SME Instrument

How to write a successful proposal

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SME Instrument

Phase 1: Concept and feasibility assessment

Input: Idea/Concept: "Business Plan 1" (~ 10 pages)
10% budget

Activities:
Feasibility of concept
Risk assessment
IP regime
Partner search
Design study
Pilot application
etc.

10% success

Output: elaborated "Business plan 2"

Lump sum: 50.000 €

~ 6 months

Phase 2: R&D, demonstration, market replication

30-50% success

Input: "Business plan 2" plus description of activities under Phase 2 (~ 30 pages)
88% budget

Activities:
Development, prototyping, testing, piloting, miniaturisation, scaling-up, market replication, research

Output: "investor-ready Business plan 3"

0,5-2,5 (5) M€ EC funding

~ 12 to 24 months

Phase 3: Commercialisation

Promote instrument as quality label for successful projects

Facilitate access to private finance

Support via networking , training, information, addressing i.a. IP management, knowledge sharing, dissemination

SME window in the EU financial facilities (debt facility and equity facility)

Possible connection to PPC (and PPI?)

No direct funding

Coaching = 2% budget

Phase 1: Concept and feasibility assessment

Objective

- Support: A Phase 1 grant is up to € 50.000 either to support a feasibility study or to fund preparation for a Phase 2 application.
- Purpose:
  - (Co)fund an analysis of the commercial potential and technical feasibility of an innovation.
  - Only project applications which demonstrate a clear direct or indirect EU dimension / relevance are eligible.
  - The project application shall clearly explain the purpose and the expected result of the proposed activities, if a grant is rewarded.
  - The overall purpose of phase 1 is to reply the question: “can this innovation business project succeed?”

Note: The SME instrument does not exclude funding R&D, but only if it is directly linked to an innovation project with previous technical and commercial viability study.

Phase 1: Concept and feasibility assessment

Main Activities:

- Feasibility of concept
- Risk assessment
- IP regime
- Partner search
- Design study
- Pilot application

Feasibility of concept

- A concept feasibility study includes market demand information, trends and growth potential, as well as identification of potential obstacles and how the concept will overcome those barriers.

Risk assessment

- The Risk Assessment is the determination of quantitative or qualitative value of risk related to a concrete situation and a recognized threat (also called hazard).

1.3.5 Risks analysis and contingency plans

The technical committee, responsible of the project's monitoring activity, will continuously check the project's development taking special care of the risks. The programme is focused on the realization of a new highly reliable, high efficiency, low manufacturing cost HCPV generator: the main risk of the activities is not being able to meet those requirements. The cost of a photovoltaic generator is strictly dependent on the generator's conversion efficiency and thus its energy yield. The higher the efficiency, the lower the cost constrains, so the risk analysis will carefully consider the balance between efficiency and manufacturing cost. The risk analysis must be focused on the development of all the critical parts that affect the generator's performance.

In order to control and minimize the risk, the programme has many check points that enable the easy assessment of the required targets. The WP1 includes the RTD activities regarding all the parts that will be developed and, for each part (the module, the optics, the cell, the receiver, the tracker and the inverter) the deliverables will be evaluated to check their compliance with the project's target. The subsequent development activities (WP2÷WP8) will be continuously monitored to check the effective implementation of the designed results.

Example

Hereafter follows a table indicating the risks and related contingency plans:

Ref.	Risk	Likelihood	Severity	Contingency action	Responsibility
HCPV Cell, WP1, WP5	The final cell efficiency being much lower that 45%	low	medium	Stress the efficiency of the optical part to recover the cell's performance loss respect to the target	BECAR, OEC
Optics design, WP1	The optical system doesn't meet the angular performance requirements	low	low	Work harder on the pilot module's assembly line to guarantee a higher precision in the optics and receivers assembly process. Stress the tracker's accuracy	BECAR

RISK)			
Insufficient consensus and IPR problems arising on releasing information through publications or Reference implementations. (MANAGEMENT RISK)	LOW	HIGH	Probability of this is very low to insignificant. The project partnership is including these issues already to consortium agreement (of which we already have an early understanding) including statements.
Loss of critical competencies or of key people in the project (TECHNICAL/MANAGEMENT RISK)	LOW	HIGH	- Make sure that in most cases a partner can replace a key competence internally in the organization - Get early indication of possible withdrawal of key persons from partner if not internally replaceable - Contact all partners on the availability of comparable competencies amongst other partners of the project. Budgets will be shifted from the "defaulting" partners
Loss of technical orientation because of lack of internal and external knowledge (MANAGEMENT RISK)	LOW	MEDIUM	- Scan and monitor relevant technological and scientific areas - Take an active role in scientific community - Proactively disseminate information via email lists, telephone conferences and tutorials at meetings
Adoption of a standard that may become obsolete or new market standards introduced (EXPLOITATION RISK)	LOW	LOW to MEDIUM	All new components will be developed basing on technologically proved standards. In the unlikely event that a new component will be approved and entered into the market close during the project, the industrial partners will decide whether invest further efforts in the development and inclusion of that component in the system.

