

# SME-Instrument. Opportunities and Challenges

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**NCP SME UKRAINE**

Міжнародні програми для підтримки підприємництва



**HORIZON 2020**

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

# EU Support Programmes for Innovative SMEs

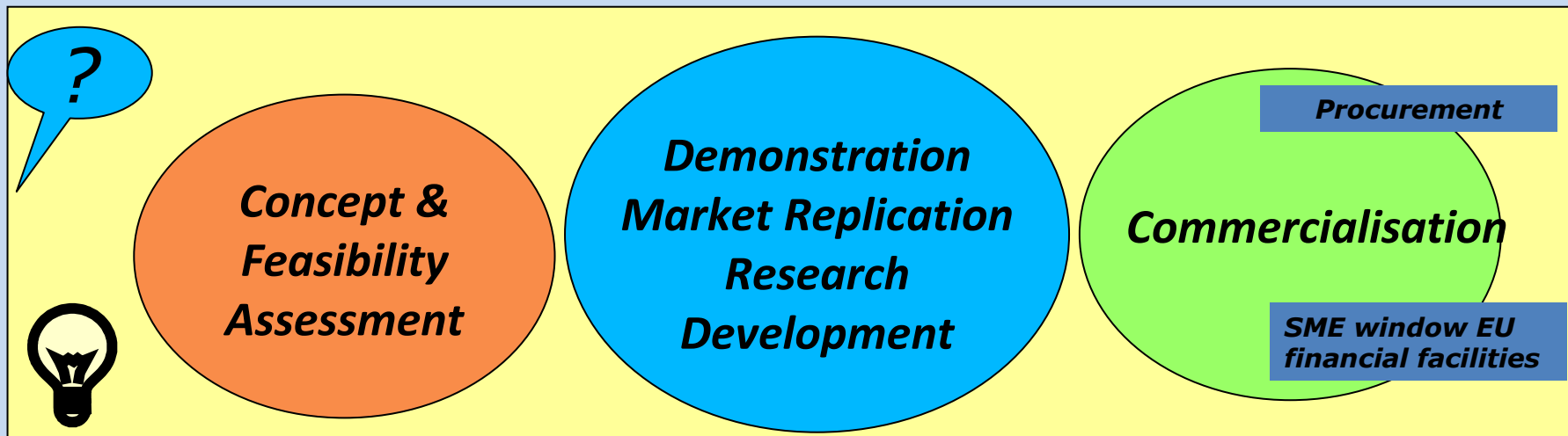
- H2020 - Collaborative Projects
- H2020 – SME Instrument
- H2020 – Fast track to innovation
- H2020 – Eurostars (Eureka)
- H2020 – Access to Risk Finance
- H2020 - Marie Skłodowska Curie Actions
- Enterprise Europe Network
- COSME – Access to Finance

## Special for Ukraine: EU SURE (€55 million)

The action supports national, regional and local authorities and other stakeholders to develop and implement effective economic development policies, including SMEs policy. One component will be the setting up of Business Support Centres to cover 15 regions

This action will also facilitate Ukraine's participation in Horizon 2020.

# ***SME instrument***



**Phase 3 = 2% budget**

**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**

**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  
**TL >= 6**

**30-50% success**

**Output: "investor-ready Business plan 3"**

**1-3 (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**

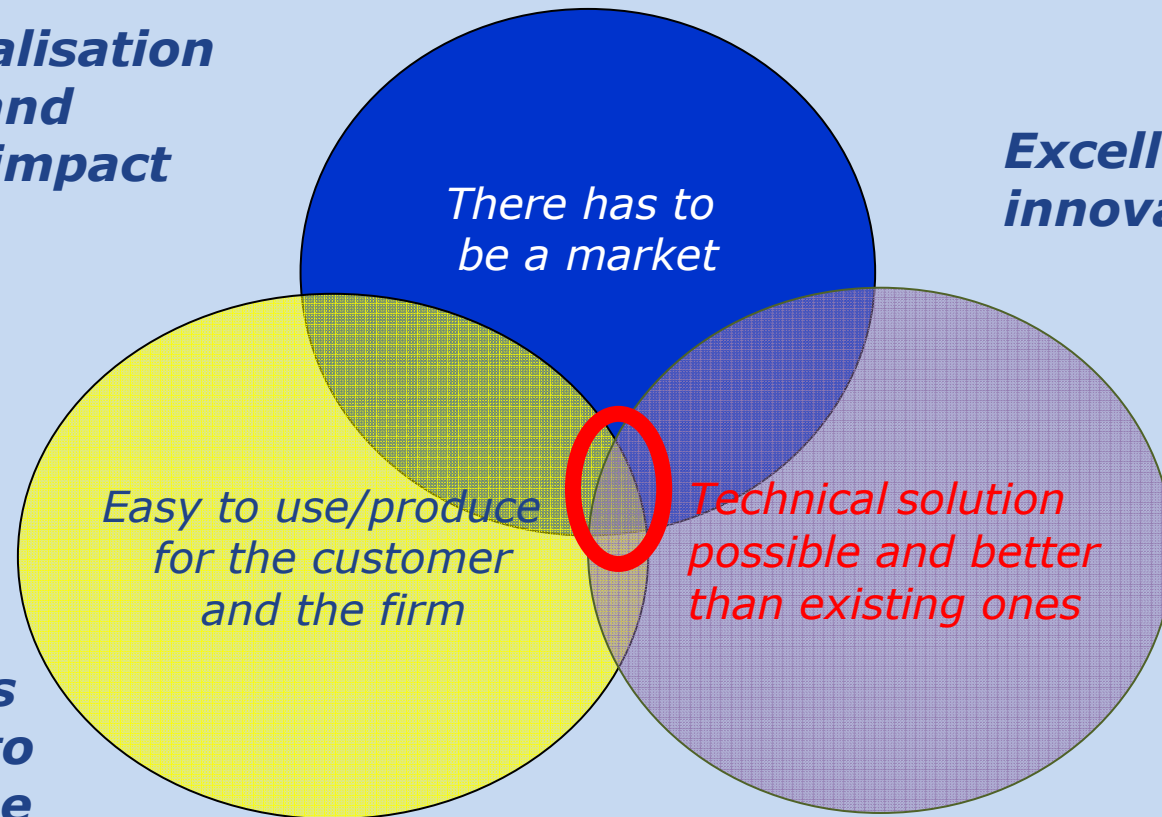
## Topics for SME-instrument in WPs of Societal Challenges and Leadership in Enabling and Industrial Technologies.

