

Best Practice Profiles for the exploitation of research results

Overview of 20 Best Practice Cases stemming from the EC funded project
ECOINNO2SME



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Domestic EMergency Advanced Generator

Company: **LABOR S.r.l.**

About the SME:

Country: Italy
Industrial Sector: Energy
Area of activity: Hydrogen technologies, Energy efficiency and renewable energies, Electronics and industrial automation, Material and processes for energy and environment

Project description

- **Acronym:** DEMAG
- **Funding Scheme:** FP6 - CRAFT
- **Project objective and activities:**
DEMAG intended to investigate the indoor domestic application of advanced hydrogen technologies to life saving emergency energy generators, and deliver an Emergency Power Supply, rated 10 kWh, based on the integration of a PEM fuel cell with ultracapacitors and with a metal hydrates container for hydrogen storage: the FC is expected to provide a basic power output, whereas ultracapacitors can supply temporary peak loads
- **Coordinator:** Alfredo Picano, LABOR Srl
- **Achievement of the project:**
10 kWh Emergency Power Supply, able to supply 1 kW during 10 hours
220 Volt @ 50 Hz power output, Power generation by means of a 1 kW PEM Fuel Cell
Weight < 100 Kg (including hydrogen storage, energy generation by PEMFC, controllers, auxiliaries and ancillaries)
Volume < 12 litres (including hydrogen storage, energy generation by PEMFC, controllers, auxiliaries and ancillaries)
Safe energy storage through a state-of-the-art metal hydrates LaNi5 hydrogen tank, operating at 2 bar and room temperature ...

Key Success Factors

See other page

Lessons Learned / Recommendations

See other page

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Domestic Emergency Advanced Generator

Company: **LABOR S.r.l.**

About the SME:

Country: Italy

Industrial Sector: Energy

Area of activity: Hydrogen technologies, Energy efficiency and renewable energies, Electronics and industrial automation, Material and processes for energy and environment

- **Main achievement of the project::**

...

Automatic start-up during black-out and shut-down on grid reconnection.

Flexible and easy installation both for new installations and retrofit.

Able to supply a load exceeding the rated power for a limited time, thanks to the integration with ultracapacitors, (e.g. start-up of the compressor of a refrigerator, the inductive starter of a fluorescent lamp, or the charge of a capacitor in a switch power supply), while the system alerts the users by means of a warning sound; if the extra load persists, DEMAG will interrupt the supply for some seconds, allowing the users to remove the extra loads.

Usable also as a portable power generator, powered by a small size lighter hydrogen tank

Exploitable knowledge	Exploitable product or measure
DEMAG system simulator	SIMULINK program
DEMAG expert system	SW tool for sizing optimized generators
DEMAG design	DEMAG generator

- **Exploitation of the project results:**

Copyright protection will be evaluated for DEMAG system simulator and expert system

Key Success Factors

- Industrial sector with existing technology needs
- EU funding adequate to the project objectives
- Strong role in the project (coordinator and research performer)

Lessons Learned / Recommendations

- Lessons learned/ Positive and negative factors and main barriers for innovation:

Partnership definitively too large (10 partners)
Copyright expenses not covered by the project
Top class technology but for a too specific market
Price of new product too high for the market

- Recommendations:

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HEART Rating for Objective Neural Intelligent Communication

Company: **Labor s.r.l.**

About the SME:

About the SME

Country: I Italy
Industrial Sector: Biotechnology
Area of activity: Hydrogen technologies, Energy efficiency and renewable energies, Electronics and industrial automation, Material and processes for energy and environment

Project description

- **Acronym:** HEARTRONIC
- **Funding Scheme:** FP6 - CRAFT
- **Project objective and activities:**
The HEARTRONIC Project developed an innovative system for prevention and early warning by a continuous monitoring of heart conditions, integrated in a wearable and light support like a shirt, capable to recognize cardiovascular anomalies and to alert doctors and Hospitals in real time.
- **Coordinator:** Alfredo Picano, LABOR Srl
- **Achievement of the project:**
The results of the research are:
 - ECG T-shirt with Embedded sensors
 - First set of ECG Recognition algorithms (classifier analysis)
 - Heartronic Handheld device
 - PDA Software
 - Wireless Network
 - Database architecture
 - Second set of ECG Recognition algorithms (fine analysis)
- **Exploitation of the project results:**
See next column

Exploitable Knowledge	Exploitable product or measure
T-shirt embebbed sensors	Heatrornic T-shirt
Electronic board design + ECG Pattern recognition algorithms	Heartronic acquisition board
Accurate ECG diagnosis and TLC integration	Heartronic complete system
Software for PDAs	Heartronic complete system

Key Success Factors

- Specific industrial sector
- Existing technology gap
- EU funding in line with project activities
- Strategic partners and consortium with an added value

Lessons Learned / Recommendations

Partnership definitively too large (10 partners)
Few expertise and not enough support for IPR
Long time for exploitation of the project due to the necessity of the medical validation of the results