Example

IP regime

RESULTS:

- PROPERTY: who generates the results is the owner
- PROTECTION: If results are useful for commercial exploitation/industrial. IF the owner can not/want to protect, can do it the EC
- EXPLOITATION: WP/GA may provide specific obligations (eg 'Draft dissemination and exploitation plan' in the proposal stage)
- TRANSFER AND EXCLUSIVE LICENSE TO THIRD COUNTRIES: right of objection by the EC

- Open access to scientific publications

Partner search

- Finding appropriate partners for participation
- Building an international consortium

Partner search

- National Contact Points – these figures are the main contacts who can provide guidance, practical information and assistance on all aspects of participation in Horizon 2020 including searching for partners. There is an NCP for each subject area and also one for Marie Curie Fellowships.
- CORDIS Partner Service – one of the largest databases of partner profiles (self-registered profiles). It has a list of Partnership Requests and you can also launch your own.
- UKRO– BU subscribes to the UKRO service which is a fantastic information resource and which can help you find partners.
- Previously awarded bids: all proposals funded under FP7 are available to view on line and have the PI listed. Many people have found emailing the PI from a relevant project to outline their own area of expertise and request a collaboration, very successful.
- There are also several subject specific searches, such as:
- ICT Idealist Partner Search – the service includes advice on creating your profile by your local National Contact Point and there is a quality control of all the published data.
- Net4Society – this features partner search requests in the socio-economic sciences and humanities
- Nanosciences and nanotechnologies, Materials and new Production technologies Partner search – this lists those looking for partners and also allows you to launch a partner search
- Fit for Health – this is a quality checked database contains expertise profiles of researchers and SMEs acting in the Health / Life sciences sector. The service includes partner search activities advice on all aspects related to a research project, starting with help in first orientation and strategy development to proposal preparation, implementation, exploitation and promotion.
- Innovative Medicines Initiative Partner Search – the IMI supports collaborative research projects and builds networks of industrial and academic experts to boost pharmaceutical innovation and this site displays the partner searches which includes SMEs, large organizations and Universities.
- Enterprise Europe Network Cooperation Opportunities Database – this site publishes an extensive number of innovation and technology profiles from international companies and research organisations to help identify suitable partners for bilateral business, innovation and technology cooperation.

Design study

- Overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem

Pilot application

- Pilot initiatives to test innovative products, processes and services in real conditions that are not fully commercialized

Phase 1:
Writing the proposal

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Writing the proposal

- PART A **ADMINISTRATIVE INFORMATION**
  - General information (coordinator)
  - Participant information, (1 for each partner)
  - Budget (completed by the coordinator)

- PART B **TECHNICAL INFORMATION in PDF format**
  - The sections follow the **evaluation criteria**

Phase 1:
Writing the proposal: part B – 10 pages

1. Excellence

1.1 Objectives

1.2 Relation to work programme

1.3 Conceptand approach

1.4 Ambition

2. Impact

- 2.1 Expected impacts
  - a) Users/Market
  - b) Company
- 2.2 Misure to maximase impact
  - a) Dissemination and exploitation of results
  - b) Intellectual Property, knowledge protection and regulatory issues

3. Implementation

- 3.1 Work plan – work package and deliverable
- 3.2 Management structure and procedures
- 3.3 Consortium as a whole (if applicable)
- 3.4 Resources to be committed

4. Members of the consortium

- 4.1. Third parties involved in the project

5. Ethics and security

- 5.1 Ethics
- 5.2 Security

1. Excellence

- Your proposal must address a work programme topic for this call for proposals.
- This section of your proposal will be assessed only to the extent that it is relevant to that topic.
- Applicants are expected to address the points relevant to their overall innovation project and to provide information available at this stage. They should clearly explain which aspects will be further explored in the feasibility study.

1.1 Objectives

- Describe the objectives of your overall innovation project ant the subsequently expected outcome. Describe the industrial/economic/social problem to be solved and/or business opportunity you intend to address.

- Describe the specific objectives for the feasibility study, including the elaboration of a business plan, which should be clear, measurable, realistic and achievable within the duration of the project. Objectives should be consistent with the expected exploitation and impact of the project.

1.1 Objectives

- General Objectives
  - Long term: beyond the duration of the project
  - Improve, strenght, facilitate, realize…
- Specific Objectives
  - To be realized during the project implementation
  - Testing, pilot plant, develop new knowledge, …

General Objectives

Organisations (PU/PRI)

Enhancement / Profit!

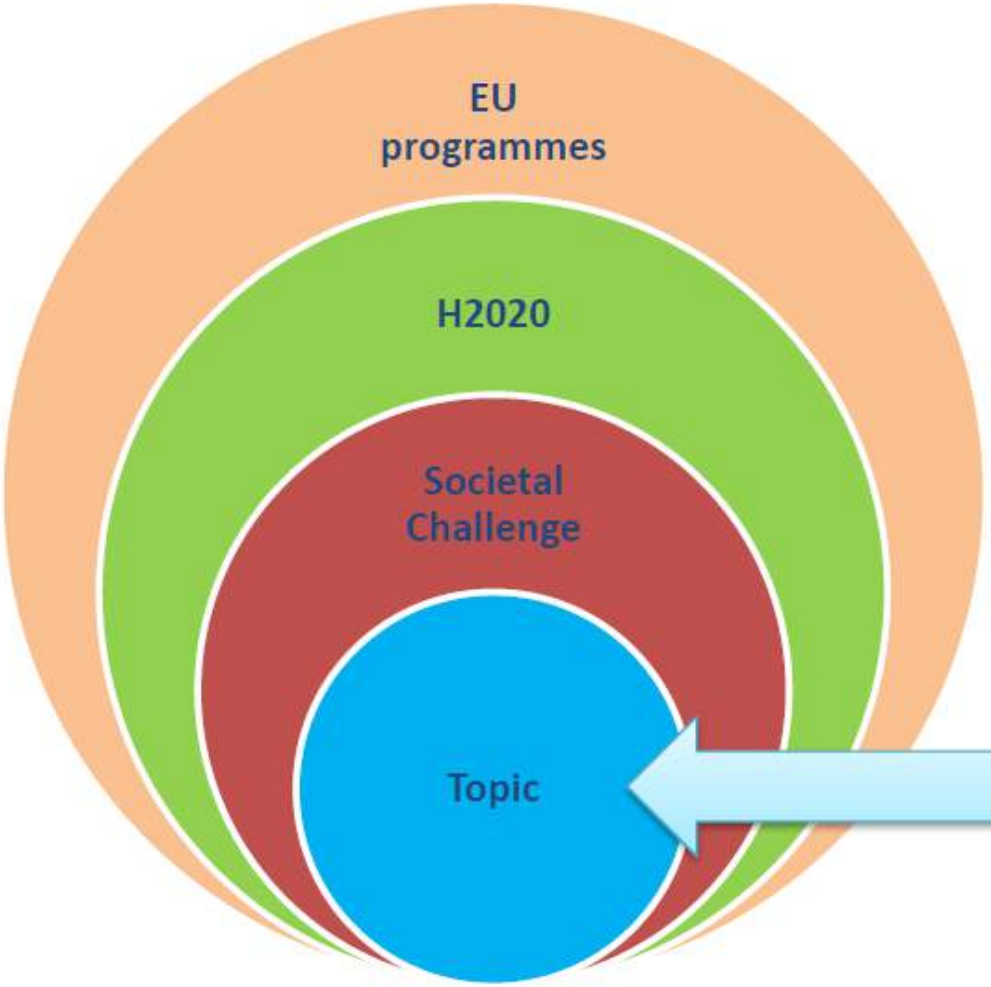
- Improving profit
- Enhancing innovation
- Improving efficiency
- Cost reduction
- Train the staff
- Strengthen the image
- Enter new market

