

APRE

Agenzia per la Promozione
della Ricerca Europea



Opportunità del programma Horizon 2020 nel settore Energia

ENERGYMED

Napoli, 5 Aprile 2018

CHIARA POCATERRA

APRE - EU Horizon 2020 National Contact Point

Secure, clean and efficient energy

Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy

EURATOM

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Content

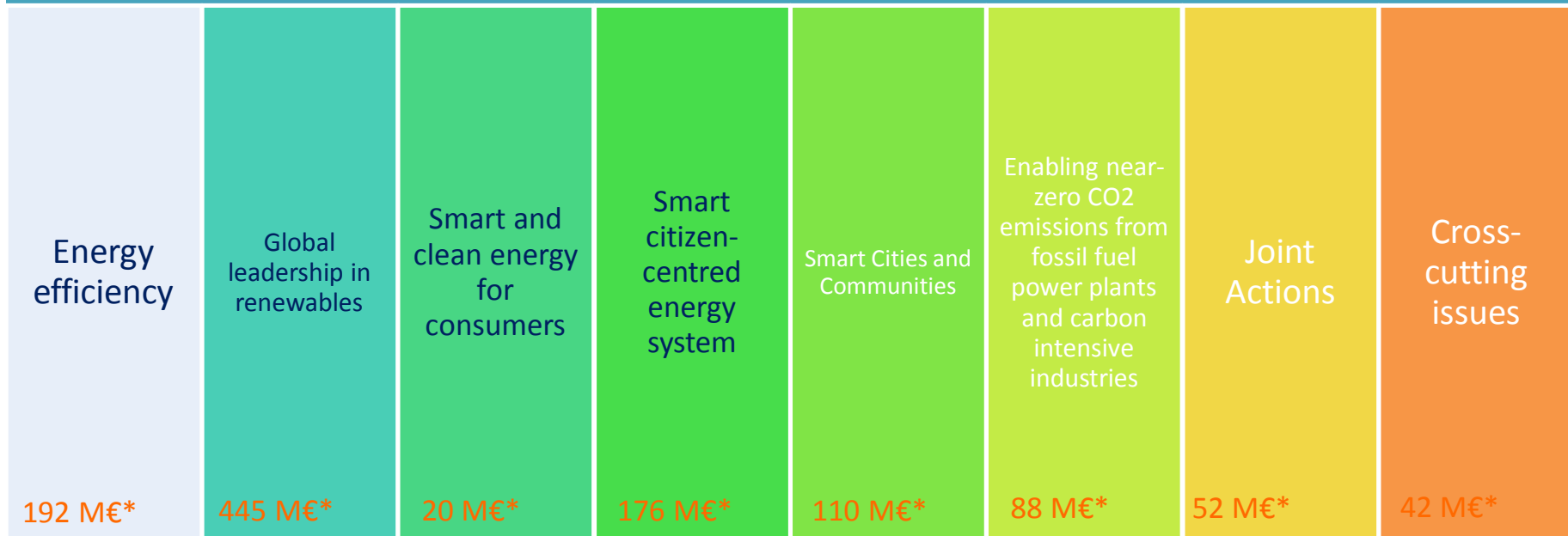
- “ H2020 ENERGY Calls 2018-2019
- “ HORIZON 2020 Rules
- “ Tips for successful proposals

Content

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Calls for proposals LC-SC3-2018-2019-2020

Calls for proposals LC-SC3-2018-2019-2020



* Budget figures for 2018-2019 only (2020 to be confirmed at a later stage)



European
Commission

Energy Efficiency / Smart and Clean Energy for Consumers



Buildings



Consumers
& Services



Industry



Financing
Energy
Efficiency



Public
Authorities
& Policy Support



Digitisation

**Innovation
Actions**
EU Support: 70%
3 to 30 M€ / project

EE1/*EE1*
EE4
EE5

EE6

DT-ICT-10

**Coordination
& Support
Actions****
EU support: 100%
0.5 to 2 M€ / project

EE2/*EE2*
EE3
EE5

EC1/*EC1*
EC2/*EC2*
EE13/*EE13*

EE6
EE8/*EE8*

EE2/*EE2**
EE9/*EE9*
EE10/*EE10*
EE11/*EE11*
EE13/*EE13**
EE17

EE16/*EE16*
EE15
*EE17**

**Research &
Innovation
Actions**
EU Support: 100%
1 to 2 M€ / project

EE14/*EE14*

Standard text: 2018 topics Deadline: 4 Sep 2018

Italic text: 2019 topics Deadline: 3 Sep 2019



* The topic also addresses this thematic area where indicated

** Mostly minimum 3 beneficiaries (check the Work Programme 2018-2020)

Smart and clean energy for consumers

EC-1-2018-2019: The role of consumers in changing the market through informed decision and collective actions

