



LIFE15

Soil

Sustainability & Replicability

Brussels

Carlo Ponzio

Neemo – LIFE Monitoring Team

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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**



Evaluation criterion 6: EU added value: replicability and transferability

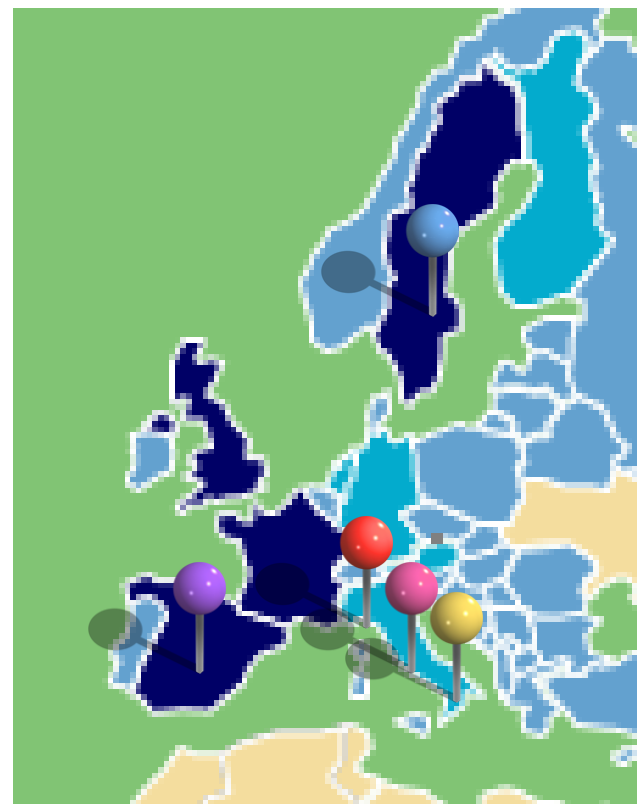
The following points should be taken into account:

1. Realistic strategy and action plan for sustainability and replication? Including funding and provisions for generation of savings and/or income
2. Concrete actions to facilitate replication to other sectors, entities, regions and countries during and/or after its duration. To what extent such actions go beyond simple dissemination, transfer of knowledge and networking?
3. Is the proposed approach sufficiently ambitious and realistic in order to **reach a critical mass** and mobilise a **wider uptake?**



Projects selection

- LIFE15 FR ENV 512
- LIFE15 IT ENV 392
- LIFE15 IT ENV 423
- LIFE15 IT ENV 585





LIFE15 ENV FR 512 **LIFE AGROMINE**

Cropping hyperaccumulator plants on nickel-rich soils and wastes for the green synthesis of pure nickel compounds

- ➔ **Product:** Technology to extract nickel through cropping hyperaccumulator plants from nickel-rich soils and wastes
- ➔ **Market:** Industrial and agricultural SMEs; quarry companies



LIFE15 ENV FR 512 **LIFE AGROMINE**

Cropping hyperaccumulator plants on nickel-rich soils and wastes for the green synthesis of pure nickel compounds

→ **Replicability and Sustainability:**

- Activities within the EIT RawMaterials project (CB is partner of the EIT-RM consortium);
- Econick start-up for the commercial exploitation of the patent and to seek investors to start a full-scale plant and energy production facilities
- Scaling up from pilot- to industrial scale
- Support to SMEs for metal processing and recovery and trading of “green” metal products
- The serpentine quarry companies in EU will take up agromining in their reclaiming plans after exploitation
- Sharing intellectual property
- 20 ha of *A. murale* planted in Albania to have enough biomass for the processors in 2017



LIFE15 ENV FR 512 **LIFE AGROMINE**

Cropping hyperaccumulator plants on nickel-rich soils and wastes
for the green synthesis of pure nickel compounds

- ➔ **Actions/deliverables:** - Task B4, Overview of agronomic practices used during AGROMINE and their implications for the upscaling of the phytomining cycle; Deliverable D1.1 - Business strategies for all beneficiaries for the deployment of know-how gathered in this project; Deliverable C4.1 - A report on the economic feasibility of the process for the three different scenarios
- ➔ **What can be improved:**
- ➔ Quantify market potential and business value of the technology
- ➔ Indicate its financial profitability: for industry and agriculture
- ➔ Business plan for Econick and new patents
- ➔ Assess of the impact on jobs and growth of different replication/ transfer scenarios (e.g. no, low, medium, high)



LIFE15 ENV IT 585 **LIFE DOP**

Demonstrative model of circular economy process in
a high quality dairy industry

- ➔ **Product:** Good agronomic and livestock practices for environmental sustainability of the dairy value chain of high quality cheese product
- ➔ **Market:** Organisations of livestock farmers; biogas producers