European Union

Policies of the Community!

- generate growth
- job creation
- protecting the environment
- Creating industrial leadership
- move towards a low-carbon economy
- investing in skills & training
- modernising labour markets and welfare systems
- Increase the competitiveness of EU

Fitting H2020



PROJECT IDEA

Translate your own objectives into the political objectives of the EC

General vs Specific

- **General objectives are broad and long-term. Specific objectives are short term and narrow in focus. The general objective is met through accomplishing each of the specific objectives.**

- Example :

  - General Objective: Tom will increase profits in the lawn care division from ten thousand dollars annually to ten thousand , five hundred dollars by 1/15/2010.

  - Specific objectives:
    - John will increase his monthly customer contacts for 40 to 65 or more by 5/1/08.
    - John will circulate 100 promotional flyers in at least 5 new counties by 2/2/09.
    - John will make follow up calls to at least 90% of the counties targeted above by 4/1/09.
    - John will increase his work hours from 20 to 25 or better beginning 4/1/09.

The BioWalk4Biofuels project is a research and an demonstrative initiative which **has the aim to develop a cost-efficient solution that uses biowaste as a feedstock for the production of 2nd generation biofuels, using macroalgae as a catalyser, while minimising the environmental impact of biofuel production. Main** and **Specific objectives** of the project are pointed out as follows:

a) The use of macroalgae as interface between biowaste and energy production allow a direct utilisation of biowaste obtaining, at the same time, the following positive externalities or specific objectives:

a1) Treatment of high nitrogen and phosphate content biowaste (control index 21 kg N/day, control index 3 kg P/day)

a2) Creation of a CO2 sink for the carbon credit market (control index 190 kg/h insufflated)

a3) Production of biomass pellets and fertilizer from organic residues of the biodigestor (control index 300 kg/day)

Example

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a1) ***Treatment of high nitrogen and phosphate content biowaste***

Macroalgae need nitrogen and phosphate to grow: an adequate choice of biowaste rich on this chemical elements (e.g. poultry manure) can provide the right amount of nitrogen requested for algae growth and, at the same time, transform the negative eutrophication potential of such biowaste into a positive input. The idea is to take advantage of the eutrophication problem and CO_2 emissions that are negative externalities of human activities using them as feeding for macroalgae cultivation with the aim to optimize the life-cycle analysis (LCA) of the overall process from wheel to wheel. Considering the above reasons macroalgae could resolve the problems related to the excessive amount of nitrogen in wastewater treatment plants.

1.2 Relation to the work programme

Indicate the work programme topic to which your proposal relates, and explain how your proposal addresses the specific challenge and scope of that ***topic, as set out in the work programme***

VIP Products Relation with the KBBE.2013.3.1.01 Plant High Value Products – from discovery to final product