- **2018:** develop activities informing and motivating consumers to **change old and inefficient installed appliances** with the highest energy saving potential to more efficient and clean energy heating and/or cooling solutions; consider financial and other aspects; address 'rebound effect'; involve all relevant stakeholder
- **2019:** set up and/or support consumer cooperatives/collective purchase groups, and/or other **consumer-driven collective actions** to **increase energy efficiency** and/or optimise energy management within the community; address regulatory barriers and contractual conditions; address split incentives

EC-2-2018-2019: Mitigating household energy poverty

- Contribute to actively alleviating energy poverty and developing a better understanding of the types and needs of energy poor households and how to identify them
- Facilitate **behaviour change** and implementation of **low-cost energy efficiency measures** tailored for energy poor households
- Support the set-up of financial and non-financial **support schemes** for energy efficiency and/or small-scale renewable energy **investments** for energy poor households
- Develop, test and disseminate **innovative schemes for energy efficiency/RES investments** established by utilities or other obligated parties under Article 7

Topic EC-3 will be opened in 2020.



European
Commission

Global leadership in renewables

	2018	2019	2020
Next renewable energy solutions	RES-2	RES-1	RES-3
Renewable energy solutions at consumer scale	<i>Energy generation at building scale</i> RES-4, RES-5, RES-6	<i>Renewable energy solutions at district level and for industrial processes</i> RES-7, RES-8	RES-9, RES-10
Renewable energy solutions for energy system implementation	<i>Reduce costs of key technologies for renewable energy conversion</i> RES-11, RES-12, RES-13	<i>Optimize processes and manufacturing</i> RES-14, RES-15 <i>Provide flexibility to the energy system</i> RES-16, RES-17	RES-18, RES-19, RES-20
Renewable fuels for transport	<i>Drop-in fuel solutions for fossil-fuel substitution</i> RES-21, RES-22	<i>Upscaling renewable fuels production</i> RES-23 RES-24	RES-25, RES-26, RES-27
Market Uptake Support	RES-28	RES-28	RES-28

Global leadership in renewables

Technology area	Research activities (RIA)	Innovation activities (IA)
Solar energy (PV, CSP)	RES-1-2019, RES-2-2018, RES-4-2018, RES-7-2019, RES-11-2018, RES-14-2019	RES-6-2018, RES-8-2019, RES-13-2018, RES-15-2019, RES-17-2019
Wind energy	RES-1-2019, RES-4-2018, RES-11-2018	RES-13-2018
Ocean energy	RES-1-2019, RES-11-2018, RES-14-2019	
Biofuels / alternative fuels	RES-1-2019, RES-2-2018, RES-16-2019, RES-21-2018, RES-23-2019	RES-17-2019, RES-22-2018, RES-24-2019
Geothermal energy	RES-1-2019, RES-4-2018, RES-11-2018, RES-14-2019	RES-8-2019, RES-13-2018
Heating / cooling, CHP	RES-1-2019, RES-4-2018, RES-11-2018	RES-5-2018, RES-8-2019, RES-12-2018
Hydro energy	RES-1-2019, RES-11-2018, RES-16-2019,	RES-17-2019
Virtual Power Plant	RES-16-2019	

- “ Topics for 2018 in black font Deadlines closed; for 2019 in purple font Deadline 16/10/2018 (First stage topics) 11/12/2018 full proposal topics
- “ Topics for 2020 not included (added as of mid-2018)
- “ Market-uptake activities (CSA, RES-28) cover all areas Deadline 11/12/2018



Smart Citizen-Centred Energy System

Smart citizen-centred energy system

Grid

- “ ES-1-2019: Flexibility and retail market options for the distribution grid (IA)
- “ ES-2-2019: Solutions for increased regional cross-border cooperation in the transmission grid (IA)
- “ ES-5-2018-2020: TSO – DSO – Consumer: Large-scale demonstrations of innovative grid services through demand response, storage and small-scale (RES) generation (IA)
- “ ES-6-2019: Research on advanced tools and technological development (RIA)