- [Space-SME-2014-1: SME Instrument](#)
- [ICT-37-2014-1: Open Disruptive Innovation Scheme \(implemented through the SME instrument\)](#)
- [NMP-25-2014-1: Accelerating the uptake of nanotechnologies, advanced materials or advanced manufacturing and processing technologies by SMEs](#)
- [PHC-12-2014-1: Clinical validation of biomarkers and/or diagnostic medical devices](#)
- [SFS-08-2014-1: Resource-efficient eco-innovative food production and processing](#)
- [BG-12-2014-1: Supporting SMEs efforts for the development - deployment and market replication of innovative solutions for blue growth](#)
- [SIE-01-2014-1: Stimulating the innovation potential of SMEs for a low carbon energy system](#)
- [IT-1-2014-1: Small business innovation research for Transport](#)
- [SC5-20-2014-1: Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials](#)
- [DRS-17-2014-1: Critical infrastructure protection topic 7: SME instrument topic: "Protection of Urban soft targets and urban critical infrastructures"](#)
- [BIOTEC-5a-2014-1: SME boosting biotechnology-based industrial processes driving competitiveness and sustainability](#)

# Evaluating SME instrument activities

**Commercialisation potential and economic impact**

**Excellence in innovation**



*There has to be a market*

*Easy to use/produce for the customer and the firm*

*Technical solution possible and better than existing ones*

**Company's potential to achieve the envisaged results**

**Plus: EU added value**

# Technology readiness levels (TRL)

- TRL 1 – basic principles observed
- TRL 2 – technology concept formulated
- TRL 3 – experimental proof of concept  
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- 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)  
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- TRL 7 – system prototype demonstration in operational environment
- 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)

# Level of competition

**On 17 September** – the third cut-off date in 2015 for Horizon 2020 SME Instrument – EASME received in total **2,833** new proposals – **1,873** for Phase 1 and **960** for Phase 2.

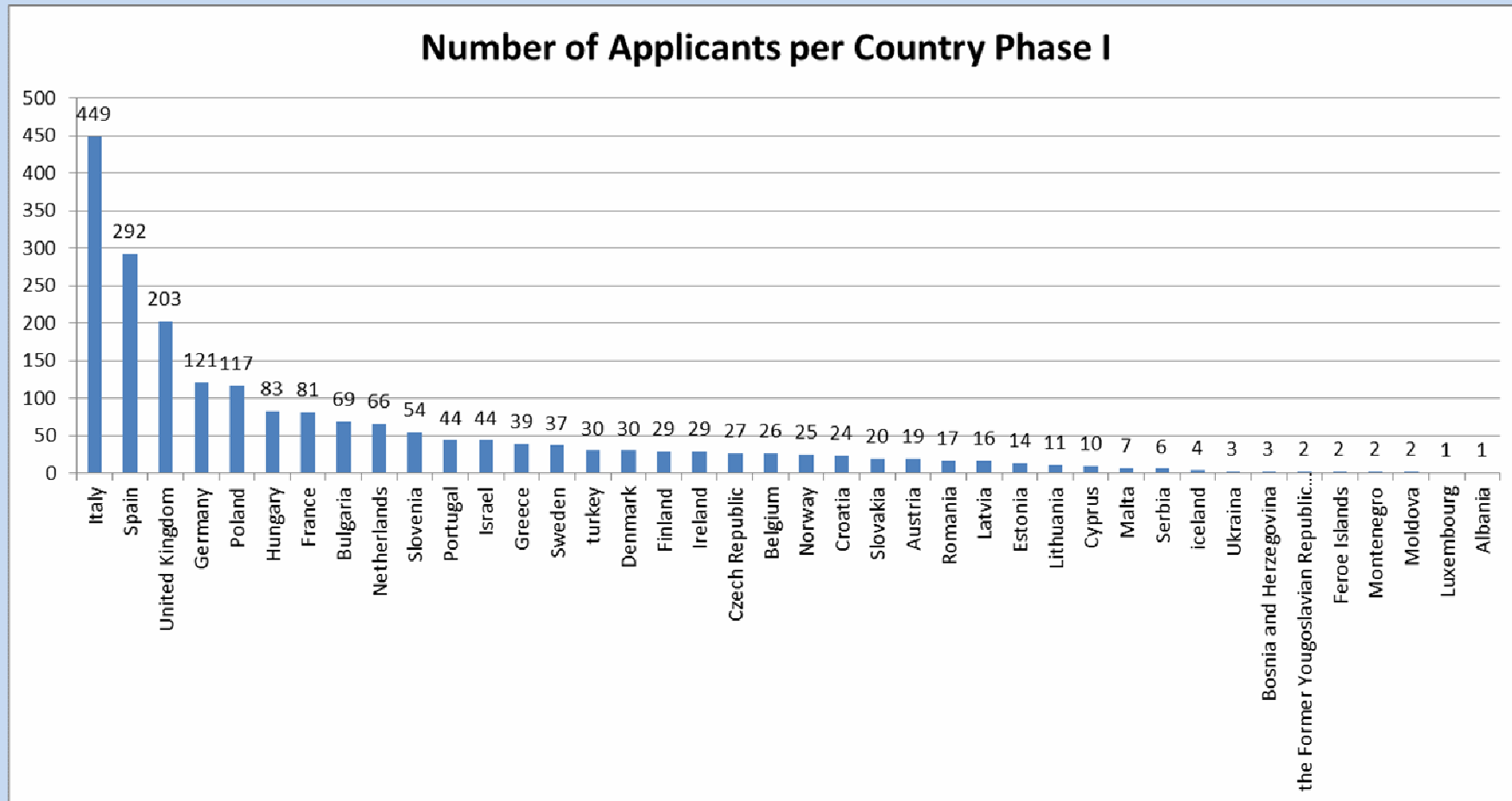
- On the top of the list of topics ICT still gathers the greatest number of proposals with 702 proposals submitted for both phases, followed by nanotechnology (316), low carbon energy systems (310), and eco-innovation (280).

- The top three countries in terms of number of applicants are Italy (449 for Phase 1 and 220 for Phase 2), Spain (292 for Phase 1 and 152 for Phase 2) and the United Kingdom (203 for Phase 1 and 109 for Phase 2). These figures are based on the nationality of the project coordinator, given that one project can include participants from several countries.

