicating the project methodologies in various contexts. Sustainability will be addressed by a business & marketing plan, developed also looking at other kinds of contamination (e.g. hydrocarbon-contaminated soils). Development of a DSS (via website) to provide recommendations to new users

Related actions:

- Action B.3: Replicability & transferability plan

Relevant deliverables:

- Letters of intent from at least 10 entities responsible for sites contaminated by wastewater from olive mills, demonstrating their interest/commitment to adopting the project results (B3 – D1)
- Business plan & marketing plan (B3 – D2)
- DSS tool final version (B3 – D3)
- Report on training & replicability activities (B3 – D4)

LIFE16 ENV/ES/000331 **LIFE+ REGROW**

Reclamation of olive oil waste abandoned lagoons using bio-recovering strategies in a circular economy scenario

Challenges: ⚠

- ***The list of interested organisations mostly includes public entities. Is there a specific strategy to ensure replication among targeted private companies (olive oil and waste management firms)?***

- ***Which is the specific (business) potential of the bio-recovering strategies proposed by the project with respect to alternative low cost methods already in use for reclaiming contaminated land?***

- ***Is there any intention/plan to patent the methodologies devised by the project? How will you manage the issue of IPR?***

LIFE16 ENV/ES/000159 **LIFE TECMINE**

Innovative techniques for Facies Weald and Utrillas mine restoration

- **Product:** Technical solutions for mine restoration in Mediterranean forest areas by gathering and demonstrating the feasibility and suitability of new techniques
- **Market**: Public sector bodies/agencies dealing with mine restoration in forest areas. Mining and quarry companies. Companies dealing with environmental restoration.
- **Competition:** European market
- **Replicability and sustainability**

Strategy:

The solutions will be implemented in a forest ecosystem, following a multidisciplinary approach. Replication of project results will be carried out after contacting main European stakeholders; assessing feasibility of replication in selected areas; support interested entities to develop new projects; developing communication to share information and provide technical assistance; and by finally developing a Replication Plan

LIFE16 ENV/ES/000159 **LIFE TECMINE**

Innovative techniques for Facies Weald and Utrillas mine restoration

- **Related actions**:

- Action B.7: Replicability and transferability strategy

- **Relevant deliverables:**

- Replication Plan (B7)

LIFE16 ENV/ES/000159 **LIFE TECMINE**

Innovative techniques for Facies Weald and Utrillas mine restoration

Challenges: 

- ***Have you a specific strategy to ensure replication among the potential users of the proposed technical package besides training and dissemination?***
- ***Did you assess the transferability potential of the bio-restoration techniques to other sectors (e.g. landfills; brownfields)?***
- ***How will you cope with possible competition from other methodologies of mine restoration available in the market?***
- ***Will you develop a business plan to assess costs and benefits of your methodology?***
- ***Will you produce an investment plan, to attract potential investors?***

LIFE16 ENV/IT/000389 **LIFE-LIBAT**

Recycling of primary LIthium BATtery by mechanical and hydrometallurgical operations

- **Product:** An innovative process for the recycling of primary Li batteries (Li(0)/MnO2 batteries). It integrates mechanical pre-treatment of primary Li batteries with a hydrometallurgical treatment route (patented by the coordinating beneficiary)
- **Market**: Companies dealing with electronic waste recycling. Companies interested in the fractionated materials from the process, such as metals, non-metals, Mn and Li.
- **Competition:** European/Global market
- **Replicability and sustainability**

Strategy:

Replicability of the proposed process solution will be studied in Romania and Greece. Potential stakeholders involved in the recycling of batteries and interested into the exploitation of the proposed process to be identified in the targeted areas. Economic analysis and business planning are foreseen for the industrial scale application of the technology. Transferabiliy to other kinds of Li-battery to be studied. Competitor analysis

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Related actions:

- Action B.4: Economic feasibility assessment and analysis of replicability

Relevant deliverables:

- Final technical economic analysis (B4 – D1)
- Replicability and Transferability Plan (B4 – D2)
- Business plan (B4 – D3)

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Challenges:

- ***Will you design a specific action plan for the replication of the technology, in agreement with other companies in Greece and Romania?***
- ***How strong is the competition in the market with other similar technologies capable to fully recycle single components of primary Li-batteries?***
- ***Do you foresee an investment plan?***
- ***Is there any intention/plan to patent the entire technology devised by the project (considering that the hydrometallurgical treatment is already patented)? How will you manage the issue of IPR?***

Conclusions

- **Enhance market uptake during and after the project**
  - Identify market gaps, policy gaps
  - Develop long-term vision
  - Orient project towards an increase of the market uptake
- **Tackle the challenges**
  - Do targeted dissemination and network
  - Increase benefits to the project
  - Strengthen leadership position / innovation character
  - Increase environmental benefits at EU level

Wishing you Success
in achieving
sustainable results...

Thank you!