Topics of the KBBE.2013.3.01	How the topics addressed in VIP Products
Their efficient utilization of natural bioactive molecules requires an integrated and comprehensive effort through identification of suitable bioactive compounds, then to optimised the cultivation strategies for selected plant species or ecotypes, metabolic engineering of the selected biochemical pathways to improving the productivity and finally to product development and commercialisation.	VIP Products will utilize natural bioactive molecules from five dual crops (flax, hemp, kenaf, nettle and roselle) with multiuse. First of all the suitable bioactive compounds will be identified (WP1). Varieties, accessions and wild genotypes from Europe and outside Europe (China, South Africa, Argentina and Mexico) will be screened (WP3) then cultural strategies will be studied (WP4). Metabolomic engineering of selected biochemical pathways will be carried out (WP2) in order to improve the product development (WP6, WP7, WP8) and commercialization (WP9).
The projects will engage in a full chain of research and innovation needed to bring to market new or improved products aiming at innovative methodologies in order to tackle the existing bottlenecks and addressing the needs of the bio-industry.	VIP Products will produce valuable industrial plant products in a full chain of research and innovation needed (from the agronomy research (WP3, WP4), the metabolomic engineering for improving them (WP2) and finally to produce VIP Products with bioactive properties (WP6) and added value (WP7) that addressing the needs of the bio-industry (WP9).
This includes improvements in technical aspects of the metabolic engineering pipeline (e.g. metabolomics, new gene mining concepts, isolation of biomolecules, their purification and sustainable production either in planta, bioreactors, or in alternative biological systems).	VIP Products will improve the technical aspects of the metabolomic engineering for selected biochemical pathways (WP2). A unique genes in metabolomic pathways will be identified that determine the content and compositions of different bioactive compounds in the selected crops with emphasis on secondary metabolite pathways and identify genes to use for the crops breeding and for vast production of active compounds in cell culture and *E.coli* (WP2).
The targeted plants can originate from a broad range of European and/or non-European species (e.g. medicinal or aromatic), either cultivated (e.g. industrial crops) or collected from the wild.	In VIP Products the targeted plants (WP3, WP4) are five dual (cultivated for both stems and seeds) crops (flax, hemp, kenaf, nettle and roselle) with numerous uses. Two of them are underutilised (nettle and roselle). Several varieties, accessions and wild genotypes will be compared. The selected crops have medicinal uses.

Example

1.3 Concept and approach

- Explain how your innovative solution will solve the problem and/or use the business opportunity.
- Describe the current stage of development of the innovation. Where appropriate, mention key milestones that led to the current stage (e.g. prototype, field trials, pilot studies with intended end-users and/or potential clients).
- Describe the positioning of the business innovation project, e.g. where it is situated in the spectrum from 'idea to application', or from 'lab to market'. Refer to Technology Readiness Levels where relevant.
- Describe what you want to achieve in the feasibility assessment. Explain the approach and methodology, distinguishing, as appropriate, activities linked to assess the technological/technical/practical feasibility and economic viability (e.g. market studies, customer survey, etc.).
- Describe how your project intends to develop something new to Europe that addresses EUwide/global challenges
- Where relevant, describe how sex and/or gender analysis is taken into account in the project's content.

Technology readiness levels (TRL)

- Where a topic description refers to a TRL, the following definitions apply, unless otherwise specified:
  - TRL 1 –basic principles observed
  - TRL 2 –technology concept formulated
  - TRL 3 –experimental proof of concept
  - TRL 4 –technology validated in lab
  - TRL 5 –technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
  - TRL 6 –technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
  - TRL 7 –systemprototypedemonstrationin operationalenvironment
  - TRL 8 –system complete and qualified
  - TRL 9 –actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

1.4 Ambition

- Explain the novelty of your innovation business project. What do you envisage as key market application of the innovation project result?

- Explain the envisaged solution (products, processes, services etc.) and highlight the advantage of your (expected) solution with respect to competing solutions; how does it provide more added value to potential customers? Provide a preliminary comparison with alternatives solving the same or similar problems. If appropriate, compare to state-of-the art research and known commercial initiatives. This could include costs, environmental benefits, ease-of-use or other features.

- Describe intended improvement potential over time – also compared to existing solutions. Why is it worth to develop / or to invest in it?

1.2.2. Progress beyond the state of the art

OPTIBIOCAT will break through the barriers of the low production levels and not industrial targeted properties of FAEs and GEs by performing a systematic study on the variety of FAEs and GEs from fungi and bacteria in which genome mining, heterologous expression and enzyme characterization are combined with site-direct mutagenesis and evolutionary mutagenesis. The application of feruloyl esterases and particularly glucuronoyl esterases has so far been hampered by relatively low production levels of these enzymes and in the case of GE also limited information about their biochemical properties. The biocatalysts obtained from OPTIBIOCAT will be produced at high levels using improved fermentations to supply sufficient enzyme quantities to perform conversion tests. OPTIBIOCAT will allow reaching a biocatalytic production of antioxidants for cosmetic and health care industries more sustainable than the chemical route. The advancements beyond the state of the art achieved with OPTIBIOCAT biocatalysts, bioconversions, products and the overall biocatalytic process are summarized in the following table.

Present situation	OPTIBIOCAT progress
OPTIBIOCAT BIOCATALYSTS	
Around 50 feruloyl esterases (FAEs) have been purified and characterized from fungi and bacteria. Only few glucuronoyl esterases (GEs) have been so far characterized	Through exploration of bacterial and fungal genomes sequences, the repertoire of available DNA sequences for FAEs and GEs will be hugely expanded.
Several methods of classification of FAEs have been proposed and developed but the lack of information on them does not allow a univocal classification.	Bioinformatic and phylogenetic analysis on known and novel FAEs will allow a more univocal classification and also the biochemical characterization of the most promising recombinant enzymes will provide a large source of information. The project will provide a biochemically supported systematic analysis of FAEs unlike any performed before.
GEs are identified as a family (CE15) in the CAZy system with several subgroups but only characterization of a few members.	The combination of bioinformatics and biochemical characterization will result in detailed insight in the different properties of the subclasses of the GEs enzyme family and their potential for applications.
Production levels of FAE and GE genes are far from the industrial target and the knowledge about the expression is still limited.	An industrial viable production platform for FAEs and GEs will be developed testing fungal and yeast based expression systems, which are commonly used in industry.
The biochemical and the synthetic properties of FAEs and GEs are far from industrial target.	The properties and synthetic capabilities of FAEs and GEs according to the industrial target will be achieved through site-directed mutagenesis,

Example

2. Impact

- Applicants are expected to address the points relevant to their overall innovation project and to provide information available at this stage. They should clearly explain which aspects will be further explored in the feasibility study.

