

# Jornada Connect-EU

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Co-organitzadors:

**ACCIÓ i AGAUR**

Amb el suport de:

**iberCaja** 



**Sessió - Energia segura, neta i eficient**

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# H2020: ENERGÍA LIMPIA, SEGURA Y EFICIENTE: WP2018-2020\*



**Pilar González Gotor**  
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Madrid, 2 de noviembre de 2017

Source: European Commission Data elaborated by CDTI  
Official Data Base of the Spanish Participation in the European  
Framework Programme.

# Índice

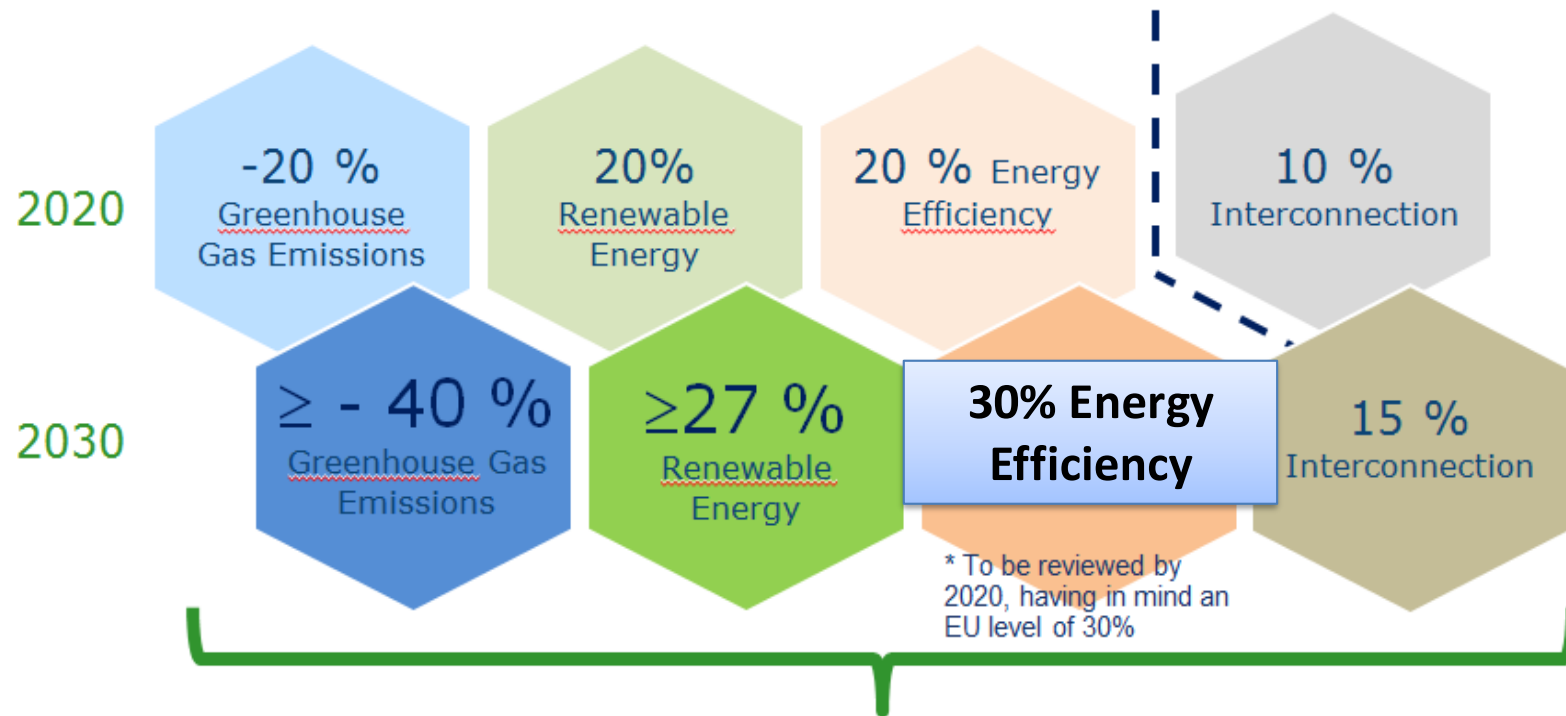
- **Contexto Político y Regulatorio**
- **Energía en H2020**
- **WP 2018-2020\***
- **Resultados**

