



EASME

Executive Agency for Small and Medium-sized Enterprises



SME SUPPORT



ENERGY



ENVIRONMENT



MARITIME



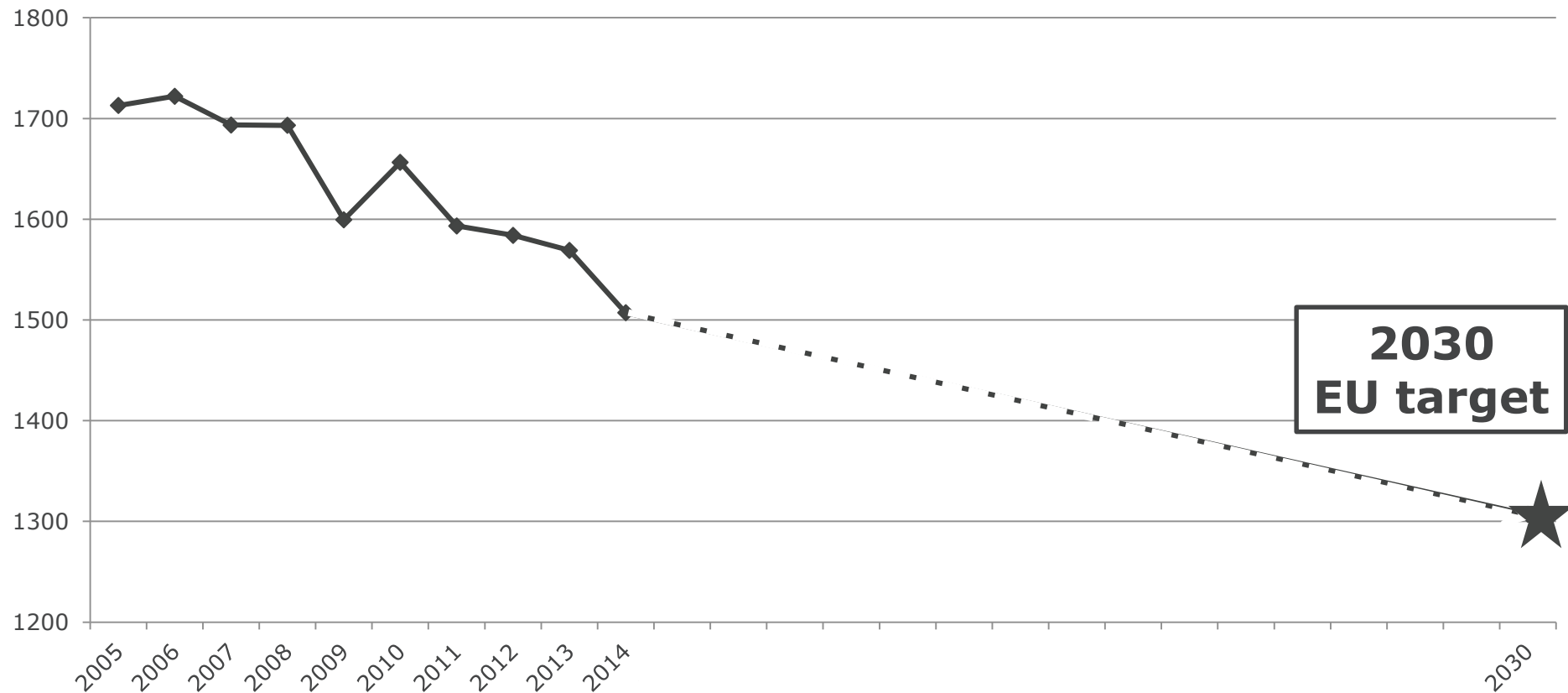
The EU Framework Programme for Research and Innovation

HORIZON 2020

Energy Efficiency Call 2017 Overview of June 7 Call Deadline

Gordon SUTHERLAND
Senior Project Advisor
H2020 Energy

EU primary energy use (Mtoe)