LIFE15 ENV IT 585 **LIFE DOP**

Demonstrative model of circular economy process in
a high quality dairy industry

- ➔ **Replicability and Sustainability:**
- ➔ Good practices technically easy replicable and transferable among the thousands of dairy farmers and processors for Grana Padano and Parmigiano Reggiano
- ➔ More value to the farmers' products, due to higher environmental sustainability and resource use efficiency;
- ➔ Set up of one digital "stock exchange" for cattle slurry, which can be also transferred to the pig value chain (second chain in order of economic importance in Lombardia, after the dairy one)
- ➔ Links between dairy and agro-energy value chains strengthened



LIFE15 ENV IT 585 LIFE DOP

Demonstrative model of circular economy process in
a high quality dairy industry

- ➔ **Actions/deliverables:** - ACTION B.6: Check and optimisation of environmental management systems of the dairy value chain; Deliverable B6.1 Business cases to implement the model LIFE DOP
- ➔ **What can be improved:**
- ➔ Activities for the replication of the “Virgilio model” among the farmers of the Consortium and outside
- ➔ A strategy for the transferability of the model to other dairy contexts, other than the one of Grana Padano e Parmigiano Reggiano
- ➔ A business plan to ensure financial sustainability, including the option of patenting the innovative management of the slurry, etc.
- ➔ Assessment of the impact on jobs and growth of different replication/transfer scenarios (e.g. no, low, medium, high)



LIFE15 ENV IT 423 **AGROWETLANDS II**

Smart water and soil salinity management in agro-wetlands

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- **Product:** Technology for integrated water and soil salinity management developed in a Mediterranean agro-wetland
 - **Market:** Farmers of wetlands; irrigation farmers; irrigation advisors; manufacturers of electronic devices



LIFE15 ENV IT 423 **AGROWETLANDS II**

Smart water and soil salinity management in agro-wetlands



- ➔ **Replicability and sustainability:**
- ➔ More farmers expected to adopt the system in the mid-term thanks to specific co-financing made available by the regional RDP
- ➔ Pilot project replicated in Spain
- ➔ The technology is suitable for any irrigation project, thus it may be easily replicated among the farmers of the partner Agrisfera and transferred to other irrigation schemes



LIFE15 ENV IT 423 **AGROWETLANDS II**

Smart water and soil salinity management in agro-wetlands

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- ➡ **Actions/deliverables:** - Task D2, Networking, Training activities and Dissemination Events – Replicability; Deliverable D2.5 Report on transferability of the AGROWETLANDS II system in the Comunidad de Carrizales;
 - ➡ **What can be improved:**
 - ➡ Business plan for the financial sustainability of the technology, indicating how partners will commercially exploit the innovation
 - ➡ Activities to ensure replicability among farmers (proposed technology too complicated?)
 - ➡ Assessment of the impact on jobs and growth of different replication/transfer scenarios (e.g. no, low, medium, high)



LIFE15 ENV IT 392 **VITISOM LIFE**

Viticulture innovative soil organic matter management: variable-rate technology (VRT) distribution system and monitoring of impacts



- ➔ **Product:** A technology to handle in an efficient way organic fertilisation in high-quality vineyards
- ➔ **Market:** (Organic) farmers with vineyards; local organic matter producers (manure, compost, digestate); manufacturers of precision farm machinery, agricultural contractors (farm machinery)



LIFE15 ENV IT 392 **VITISOM LIFE**

Viticulture innovative soil organic matter management: variable-rate technology (VRT) distribution system and monitoring of impacts

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- ➔ **Replicability and sustainability:**
 - ➔ Study for the exploitation of the intellectual property of the results;
 - ➔ Opportunities of co-financing through the RDPs, Horizon 2020 and national funds supporting the food sector;
 - ➔ Action plan for scaling up the VRT from prototype to a commercial and standard dimension
 - ➔ Five prototypes established in different vineyard agro-ecosystems, representative of the major European wine-growing areas
 - ➔ Three partners are leader enterprises of the high quality wine sector, and ready to transfer results to their wide network of wineries



LIFE15 ENV IT 392 **VITISOM LIFE**

Viticulture innovative soil organic matter management: variable-rate technology (VRT) distribution system and monitoring of impacts

→ **Actions/deliverables:** - Task B3 Development of business strategy for expanding the tested methodology. Deliverable B3.1 Agreement among parties for the IPR exploitation; Deliverable B3.2 Commercial Strategy Plan. - Task D2 VITISOM communication materials. Deliverable D2.1 Manual of good practice of organic matter management (with info about opportunities of financial support through RDPs)

→ **What can be improved:**

- Quantify the market potential of the VRT and the cash flow it may generate: business plan
- Strategy with concrete actions for transfer to other regions and countries
- Assessment of the impact on jobs and growth of different replication/transfer scenarios (e.g. no, low, medium, high)



Conclusions

➔ Enhance market uptake during and after the project

- ➔ Identify market gaps, policy gaps, users
- ➔ 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!