Local systems & island

- “ LC-SC3-ES-3-2018-2020: Integrated local energy systems (Energy islands) (IA)
- “ LC-SC3-ES-4-2018-2020: Decarbonising energy systems of geographical Islands (IA)
- “ LC-SC3-ES-8-2019: European Islands Facility - Unlock financing for energy transitions and supporting islands to develop investment concepts (CSA)

“ Deadline 05/02/2019

Smart Cities and Communities – SCC-1

Specific Challenge

- COP21, EU Energy/Climate goals
- Necessary energy transition in cities
- Increase energy systems integration and to push energy performance levels significantly

Scope

- Deploy and test integrated innovative solutions for **Positive Energy Blocks/Districts** in the Lighthouse Cities
- Carry out extensive **performance monitoring** (ideally for **more than 2 years**)
- **Interaction and integration** between the **buildings**, the **users** and the larger **energy system**
- Implications of increased **electro-mobility**, its impact on the energy system and its integration in planning

Expected impact

- **Meeting EU climate mitigation and adaptation goals** and national and/or local energy, air quality and climate targets, as relevant;
- Significantly increased share of i) **renewable** energies, ii) waste **heat recovery** and iii) appropriate **storage** solutions (including batteries) and their **integration** into the energy system and iv) **reduce greenhouse gas emissions**;
- Lead the way towards wide scale roll out of **Positive Energy Districts**;
- Significantly **improved energy efficiency**, district level optimized **self-consumption**, reduced curtailment;
- Increased uptake of **e-mobility** solutions;



Deadline 05/02/2019

Enabling near-zero CO2 emissions from fossil fuel

NZE-1: Pilots for advanced capture technologies (2018)

- *RIA; Deadline: 6.9.2018; indicative budget: EUR 20 million*

NZE-2: Pilots on CO2 conversion to fuels (2018)

- *RIA; Deadline: 6.9.2018; indicative budget: EUR 12 million*

NZE-3: Strategic planning for CCUS deployment (2018)

- *CSA; Deadline: 6.9.2018; indicative budget: EUR 2 million*

NZE-4: Integrated solutions for flexible power plants using power-to-X and energy storage (2019)



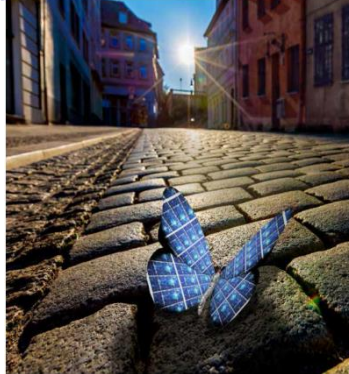
- *IA; Deadline: 27.8.2019; indicative budget: EUR 20 million*

NZE-5: CCS in industry (2019, 2020)

- *IA; Deadline (2019): 27.8.2019; indicative budget: EUR 33 million*

NZE-6: Geological storage pilots in different settings (2020)

Running energy prizes - overview

	Title	Budget	Submission by
	<p><u>CO2 reuse in innovative products</u> EC-CO2REUSE-PRIZE@ec.europa.eu</p>	<p>€1.5 EUR million</p>	<p>3 April 2019</p>
	<p><u>Low carbon hospital</u> Combined Heat and Power installation in a hospital using 100% renewable energy sources EC-LOWCARBON-PRIZE@ec.europa.eu</p>	<p>€ 1.0 EUR million</p>	<p>3 April 2019</p>
	<p><u>Photovoltaics meets history</u> Integrated Photovoltaic Energy System in a European protected historic urban district EC-PHOTOVOLTAICS-PRIZE@ec.europa.eu</p>	<p>€ 0.75 EUR million</p>	<p>26 September 2018</p>
<p><u>'FUEL FROM THE SUN: ARTIFICIAL PHOTOSYNTHESIS</u></p>		<p>€5 million 3 February 2021</p>	

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1. Who can participate?

Any legal entity, regardless of its place of establishment, or international organization.

2. How can participate?

- (a) at least three legal entities shall participate in an action;
- (b) three legal entities shall each be established in a different Member State or associated country; and
- (c) the three legal entities referred to in point (b) shall be independent of each other.

3. Who is eligible for funding?

- (a) any legal entity established in a Member State or **associated country***, or created under Union law;
- (b) any international European interest organisation;
- (c) any legal entity established in a **third country** identified in the work programme (Annex A).