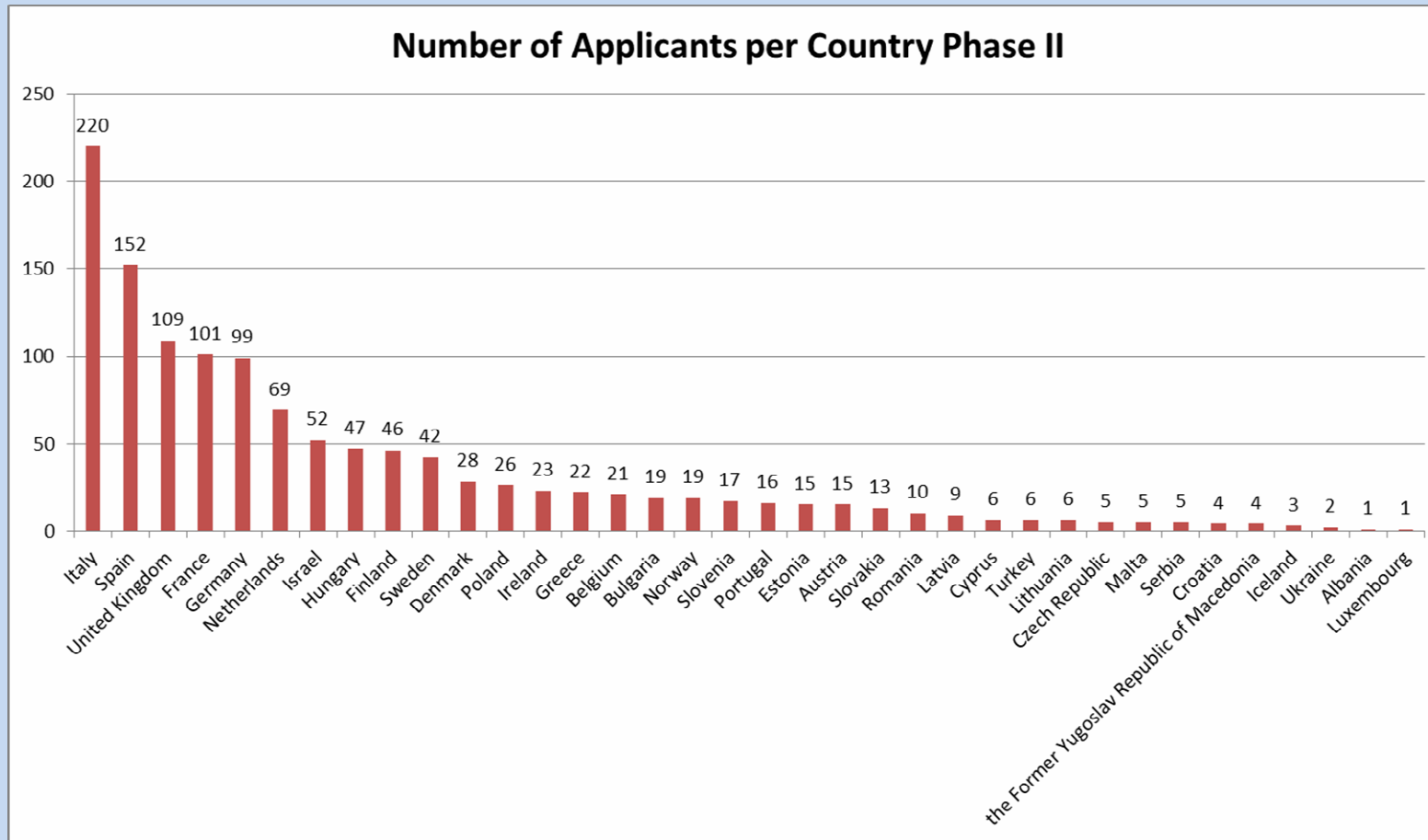
- Since the beginning of this year a total of 8006 proposals have been submitted – 5471 for phase 1 and 2535 for phase 2.



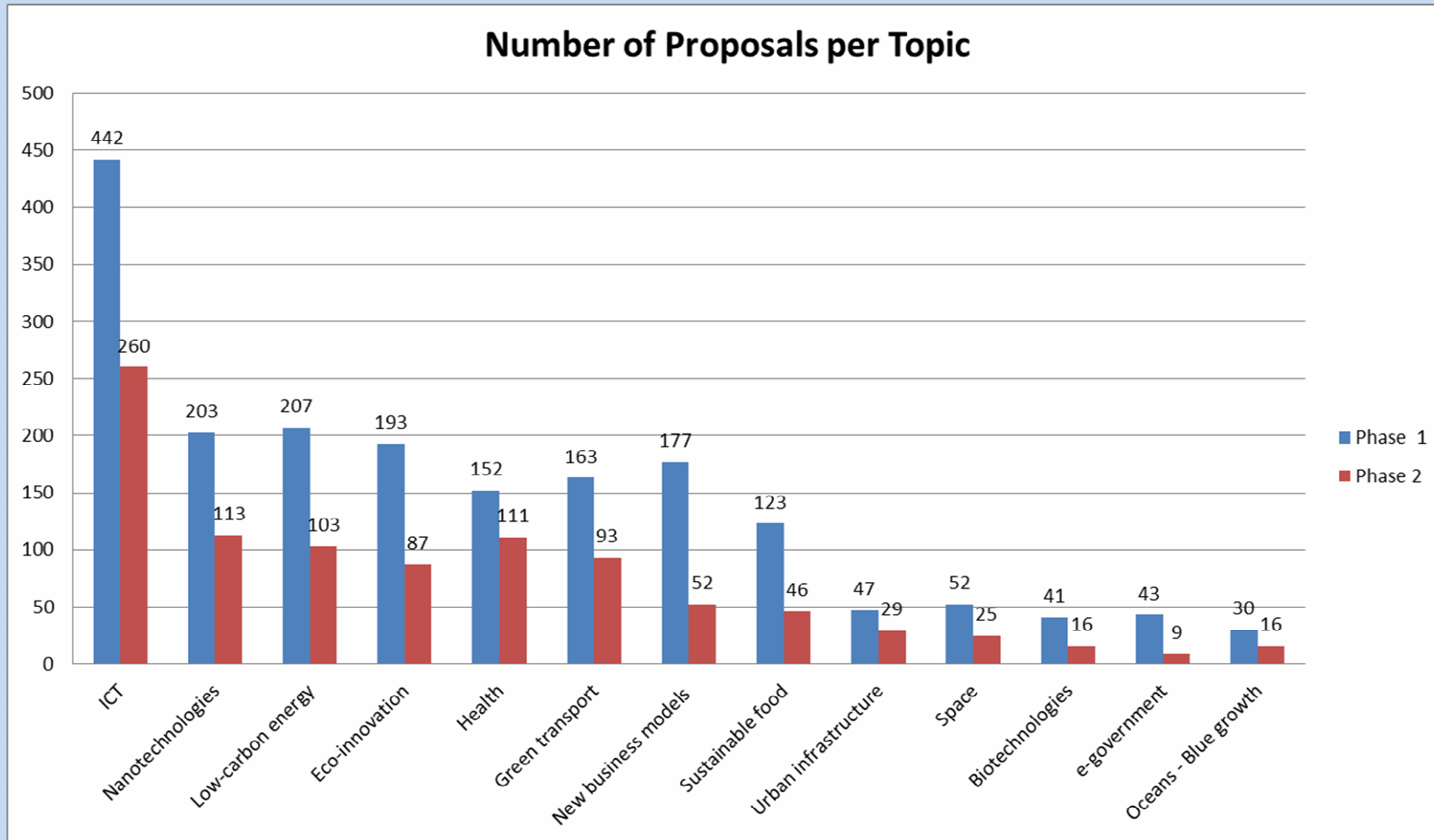
# Level of competition (2)



