ORGANIC SPIRULINA

Key note speech: financing innovation in the organic sector with the SME instrument
WHO WE ARE

GreenTech Ltd. is an academic spin-off by a group of researchers affiliated with the Università Politecnica delle Marche, in Italy.

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Biotechnology use of Algae

Prof. Francesco Corvaro
Renewable energy expert
ReSpirA
Olive oil wastewater Reuse for the production and commercialization of Spirulina Alga

Call: H2020-SMEINST-1-2015
Type of Action: SME-1
Topic: Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials by SMEs SC5-20-2015-1
Acronym: ReSpirA
Number: 711725
Duration: 6 months
Start Date: 2015-12-01
EU Contribution: 50.000

The SME Instrument

Phase 1 – Concept & Feasibility Assessment. Idea to Concept
Idea > Business Plan
Grant: € 50,000 in funding and business coaching
Duration: 6 months
Outcome: a feasibility study (technical and commercial)

Phase 2 – Demonstration, Market Replication, R&D. Concept to Market-Maturity
Innovation activities, draft a more developed business plan
Grant: € 0.5 million and € 2.5 million in funding and business coaching
Duration: 1-2 years
Outcome: a new product, process or service to launch on the market; a business innovation plan with a commercialisation strategy and a financing plan in view of market launch.

Phase 3 – Commercialisation. Prepare for Market launch
Facilitate the commercial exploitation of the innovation activities and access to networking opportunities
Grant: no

Horizon 2020 SME Instrument: 2,833 new project proposals received in September - 1,873 for Phase 1 and 960 for Phase 2.

The top three countries in terms of number of applicants are:

- **Italy** (449 for Phase 1 and 220 for Phase 2)
- **Spain** (292 for Phase 1 and 152 for Phase 2)
- **United Kingdom** (203 for Phase 1 and 109 for Phase 2)

Phase 1: 17 September 2015 third cut-off

- **141** small SMEs
- **24** countries
- **30** Italian SMEs beneficiaries followed by firms from Spain (24) and the UK (15).
- **1099** SMEs have been selected under Phase 1 of the SME Instrument (since the launch of the programme on 1st January 2014)

Success Rate: **7.52%**

"If I succeed phase 1, will I have more chances to successfully access phase 2?"

**ANSWER!**

Proposals from successful phase 1 participants will be scrutinised and evaluated as any other proposal applying to phase 2, **there is no preferential treatment**.

However, successful completion of phase 1 will have allowed you to make the feasibility assessment and elaborate the business plan required for phase 2. Support in phase 1, including coaching, should have helped the project to grow to a stage where a proposal for funding in phase 2 can be well substantiated.

**Source**: https://ec.europa.eu/digital-agenda/en/sme-instrument-frequently-asked-questions
IDEA

Convert olive oil mill WasteWaters (WWs) into raw materials for the production of enriched Organic Spirulina.

The Greentech process offering both services and products:

✔ The service is addressed to Olive Oil Mills, and it offers the collection and purification of WWs resulting from oil production.

✔ The product is Certified Organic Spirulina enriched with polyphenols & produced using natural nitrates & phosphates obtained from WWs.
BACKGROUND AND PROBLEM

OLIVE OIL

WASTEWATER

Municipal water treatment - 80 €/m³

Spread on agricultural land - 20 €/m³

Tav. 9
MAIN INNOVATION

SEPARATION

MICROALGAE CULTIVATION

NITRATES + PHOSPHATES + POLYPHENOLS

OUTPUTS

CLEAN WATER

ORGANIC FRACTION (COMPOST)
ORGANIC ENRICHED SPIRULINA

✓ Certified organic: all inputs from organic olive oil wastewaters + energy
✓ Made in Italy
✓ New certification standard (CCPB)
✓ Highest source of beta-carotene
✓ Rich in polyphenols
✓ Unique product
ADDRESSABLE MARKET - SPIRULINA

EUROPE
350 M€ - 3000 t/year

NETHERLANDS
160 M€ - 1400 t/year

GERMANY
40 M€ - 400 t/year

ITALY 2,3 M€ - 20 t/year

European Algae Biomass Organization, Portugal, October 2014

EUROPEAN microalgae MARKET > 755 M€
ADDRESSABLE MARKET – OLIVE MILL

WORLD WASTEWATER PRODUCTION > 15 Mt/year

- **RoW**: 3.6 Mt/year
- **Greece**: 1.95 Mt/year
- **Spain**: 4.8 Mt/year
- **Italy**: 4.2 Mt/year

**Europe**: 11.5 Mt/year

**Target**: 0.8 Mt/year

International olive Council, Market newsletter, August 2015
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TARGET MARKET

Potential customers are B2B and B2C.

B2B are customer working in the food industry sector (pasta, bread ...), pharmaceutical and the cosmetics industry.

The B2C will be achieved through off-line and on-line channels and traditional shops specialized in selling organic products.

Greentech will create a new brand dedicated to Organic Spirulina products.
Evaluation of proposals

CRITERIA

1. IMPACT to demonstrate that the project will generate revenues and create jobs. European or international dimension of the project. Intellectual property.

2. EXCELLENCE the product, process or service is «disruptive», change the dynamic of the market, societal challenge.

3. QUALITY AND EFFICIENCY OF THE IMPLEMENTATION you can make it! Technical competence and commercial competence. Credibility of the team and work plan. Time frame realistic.

Source: https://ec.europa.eu/easme/en/sme-instrument-essential-tips-your-application
EVALUATION CRITERIA

Total score: (Threshold: 13)

**CRITERION 1 – IMPACT**
(Threshold: 4/5.00, Weight: 100%)

**CRITERION 2 – EXCELLENCE**
(Threshold: 4/5.00, Weight: 100%)

**CRITERION 3 – QUALITY AND EFFICIENCY OF IMPLEMENTATION**
(Threshold: 4/5.00, Weight: 100%)