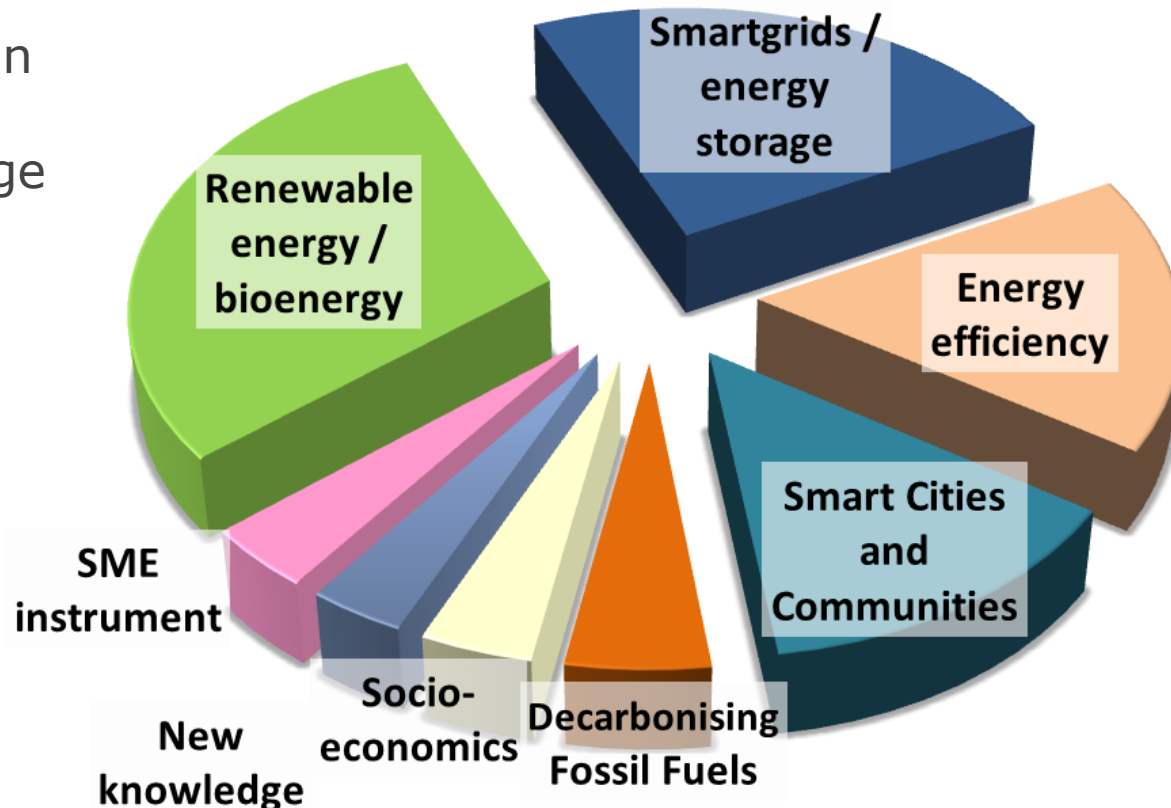
Source: Eurostat 02/2016



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The Horizon 2020 Societal Challenge Secure, Clean and Efficient Energy

Balance between
areas of the
Energy Challenge



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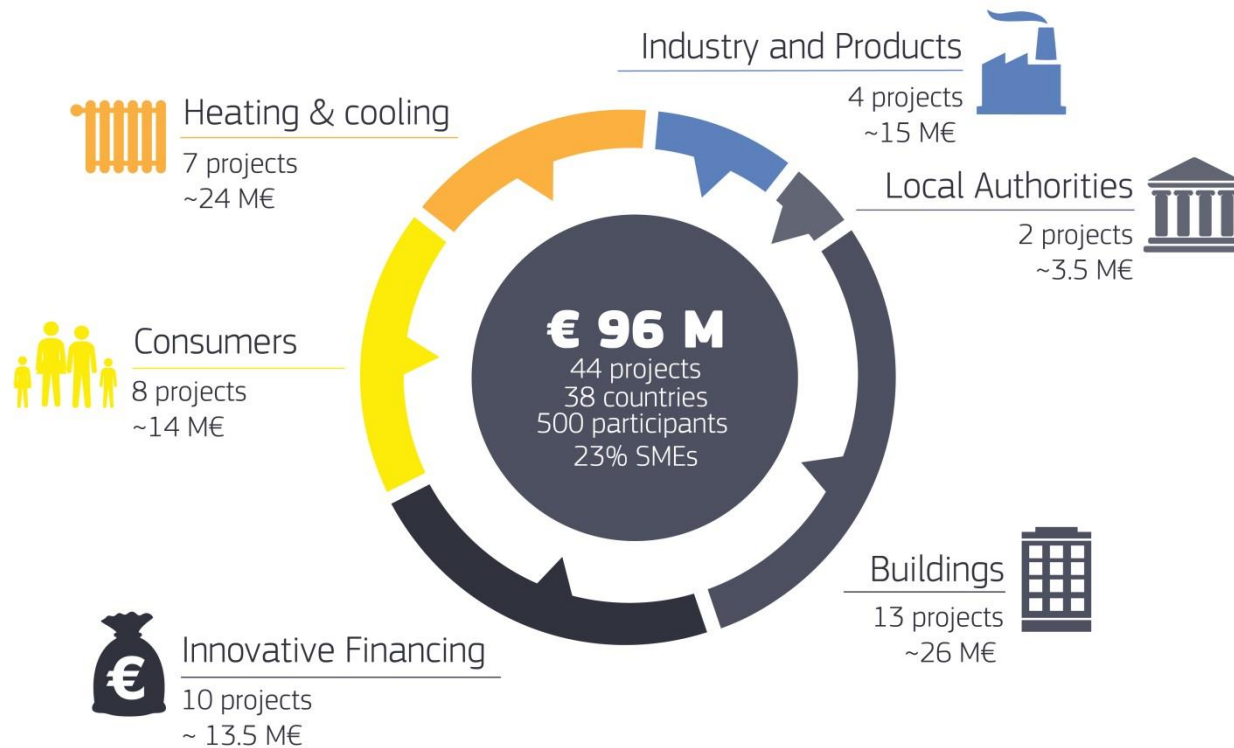


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H2020 Energy Efficiency 2016 Call Results



H2020: Main type of actions in the Energy Efficiency Call 2017

Deadline 19 January 2017

Deadline 07 June 2017

RIA

Research & innovation actions that establish new knowledge or develop more energy-efficient technologies and solutions.