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Domestic Network Oriented Risk assessment by in situ Screening of Contaminated Sites

Company: **Agruniver Holding Environmental Management,
Research and Technology Development Ltd**

About the SME:

Country: Hungary
Industrial Sector: biotechnology, environment, waste management
Area of activity: Environmental service and management, technology development; site investigation, risk assessment, remedial action and monitoring, water and waste management

Project description

- **Acronym:** NORISC
- **Funding Scheme:** FP5 STREP
- **Project objective and activities:**
The interdisciplinary approach of the NORISC project was developed within a network of cities, environmental engineering companies, research institutes and universities. NORISC methodology significantly contributes to improvements in contaminated site management by minimising time and cost needed for site investigation and assessment, as well as for remediation and revitalisation, meeting the basic interest of city planners, decision-makers, landowners and investors involved in brownfield redevelopment.
- **Partner and countries involved:**
Germany, Greece, Hungary, Italy, Poland, Sweden, USA
- **Coordinator:** government agency, Germany
- **Main tasks of the company in the project:**
Development of revitalisation strategy, system testing

Key Success Factors

See other page

Lessons Learned / Recommendations

Lessons learned
Positive and negative factors and main barriers for innovation
Recommendations

See other page

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Domestic Network Oriented Risk assessment by Insitu Screening of Contaminated Sites

Company: **Agruniver Holding Environmental Management,
Research and Technology Development Ltd**

About the SME:

Country: Hungary
Industrial Sector: biotechnology, environment,
waste management
Area of activity: Environmental service and
management, technology development; site
investigation, risk assessment, remedial action
and monitoring, water and waste management

Project description

- **Achievement of the project**

NORISC approach: integrated contaminated site
assessment including field investigation
techniques (combination of geophysical
screening, sampling, on site analytical and
(hydro-) geological measurement, real time data
processing), risk assessment, data visualisation,
as well as revitalisation strategy

- **Exploitation of the project results**

Prepared know-how and best practice used by
the SME

Key Success Factors

- IPR available and partly owned by the
SME
- revitalisation strategy (IPR owned by the
SME) used by the SME brings economic
benefits to the company: through orders of
a large oil industry
- potential market available: possibility for
licensing the strategy
- know-how gained during the project is
used by the SME

Lessons Learned / Recommendations

Positive factors

New cooperation partners
New research results

Negative factors

Consumption of too much resources
Not entirely completed development

- **Recommendations:**

Better developed exploitation plan,
More extensive market demand studies
Better IPR management
Better estimation of workload and timing to
reach the planned technology targets

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C-Tech Innovation
...advantage through technology

Enhanced Production of Methane from Anaerobic Digestion with Pre-Processed Solid Waste for Renewable Energy

Company: **C-Tech Innovation Limited**

About the SME:

Country: UK
Industrial Sector: Biotechnology, Environment and Energy
Area of activity: Energy

Project description

- **Acronym:** DIPROWASTE
- **Funding Scheme:** FP5 CRAFT
- **Project objective and activities:**
Extension of methods for externalities research to new sectors, improve exploitation of existing results.
- **Partner and countries involved:**
Sundorne Products (Llanidoes) Ltd. T/A Evans Logistics, UK , Abirer -Systems Jan Kai Dobelmann, sustainable engineering solutions, Germany, Bioplex Ltd, UK, Verein zur Foerderung der Technologie, Hochschule Bremerhaven, Germany
- **Coordinator:**
Ingenieurbüro Dobelmann & Kroke GmbH, DE
- **Main tasks of the company in the project/Research undertaken:**
Development of thermal technologies appropriate for pre-treatment of waste material prior to anaerobic digestion to enhance the process.
- **Achievement of the project:**
The technology utilised, ohmic heating is on the market.
- **Exploitation of the project results:**
The technology has not been exploited but modifications and implementation are being conducted in related areas.

Key Success Factors

- Partners were well placed to exploit any new technologies and partners were chosen accordingly.
- A new technology was implemented with it being available on the market today, ohmic heating.

Lessons Learned / Recommendations

- **Positive and negative factors:**
Good collaboration with partners and useful results were generated by the work.
Economic benefit gained after the project via networking opportunities created by the project.
Final project payment and audits could be quicker as this makes it difficult for SMEs.
- **Main barriers for innovation:**
Lack of funding,
Lack of available resources and time.
- **Recommendations:**
Clear timetables for calls and shorter contract negotiations.