# Índice

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# UE: 2030 Framework for Climate and Energy

Agreed headline targets

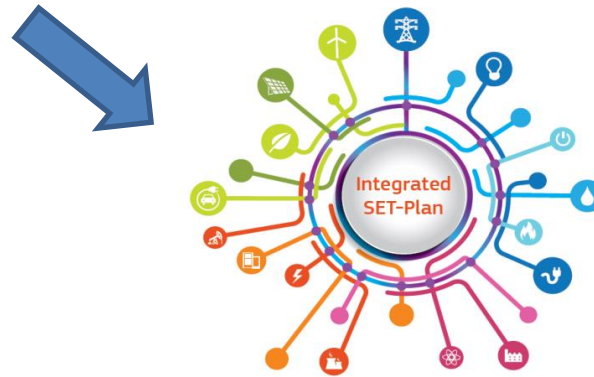


New governance system + indicators

# Political Context (1)

## Energy Union

- Energy **security**, solidarity and trust
- A fully **integrated** internal energy market
- **Energy efficiency** first
- Transition to a **low-carbon** society
- An Energy Union for Research, Innovation and Competiveness





# Political Context (2)

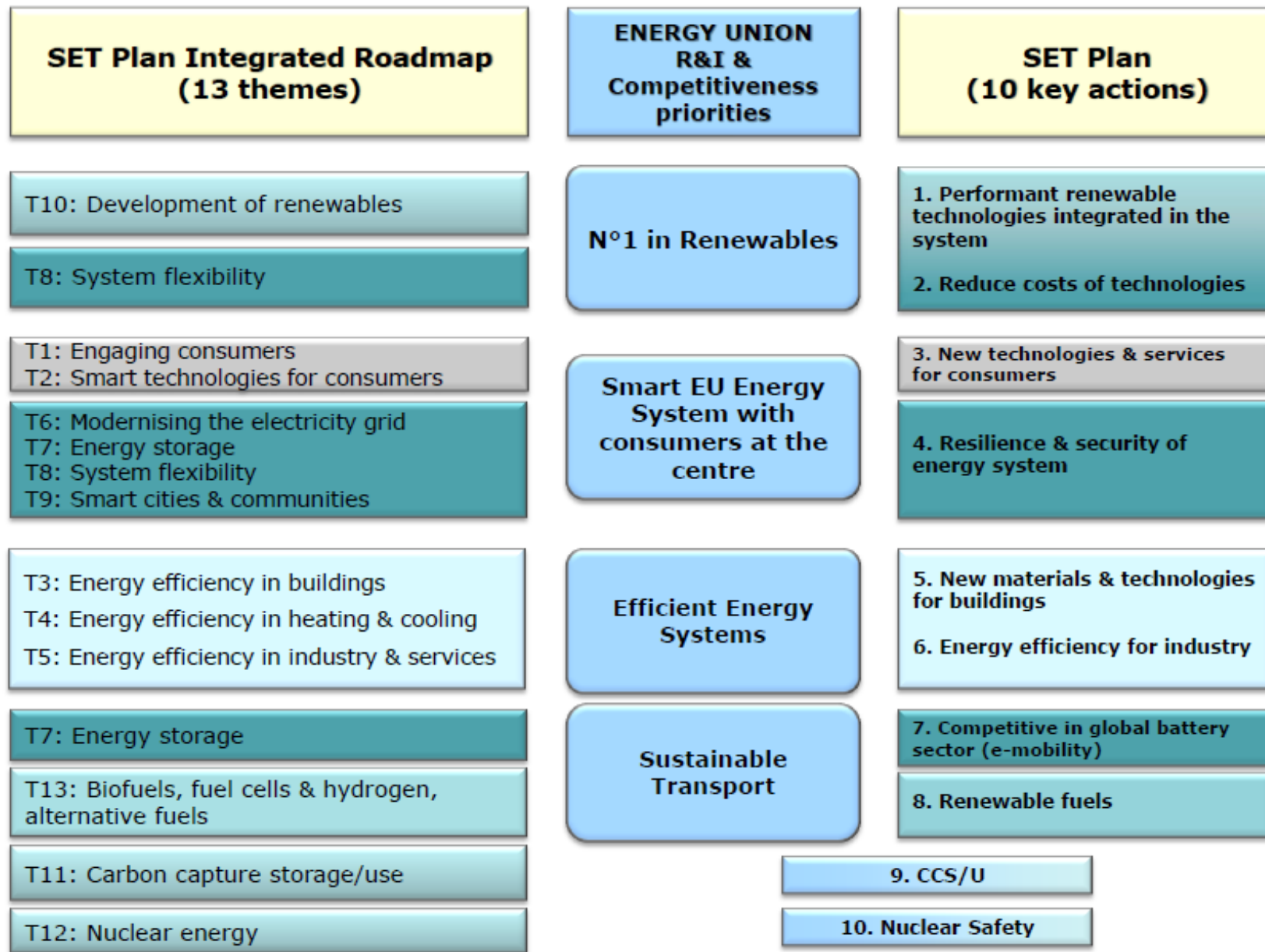


[http://unfccc.int/paris\\_agreement/items/9485.php](http://unfccc.int/paris_agreement/items/9485.php)



<https://ec.europa.eu/energy/en/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition>