# Level of competition (3)



# Level of competition (4)



# Some statistic from EASME

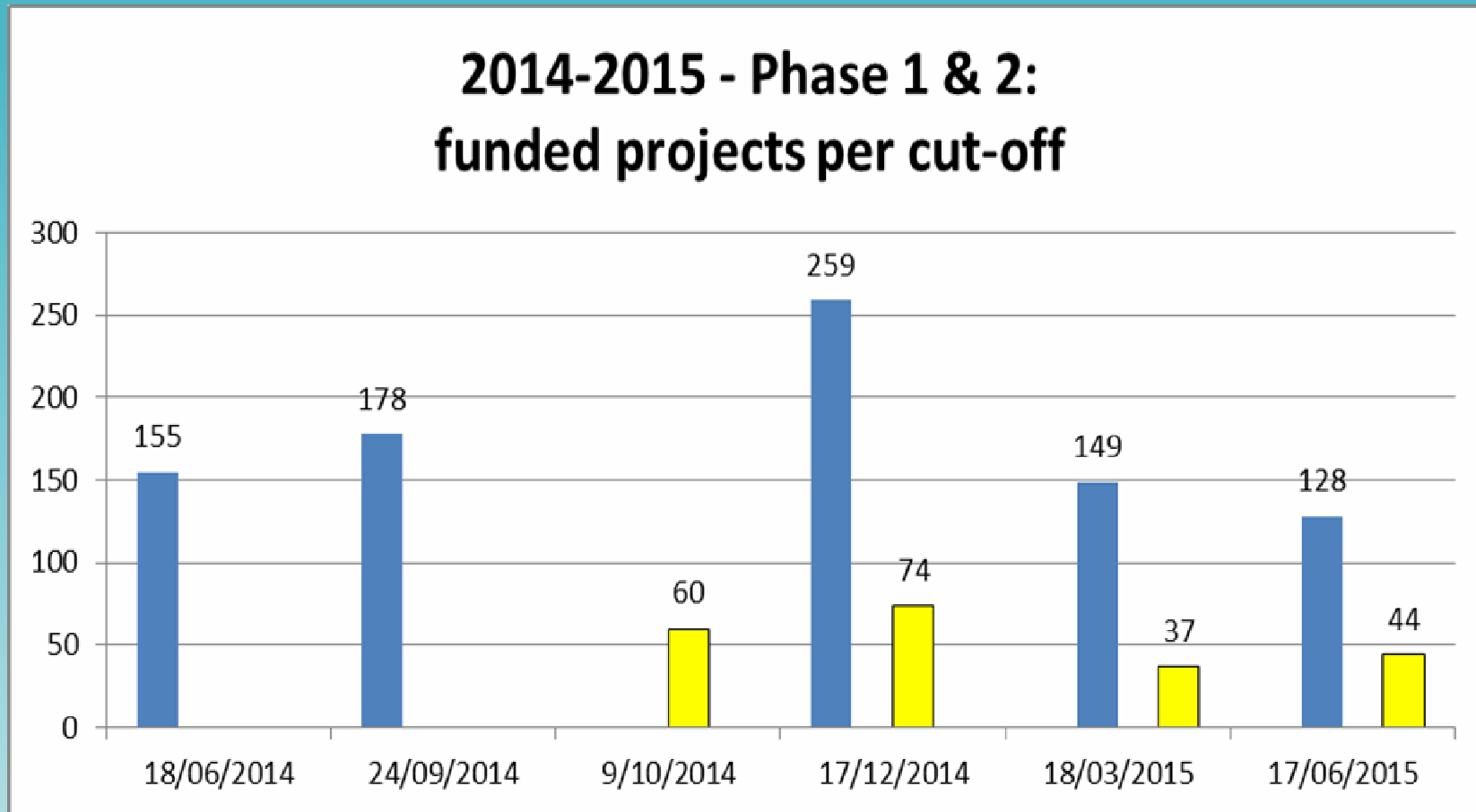
## Materials of Horizon 2020 Information Day:

**Brussels, 21 September: The European Commission organised an Information Day to present the new work programme of Horizon 2020's Societal Challenge "Climate Action, Environment, Resource Efficiency and Raw Materials"**

<https://ec.europa.eu/easme/en/horizon-2020-information-day-21-september-2015>

# PHASE 1 & 2: 2014-2015

# Funded projects per cut-off





# SC5 topic: budget 2014-2015

Eco-innovation and sustainable raw material supply	<u>SC5-20-2014-1</u> ~34 projects €1.7m	<u>SC5-20-2014</u> ~10 projects €15m	<u>SC5-20-2015-1</u> 38 projects €1.9m	<u>SC5-20-2015</u> ~11 projects €17m
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# RESULTS: 2014-2015

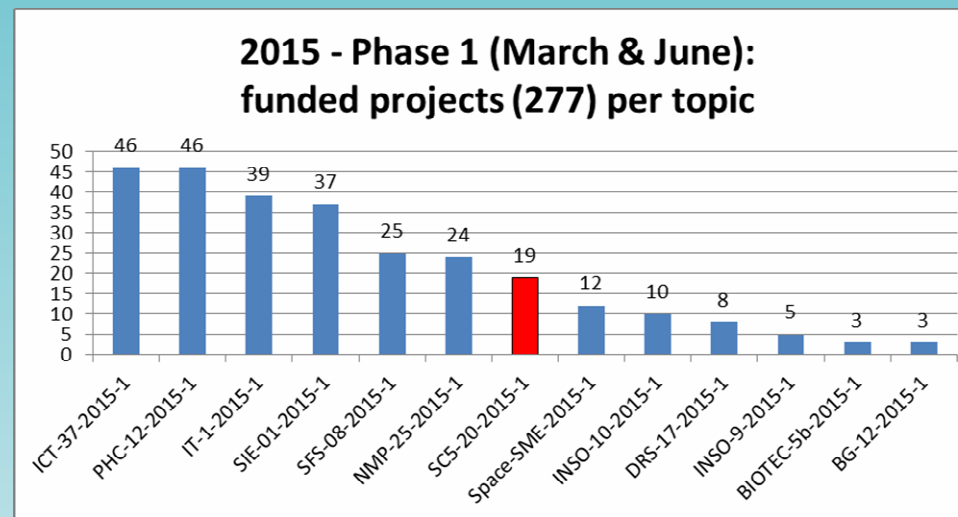
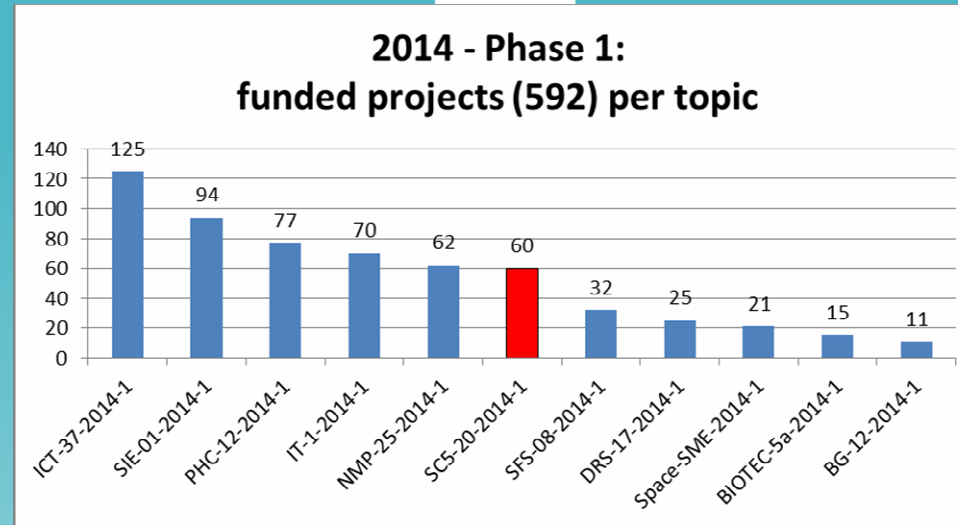