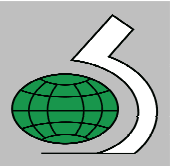
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New methods for ecotoxicological testing of pharmaceuticals *for authorization purposes*

Company: **ECT Oekotoxikologie GmbH**

About the SME:

Country: Germany
 Industrial Sector: Environment
 Area of activity:
 Testing the ecotoxicological impact of substances to aquatic, benthic and terrestrial environments

Project description

- **Acronym:** ERAPharm
- **Funding Scheme:** FP 6 - STREP
- **Project objective and activities:**
 Improvement and complementation of existing knowledge and procedures for the environmental risk assessment (ERA) of human and veterinary pharmaceuticals.
- **Partner and countries involved:**
 14 partners from 8 countries
- **Coordinator:** ECT Oekotoxikologie GmbH
- **Main tasks of the company in the project /Research undertaken:**
 Modify and refine test methods in order to detect the effects of long-term, low-level exposure to pharmaceuticals on aquatic and terrestrial organisms (bacteria, invertebrates and fish) at the individual, population and community level. Investigate whether and to what extent environmentally relevant concentrations of selected pharmaceuticals cause effects in environmental organisms.
- **Achievement of the project/Exploitation of the project results:**
 Conceptual and experimental support for evaluating the impact of environmental stressors on ecosystems Existing laboratory tests with soil.

Key Success Factors

- International scientific cooperation
- Project management experience
- Innovative proposal/idea
- Initiating the proposal
- Well structured consortium
- Well defined work plan
- Innovative technology
- Demands from public authorities
- Forum for representatives from pharmaceutical industry and competent authorities

Lessons Learned / Recommendations

- **Positive and negative factors and main barriers for innovation:**
 New cooperation partners found
 New market access achieved
- **Recommendations for other SMEs:**
 Follow the rules provided by the research programme
 Choose long-term objectives for your SME when participating in EU-funded projects

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Development of an new articulated skidder for heavy timber conditions in Middle Europe

Company: **HSM Hohenloher Spezial-Maschinenbau GmbH & Co. KG**

About the SME:

Country: Germany
 Industrial Sector: Machine building, environment/wood, forest techniques
 Area of activity: Production & Construction of special forest machines

Project description

- **Acronym:** FORSTINNO
- **Funding Scheme:** FP6 - CRAFT
 The project "ForstINNO" is a co-operative research project (CRAFT). 15 partners from eight different European countries had the task to construct, develop and test high productive timber harvesting techniques which fit best to the specific ecological and social conditions in Central Europe.
- **Partner and countries involved:**
 Konrad Adler GmbH & Co. KG, Germany
 CTL Technology GmbH, Germany, MTN - Mechanical Technology Neier, Germany, IUP design, Germany, IMK engineering GmbH, Germany, S.C. Roteca S.R.L., Romania, Ing. Vojtech Novotny, Czechia etc.
- **Coordinator:** HSM GmbH & Co. KG, Germany
- **Main tasks of the company in the project/Research undertaken:**
 Building of special forest skidders for strong/hard wood, testing and assessment of the technology
- **Achievement of the project/Exploitation of the project results:**
 Special 6WD articulated skidder HSM 904Z 6WD. 0-typ production run of special forest skidders built

Key Success Factors

- Internationalisation
- EU-Project management experience
- Project initiator
- Well Structured consortium
- Well defined workplan
- Exploitation plan
- New evolving markets addressed
- Specific consumer demands addressed
- IPR management

Lessons Learned / Recommendations

- **Barriers for innovation:**
 Lack of funds
 Lack of resources
 Lack of strategic partners
- **Positive and negative factors:**
 New cooperation partners
 New research results
 New market access
 Consumption of too many resources
- **Recommendations:**
 Be the coordinator...!

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New technology for removing hard coatings of plasma spray

Company: **HT Lasertekniikka OY**

About the SME:

Country: Finland
Industrial Sector: Environment
Area of activity: Energy, Environment

Project description

- **Acronym:** ABRADE
- **Funding Scheme:** FP 5 CRAFT
- **Project objective and activities:**
Development of adaptive abrasive water jet removal method for hard coatings to replace environmentally dangerous chemical stripping
- **Partner and countries involved:**
Finland, Germany, Norway
Partners with experience of producing coating, experience of building necessary machines and demand for the end product
- **Coordinator:** HT Lasertekniikka OY
- **Main tasks of the company in the project/Research undertaken:**
Coordinator + end user
- **Achievement of the project:/ Exploitation of the project results:**
New technologies and products on the market, IPR protected

Key Success Factors

- Well composed and complementary consortium
- Lots of different know-how brought in by partners
- The project targeted new markets
- Technology foresight /watch done to detect new demands/markets
- Targeted technology was very innovative
- High consumer demands for the technology
- Framework of the project was good and clear
- Coordination work was successful

Lessons Learned / Recommendations

- **Lessons learned:**
Problems are the same everywhere
Abundant discussions are essential
- Positive and negative factors and main barriers for innovation
Lack of funds and resources
Lack of governmental support
Lack of available research results
- **Recommendations:**
Don't be afraid to participate!
Keep an open mind to overcome cultural barriers and differences in working habits!
Keep a constant open discussion with the partners!