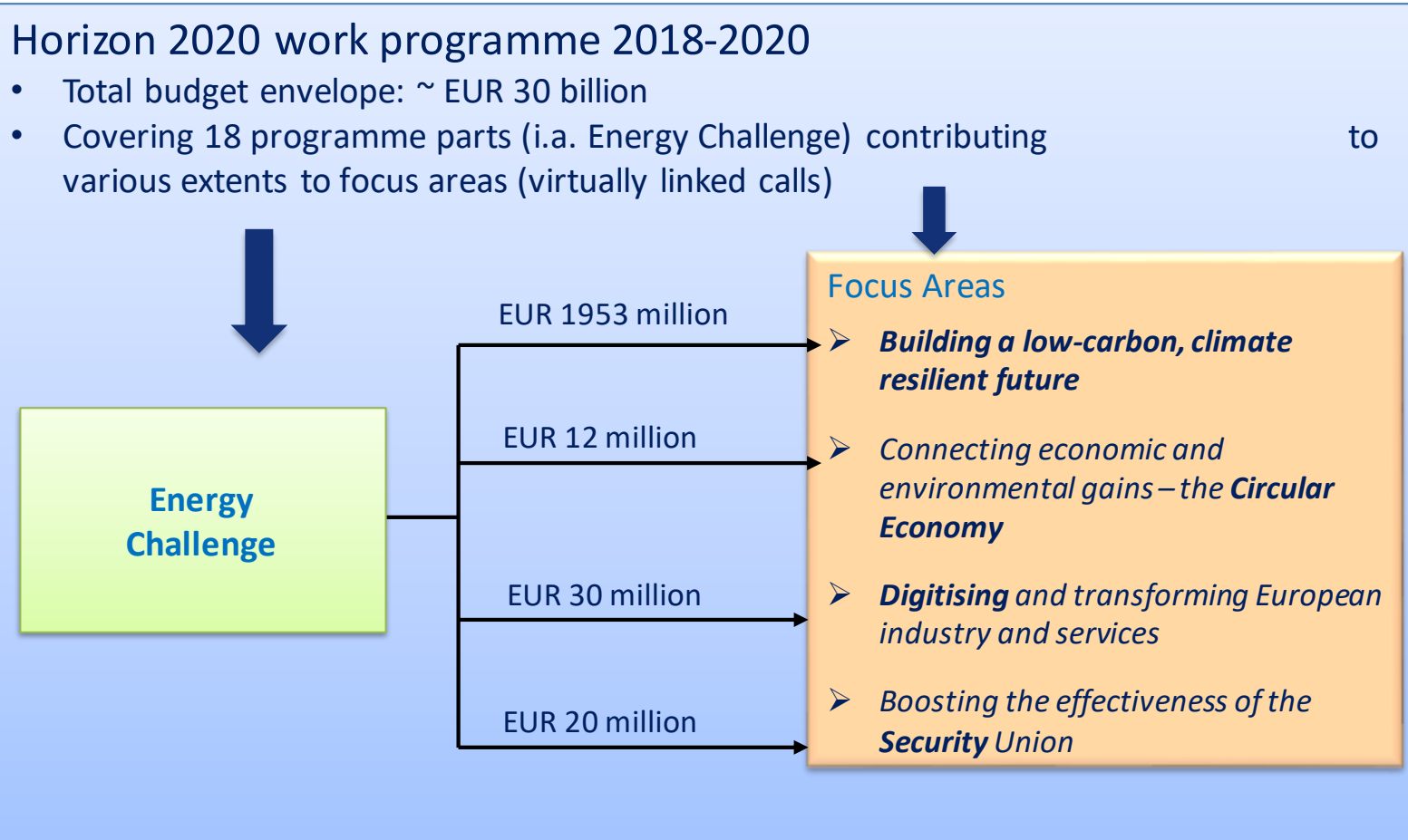




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# Horizon 2020 work programme 2018-2020



# Energy in Horizon 2020

Appart from SC3, Energy is addressed in many Horizon 2020 parts

## Bottom-up activities

- European Research Council (ERC)
- European Innovation Council (SME instrument, FTI pilot, FET)
- Marie-Sklodowska Curie Actions