Cut-off date: all topics											
	18/06/2014	24/09/2014	9/10/2014	17/12/2014	17/12/2014	18/03/2015	18/03/2015	17/06/2015	17/06/2015	TOTAL	TOTAL
Phase	1	1	2	1	2	1	2	1	2	1	2
N° of proposals received	2.662	1.947	580	2.363	629	1.569	614	2.029	962	10.570	2.785
N° of proposals evaluated	2.603	1.920	571	2.328	611	1.539	597	2.017	946	10.407	2.725
Above threshold	317	237	132	320	180	251	230	342	357	1.467	899
Rate of positively evaluated	12%	12%	23%	14%	29%	16%	39%	17%	38%	14%	33%
Funded	155	178	60	259	74	149	37	128	44	869	215
Success rate	6%	9%	10%	11%	12%	9%	6%	6%	5%	8%	8%

Cut-off date: SC5 topic											
	18/06/2014	24/09/2014	9/10/2014	17/12/2014	17/12/2014	18/03/2015	18/03/2015	17/06/2015	17/06/2015	TOTAL	TOTAL
Phase	1	1	2	1	2	1	2	1	2	1	2
N° of proposals received	250	201	30	248	69	170	52	219	91	1.088	242
N° of proposals evaluated	248	196	30	245	68	166	51	218	89	1.073	238
Above threshold	32	29	4	48	15	38	21	48	42	195	82
Rate of positively evaluated	13%	15%	13%	20%	22%	23%	41%	22%	47%	18%	34%
Funded	12	15	4	33	9	10	3	9	3	79	19
Success rate	5%	7%	13%	13%	13%	6%	6%	4%	3%	7%	8%

# PHASE 1: 2014-2015

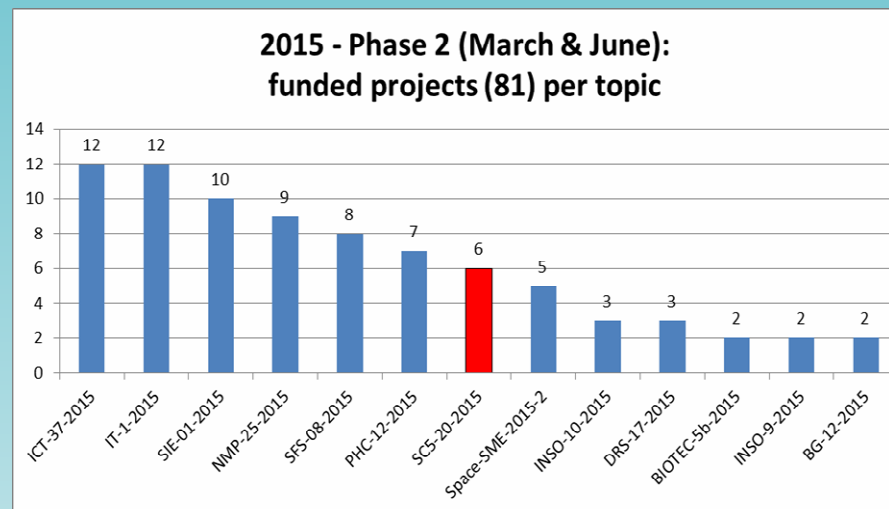
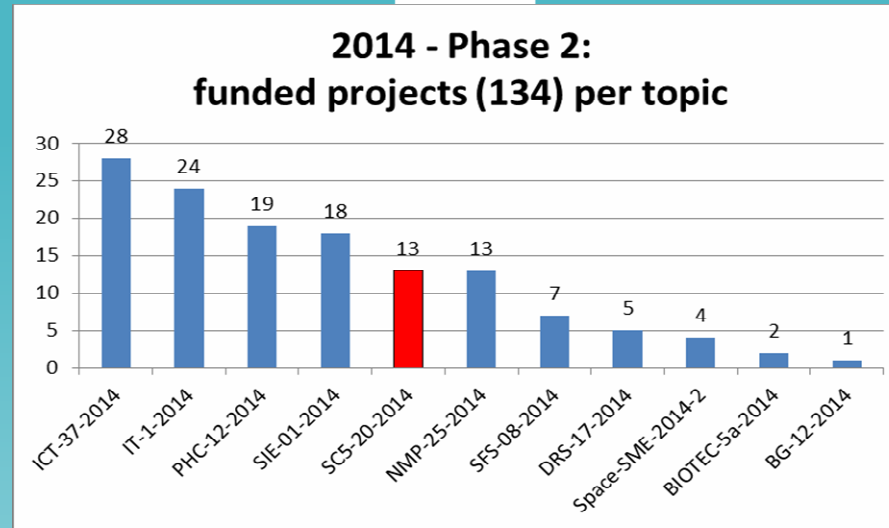
## *Funded projects per topic*