Associated Countries

- " Iceland
- " Norway
- " Albania
- " Bosnia and Herzegovina
- " the former Yugoslav Republic of Macedonia
- " Montenegro
- " Serbia
- " Turkey
- " Israel
- " Moldova
- " Switzerland
- " Faroe Islands
- " Ukraine
- " Tunisia
- " Georgia
- " Armenia

International Cooperation

In case of a participating legal entity established in a **third country not eligible for funding**, funding from the Union may be granted provided that at least one of the following conditions is fulfilled:

- a) The participation is deemed essential for carrying out the action
- b) Such funding is provided for under a bilateral scientific and technological agreement

Third countries not eligible

Industrialised countries: for instance US, Canada, Republic of Korea, Singapore, Australia, Taiwan, New Zealand, Macao, San Marino, Monaco, Andorra, Vatican, etc.

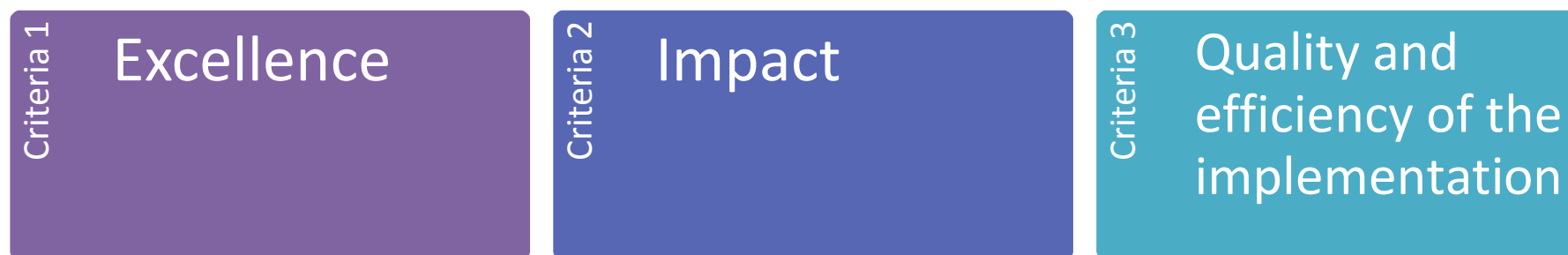
Emerging economies: BRIC+M Brazil, Russia, India, China and Mexico

4. How proposal are selected?

The evaluation is carried out by independent experts.

<http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html>

3 CRITERIA



- “ For full proposals, each criterion will be scored out of 5. The threshold for individual criteria will be 3. The overall threshold, applying to the sum of the three individual scores, will be 10.
- “ For Innovation actions to determine the ranking, the score for the criterion ~~impact~~ will be given a weight of 1.5.

The scoring scale

0

The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.

1

Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.

2

Fair. The proposal broadly addresses the criterion, but there are significant weaknesses.

3

Good. The proposal addresses the criterion well, but a number of shortcomings are present.

4

Very Good. The proposal addresses the criterion very well, but a small number of *shortcomings are present*.