EU funding rate: 100%.

3 beneficiaries

IA

Innovation actions that demonstrate the viability of new technologies and solutions or support their first deployment in the market.

EU funding rate: 70%.

* 100% for non-profit legal entities

3 beneficiaries

CSA

Coordination & support actions* that improve skills, mobilise large-scale investments or facilitate EU policy implementation.

EU funding rate: 100%.

*Mostly 3 beneficiaries (with some exceptions to 1 beneficiary, check the Work Programme)



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**Heating &
Cooling**



Consumers



Buildings



**Industry &
Products**



**Finance for
Sustainable
Energy**

**Innovation
Actions**

EU Support: 70%
1 to 6 M€ / project

49.000.000 €
Closed 19 January 2017

**Coordination
& Support
Actions**

EU support: 100%
0.5 to 2 M€ / project

55.000.000 €
Closing 7 June 2017



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**Heating &
Cooling**



Consumers



Buildings



**Industry &
Products**



**Finance for
Sustainable
Energy**

**Coordination
& Support
Actions**

EU support: 100%

EE02

**EE06
EE09**

**EE11
EE14**

**EE15
EE16
EE18**

**EE22
EE23
EE24**

EE19*



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**Heating &
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Consumers



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Industry &
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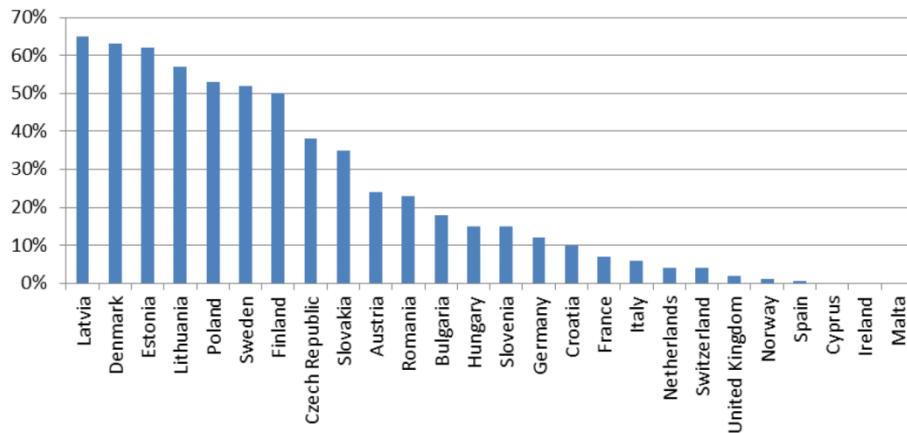


Finance for
Sustainable
Energy

**Coordination
& Support
Actions**

EE02 - Improving existing district heating networks

Improving existing district heating networks



Percentage of the population served by district heating (2013). Source: Commission services using data supplied by Euroheat and Power

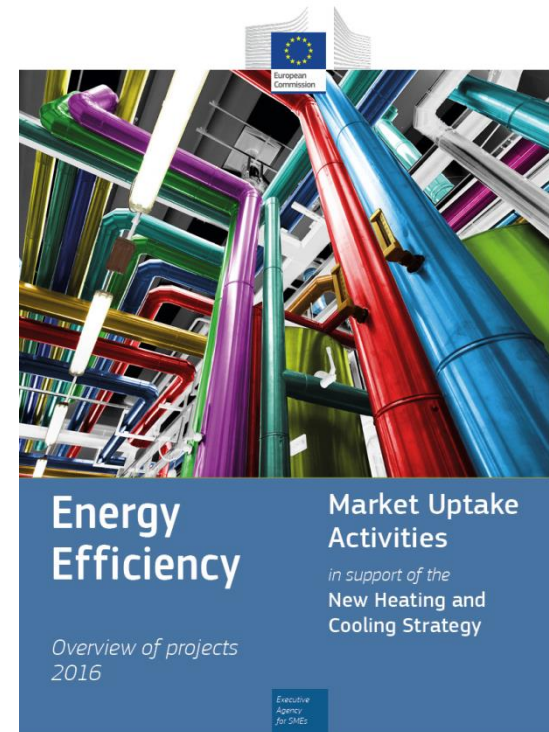
- significant number of DH systems are **old and inefficient** and run using fossil fuels
- **poor maintenance**, high customer heat costs and limited ability for user control
- significant **number of customers disconnect** from networks and install individual systems



Market uptake for heating and cooling

Support under IEE and Horizon 2020 EE and LCE sections of the energy challenge

- support to **market actors** for the uptake of specific heating and cooling solutions [REGEOCITIES](#), [GEODH](#), [SDHPLUS](#) , [RESCUE](#) , [BiogasHeat](#) , [CODE2](#).
- support to **energy labelling for heating and cooling products** and end consumer decision making [LabelPackAplus](#), [FRONT](#), [SuperSmart](#).
- heating and cooling **planning** [Progressheat](#), [SmartReFlex](#), [RES H/C SPREAD](#), [STRATEGO](#), [HRE \(4\)](#), [CoolHeating](#), [SDHp2m](#).
- Support to **project development assistance** -> e.g MLEI PDA and Horizon 2020 PDA [SOLROD](#) , [BOWEN](#) , [Energy4Flexibility](#) , [GeoKec](#) , [EFIDISTRICIT](#) , [BEenergi](#) , [TrustEE](#).
- For projects with larger investments refer to the ELENA facility managed by the EIB.