## Industrial Leadership

- Materials
- **PPPs on Energy-efficient Buildings and SPIRE**
- Information and Communication Technologies
- Space (Galileo)

## Societal Challenges (SC)

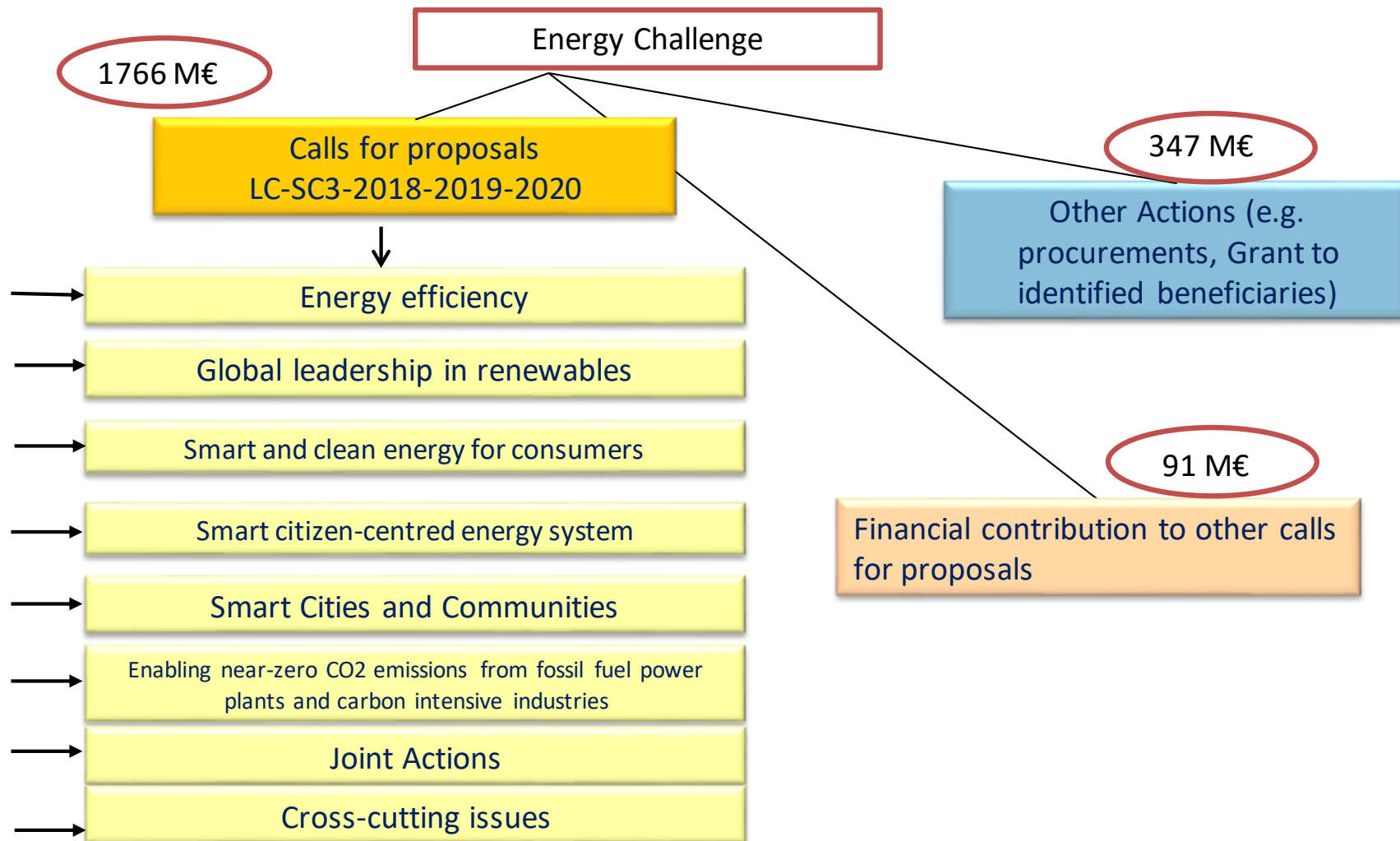
- SC2: Bioeconomy, Blue Growth
- SC4: Electric vehicles, Batteries, Energy-efficient transport
- SC5: Cities
- SC7: Cybersecurity, Critical energy infrastructure