5

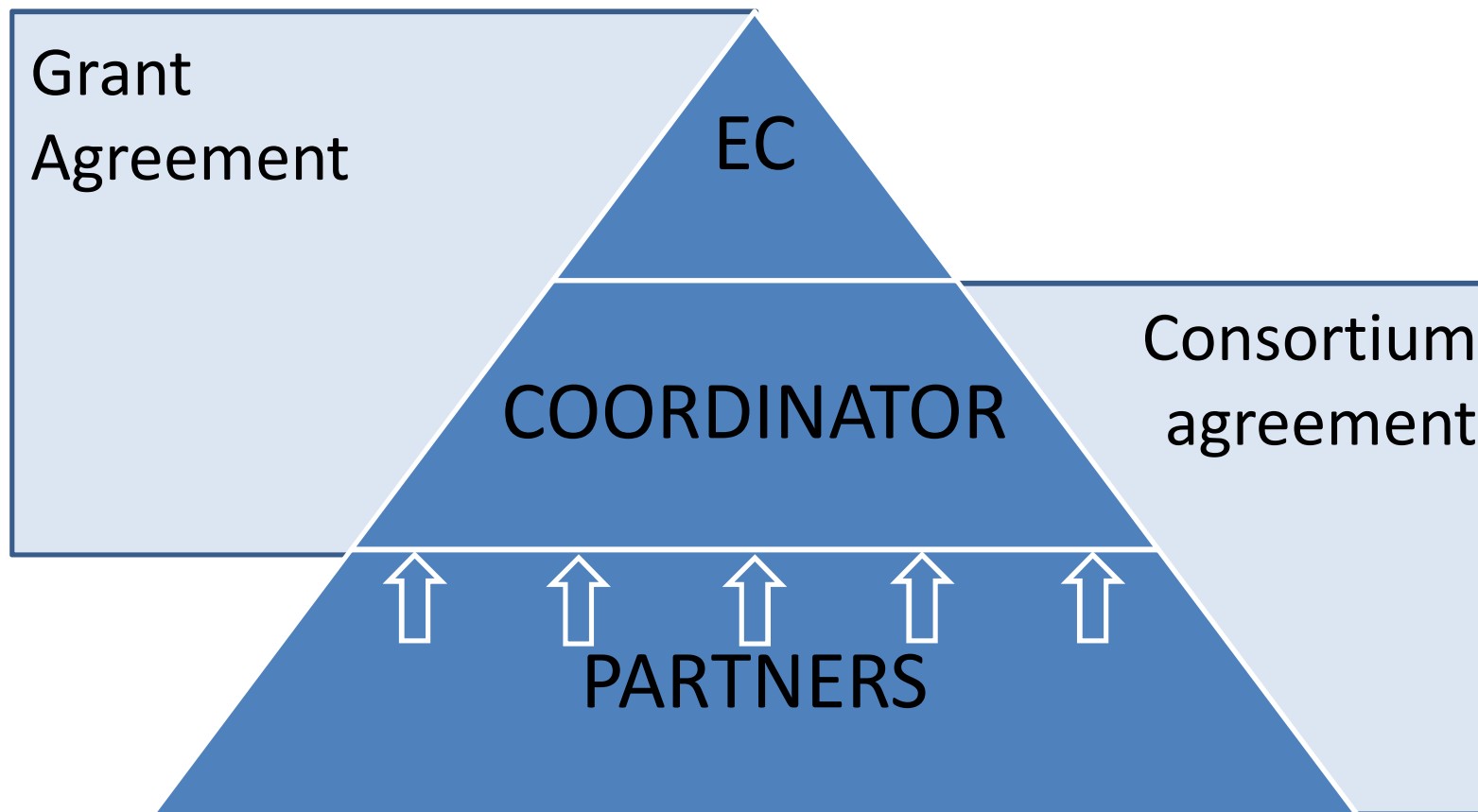
Excellent. The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

5. When a project starts?



By default: the first day of the month following the date the **Grant Agreement** enters into force.

Legal frame



6. What are the funding rules?

1 reimbursement rate by action (same rate for all beneficiaries and all activities):

- “ Up to 100% for Research and Innovation Actions
- “ Up to 100% for Coordination and Support Actions
- “ Up to 70% for Innovation Actions (non-profit entities up to 100%) and programme co-fund actions

1 method for calculation of indirect costs:

- “ Flat rate of 25% of total direct costs, excluding subcontracting, costs of third parties and financial support to third parties
- “ If provided in WP, lump sum or unit costs

Funding of the action not exceed **total eligible costs minus receipts**

Content

- “ H2020 ENERGY Calls 2018-2019
- “ HORIZON 2020 Rules
- “ **Tips for successful proposals**

Frequent mishaps – Eligibility / Admissibility

- “ Call deadline is unchangeable: use all advantages of the electronic submission system to make the deadline!
- “ Completeness: one section missing makes your proposal inadmissible
- “ Partnerships: remember the principle of 3 participants from MS or AC (check work programme for exceptions)
- “ Page limit of 50 pages for CSA, 70 for IA+RIA: applied strictly during the evaluation