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New type of water and energy saving technique to improve the hygienic result

Company: Lagafors AB

About the SME:

Country: SE
Industrial Sector: Environment
Area of activity: Environmental technology

Project description

- **Acronym:** Water Saving Pump
- **Funding Scheme:** FP5 - IP
- **Project objective and activities:**
To develop a water and energy saving technique for high pressure cleaning and to improve the hygienic result.
- **Coordinator:** LAGAFORS FABRIKS AB
- **Main tasks of the company in the project /Research undertaken:**
To coordinate research within the project and lay a foundation for product development of a new water saving pump
- **Achievement of the project :**
The overall objective:
 - develop a water saving technique for high-pressure cleaning
 - reduces the water consumption with 40% about 20 %
 - allows flow and pressure to be adjusted independently, to optimise all types of hygienic cleaning
- **Exploitation of the project results:**
A water saving technique for high pressure cleaning pumps with trig-less spray gun and possibilities to adjust water flow and pressure was developed and is on the market today.

Key Success Factors

- EU subsidies and the EU water saving directives have been the most important factor(s) in this SME's ability to do this type of product development.
- Exploitation plan accepted by all partners and new technique IP protected

Lessons Learned / Recommendations

Positive factors:

New research results
It is positive that EU supports transnational research for product development by SMEs aimed to fulfil important EU environmental legislation.

Negative factors:

No one from the EU seems to be interested to actually see our product. It is really disappointing.

Main barriers for innovation:

Lack of funding
Regulation barriers

- **Recommendations:**
More focus on:
The outcome and the sources of the project.
The value of the project for development of the SMEs
Less focus on bureaucracy.

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Jönköping AB



Fire Risk Evaluation to European Cultural Heritage

Company: **Fire Safety Nordic AB**

About the SME:

Country: Sweden
 Industrial Sector: Environment
 Area of activity: Environmental Engineering/ Technology

Project description

- **Acronym:** FIRETECH
- **Funding Scheme:** FP5 (Key Action 4 – Environment & Sustainable Development)
- **Project objective and activities:**
To Evaluate fire risk to cultural heritage, Suggest quantification methods, Elaborate decision methods for optimisation of the use of fire protection methods
By collecting useful information, Develop a risk based approach optimizing the use of available protection means
- **Coordinator:** UGent (B)
- **Main tasks of the company in the project /Research undertaken:**
 Current methods for fire risk analysis were tested. Eventually technical adaptations to culturally significant buildings were made leading to new product development.
- **Achievement of the project:**
 A new guideline was developed for fire risk analysis of culturally significant buildings.
- **Exploitation of the project results:**
 New product constructed (Final/Pilot)

Key Success Factors

- The coordinator Professor P. Vandeveldde was very important to the success of the project..
- The consortium was well balanced in terms of partners from both the academics and the industrial world..

Lessons Learned / Recommendations

Positive factors:

We were very satisfied that the research resulted in a new guideline for fire risk analysis of culturally significant buildings
 Partners' national differences represent an important source of knowledge

Negative factors:

Loss of know-how; Difficult involvement in projects for SMEs: Shortage of internal human resources; Fire safety projects are often on a very advanced level and a single SME doesn't have enough expertise for staying abreast;
 Bureaucracy and administration burden:
 National differences in this field's regulation

Main barriers for innovation:

Lack of funds
 Lack of resources/time
 Regulation barriers
 Protected internal markets

• **Recommendations:**

To simplify bureaucracy and administration burden to reduce the use of limited internal human resources in SMEs
 To reduce the gap between basic or fundamental research in Universities and application in SMEs by increasing the interaction.

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Environmentally friendly lubricants

Company: OY Pinifer Ltd

About the SME:

Country: Finland
Industrial Sector: Environment
Area of activity: Environment

Project description

- **Acronym:** ENLUB
- **Funding Scheme:** FP5
- **Partner and countries involved:**
VTT Finland: lubricant testing
DTU Denmark: develop lubricant tests
Rautaruukki Finland: end-user
Grundfos Denmark: end-user
- **Coordinator:** Technical University of Denmark
- **Main tasks of the company in the project /Research undertaken:**
Development of new environmentally acceptable lubricants based on vegetable oils
- **Achievement of the project: / Exploitation of the project results:**
Pini Sef DD on the market, IPR protected

Key Success Factors

- Project targeted new markets
- High consumer demand for the product
- Market research was done before
- The aspect of environmentally friendliness of products and technologies is considered important
- Work plan was well defined
- Well-structured and complementary consortium

Lessons Learned / Recommendations

Positive:
New cooperation partners
New research results

- Main barriers for innovation:
Lack of resources
Lack of public funding
Lack of market study
Lack of strategic partners
- Recommendations:
Participate, it is worth it!