# PHASE 2: 2014-2015

# Funded projects per topic

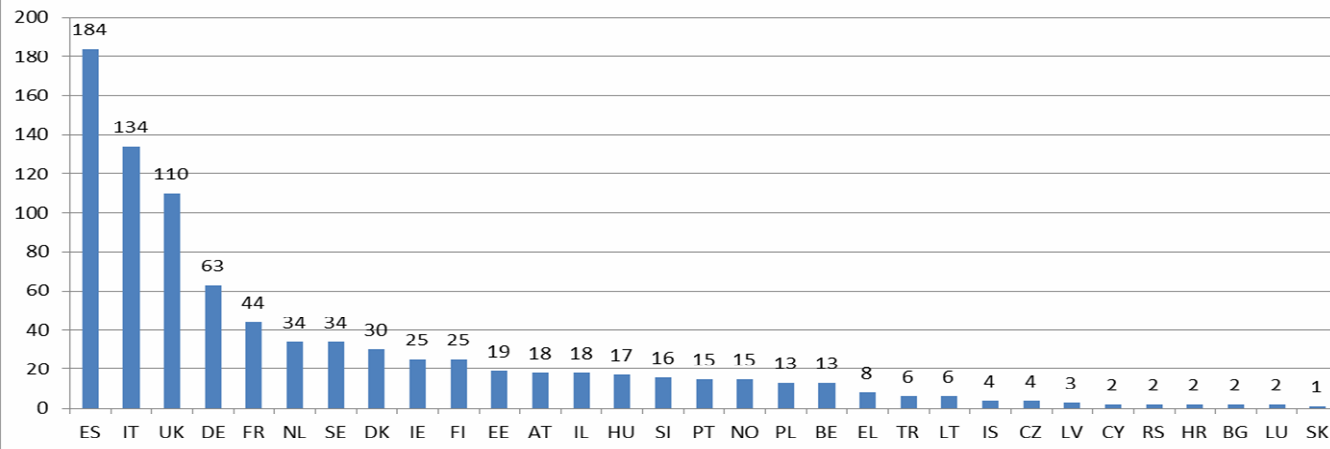


# PHASE 1 & 2: 2014-2015

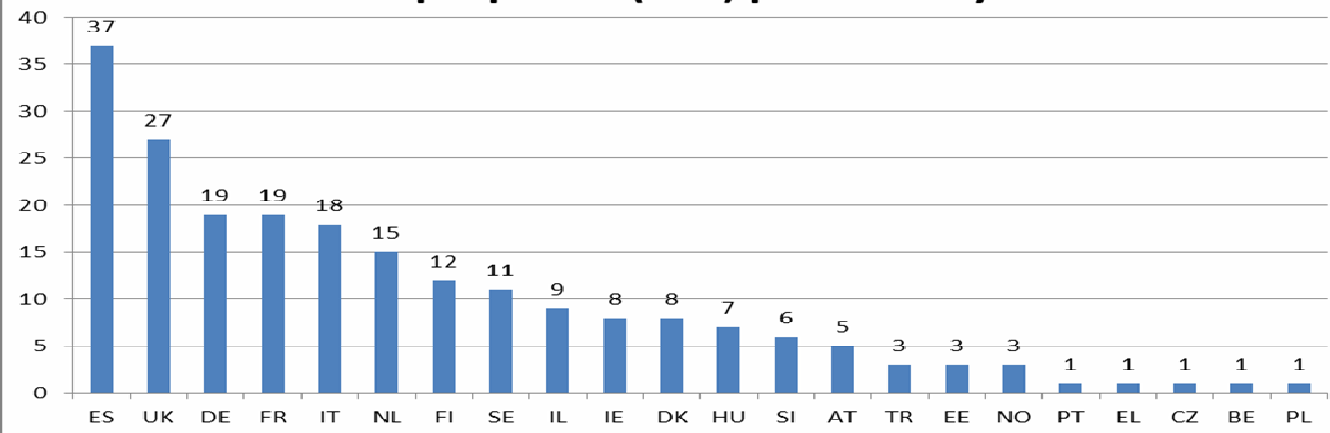


# Funded projects per country

**2014-2015 - Phase 1 - All topics:  
funded proposals (869) per country**



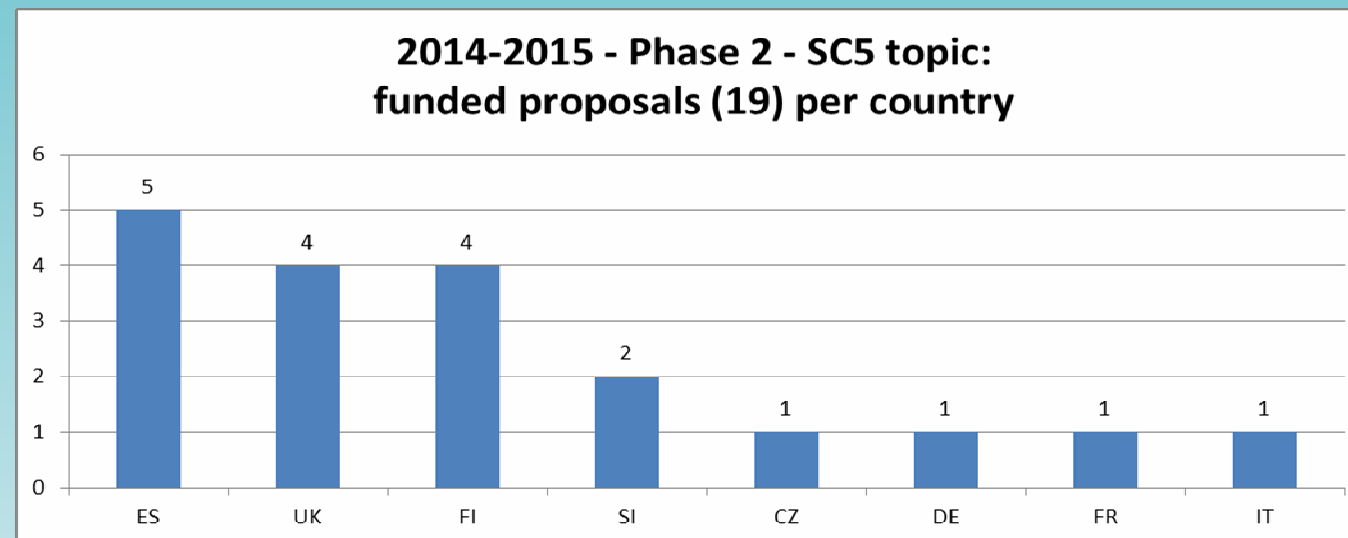
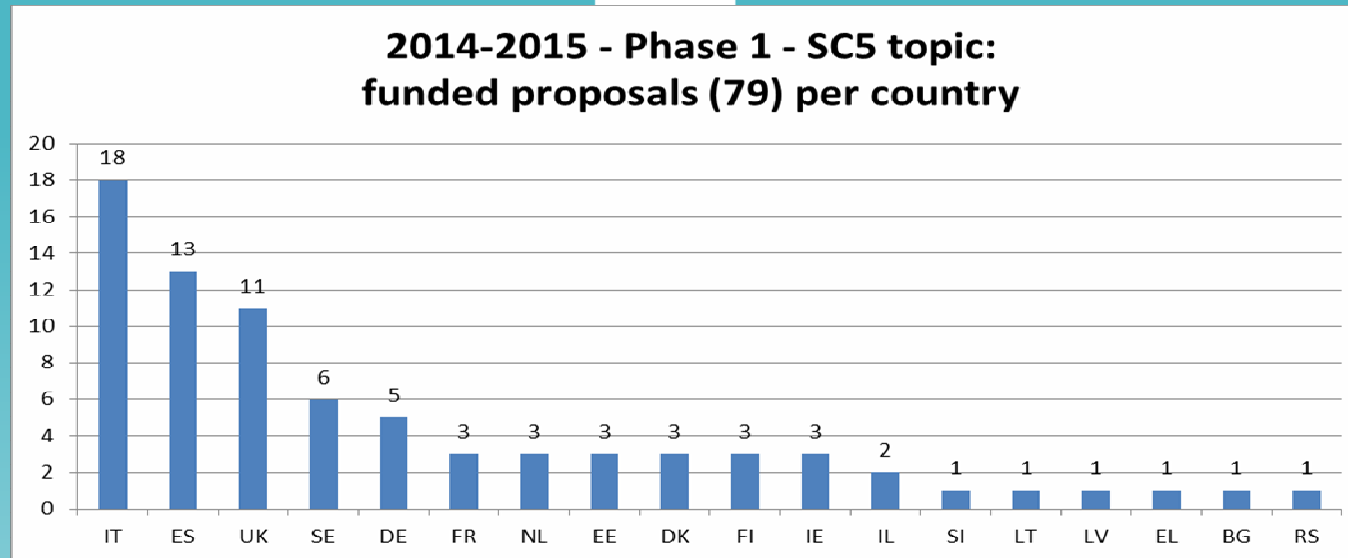
**2014-2015 - Phase 2 - All topics:  
funded proposals (215) per country**