<https://ec.europa.eu/easme/en/heating-and-cooling>



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Heating &
Cooling



Consumers



Buildings



Industry &
Products



Finance for
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Energy

**Coordination
& Support
Actions**

EE06 - Engaging private consumers

EE09 - Activating public authorities



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EE6-2017 Engaging private consumers towards sustainable energy

Specific challenge:

Consumers should be more aware, active, energy sufficient, and be prosumers. Specifically:

- Due to fluctuating energy prices, 50 million Europeans are affected by energy poverty;
- Collective consumer actions are hampered by barriers;
- Insufficient use of ICT solutions;
- Insufficient understanding of energy bills;
- Need to increase understanding of consumer behaviour





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Topic EE-09a

Actions aiming at engaging public authorities

Why public authorities?

- ✓ spending power (19% of EU GDP)
- ✓ pivotal role in their communities
- ✓ important driver in energy transition



In practice - What are we looking for?

- Innovative approaches
- Ambition in plans and measures
- Multi-stakeholder engagement
- Focus on sectors with high energy saving potentials
- Capitalising on synergies with e.g. Covenant of Mayors, Smart Cities & Communities or similar



The challenge of EE-09 b) Peer to peer learning for public authorities

- Step up public authorities' capacity to help deliver the energy transition
- Various techniques of peer-learning already tested
staff mobility schemes, peer-to-peer working, mentoring, work shadowing, peer-reviews, study visits, etc.
- Need for scaling up peer-learning to exploit full potential



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Consumers



Buildings



Industry &
Products



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Energy

Coordination
& Support
Actions

EE11 - Promoting deep renovation of buildings

EE14 - Construction skills

Buildings -

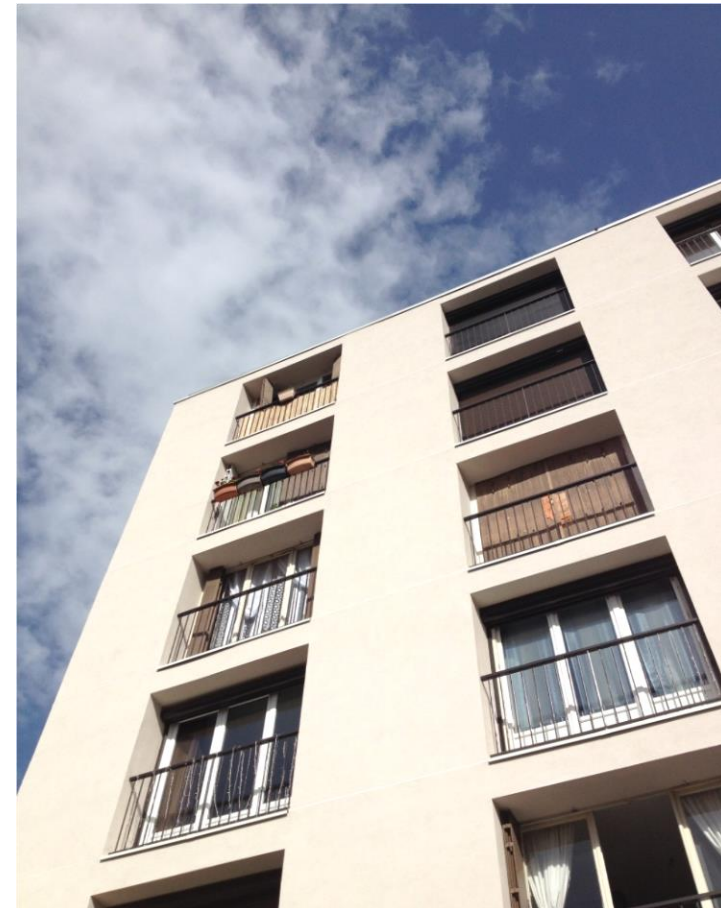
Pivotal for achieving the EU Energy and Climate Objectives:

2020 objectives:

- + 20% Energy Efficiency,
20% Share of Renewable Energy
- 20% CO2 emissions

2030 objectives:

- + 27% Energy Efficiency



EE-11 Buildings

- Increase renovation rate
- Improve energy performance of renovations
- Environmental sustainability, health and well-being

Barriers to overcome:

- Non-technological, value-chain based (expl.: packages, finance, performance guarantees)



Example: Transition ZERO

- Standardised, affordable mass passive house retrofits in record time
- Minimal disturbance of the tenants – successful NL model 'Energiesprong' scaled-up and transferred to UK and French markets
- Involves social housing associations, suppliers and financiers





Is the workforce ready?