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Gauge change system for oil and hazardous product trains

Company: Pöyry Infra OY

About the SME:

Country: Finland
 Industrial Sector: Environment
 Area of activity: transport and logistics;
 road engineering;
 railway engineering

Project description

- **Acronym:** INTERGAUGE
- **Funding Scheme:** FP6-STREP
- **Project objective and activities:**
To develop and test a gauge change system for oil and hazardous product trains
- **Partner and countries involved:**
Poland, Slovenia, Ukraine, Finland
- **Coordinator:**
Politechnika Warszawska
- **Main tasks of the company in the project /Research undertaken:**
Research - conducting desktop research and interviews
- **Achievement of the project:**
the new transport technology allows to limit the time required for the train to move through a border crossing with gauge-changing station as well as to minimize environmental hazards
- **Exploitation of the project results:**
Technology was exploited (over the eastern border between Poland and Ukraine) and IPR protected

Key Success Factors

- The project had a good coordinator
- Experienced partners with good know-how
- Work plan well defined

Lessons Learned / Recommendations

- **Lessons learned:**
A partner had to be substituted because of problems in common understanding of manufacturing process
- **Positive and negative factors and main barriers for innovation:**
Lack of resources/time
Lack of funds
Need for clear and precise study programs
- **Recommendations:**
Be flexible. A problem with one partner does not mean that the whole project should fail.

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Process Oriented integrated Quality Management Internet Services and eTraining for SMEs

Company: **Promis @Service Sarl**

About the SME:

Country: Germany
Industrial Sector: Information services,
Environment
Area of activity: Environment, Health & Safety,
Quality

Project description

- **Acronym:** PROMIS
- **Funding Scheme:** Other research funding scheme (eTen)
- **Project objective and activities:**
To market and initially deploy a process-oriented multilingual portal for European SMEs offering interactive services and eTraining in Health&Safety, Environment and Quality. The core of PROMIS is myPROMIS, the internet integrated management solution for good management quality. It supports the user in all the stages of implementation, the results of which are automatically documented in an electronic handbook that follows ISO 9001, ISO 14001, EMAS, OHSAS 18001 requirements
- **Partners and countries involved:**
5 countries, 11 Partner
- **Coordinator: ENEA, Italy**
FUTUREtec GmbH is the business partner in the project and also founder of the spin-off PROMIS@Service Sarl
- **Main tasks of the company in the project /Research undertaken:**
Technology provider, business support to establish the new spin-off, IPRs and legal issues, rollout, marketing and dissemination
- **Achievement of the project and exploitation of the project results:**
PROMIS is initially being marketed in five countries: Italy, Germany, United Kingdom, Rumania and Greece.

Key Success Factors

- Unique product developed: combination of Knowledge Repository with Integrated Management System as electronic handbook following ISO+ EMAS + OSHA requirements, as well as interaction among SMEs and Consultants
- Management experience
- Presence of SME with exploitation interests in the consortium
- Direct contacts with end users and associations
- Know how in business issues
- Qualification of the consultants through CEN CWA (www.cen.eu)

Lessons Learned / Recommendations

Lessons learned

- Public institute need longer time for decision making and this must be taken into consideration by the SMEs
- The different needs, action time, IPRs, exploitation issues, responsibilities and in case penalties must to be clarified in detail in the Consortium Agreement
- In some cases partners do not respect what they have signed.
- The SMEs are well advised to protect their IPRs before starting a project.

Recommendations

- All partners must know from the start what they are going to endorse
- Draw an Exploitation Plan, handle the IPR before the project starts and ensure that all partners agree
- Ensure a business model for the marketing phase after the project

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Improved anti-inflammatory compounds

Company: **Synovo GmbH**

About the SME-

Country: Germany
 Industrial Sector: Biotechnology
 Area of activity: Synthetic chemistry, pharmacology, cell engineering

Project description

- **Acronym:** MACROCEPT
- **Funding Scheme:** FP6 - CRAFT
- **Project objective and activities:**
 Inflammatory bowel diseases such as Crohn's disease still lack efficient, cost effective treatments. Using recent advances in drug design, the partners have identified a new therapeutic drug class that has the potential to cut annual treatment costs while offering a better level of treatment than is currently available.
 The project:
 - Identified new anti-inflammatory compounds
 - Formulated them for GI disease
 - Tested them in advanced disease models
 - Selected a clinical candidate and demonstrated safety
- **Coordinator:** Synovo GmbH
- **Main tasks of the company in the project /Research undertaken:**
 Research on better cost effective treatments inflammatory bowel disease
- **Achievement of the project :**
 4 new patent applications
- **Exploitation of the project results:**
 New FP7 CRAFT (KINACEPT) project to further exploit research results

Key Success Factors

- Internationalisation
- Strong project management experience
- Coordinator of the project
- Well Structured consortium
- Workplan well defined
- Exploitation plan effectively done
- IPR management

Lessons Learned / Recommendations

- Lessons learned/Positive and negative factors:
 New research results
 High IPR costs
- Main barriers for innovation:
 Expensive IPR
- Recommendations:
 Establish exploitation association (e.g. funding of an exploitation company among the project partners) for the management of research results.