FUEL CELLS AND HYDROGEN  
JOINT UNDERTAKING

*Please check also calls of other Horizon 2020 parts!*

# Societal Challenge 3 - Secure, clean and efficient energy



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# Societal Challenge 3 - Secure, clean and efficient energy

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

Energy efficiency	Global leadership in renewables	Smart and clean energy for consumers	Smart citizen-centred energy system	Smart Cities and Communities	Enabling near-zero CO2 emissions from fossil fuel power plants and carbon intensive industries	Joint Actions	Cross-cutting issues
192 M€*	445 M€*	20 M€*	176 M€*	110 M€*	88 M€*	52 M€*	42 M€*

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



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

- **Energy efficiency**
- **Global leadership in renewables**
- **Smart and clean energy for consumers**
- **Smart citizen-centred energy system**
- **Smart Cities and Communities**
- **Enabling near-zero CO2 emissions from fossil fuel power plants and carbon intensive industries**
- **Joint Actions**
- **Cross-cutting issues**

# Energy Efficiency

## Overview of the 2018/2019-20 topics



Buildings



Consumers  
& Services



Industry



Financing  
Energy  
Efficiency



Public  
Authorities  
& Policy Support



Digitisation

Innovation  
Actions  
3 to 30 M€ /  
project

EE1  
EE4

EE6

DT-ICT-10  
DT-ICT-11

Coordination  
& Support  
Actions  
0.5 to 2 M€ /  
project

EE2  
EE3  
EE5

EC1  
EC2  
EE13

EE8

EE9  
EE10  
EE11

EE16  
EE15  
EE17

EE14 (RIA)