2.1 Expected Impacts

- **a) Users/Market**
  - Which user needs have been identified and will be met upon completion of the project?
  - Describe the main *economic benefits for the users that, compared to current state of the art,* will make the users buy or invest in the innovation. What are you planning to use as unique selling points?
  - Describe the type of market, e.g. a niche market or high volume market. What is the estimation of total available market size and growth rate (mature or growing market)? What are the market trends? Describe if and how your project addresses European and/or global markets.
  - List main competitors and competitive solutions.
  - Indicate the most relevant market segments for initial introduction of the new solution.
  - Indicate the most important market barriers to be overcome to realise commercialization.
  - Describe the targeted users of the final solution; in which market segment/geographical areas do you see these potential users, and how do you intend to reach them?
  - List key stakeholders to get involved for making a successful commercial exploitation

2.1 Expected Impacts

- b) Company
  - How does the innovation project fit with the strategy of the participating SME(s)
  - What is the relevance and rationale of the innovation project for the management team of the SME (or lead SME(s) in a consortium)
  - What is the expected growth potential of your solution in terms of turnover, employment, market seize, IP management, sales, return on investment and profit etc.

3.1 Expected impacts listed in the work programme

3.1.1 From knowledge to action

The main means of ensuring that the RICHES project's outputs achieve maximum impact will be for the project to generate **wide general knowledge** of the reports, recommendations, guidelines, the project's book, case studies, best practices and all the other resources to be developed by the partners.

The process of achieving impact will begin with every element in the value chain of CH practice – from creator to institution to user - being made aware of the project's achievements and using these as springboards for action.

Example

RICHES	Actors	Actions
PRO-ACTIVE DISSEMINATION OF INFORMATION, ON MANY CHANNELS: - Online access to documents and demonstrations - Mailing lists and newsletters - Communication in general media - Focused communication on sectoral media - Insertions and links on portals and web-magazines - Distribution of printed material - Direct communication, through seminars, workshops and conferences	European, national and regional policy makers and programme owners	should take into account the priorities identified by RICHES in shaping policy and calls for implementation
	The network of all the cultural institutions and public administrations responsible for the implementation of policies and programmes	should adopt the guidelines and recommendations of RICHES in the planning of their initiatives
	The service providers (schools, colleges, enterprises, research centres, association and civil society) appointed by cultural institutions and public administrations to implement practical actions	should use the resources (best practices and lessons learnt) made available by RICHES in the development of services, teaching curricula and continuing professional development
	The end-users of CH (students, young people, general audiences, cultural tourists, researchers)	should be aware of other successful initiatives and demand that CH institutions deliver the priority services identified by RICHES and

2.2 Measures to maximise impact

- **a) Dissemination and exploitation of results**
  - Explain an initial plan for full commercialisation of the project results, i.e. own commercialisation or licensing? Need of cooperation with third parties for own commercialisation? Estimate of the total funding requirements? Approximate time to first sales/employment?
  - How does the proposed work in Phase 1 of the SME instrument fit into the overall plan to reach market?

APRE CAMPANIA
AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA

Exploitation Plan

Example

Technapoli
PARCO SCIENTIFICO TECNOLOGICO DELL'AREA METROPOLITANA DI NAPOLI E CASERTA
Deliberazione MIUR del 25 marzo 1994 G.U.R.I. n.187 dell'11 agosto 1994
Organismo di Ricerca ai sensi del Reg.to CE n. 800/2008

2.2 Measures to maximise impact

b) Intellectual Property, knowledge protection and regulatory issues

- Explain key knowledge (IPR) items and who owns them. Refer to the results of any patent search carried out. Have you conducted a “freedom to operate analysis”, and if “yes” what has been the result?
- Outline the status and the strategy for knowledge protection. If by patent, has a patent application already been filed or is there potential for patent application?
- If regulatory and/or standard requirements are to be fulfilled for the exploitation of the innovation, please list them, and what are the plans to meet these regulatory and/or standard requirements? Indicate if and how they will be addressed in the feasibility assessment. Are you seeing any new market opportunity through regulatory requirements?

3. Implementation

- Work plan
- Management structure and procedures
- Consortium as a whole (if applicable)
- Resources to be committed

3.1 Work plan – Work package and deliverable

- Please provide the project plan comprising one work package with one deliverable (i.e. elaboration of the feasibility report including a business plan)

- **Definitions**:
  - "Work package" means a major sub-division of the proposed project. In the case of the SME instrument – phase 1, there is only one work package describing the work to be done for the feasibility assessment.
  - "Deliverable" means a distinct output of the project. In the case of the SME instrument – phase 1 the output is the feasibility report, including a business plan.

Work package number	4	Start date or starting event:		1	
Work package title	Insertion of the crops in the existing agricultural systems				
Activity Type[15]	RTD				
Participant number	1	5	6	7	9
Participant short name	CRES	UNIBO	IWNIRZ	CRA-ING	Hempflax
Person-months per participant:	38	10	8	24	15
Participant number	14	17	22		
Participant short name	FCT UNL	IBFC	ARC		
Person-months per participant:	12	14	14		

Example

Objectives: The main objective of WP4 is to investigate all the important parameters (agronomic and harvesting) for the successful insertion of the five selected crops in the existing agricultural systems.

Description of work (possibly broken down into tasks), and role of participants:

Task 4.1 Agronomic aspects for the successful insertion in the existing agricultural systems (Task leader: CRES).