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Multi Fuel Operated Integrated Clean Energy Process: Thermal Desorption Recycle-Reduce-Reuse Technology

Company: **TERRA HUMANA Clean Technology Ltd.**

About the SME:

Country: Hungary
 Industrial Sector: Environment
 Area of activity: agri-environmental engineering, waste recycling and reuse

Project description

- **Acronym:** MULTIFUEL
- **Funding Scheme:** FP 5 IP
- **Project objective and activities:**
- Thermal Desorption Recycle-Reduce-Reuse Technology, the innovative 3R clean coal, the carbon capture & storage integrated energy technology provides zero emission solution for solid fuel power plants up to 300MW capacity
- Partner and countries involved: 8 partners from 6 countries
- **Coordinator:** Terra Humana
- **Main tasks of the company in the project /Research undertaken:**
 key research on the clean coal technology and process, field demonstration on product-like equipment scale, key technology RTD, design and construction
- **Achievement of the project:**
 the main result: within 2 years after the end of the project the technology has been industrial licensed and listed on the London Stock Exchange as an international dissemination programme
- **Exploitation of the project results:**
 The results are new technology and product

Key Success Factors

- Strong internationalisation
- High PM experience
- Innovative idea of the project
- Initiator and coordinator of the project
- SME- main exploiter,
- Access to IP
- Workplan and exploitation plan well done
- Market research done to detect new markets/technology watch done
- Exploitation result: technology license sold

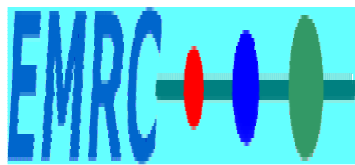
Lessons Learned / Recommendations

- Lessons learned/Positive and negative factors and main barriers for innovation:
 Limited information on existing exploitation practices
 Very expensive exploitation costs.
- Recommendations:
 Put more attention on estimated working time and costs to be spent on the project and the exploitation programme. (In this case the project gave 50% more work and cost to the SME than it supposed to give as per Annex 1.)

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Methods and Data on Environmental and Health Externalities: Harmonising and Sharing of Operational Estimates

Company: **EMRC (Ecometrics, Research and Consulting)**

About the SME:

Country: UK
Industrial Sector: Environment
Area of activity: Environment

Project description

- **Acronym:** MethodEx
- **Funding Scheme:** FP6 STREP
- **Project objective and activities:**
Extension of methods for externalities research to new sectors, improved exploitation of existing results
- **Partner and countries involved:**
University of Bath, UK, Uniwersytet Warszawski, POLAND, Association Pour La Recherche et Le Développement et Méthodes et Processus, Industriels, France, Instituto di Studi Per L'Integrazione dei Sistemi', Italy, Univerzita Karlova v Praze, Czech Republic, Seco Gøner As, Norway, Universitaet Stuttgart, Germany, Institute of Occupational Medicine, UK, Universitaet Hamburg, Germany, Levego Mukacsoport, Hungary, Paul Watkiss Associates Ltd, UK
- **Coordinator:** AEA Technology PLC, UK
- **Main tasks of the company in the project /Research undertaken:**
Case studies and development of a web-based tool box.
- **Achievement of the project:**
Methodex toolbox is available free on the internet.
- **Exploitation of the project results:**
Via provision of consultancy services

Key Success Factors

- Methodex toolbox is available on the internet.
- Project results exploited via provision of consultancy work.

Lessons Learned / Recommendations

- **Positive and negative factors:**
Good collaboration with the project team with useful results generated from the work. However the SME is still waiting for the final payment, over a year later which makes it difficult and discourages SMEs from participation in such schemes.
- **Main barriers for innovation:**
Lack of resources/time.
- **Recommendations:**
Payment on time and quicker response to documents sent especially if there is a problem. There should be one standard questionnaire sent to SMEs. Currently SMEs are being sent numerous questionnaires asking exactly the same questions. It is an annoyance and a waste of time.

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Cannabis extract for migraine and rheumatic arthritis

Company: **Vivacell GmbH**

About the SME:

Country: Germany
Industrial Sector: Biotechnology
Area of activity: Diagnostic and Analytical Services

Project description

- **Acronym:** Cannabis
- **Funding Scheme:** CRAFT (FP6)
- **Project objective and activities:**
To develop Cannabis extracts for the treatment of migraine and rheumatic arthritis
- **Partner and countries involved:**
- **Coordinator:** The School of Pharmacy, Univ. London
- Main tasks of the company in the project / Research undertaken:
Testing the selected extracts in cellular systems relevant to rheumatic arthritis
- Achievement of the project:
Development of a standardised extract of Cannabis for further drug development against migraine and rheumatic arthritis
- **Exploitation of the project results:**
A new Cannabis extract tested against migraine and rheumatic arthritis.