# SC5 PHASE 1 & 2: 2014-2015



# Funded projects per country

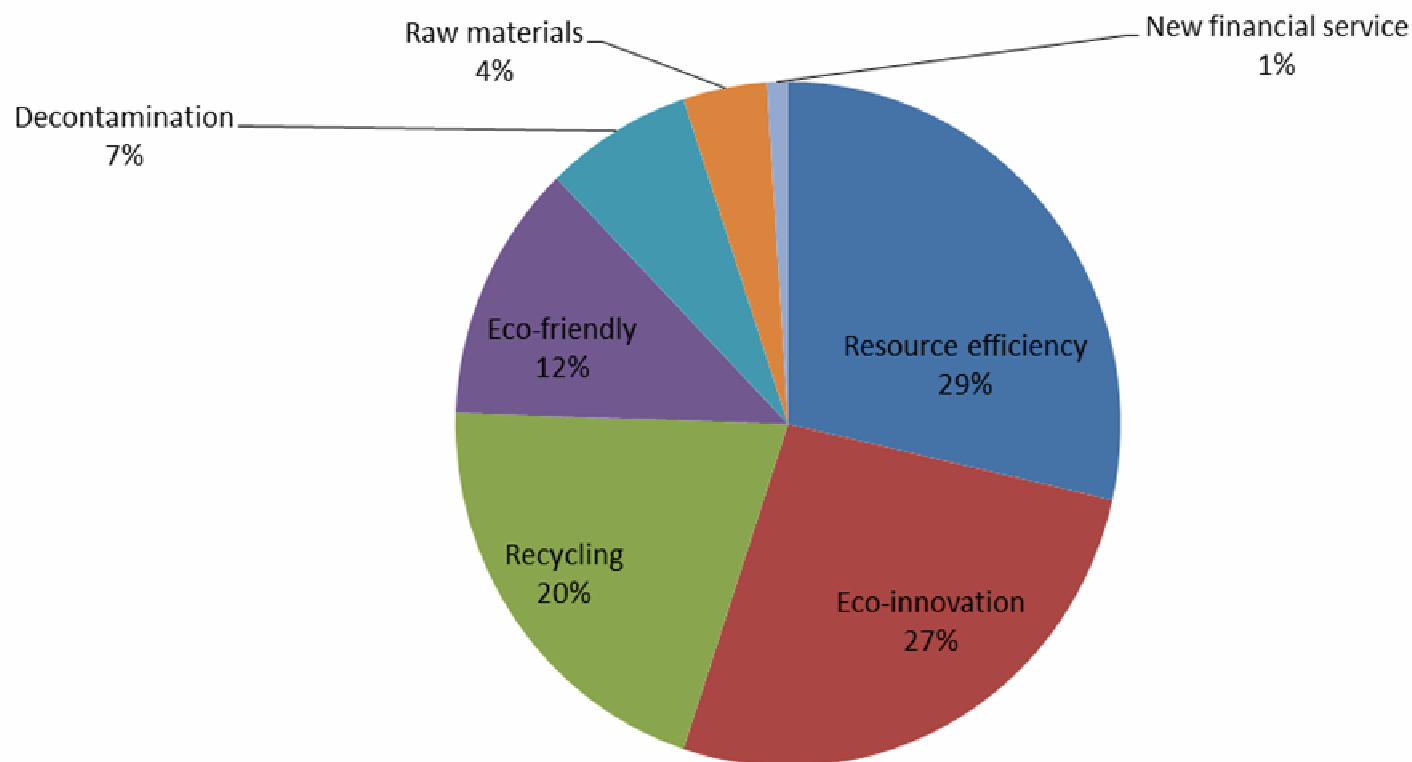


# **SC5 PHASE 1 & 2: 2014-2015**



# ***Funded projects classifications***

## **SME Instrument - 2014-2015 - SC5 - Phase 1 & 2: 98 funded projects SC5 topic**

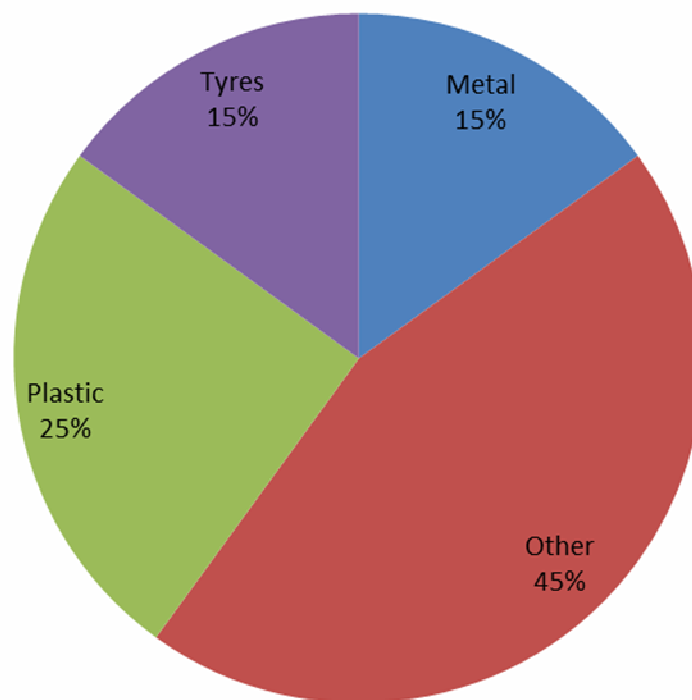


# **SC5 PHASE 1 & 2: 2014-2015**

# ***Funded projects related to recycling***



**SME Instrument - 2014-2015 - SC5 - Phase 1 & 2:  
out of 98 funded projects, 20 are related to recycling**



# Evaluation of proposals

- By independent **experts**
- Award criteria:
  - IMPACT
  - EXCELLENCE
  - QUALITY
- **Threshold**
  - Phase 1 : per individual criteria is 4. Overall is 13
  - Phase 2 : per individual criteria is 3 (except for "Impact" which is 4). Overall is 12

# Evaluation: IMPACT

Convince evaluators that your project will make money and create jobs

- Market (will to pay) - targeted users
- Market conditions – competition – Market share
- Commercialisation plan
- EU/global dimension
- Knowledge protection
- Jobs created in Europe

# Evaluation: IMPACT - Details

- **The targeted users or user groups** of the final product/application, and their needs, are well described and the proposal provides a realistic description of why the identified groups will have an interest in using/buying the product/application, **compared to current solutions** available
- The proposal demonstrates very good understanding of **the needs for a realistic and relevant analysis of market conditions**, total available market size and growth rate, competitors and competitive solutions and key stakeholders, or includes a plan for achieving this information
- It is described in a **realistic and relevant way** how the innovation has the potential to boost the growth of the applying company
- The proposal demonstrates the alignment with **the overall strategy** of the participating SME(s) and the need for commercial and management experience, including understanding of the financial and organizational requirements for commercial exploitation.
- The initial commercialisation plan is outlined and explains how will be **further developed** (in-house development, licensing strategy, etc)
- The innovation /solution has a clear **European dimension** both with respect to commercialisation and **with respect to competitor / competition** evaluation
- The proposal includes a realistic and relevant description of **status and strategy of knowledge protection**, the need of "freedom to operate analysis", **and current IPR situation**, which could include a plan for achieving this information. If relevant, potential regulatory requirements are also addressed.
- Overall perception including other pertinent factors not covered by the above questions (25% weight in the assessment of this criterion)



# Evaluation: EXCELLENCE

Convince evaluators that your innovation is **excellent**

- Innovative product/process/service
- Viable & Disruptive technology
- Added value
- Better than existing solutions
- Commercial potential
- Understanding of risks and opportunities

# Evaluation: EXCELLENCE - Details

- The innovation aims at exploring new market opportunities addressing EU/global challenges
- The proposal provides a realistic description of the current stage of development and added value of its innovation as well as an understanding of the competing solutions. Includes good comparison with state-of-the-art, known commercial solutions, including costs, environmental benefits, gender dimension , ease-of-use and other features, or includes plans for achieving this information  
Note:In relation to the project content, e.g. gendered studies, clinical trials, etc.
- The objectives for the feasibility study and the approach and activities to be developed are consistent with the expected impact of the project
- The expected performances of the innovation are convincing and have the potential to be relevant from a commercial point of view (Value for money). It is potentially better than alternatives
- The proposal reflects a very good understanding of both risks and opportunities related to a successful market introduction of the innovation, both from a technical, commercial point of view
- Overall perception including other pertinent factors not covered by the above questions (25% weight in the assessment of this criterion)