EE-14-2017: Construction skills

Specific Challenge

- Improve skills of entire value chain for energy efficiency
- Blue and white collar workers
- New challenges e.g. BIM, RES integration, new products and processes





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Finance for
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Energy

Coordination
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Actions

EE15 - Increasing capacities in industry and services

EE16 - Implementing EU product efficiency legislation

EE18 - Energy efficiency of industrial parks

Public
Procurement
of Innovation

EE17 - Public Procurement of Innovative Solutions

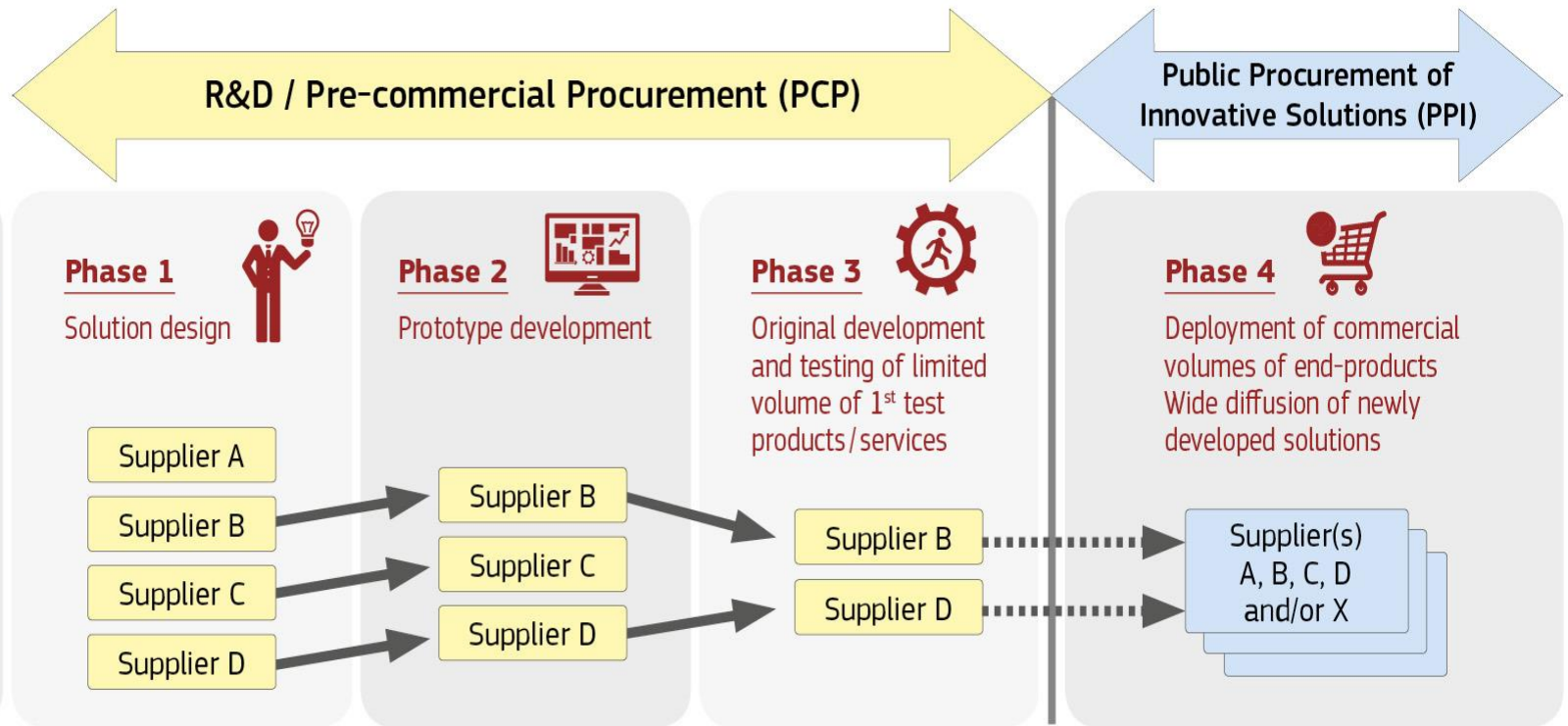
EE-15 Energy efficiency measures in industry

- Ensure that energy audit recommendations lead to **actual implementation**,
- Ensure that the results of energy audits provide the relevant financial data and can be **addressed at board level**
- Energy efficiency also relies on **people behaviour** and **improvement of the energy culture** of **enterprises and their supply-chain**.

The challenge of EE-18 Energy efficiency of industrial parks

- ***Energy*** represents an ***important*** part of enterprises' ***production costs*** even for ***non-energy intensive industries***
- In ***industrial parks*** ***optimising*** energy efficiency can be obtained by ***stimulating and facilitating energy cooperation*** among businesses
 - Physical *clustering* (buildings and processes, energy exchange, collective production) and service clustering (*joint contracting*)
 - Addressing *organisational, financial, legal, social and technical* barriers

EE-19: Introducing Public Procurement of Innovative Solutions



Why European cooperation on PPI?