In this task several agronomic aspects will be tested for the successful insertion of the studied crops in the existing agricultural systems: the rotation systems, the determination of realistic yields when cultivated in large fields as well as cultivation with waste water. *In this task emphasis will be given in flax, hemp and kenaf because two of them already cultivated in Europe and the third crop is clear to commercialisation.*

Sub-Task 4.1.1 – Crop rotation trials (CRES, UNIBO, IBFC, ARC) The importance of crop rotation has been long recognized as an alternative system that can reduce agriculture's dependence on external inputs through internal nutrient recycling, maintenance of the long-term productivity of the land, avoidance of accumulation of diseases and pests associated with mono-cropping and increased crop yields. However, barriers that would stop farmers for adopting crop rotation systems are the need for diversified farm activities, and information, as well as more diversified equipment and storage facilities. In 4FCROPS (www.4fcrops.eu) crop rotations have been suggested for three out of the five selected crops. In this task two crop rotations will be tested: a) the three of the crops (hemp, flax and kenaf) to act as leading crop, following by a cereal and legume and b) in a rotation dedicated to non-food uses with rapeseed as a leading crop,

Table 3.1 a: Work package description

Work Package Title	Feasibility Study

Objectives

Description of work (where appropriate, broken down into tasks), lead partner and role of participants

Deliverable: **Feasibility report, including a business plan** (brief description and month of delivery)

3.2 Management structure and procedures

- Describe the organisational structure and the decision-making

Note: Only to the extent relevant in single entity proposals

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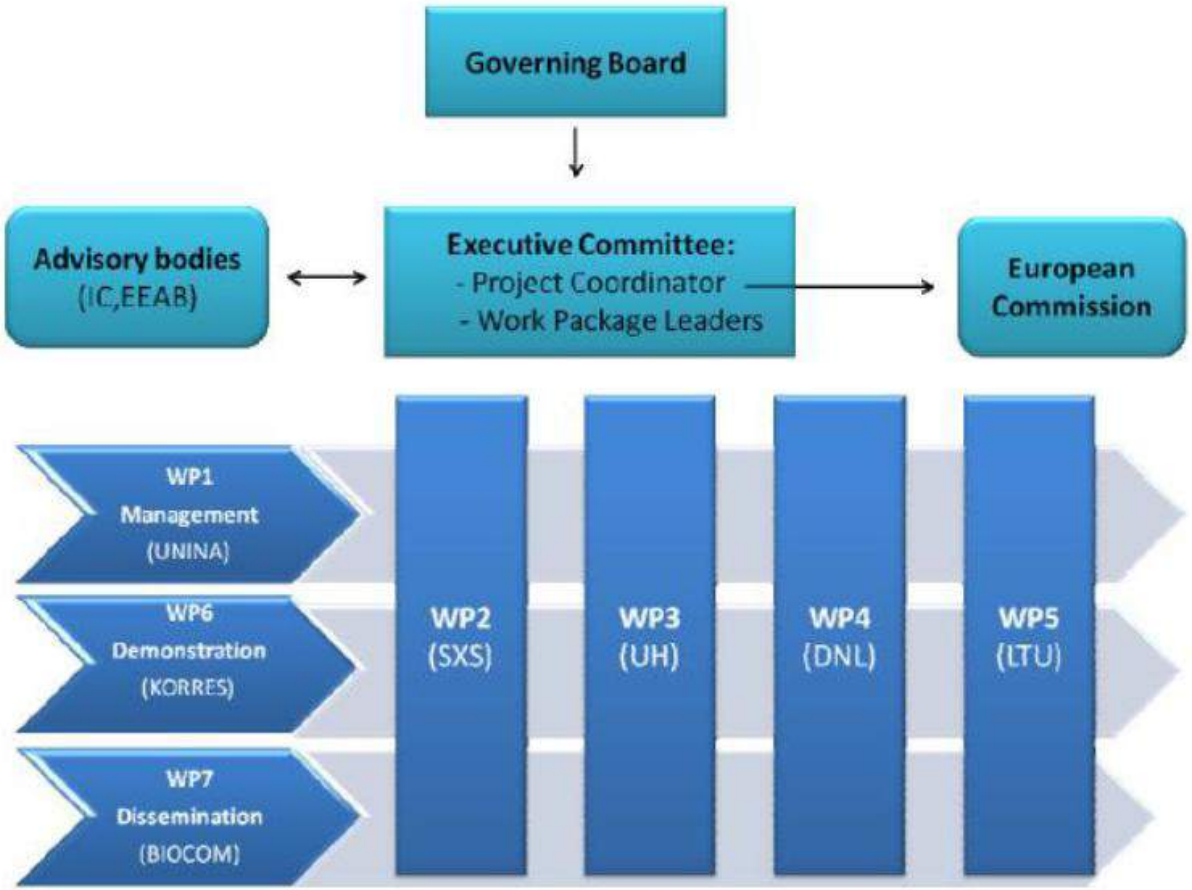
The following chart shows the OPTIBIOCAT management structure which is further described below.



Example

3.3 Consortium as a whole (if applicable)

- *The individual members of the consortium are described in a separate section 4. There is no need to repeat that information here.*

- Describe the consortium:
  - How will it match the project's objectives?
  - How do the members complement one another (and cover the value chain, where appropriate)?
  - In what way does each of them contribute to the project?
  - How will they be able to work effectively together?