Key Success Factors

- Internationalisation
- Project management experience
- Call fitted to core business
- One of the Project initiators
- Well Structured consortium
- Workplan
- IPR management

Lessons Learned / Recommendations

- Positive and negative factors and main barriers for innovation
- New cooperation partners found
 No further funding sources after project end—no product on the market yet.
- Barriers to innovation:
- Lack of funds, resources, market information, strategic partners, specialised staff
- Recommendations for other SMEs:
- Be partner of a well experienced and structured consortium.
 Manage the IPR properly

More Information on SME

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Biological procedures for diagnosing the status and predicting evolution of polluted environments

Company:

About the SME:

Country: Spain
Industrial Sector: Biotechnology
Area of activity: Environment, Biotechnology.

Project description

- **Acronym:** BIOTOOL
- **Funding Scheme:** STREP FP 6
- **Project objective and activities:**

The objective of BIOTOOL is the generation and validation of novel conceptual and material instruments, rooted in biological processes, for diagnosing soil status and predicting evolution of contaminated soil and groundwater.

- **Partner and countries involved:**
8 partners (2 from Spain, 2 from Check Republic, 2 from Denmark, 1 from Germany and 1 from Switzerland)

- **Coordinator:** HELMHOLTZ-ZENTRUM FÜR INFektionsFORSCHUNG GMBH (Germany)

- **Main tasks of the company in the project /Research undertaken:**
Developing a kit to extract DNA from the soil, a phage library and a array to know the metabolism power to the soil itself to recuperate to the contamination.

- **Achievement of the project:**
A new product (the extraction DNA soil kit) and a new technology (the extraction procedure).

- **Exploitation of the project results:**
It has been done internally. The product has not been sold or patented.

Key Success Factors

Good experience in project participation.
Product/technology very useful for company.
Company's role clearly defined in the project.

Lessons Learned / Recommendations

- Positive and negative factors and main barriers for innovation

Positive factors: New cooperation partners and new research results

Negative factors: none

Barriers for innovation: Lack of Information on specific market entry regulations and lack of extra resources.

- Recommendations for other SMEs:

There should be more possibilities to enter in new projects and new researches.

More Information on SME

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A new software tool for grain milling SME's

Company:

About the SME:

Country: Spain
Industrial Sector: Food
Area of activity: Production of flour and semolina

Project description

- **Acronym: MAP-MILLING**
- **Funding Scheme: STREP FP 6**
- **Project objective and activities:**
 - to design and develop reliable, fast and economic measurement systems focussing on the most common pollutants (mycotoxins, pesticides and acrylamide) on the grain milling/ processing industry. Both in field and in processing plant.
 - to develop a risk management tool that allows, by means of an easy and economic procedure, to ensure final product (flour) quality and safety, integrating all the results obtained (measurement system results, correlation with official results and best procedures) in a friendly and easy-to-use software tool to be used by the milling companies.
- **Partner and countries involved:** 14 partners (1 from Estonia, 5 from Germany, 3, from Italy, 5 from Spain).
- **Coordinator:** Confederación de Empresarios de Zaragoza, Spain
- **Main tasks of the company in the project /Research undertaken:** Their main R&D activities are focused in the raw materials control.
- **Achievement of the project:** A new technology for design and development of quick, reliable and cheap measurement systems for some target pesticides (2,4-D, DDT and chlorpyrifos-methyl) in cereal products in validation stage
- **Exploitation of the project results:** The new technology (a software tool, mainly) is offered for free.

Key Success Factors

Strategic partners involved;
Role clearly specified within the project.
Project outcome was a major improvement for end users. In addition, it was implemented according to specific requirements from participating SMEs

Lessons Learned / Recommendations

- **Lessons learned:**

The company is satisfied with the project results, and is willing to participate again in a funded project. It met its expectations.
- **Positive and negative factors and main barriers for innovation**

Positive factors: The system has been developed according to their specific needs; it is more visual and it is easier to detect any missing documents or problems
Negative factors: none.
- **Recommendations for other SMEs:**

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Flexible framework for Indicators for Sustainability in Regions using system dynamics modelling

Company: **TAU CONSULTORA AMBIENTAL S.L.**

About the SME:

Country: Spain
Industrial Sector: Environmental Services
Area of activity: Environment consultancy firm