- **Speed up public sector modernisation**
- **Get better value for money through cooperation**
- **Address issues of common interest together**
- **Create growth and jobs in Europe**

PROCUREMENT OF LIGHTING INNOVATION AND TECHNOLOGY IN EUROPE (PRO-LITE)



www.prolitepartnership.eu



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**Finance for
Sustainable
Energy**

**Coordination
& Support
Actions**

EE22 - Project Development Assistance

EE23 - Innovative financing schemes

EE24 - Making the energy efficiency market investible

Impacts - Examples



Finance of energy efficiency:

- Pilot of energy performance contracting in condominiums
- All inclusive package: design, implement, finance, monitor
- As of February 2016, 22 contracts were signed with condominiums in the Ile-de-France Region, representing 3,442 units. In total, 41million€ of investment
- Law on energy transition August 2015 + a reduced rate of VAT for energy retrofits made by a TPF provider
- EIB Loan for 100million€ signed backed by EFSI (Junker Plan)





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**H2020 Energy Efficiency Call 2017 Info
Day topic specific sessions available on-
line:**

<https://ec.europa.eu/easme/en/horizon-2020-secure-clean-and-efficient-energy-info-day>



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Find out more

<http://ec.europa.eu/research/horizon2020>

EASME on Twitter



@H2020EE • @H2020SME • @EEN_EU • @EU_ECOINNO

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The EU Framework Programme for Research and Innovation

HORIZON 2020 – Energy Efficiency Call

Tips & and tricks for submitting an excellent proposal



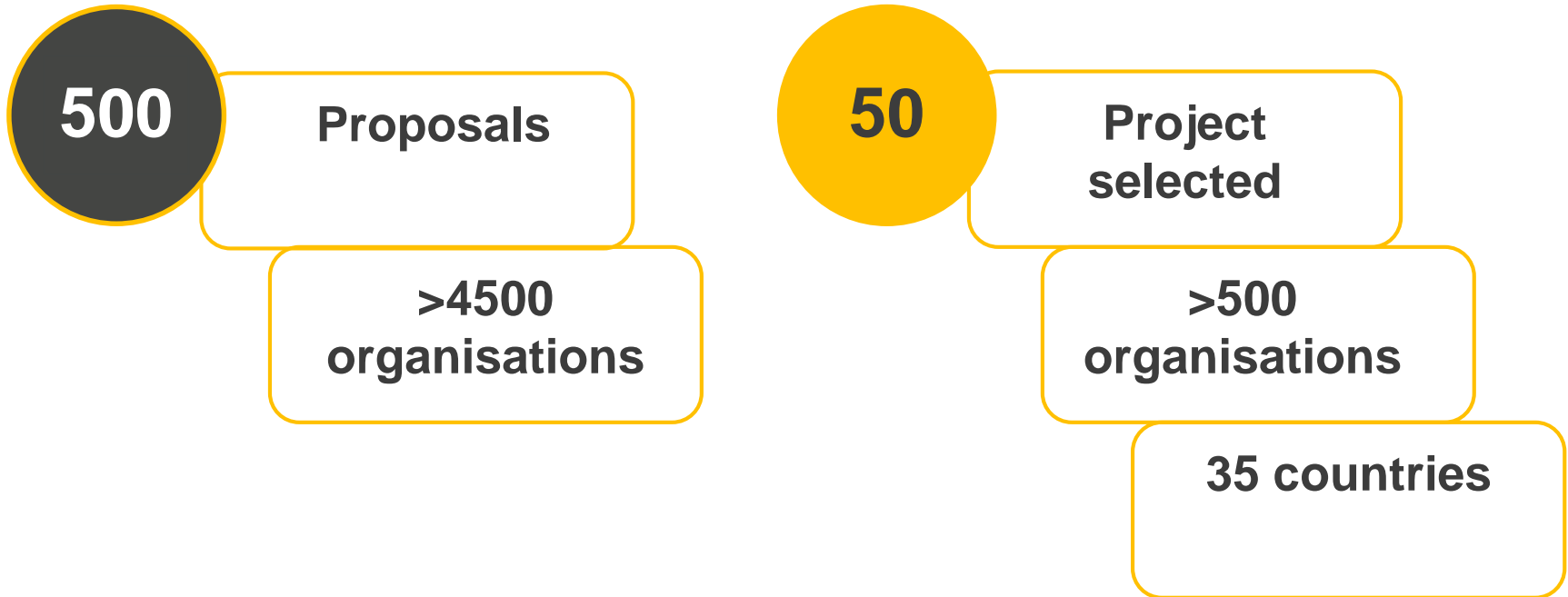
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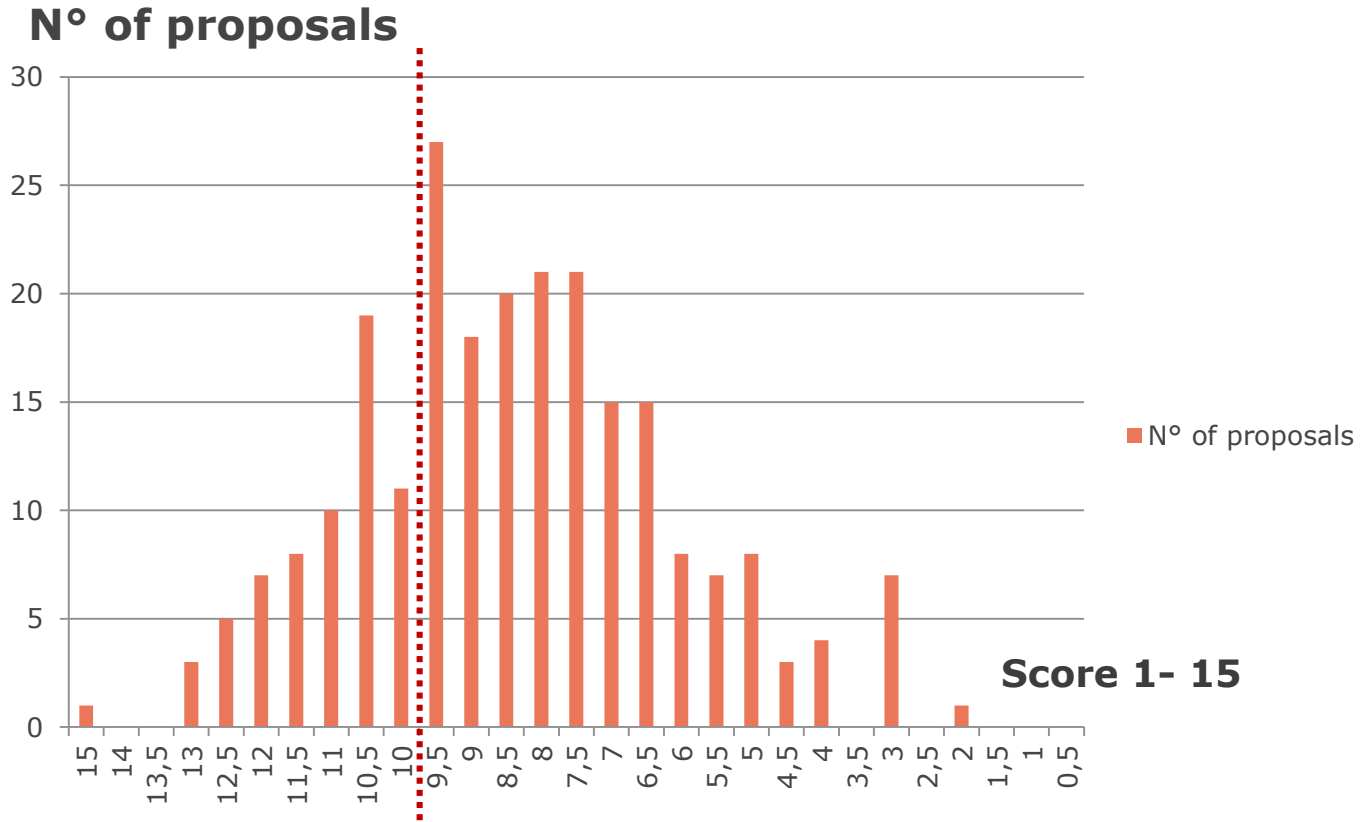