Frequent mishaps – Excellence

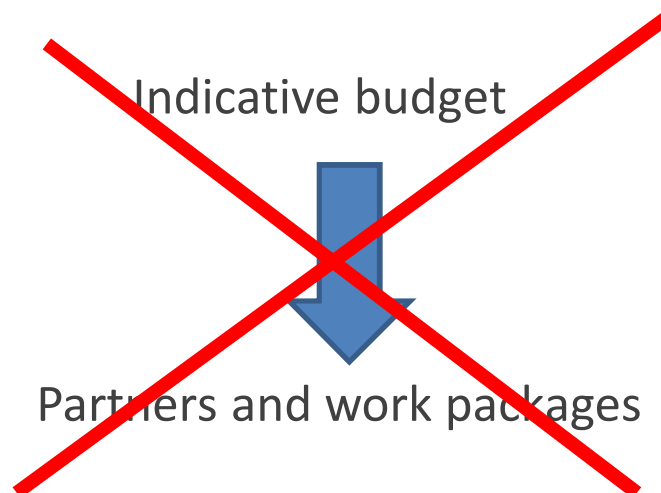
- “ Evaluation results: proposal often miss explanation of the concept and added value and innovation falls short.
- “ Be courageous – take choices, focus and innovate.
- “ “Explain the overall concept underpinning the project” -> do this not only from the perspective of the coordinator.. Input from your partners is key.
- “ Do not assume that evaluators know your specific context.
- “ Do not overcrowd objectives and show how you achieve them.
- “ You win by explaining!

Frequent mishaps – Impact and Implementation

- “ Evaluation results: ambition is not quantified / not realistic / not supported by action.
- “ Quantify! Describe in a concise, yet robust, manner your baseline, benchmarks and assumptions.
- “ Keep your challenge in mind!
- “ Plan activities to monitor your performance.
- “ The consortium of partners must be excellent and appropriate for the tasks.
- “ Be aware: keep the link to actual activities in your work plan!

Frequent mishaps – Resources

- “ Evaluation results: work plan not sufficiently detailed / budgets not justified / budgets seem top-down
- “ Make sure work description sufficiently detailed and clear
- “ Invest time into this: this is the opportunity to convince evaluators that you can materialize your vision
- “ Invest time into your resource planning bottom up:



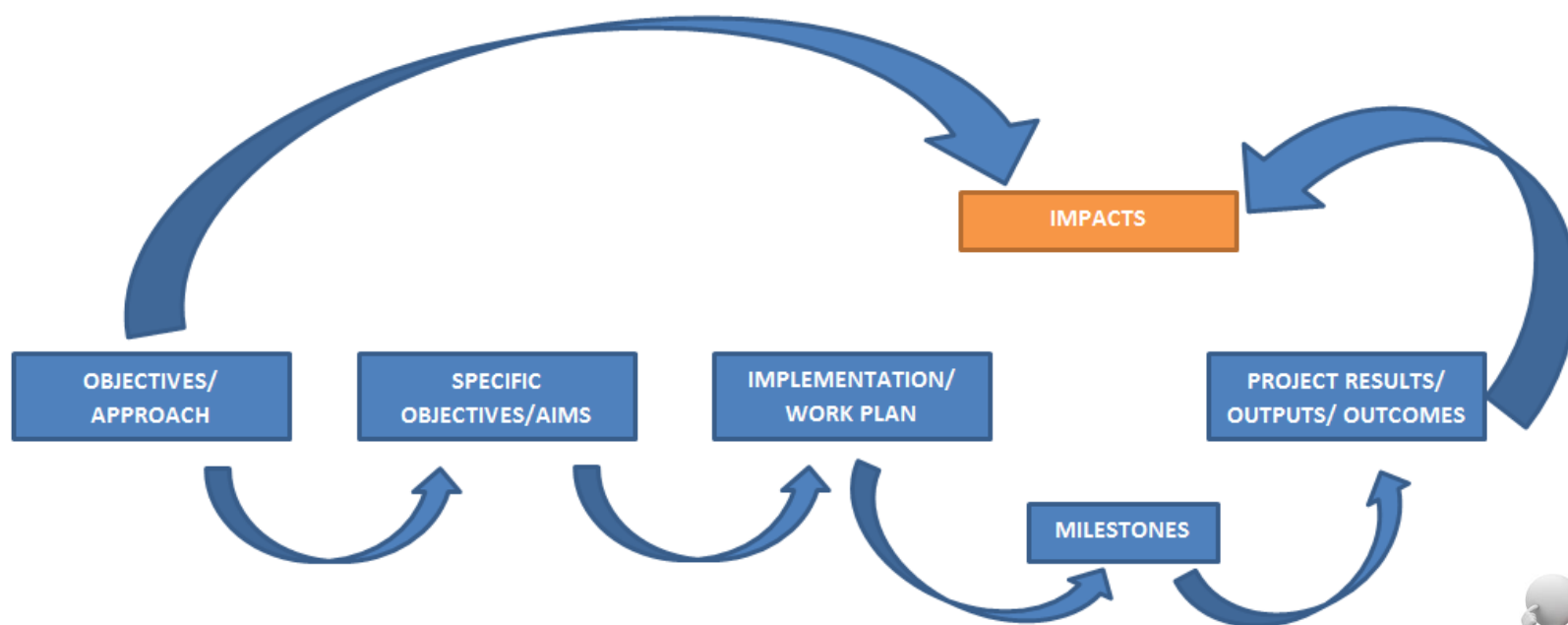
Tips for successful proposals

- “ Treat each section as if it is the most important section.
- “ Think about presentation and the layout of the proposal. Use diagrams to explain complex concepts.
- “ Ask an “informed outsider” for critical proof-reading and check for spelling mistakes (ask a native speaker check the English).
- “ Sell, don’t tell. Make the evaluator feel your passion. In addition to having an excellent idea which is the basis of any successful proposal, researchers must sell the concept to the evaluators.
- “ The Project has to serve the needs of the European Community / European Policies (Impact).

Tips for successful proposals

- “ Do not submit at the last minute!
- “ Do not hesitate to submit several versions.
- “ Read all the documents provided by the EC.
- “ Follow exactly the structure given in the guide for applicants.
- “ Be as concise and precise as possible. Avoid general statements.
- “ Have the evaluation criteria at the forefront when writing the proposal.

Coherence of the proposal



Consistency of the proposal

Description
of the
activities



Budget



Development of the text

- “ Introduce (new) concepts at the beginning, explain (do not introduce new concepts afterwards)
- “ Refer to public data (statistics) if relevant
- “ Refer to previously funded projects (innovation can be a follow-up)
- “ Use terminology relevant to the context of the Programme and the call (topic)
- “ Short and dense text (use the diagrams)
- “ Make the text clear, well structured and fluent
- “ Plan an index, use short paragraphs, point out key passages, schematise the concepts
- “ Insert only information relevant to the project



Structure and approach

Make the proposal readable.

Evaluator has few hours to read your proposal and evaluate it.

Write in **bold**, use *cursiv*, underline.

Better one table than thousand words...





Eleven centres and research groups active in andrology and medical sexology have been selected: Leuven (B), Muenster (D), Leipzig (D), Barcelona (E), Rome (I), Florence (I) (these biomedical centres also have interdisciplinary connections with psychological and psychosexual research groups and inter sectorial connections with research groups in the sectors of sociology and science of communication; complementary training described in point B2.1 will be organised in these Centres); Malmoe (S), Manchester (UK), Giessen (D), Tartu (EE), Lodz (PL) (centres with clinical and bio-molecular facilities). See also point B3 with the individual Centres description.

As previously noted, these centres are already active in the field. The project will be able to make use of an already existing infrastructure.

Also inserted in the Network will be the complementary training in the andrological field: Serono, Organon, Ferring, Eli Lilly, Pfizer, Bayer, and GSK, manufacturers of testosterone replacement therapy; Johnson & Johnson, manufacturer of the treatment for premature ejaculation, Schering-Plough, manufacturer of the administration methods dedicated to andropause. The complementary training described in point B2.1 will be organised by experts in the field.

List of involved Centres

Malmö (S), University of Lund, Department of Urology, Chairman Prof. Anders Giwercman
 Manchester (UK), Department of Endocrinology and Reproductive Medicine, Chairman Prof. Frederick Wu
 Tartu (EE), Department of Urology, Tartu University, Chairman Prof. Jaan Uusküla
 Leuven (B), Department of Endocrinology, University of Leuven, Chairman Prof. Eberhard Nieschlag
 Muenster (D), Institute of Reproductive Medicine, University of Muenster, Chairman Prof. Andreas Meinhardt
 Giessen (D), Department of Dermatology, Justus Liebig University of Giessen, Chairman Prof. Hans-Juergen Glander
 Leipzig (D), Department of Andrology and Dermatology, University of Leipzig, Chairman Prof. Hans-Juergen Glander
 Lodz (PL), Department of Andrology and Reproductive Endocrinology, Medical University of Lodz, Chairman Prof. Krzysztof Kula
 Barcelona (E), Fundacion Puigvert Andrology Service, Clinica de la Santa Creu, Chairman Prof. Osvlado Rajmil
 Rome (I), Department of Medical Physiopathology, University of Rome "La Sapienza", Co-Chairmen Prof. Andrea Lenzi and Prof. Franco Dondero