Project description

- **Acronym:** INSURE
- **Funding Scheme:** STREP FP 6
- **Project objective and activities:**
INSURE aimed to develop a practical and ready to apply method and toolkit for working with SD indicators at regional level. This is expected to help to overcome some of the most common limitation on SD indicators development: lack of integration, lack of data, sectoral barriers, lack of consensus between stakeholders and lack of comparability among regions. Other general objectives of the project are: i) to increase awareness related to sustainable development among local/regional stakeholders; ii) to advance/improve some methods and tools related to 'sustainability science' and provide a helpful tool for some relevant decision procedures.
- **Partner and countries involved:**
3 universities (Turkey, Germany and United Kingdom), 2 research centres (Germany and Belgium), 1 foundation (Italy) and 1 institution (Czech Republic).
- **Coordinator:** TAU Consultora Ambiental
- **Main tasks of the company in the project /Research undertaken:**
Project technical and administrative coordination, financial management and distribution of EC financing, coordination with EC officers, leader of the work package on system model in a system indicators scheme).
- **Achievement of the project:**
New methods for using existing statistical information to produce composite SD indicators and SD scenarios.
- **Exploitation of the project results:** Internally

Key Success Factors

Strategic partners involved;
Role clearly specified within the project.
Project outcome was a major improvement for end users. In addition, it was implemented according to specific requirements from participating SMEs.

Lessons Learned / Recommendations

- Lessons learned:
- Positive and negative factors and main barriers for innovation

Positive factors: New research results and new market access. New contracts gained.
Negative factors: Lack of public funding.

- Recommendations for other SMEs:

SME capacity to disseminate and consolidate new products or results is rather limited. Public support for subsequent marketing would be of great help.

More Information on SME

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Industrial culture of ocellated lizard (*Iacerta lepida*)

Company: **TENCARRAL S.L.**

About the SME

Country: Spain
 Industrial Sector: Environment
 Area of activity: Environment, Biodiversity
 Eco-system

Key Success Factors

See other page

Project description

- **Acronym:** RIC (Reptiles industrial culture of ocellated lizard (*Iacerta lepida*), european pond terrapin (*emys orbicularis*) and nile crocodile (*crocodilus niloticus*))

- **Funding Scheme:** CRAFT FP 5

- **Project objective and activities:**

The project aimed at developing farming of three species, namely the ocellated lizard, the European pond terrapin and the Nile crocodile. The ocellated lizard is a protected species. The aim of commercial lizard farming as foreseen in the project is on the one hand, the release in their natural habitat in order to restore the population and hence contribute to the trophic chain by providing food for also endangered bird species. Secondly, it would allow to provide meat and skins. The consumption of lizard meat has a long tradition in some regions of Spain and Portugal where it is highly appreciated. The availability of legally produced lizards will contribute to reduce the illegal catches. Similar situation occurs with the skin for the leather industry. For all three species it is also foreseen to cover demands for educational and research purposes. The project will increase current knowledge on the biology of these species, embryology, nutrition, reproduction, pathology in particular parasitic diseases etc. ... Overall, farming of these species can contribute to restore and maintain threatened species and to reduce the illegally caught animals either locally or in third countries. In addition, if economical viable, it could be an alternative for rural development in particular in more deprived areas of the Union and developing countries as it has been the case for other species (ostriches, frogs, fish, crustaceans, molluscs, etc.).

- **Partner and countries involved:**

Spain (2 companies and 1 university) and Portugal (2 companies and 1 university)

- **Coordinator:** Tencarral (Spain)

.....

Lessons Learned / Recommendations

- **Lessons learned:**

In order to have a more successful project, we should have had access to public funding and more resources (both human and finances).

- **Positive and negative factors and main barriers for innovation**

Positive factors: new research results and new market access.

Negative factors: Consumption of too much resources and no access to Intellectual Property Rights. Unexpected legal barriers when project was finished (expected-to-be law still under discussion).

- **Recommendations for other SMEs:**

In order to improve the SME participation in EU research programmes, it would be necessary to increase awareness of the importance of results among local authorities

SME capacity to disseminate and consolidate new products or results is rather limited. Public support for subsequent marketing would be of great help.

More Information on SME

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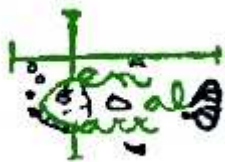
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Industrial culture of ocellated lizard (*Lacerta lepida*)

Company: **TENCARRAL S.L. . .**

About the SME

Country: Spain
 Industrial Sector: Environment
 Area of activity: Environment, Biodiversity, Eco-system

Key Success Factors

Project targeted new evolving markets (ocelated lizard was not bred before wards).
 Targeted product very innovative (same reason).

Project description

- **Main tasks of the company in the project / Research undertaken:**

Support to scientific coordinator, coordinating SMEs. The breeding and semi extensive fattening of the Ocellated lizard (*Lacerta lepida* Daud. 1802)

- **Achievement of the project:**

A new product: Ocellated lizard, European pond terrapin

- **Exploitation of the project results:**

The company is currently breeding lizards

Lessons Learned / Recommendations

- **Lessons learned:**

In order to have a more successful project, we should have had access to public funding and more resources (both human and finances).

- **Positive and negative factors and main barriers for innovation**

Positive factors: new research results and new market access.

Negative factors: Consumption of too much resources and no access to Intellectual Property Rights. Unexpected legal barriers when project was finished (expected-to-be law still under discussion).

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