# Energy Efficiency Call 2018 (Deadline 4/9/2018)



Buildings  
21 M€



Consumers  
& Services



Industry



Financing  
Energy  
Efficiency



Public  
Authorities  
& Policy Support



Digitisation

Innovation  
Actions

**EE1 - Innovative approaches for building renovation**

Coordination  
& Support  
Actions

**EE2 – Integrated home renovation services**

**EE5 – Next generation of energy performance certification**

# Energy Efficiency Call 2018 (Deadline 4/9/2018)



Buildings



Consumers  
& Services  
14 M€



Industry



Financing  
Energy  
Efficiency



Public  
Authorities  
& Policy Support



Digitisation

Coordination  
& Support  
Actions

**EC1 – Role of consumers in changing the market**

**EC2 – Mitigating household energy poverty**

**EE13 – Next generation of smart energy services**

# Energy Efficiency Call 2018 (Deadline 4/9/2018)



Buildings



Consumers  
& Services



Industry  
19 M€



Financing  
Energy  
Efficiency



Public  
Authorities  
& Policy Support



Digitisation

Innovation  
Actions

**EE6 – Industrial waste heat/cold recovery**

Coordination  
& Support  
Actions

**EE8 – Capacity building to support energy audits**

# Energy Efficiency Call 2018 (Deadline 4/9/2018)



Buildings



Consumers  
& Services



Industry



Financing  
Energy  
Efficiency  
19 M€



Public  
Authorities  
& Policy Support



Digitisation

Coordination  
& Support  
Actions

**EE9 – Innovative financing for EE investment**

**EE10 – Mainstreaming EE finance**

**EE11 – Project Development Assistance**

# Energy Efficiency Call 2018 (Deadline 4/9/2018)



Buildings



Consumers  
& Services



Industry



Financing  
Energy  
Efficiency



Public  
Authorities  
& Policy Support  
17 M€



Digitisation

Coordination  
& Support  
Actions

**EE16 – Supporting public authorities**

**EE15 – New energy label**

Research  
& Innovation  
Actions

**EE14 – Socio-economic research**



# Energy Efficiency

## Call 2018 (14/11/2018)



Buildings



Consumers  
& Services



Industry



Financing  
Energy  
Efficiency



Public  
Authorities  
& Policy Support



Digitisation  
15 M€  
(+ 15 M€ '19)

Innovation  
Action

**DT-ICT-10** Interoperable and smart homes and grids

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

- Energy efficiency
- **Global leadership in renewables**
- Smart and clean energy for consumers
- Smart citizen-centred energy system
- Smart Cities and Communities
- Enabling near-zero CO2 emissions from fossil fuel power plants and carbon intensive industries
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# Global leadership in renewables



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

# Global leadership in renewables



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

- Topics for 2018 in black font; for 2019 in purple font; topics for 2020 not included (added as of mid-2018)
- Market-uptake activities (CSA, RES-28) cover all areas

# Next renewable energy solutions



**RES-1-2019:** Developing the next generation of renewable energy technologies

- *Bring technologies that form the backbone of the energy system in 2050 to TRL 3 to 4*
- *Recommended EU contribution per project: EUR 2-5 million*
- *Indicative topic budget: EUR 20 million, RIA*

**RES-2-2018:** Disruptive innovation in clean energy technologies

- *Accelerate technology development for Photovoltaic windows and bionic leaf from TRL3 to at least TRL5*
- *Stage-gate approach based on milestones and periodic reviews.*
- *Recommended EU contribution per project: EUR 2-3 million*
- *Indicative topic budget: EUR 12 million, RIA*

**RES-3-2020:** International Cooperation with USA on alternative renewable fuels for energy and transport

- *Text, budget and deadlines to be decided as of mid-2018*

# Renewable energy solutions for implementation at consumer scale



## 2018: Energy generation at building scale

- **RES-4:** Renewable energy system integrated at the building scale
  - RIA, TRL 3/4 -> TRL 4/5, EUR 2-5 million/project, topic budget: EUR 27.5 million, 2-stage submission
- **RES-5:** Increased performance of technologies for local heating and cooling solutions
  - IA, TRL 5/6 -> TRL 6/7, EUR 3-10 million/project, topic budget: EUR 10 million
- **RES-6:** Demonstrate significant cost reduction for Building Integrated PV (BIPV) solutions
  - IA, TRL 5/6 -> TRL 6/7, EUR 6-10 million/project, topic budget: EUR 30 million

## 2019: Renewable energy solutions at district level and for industrial processes

- **RES-7:** Solar Energy in Industrial Processes
  - RIA, TRL -> TRL 4/5, EUR 3-5 million/project, topic budget: EUR 10 million
- **RES-8:** Combining Renewable Technologies for a Renewable District Heating and/or Cooling System
  - IA, TRL -> TRL 6, EUR 8-15 million/project, topic budget: EUR 15 million

# Renewable energy solutions for energy system level implementation



## 2018: Reduce costs of key technologies for renewable energy conversion

- **RES-11:** Developing solutions to reduce the cost and increase performance of renewable technologies (Floating wind, Onshore wind, Ocean (tidal), Geothermal, CSP, Hydropower, Bioenergy (CHP))
  - *RIA, TRL 3/4 -> TRL 4/5, EUR 2-5 million/project, topic budget: EUR 30 million, 2-stage submission*
- **RES-12:** Demonstrate highly performant renewable technologies for combined heat and power (CHP) generation and their integration in the EU's energy system
  - *IA, TRL 5 -> TRL 7/8, EUR 15-20 million/project, topic budget: EUR 30 million*
- **RES-13:** Demonstrate solutions that significantly reduce the cost of renewable power generation (Offshore wind, Deep Geothermal, CSP)
  - *IA, TRL 5 -> TRL 7, EUR 15-20 million/project, topic budget: EUR 45 million*