for the EAA. This new research and training

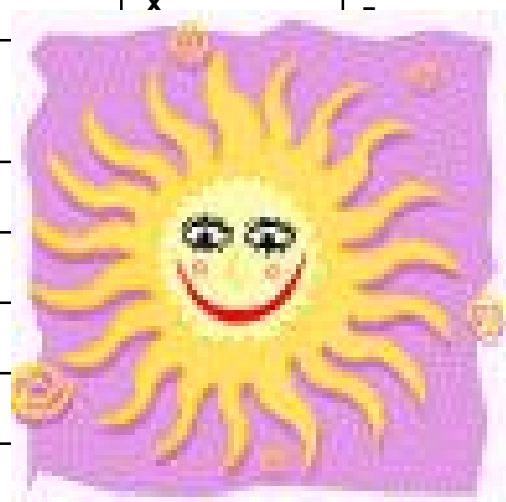
will focus on the development of new generation products active in the field of andrology: testosterone replacement therapy, aromatase inhibitors acting on erectile dysfunction, selective serotonin reuptake inhibitors, specifically aimed at the treatment of andropause. The complementary training described in point B2.1 will be organised by experts in the field.

for Giwercman
 Prof. Frederick Wu
 Jaan Uusküla
 Eberhard Nieschlag
 Prof. Andreas Meinhardt



!!!

centres	Competencies					
	Clinical	Laboratory	Sexological	Psychological	Ethical	Sociological
Rome	X	X	X	X	X	X
Malmo	X	X	x	-	X	-
Manchester	X	X			X	-
Tartu	X	X			-	-
Leuven	X	X			X	X
Muenster	X	X			X	X
Giessen	X	X			X	-
Leipzig	X	X			-	-
Lodz	X	X	X	-	-	-
Barcelona	X	X	X	X	X	X
Florence	x	X	X	x	x	X



.. The last tips!

- “ Your proposal must be written in order to solve European problems identified in EU policies.. Never give the impression that you are writing a project because trying to get funding!
- “ Don't considerate only scientific aspects (it is not an scientific paper!) but also political, economical and social!
- “ Confront with the NCP the consistency of your project idea!

NCP's Mission

Highly professional **SUPPORT SERVICES** operating nationally will form an essential component of Horizon 2020 implementation. By **SPREADING AWARENESS, GIVING SPECIALIST ADVICE, AND PROVIDING ON-THE-GROUND GUIDANCE**, they will ensure that the new programme becomes **KNOWN AND READILY ACCESSIBLE TO ALL POTENTIAL APPLICANTS**, irrespective of sector or discipline.

→ *In accordance with national law, systems should be in place to ensure that **confidential information** that comes into the possession of NCPs is treated accordingly.*

*"EC - NCP Guiding Principles"

http://ec.europa.eu/research/participants/portal/desktop/en/support/national_contact_points.html

A Dedicated Partner Search (PS) tool for H2020 Energy topics



Go to <http://www.c-energy2020.eu/>

Select PS link



Login

Username (E-Mail address):

Password:

LOGIN

Registration

Password lost?

Navigation

HORIZON 2020 - WORK PROGRAMME - Part 10. :

Dedicated Partner Search Facility

This C-Energy2020 Partner Search Facility has been set up to support its clients in establishing consortia. This is done under the Energy area of the Societal challenge Pillar.

On this web-service we discern between:

- **Partner Offer** - Researchers who offer their research project consortia

- **Partner Search** - Researchers or consortia with a project to be funded

- **Partner Search** - Researchers or consortia with a project to complement the expertise scope of the consortium

In order to get information on the already published projects

Register, create an account and password

(Login if account already created)

Further Information

- “ **Horizon 2020 Helpdesk - Research Enquiry Service:**
<http://ec.europa.eu/research/index.cfm?pg=enquiries>
- “ **Energy National Contact Points (NCPs) Network:**
<http://www.c-energy2020.eu/>
- “ **Enterprise Europe Network:**
<http://een.ec.europa.eu/about/branches>
- “ **Participant Portal:**
<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>



Smart, green and integrated transport NCP

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Non esitate a contattarci!

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