3.3 Consortium as a whole (if applicable)

- **FOCUS ON:**
  - **MAJOR PARTNERS**
    - Each partner has a well define role (complementarity- 'vertical' partnership)
    - Mapping of expertises (table?)
    - Highlight different types of partners (Universities, SMEs, Public bodies, etc…)/Geographical distribution (New Member States? Third Countries?...)
    - Link project results to partners
    - **Involvement of external *stakeholders***
    - Adivisory Committee
    - End users: Evaluation Committee

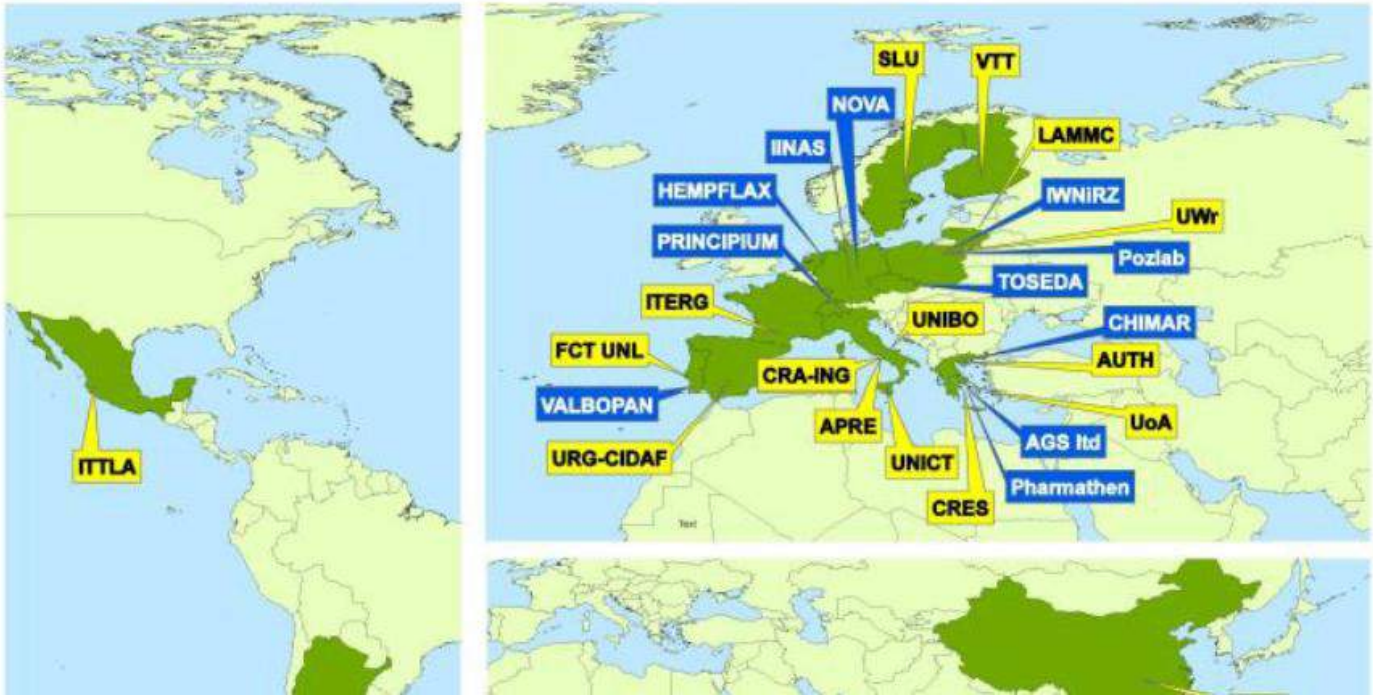
2.3 Consortium as a whole

A combination of complementary expertise and resources available in Europe-wide different research institutes and SMEs has been established in the consortium ensuring the critical mass required to accomplish the foreseen work packages and tasks of the proposed project. Additionally, each one of the participating groups is expected, through the exchange of technical knowledge and co-operation, to promote its expertise at a higher rate leading to an accelerated progress at a European level.

A total number of thirty partners have been selected to cover the work programme of the VIP Products allocated in eleven work packages. Eleven partners are ***SMEs*** and have been scheduled to share the 30% of the total EU requested contribution. One large company participates in the VIP Products consortium.

An active engagement of ***International Cooperation Partner Countries*** has been established in VIP Products consortium. Apart from the European participants four partner from ICPC participate: IBFC from China, ARC from South Africa, and ITTLA from Mexic and INDEAR from Argentina.

Example



The following table summarizes the connection between role in the project and specific skills of the partners.

Table 2.1 Partner skills and effort

NR	PARTNER	COUNTRY	SPECIFIC SKILLS	ROLE IN THE PROJECT
1	Enel Green Power	Italy	- EGP develops and manages the activities related to the generation of energy from renewable sources; - EGP combines all activities in wind, solar, geothermal and mini-hydro in Italy of Enel and an additional 13 Countries, for a total installed capacity of approx. 4,500 MW; - Long experience in construction of power plant; - Research in renewable energy power generation.	- Project Coordinator - Demo solar plant design, construction, operation and optimization - Design and construction of the solar field
2	SCHOTT SOLAR	Germany	- SCHOTT Solar is a market and technology leader for receivers for Concentrated Solar Power plants with parabolic trough technology - SCHOTT Solar has over 51 years experience in solar technology and provides core components in the value chain of solar generation system.	- Solar receiver design and technological development; - Solar receiver supply and testing
3	MET NewEN	Italy	- Met NewEN is a company derivated by Maire Tecnimont S.p.A., which was listed on the Italian Stock Exchange. M&T is an international Engineering & Main Contracting Group which provides a comprehensive, integrated system of services and installations in various market	- Scientific Director - Design and construction of Power Block - Design and supply thermal storage

Example

3.4 Resources to be committed

- Include the following budget table (no modification is possible). The description of work (feasibility study) a must demonstrate that it corresponds to the total costs (in EUR).