## 2019: Optimize processes and manufacturing

- **RES-14:** Optimising manufacturing and system operation
  - *RIA, TRL 3/4 -> TRL 4/5, EUR 3-5 million/project, topic budget: EUR 20 million, 2-stage submission*
- **RES-15:** Increase the competitiveness of the EU PV manufacturing industry
  - *IA, TRL 5/6 -> TRL 6, EUR 10-13 million/project, topic budget: EUR 25 million*

## 2019: Provide flexibility to the energy system

- **RES-16:** Development of solutions based on renewable sources that provide flexibility to the energy system
  - *RIA, TRL 3/4-> TRL 4/5, EUR 3-5 million/project, topic budget: EUR 15 million*
- **RES-17:** Demonstration of solutions based on renewable sources that provide flexibility to the energy system
  - *IA, TRL 5-> TRL 7, EUR 12-15 million/project, topic budget: EUR 40 million*



# Renewable Fuels for transports



## 2018: Drop-in fuel solutions for fossil-fuel substitution

- **RES-21:** Development of next generation biofuels and alternative renewable fuel technologies for road transport
  - *RIA, TRL 3/4 -> TRL 5, EUR 3-5 million/project, topic budget: EUR 25 million*
- **RES-22:** Demonstration of cost effective advanced biofuel pathways in retrofitted existing industrial installations
  - *IA, TRL 5 -> TRL 7, EUR 8-10 million/project, topic budget: EUR 30 million*

## 2019: Upscaling renewable fuels production

- **RES-23:** Development of next generation biofuel and alternative renewable fuel technologies for aviation and shipping
  - *RIA, TRL 3 -> TRL 5, EUR 3-5 million/project, topic budget: EUR 20 million*
- **RES-24:** Boosting pre-commercial production of advanced aviation biofuels
  - *IA, TRL 5 -> TRL 7, EUR 15-20 million/project, topic budget: EUR 20 million*

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# Smart citizen-centred energy system 2018 - 2019

## 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)
- **ES-7-2018:** Pan-European Forum for R&I on Smart Grids, Flexibility and Local Energy Networks (CSA)

## LOCAL SYSTEMS & ISLANDS

- **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)

# Smart citizen-centred energy system 2018 - 2019

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- **ES-7-2018:** Pan-European Forum for R&I on Smart Grids, Flexibility and Local Energy Networks (CSA)

	TRL	EU Contribution per project M.€	Budget M.€	Deadline
ES-1-2019	5-8	6-8	37,30	05-feb-19
ES-2-2019	5-8	8-10	25,00	
<b>ES-5-2018</b>	5-8	13-17	30,00	05-abr-18
ES-6-2019		2-4	25,35	05-feb-19
<b>ES-7-2018</b>		3-4	3,00	05-abr-18

# Smart citizen-centred energy system

	TRL	EU Contribution per project M.€	Budget M.€	Deadline
ES-3-2018	5-8	5-6	26,30	05-abr-18
ES-4-2018	5-8	7-10	19,00	
ES-8-2019		10	10,00	05-feb-19

## LOCAL SYSTEMS & ISLANDS

- **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)

# BRIDGE INITIATIVE

- Es una iniciativa europea
- Poner en común proyectos de Demostración de H2020 en las áreas: SG & Energy Storage
- Crear visión estructurada de cuáles son los obstáculos a la innovación
- Compartir conocimientos entre proyectos

DATA  
MANAGEMENT

BUSINESS  
MODELS

REGULATIONS

CONSUMER  
ENGAGEMENT

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

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# Why Smart Cities and Communities?



- Improving quality of live, competitiveness and sustainability
- Exporting European knowledge in a strong growth market estimated globally at €1.3 trillion in 2020
- 'Lighthouse project' approach continued

# SCC- SELECTED PROPOSALS

## CALL 2014 SELECTED PROPOSAL SCC-01

ACRONIMO	LEAD CITIES	FOLLOWERS CITIES
GrowSmarter	Stockholm (SE), Cologne (DE) and <b>Barcelona (ES)</b>	Valetta, Suceava, Porto, Cork and Graz
REMOURBAN (F.CARTIF)	<b>Valladolid (ES)</b> , Nottingham (GR) and Tepebasi (TR)	Seraing, Miskolc
TRIANGULUM	Manchester (GR), Eindhoven (NL) and Stavanger (NO)	Prague, Leipzig and <b>Sabadell</b>