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It is a demanding competition: a typical Call for Proposals in numbers



It is a demanding competition!*



*Example of 2015 Market Update proposals (CSA)

Agenda

- The evaluation process – some interesting elements
- Before you start - tips and lessons learnt
- Keys to success - feedback from our experts

H2020 – Some interesting elements

- 2-year work programme
- Challenge-based
- Technology Readiness Levels
- Indicative project budget for each topic
- A single funding rate per project
- A single time to grant of 8 months

Evaluation – Award Criteria

- **Excellence**
- **Impact**
- **Quality & efficiency of implementation**
 - Detailed aspects to be taken account of for each of the main criteria
 - Self-evaluation form available
 - No negotiation takes place -> only the very best are selected



Ethics

- An ethical review is carried out to assess and address the ethical dimension of your activities
- The ethical review ensures that all activities under H2020 are conducted in compliance with fundamental ethical principles
- Specific issues are checked, e.g. humans cells, animals, environmental protection, protection of personal data,...
- Participants should conduct an Ethics Self-assessment
- All proposals considered for funding will undergo an Ethics Review carried out by independent ethics experts

Agenda

- The evaluation process – basic principles
- Before you start - tips and lessons learnt
- Keys to success - feedback from our experts



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**If you didn't start early ...
then start now!**

From today, **4th April:**

+/- 2 months until deadline

7th June 2017





Learn the language ...

- **Proposal:** Your full application for funding
- **Participants Portal:** Commission's electronic submission tool – compulsory gateway for H2020 proposals
- **Consortium:** A team of organisations submitting the proposal – with one defined Coordinator

- **'Energy Challenge Work Programme 2016/17':** background, topics and budgets
- **General annexes to the Work Programme:** list of countries, eligibility and admissibility conditions, evaluation criteria and procedure, scoring and thresholds, etc.
- **Submission forms and templates:** essential forms and guides to draw up and submit your proposal
- **Guide to the submission and evaluation process**



Clearing the fog ... on the structure of your proposal

Section 1-3 'Technical Annex'

Your Proposal description

- Excellence
- Impact
- Implementation

Section 4-5

- Description of your partnership & CV's
- Ethics

Online Forms

- **Admin. data**

Optional Annexes: e.g.