	A. Costs of the feasibility study/Direct and indirect costs of the action	Total costs	Reimbursement rate %	Maximum EU contribution	Maximum grant amount
Form of costs	Lump sum				
	50 000	71 429	70 %	50 000	50 000

4. Members of the consortium

- *This section is not covered by the page limit.*
- *The information provided here will be used to judge the operational capacity.*

- Please provide for each participant, the following (if available), please provide:

  - a description of the legal entity and, in case of consortia, its main tasks, with an explanation of how its profile matches the tasks in the proposal;.
  - a curriculum vitae or description of the profile of the persons, including their gender, who will be primarily responsible for carrying out the proposed activities;
  - a list of up to 5 relevant publications, and/or products, services (including widely-used datasets or software), or other achievements relevant to the call content;
  - a list of up to 5 relevant previous projects or activities, connected to the subject of this proposal;
  - a description of any significant infrastructure and/or any major items of technical equipment, relevant to the proposed work;
  - in case of a newly created company, explain the purpose of the company creation.

4.1. Third parties involved in the project

- Please complete, for each participant, the following table (or simply state "No third parties involved", if applicable):
  - Does the participant plan to subcontract certain tasks? Y/N
    - If yes, describe and justify the tasks to be subcontracted

5. Ethics and security

Note: This section is not covered by the page limit

5.1 Ethics

- If you have entered any ethics issues in the ethical issue table in the administrative proposal forms, you must:
  - Submit an ethics self-assessment, which
    - describes how the proposal meets the national legal and ethical requirements of the country or countries where the tasks raising ethical issues are to be carried out;
    - explains in detail how you intend to address the issues in the ethical issues table, in particular as regards:
      - research objectives (e.g. study of vulnerable populations, dual use, etc.)
      - research methodology (e.g. clinical trials, involvement of children and related consent procedures, protection of any data collected, etc.)
      - the potential impact of the research (e.g. dual use issues, environmental damage, stigmatisation of particular social groups, political or financial retaliation, benefit-sharing, malevolent use , etc.).
  - Provide the documents that you need under national law (if you already have them) e.g:
    - an ethics committee opinion;
    - the document notifying activities raising ethical issues or authorising such activities

5.2 Security

- **Indicate if your project will involve:**
  - activities or results raising security issues: (YES/NO)
  - 'EU-classified information' as background or results: (YES/NO)

Format of Phase 1 proposal

- 1. Summary – max ½ A4 page to make it "easy to understand and to read"
- 2. Purpose of the business innovation project – (max 2 A4 pages)
- 3. SME & Team description – max 1.5 A4 page
- 4. Solution applications (products, processes, or services) and the main technical advantages of the new solution – max 1.5 A4 page
- 5. Work plan and present state of product / process readiness – and further steps needed to reach market – max 1 A4 page
- 6. Intellectual Property Rights (IPR), knowledge protection and regulatory issues – max ½ A4 page
- 7. Market – max 1 A4 page
- 8. Execution and Budget aspects –
- 9. Illustration – If needed Insert relevant illustrations with reference indication to the proposal text. Max 2 A4 pages

Phase 2: R&D, demonstration, market replication

Objective

- Support: Maximum EU grant for any individual Phase 2 project application is 3 € million.
- Purpose:
  - (co)fund mainly the close-to-market activities of an innovation project which can include demonstration, prototype development and testing, in depth market analysis, partnering search and preparation for internationalization of a commercial venture or other relevant activities connected to prepare the commercialization of innovative achievements.
  - The Phase 2 funding can also complement private equity funding from third party investors.
- Phase 2 addresses the financing needs of internationally oriented SMEs in developing high risk and high-potential innovation ideas with a strong commercial potential. It aims to fill the equity gap after the start-up and seed phase, which is largely covered by national and regional support, and before innovative companies become attractive for private equity financing (e.g. Business angels or venture capital financing).

Phase 2: R&D, demonstration, market replication

Main Activities:

- Development
- Prototyping
- Testing
- Piloting
- Miniaturisation
- Scaling-up
- Market replication
- Research

Phase 2: Writing the proposal

- PART A **ADMINISTRATIVE INFORMATION**
  - General information (coordinator)
  - Participant information, (1 for each partner)
  - Budget (completed by the coordinator)

- PART B **TECHNICAL INFORMATION in PDF format**
  - The sections follow the **evaluation criteria**

Phase 2:
Writing the proposal: part B – 30 pages

1. Excellence

1.1 Objectives

1.2 Relation to work programme

1.3 Concept and approach

1.4 Ambition

2. Impact

- 2.1 Expected impacts
  - a) Users/Market
  - b) Company
- 2.2 Misure to maximase impact
  - a) Dissemination and exploitation of results
  - b) Intellectual Property, knowledge protection and regulatory issues
  - c) Communication

3. Implementation

- 3.1 Work plan – work package and deliverable and milestones
- 3.2 Management structure and procedures
- 3.3 Consortium as a whole (if applicable)
- 3.4 Resources to be committed (more specific)

4. Members of the consortium

- 4.1. Third parties involved in the project

5. Ethics and security

- 5.1 Ethics
- 5.2 Security

Phase 3: Commercialisation

Objective

- The idea behind a foreseen planned 3rd Phase is to make it mandatory for the Phase 2 application that the Phase 2 project “does not stop here”. The activities planned for Phase 2 shall have the intention to lead to a subsequent business activity which either in its own right can grow, or is so attractive that the further development can be (co)-financed by private equity, most probably by one or more venture capital funds.

Technapoli
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Organismo di Ricerca ai sensi del Reg.to CE n. 800/2008

APRE CAMPANIA
AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA

Thanks for your attention

Dr. Marco Matarese