# Evaluation: IMPLEMENTATION

Convince evaluators that you will make it

- Credibility of the work plan
- Right resources internally
- Right partners and stakeholders
- Team organisation
- Realistic time frame

## Evaluation: IMPLEMENTATION - Details

- The proposal demonstrates that the project has the relevant resources (personal, facilities, networks, etc.) to develop its activities in the most suitable conditions. If relevant, describes in a realistic way how key stakeholders / partners / subcontractors could be involved
- Taking the project's ambition and objectives into account, the proposal includes a realistic time frame and a comprehensive description of work
- The team has relevant technical/scientific knowledge/management experience, including a good understanding of the relevant market aspects for the particular innovation. If relevant the proposal includes a plan to acquire missing competences
- Overall perception including other pertinent factors not covered by the above questions (25% weight in the assessment of this criterion)

# Project preparation - expert recommendations

<https://www.linkedin.com/pulse/how-prepare-winning-sme-instrument-proposal-sander-van-der-molen>

## Tips from Sander van der Molen

How to prepare a winning SME-instrument proposal?

•**Step 1:** You have an innovative IDEA (check TRL).

**Step 2:** Describe PROBLEM which idea solves. You can start by answering (at least) this 3 questions:

- What is the problem?
- Who has it?
- Why do users want solution?

•**Step 3:** Identify problem in EU policy documents. Make sure it is relevant to Community. As part of this step write down EXPECTED IMPACT (EI). As you will learn IMPACT IS EVERYTHING.

**Step 4:** Explain the need of "user" and business opportunity you will address. Talk to "user".

**Step 5:** Present your solution in details (what it does, how it solves the problem). Details are convincing, not texts with word "innovative" :)

**Step 6:** Screen the market and highlight advantages of your solution over competition. Use tables, it is easier to read (and evaluate).

**Step 7:** Set project objectives to develop your innovation. Yes, only now, when you know what you want to achieve - with clarity.

**Step 8:** Prepare workplan and activities needed to reach your project objectives.

**Step 9:** What are expected outputs of your work? What is immediate result of your project?

**Step 10:** The SECRET to high quality project: ALIGN (1) project objectives with EI, (2) outputs with EI, (3) project activities with EI.

# Organization profile

- Full title of your organization
- PIC (partner's identification code)
- Description of the legal entity and its main tasks, with an explanation of how its profile matches the tasks in the proposal
- Curriculum vitae or description of the profile of the persons, including their gender, who will be primarily responsible for carrying out the proposed research and/or innovation 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;

## **Fast Track to Innovation Pilot - the concept in a nutshell...**

The FTI pilot (2015-2016) is the only fully bottom-up measure in Horizon 2020 promoting close-to-the-market innovation activities that is open to all types of participants...

*... while cutting across 2 of the main 3 Horizon 2020 priorities!*





# Fast Track to Innovation Pilot

THE ULTIMATE BOOST FOR OUTSTANDING BUSINESS INNOVATORS WITH A NEED FOR SPEED...

## PREPARE YOUR PROPOSAL

Build your industry-intensive consortium\*  
minimum 3 partners - maximum 5 partners  
(all based in the EU and / or in Horizon 2020  
associated countries)

Proposal



Outstanding Business Innovation Concept  
(high-readiness level / TRL 6, meaning  
demonstrated in a relevant environment)

Continuous open call  
until end 2016

6 months time-to-grant

\*In a consortium with 3 or 4 partners, at least 2  
should be industry, and in a consortium with 5  
partners, at least 3; alternatively at least 60% of  
the project budget should be allocated to industry  
(i.e. private for profit entities)

## DEVELOP YOUR INNOVATION

Receive an EU grant of EUR 1 million to 3 million  
(70% of funding, 100% of funding for non-profit entities)

From Mature R&D  
Demonstration  
Market-Oriented  
R&D  
to Market-Mature Innovation

12-24 months for implementation

## HIT THE MARKET!

Start your commercial activities



The Market  
Market-Maturity to Market  
Launch



Market-ready result  
(finished product, service,  
process/ TRL 9)

At most 36 months from grant to market

... AND EAGER TO COMPETE ON GLOBAL MARKETS...!

## ACTIVITIES SUPPORTED

Systems validation in real working conditions – Testing – Piloting – Business model validation – Standard setting – Pre-normative research – EU quality label

# Rules for participation

- Consortia of a limited size: min. 3, max. 5 partners
- All of the partners should be legally established in the EU or in a Horizon 2020 associated country, and partners must be from at least three different eligible countries
- Consortia must be industry-intensive:
  - *either* 2 out of 3/4 partners = private-for-profit
  - *or* 3 out of 5 partners = private-for-profit
  - *or* 60% of the budget of the proposal (=total estimated eligible costs) is to be allocated to private-for-profit entities
- ... but can be composed of partners of any type of legal entity (industry, SMEs, first-time applicants...)
- EU funding sought cannot exceed EUR 3 million; 70% of funding for private-for-profit entities (//innovation actions)

## What type of activities can be supported?

- Advanced and specific research and development activities
- Standard setting and advanced performance testing / piloting / demonstration activities
- Validation of solutions in real working conditions / certification
- Business model validation



- TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- TRL 7 – system prototype demonstration in operational environment
- 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)

# Implementation Timeline for 2015

- **January 6, 2015**

Open for submission

- **April 29, 2015**

First intermediary call deadline

- **End of July, 2015**

First results from evaluation

- **September 1, 2015**

Second intermediary call deadline

A total of 231 proposals were submitted in response to this call - cut off 01/09/2015.

- **End of October 2015**

**First grants signed**

- **December 1, 2015**

Third intermediary call deadline & results from September intermediary call deadline known

# Proposal drafting and submission

- Industry status of participants = flagged automatically
- Max. 30 pages for technical annex (sections 1,2,3)
  - *Impact !*
  - *Excellence*
  - *Implementation*
- Business plan-logic
  - *Market relevance and positioning / exploitation strategy (IPR?!)*
  - *Financing needs / framework conditions*
  - *Return on investment?*
- EU added value at another level than the prospective economic one also important
- Solution should be described in a way that it is clear that it will go beyond the current state-of-the-art in its field
- Resources: complementary & cost-effective

## Ranking

- Proposals with an overall initial score lower than 12/15 will not be ranked
- Proposals with an initial score lower than 4/5 for impact will not be ranked
- Marking will be refined, will allow for bulk of selection decisions
- Criteria for further differentiation will be:
  - *Value of 'Impact' criterion*
  - *Size of budget allocated to SMEs*
  - *Number of first-time industry applicants*
  - *Number of industry participants*
  - *Gender balance of consortium staff performing the proposed action*

# Future of the FTI Pilot

- 2016: pending Work Programme adoption
  - 50 to 70 actions
  - Budget of EUR 100 million
- Beyond 2016: dependent on progressive, full-scale evaluation and first results!
  - Specific reporting template for FTI Pilot participants
  - Specific study to be commissioned

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