- **Letters of Support**

Define your specific objective & target group

- What would you like to achieve?
- Whom do you want to address?
- Make sure you know the current (market) situation and your starting point
- Check:
 - the IEE project database
 - the list of H2020 Energy Efficiency Call projects
- Take a reality check before you invest your time:
 - investigate the interest amongst target group and major stakeholders

Produce a first outline of your idea

- Write a preliminary 2-3 pages about your:



- objectives
 - target group
 - major steps (work packages)
 - intended consortium (countries, types of organisations)
- Internal reality check: Use it as first base to discuss with potential partners
 - External reality check: Consult with market actors – check their understanding and interest.

Your consortium

- Be consistent – remain relative to your objective & target group
- Be adaptable - be ready to renounce a country if you do not secure the right partner
- Do not cover the EU map artificially
- Involve partners in the preparation – avoid surprises after submission
- Keep consortium motivated - agree a working method for the proposal phase, make a plan for their contributions

Start writing the detailed proposal – Work Plan

- Fine-tune your aim objectives and your target group
- Take your time to decide the best methodology to be applied – can it deliver? Think impact!
- Define your main working steps
- Follow the guide on number of pages



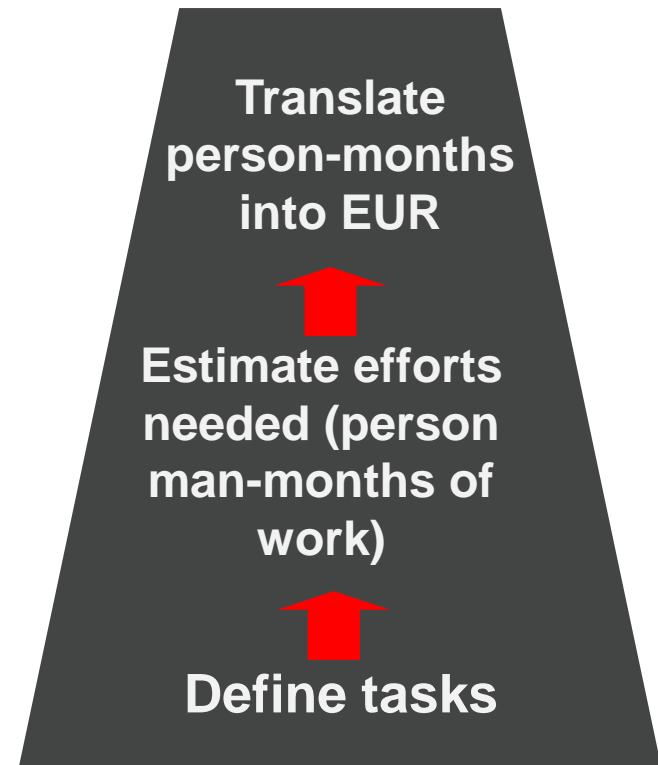
Final polishing

The technical annex must give a detailed description of the project idea and **work plan**, which:

- divides the planned work into **work packages**,
- assigns the related responsibilities and resources within the consortium,
- sets out a project time schedule, main **milestones and deliverables**,
- describes the project management structure,
- describes the communication and exploitation plans.

Create the budget

- Design your budget “bottom-up”
- Wait until the tasks are sufficiently specified and agreed – then design define the budget
- Check consistency regularly while advancing on with your Work Plan - share of resources, appropriate levels between partners, appropriate weight of person-months between major work steps



Last check: consistency / language

- Ask an “informed outsider” for critical reading and feedback
- Check consistency of your description of activities and budget
- If you have the chance, have a native speaker check the English

Agenda

- The evaluation process – basic principles
- Before you start - tips and lessons learnt
- Keys to success - feedback from our experts

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 Member States or Associated Countries (check the Work Programme 2016/17 for exceptions)
- Page limit: 50 pages for CSA

Frequent mishaps – Excellence

- Evaluation results: Proposal lacks an explanation of the concept and added value and innovation falls short
 - ✓ Focus and show how you innovate
 - ✓ Explain the overall concept underpinning the project not only from the perspective of the Coordinator... input from your partners is key
 - ✓ Don't assume that the evaluators know your specific context
 - ✓ Be clear - you win by explaining!

Frequent mishaps – Impact

- 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
 - ✓ Be aware: maintain the link between your actual activities in your work plan and the impact that they will lead to!

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 materialise your vision
 - ✓ Invest time into your resource planning –bottom up

Information Resources

- **H2020 Portal**
 - Check the FAQs
 - Contact the Participant Portal H2020 Helpdesk
- **National Contact Points**
- Horizon2020 and FP7 projects
 - **CORDIS database**
- 300+ Intelligent Energy Europe (IEE II) projects, including various information platforms and portals
- Mailbox: EASME-ENERGY@ec.europa.eu
 - No pre-proposal checks





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While perfect proposals do not exist...

- We are seeking excellent, well implemented, proposals
- Submitted by motivated and inspired project teams
- Aiming to deliver and make a “change”





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Find out more

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