## CALL 2015 SELECTED PROPOSAL SCC-01

ACRONIMO	LEAD CITIES	FOLLOWERS CITIES
SmartENcity (Tecnalia)	<b>Vitoria (ES)</b> , Tartu (Estonia), Sonderborg (DK)	Lecce, Asenovgrad
REPLICATE (F.S.Sebastián)	<b>San Sebastian (ES)</b> , Florencia (IT) y Bristol (GR)	Essen, Nilufer, Lausanne
SMARTER TOGETHER	Lyon (FR), Munich (DE), Vienna (AT)	<b>Santiago</b> , Sofía, Venecia, Kiev, Yokohama
SHARMILLM	London (GR), Lisboa (PT), Milán (IT).	Burdeos, Varsovia, Burgas

## CALL 2016 - SELECTED PROPOSAL SCC-01

ACRONIMO	LEAD CITIES	FOLLOWERS CITIES
mySMARTlife (Liderada por F. Cartif)	Nantes (France), Hamburg (Germany) and Helsinki (Finland)	Varna (Bulgaria), Bydgoszcz (Poland), Rijeka (Croatia) and <b>Palencia (Spain)</b>
Ruggedised	Rotterdam (Netherland), Glasgow (UK) and UMEA (Suecia)	Brno (Czech Republic), Parma (Italia) and Gdansk (Polonia)

# SCC- SELECTED PROPOSALS – Call 2017

CALL 2017 SELECTED PROPOSAL SCC-01		
ACRONIMO	LEAD CITIES	FOLLOWERS CITIES
IRIS	<i>Utrecht (NL), Goteborg (SE), Nice Cote d'Azur (IT)</i>	Vaasa (FI), Alexandroupolis (GR), <b>Sta. Cruz de Tenerife (ES)</b> , Focsani
<b>MatchUP (Ayto Valencia)</b>	<b>Valencia (ES)</b> , Dresden (DE), Antalya (TK)	Ostend (BE), Herzliya (Israel), Skopje (FYROM), Kerava (FI)
<b>Stardust (F. Cener-Ciemat)</b>	<b>Pamplona (ES)</b> , Tampere (FI), Trento (IT)	Derry (UK), Kozani (GR), Litomerice (CZ)

**SCC-1-2018-2019:** Projects are expected to **COOPERATE** with other SCC projects funded under H2020 as well as the EIP-SCC ( earmark appropriate collaboration resources - 5% of the requested EU contribution )

## SCC - SMART CITIES AND COMMUNITIES

5. <u>Smart Cities and Communities</u>	2018				2019				
	Action	Min	Max	Budget	Action	Min	Max	Budget	
<i>SCC-1-2018-2019-2020: SCC</i>	IA	14,5	20,0	43,0	IA	14,5	20,0	73,0	
				<b>43,0</b>				<b>73,0</b>	<b>116,0</b>

### Specific Challenge

- COP21, EU Energy/Climate goals
- Necessary energy transition in cities

### Scope

- Deploy and test integrated innovative solutions for **Positive Energy Blocks/Districts** in the Lighthouse Cities
- 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.
- Carry out extensive performance monitoring (ideally for more than 2 years)

### POSITIVE ENERGY BUILDINGS/DISTRICT - DEFINITION

- **Positive Energy Blocks/Districts** consist of **several buildings** (new, retro-fitted or a combination of both) that **actively manage their energy consumption and the energy flow between them and the wider energy system**.
- Positive Energy Blocks/Districts have an **annual positive energy balance**.
- They **make optimal use of elements** such as advanced materials, local RES, local storage, smart energy grids, demand-response, cutting edge energy management (electricity, heating and cooling), user interaction/involvement and ICT.
- Positive Energy Blocks/Districts are **designed to be integral part of the district/city energy system** and have a positive impact on it. Their design is intrinsically **scalable** and they are well embedded in the spatial, economic, technical, environmental and social context of the project site.

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

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# 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)

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# Joint Actions - overview

## Support to the SET-Plan

- JA-1-2018 (ERA-NETs)
- JA-2-2018 (CSA for Implementation Plans)

## Pre-commercial procurement for wave energy

- JA-3-2019: European Pre-Commercial Procurement Programme for Wave Energy Research & Development

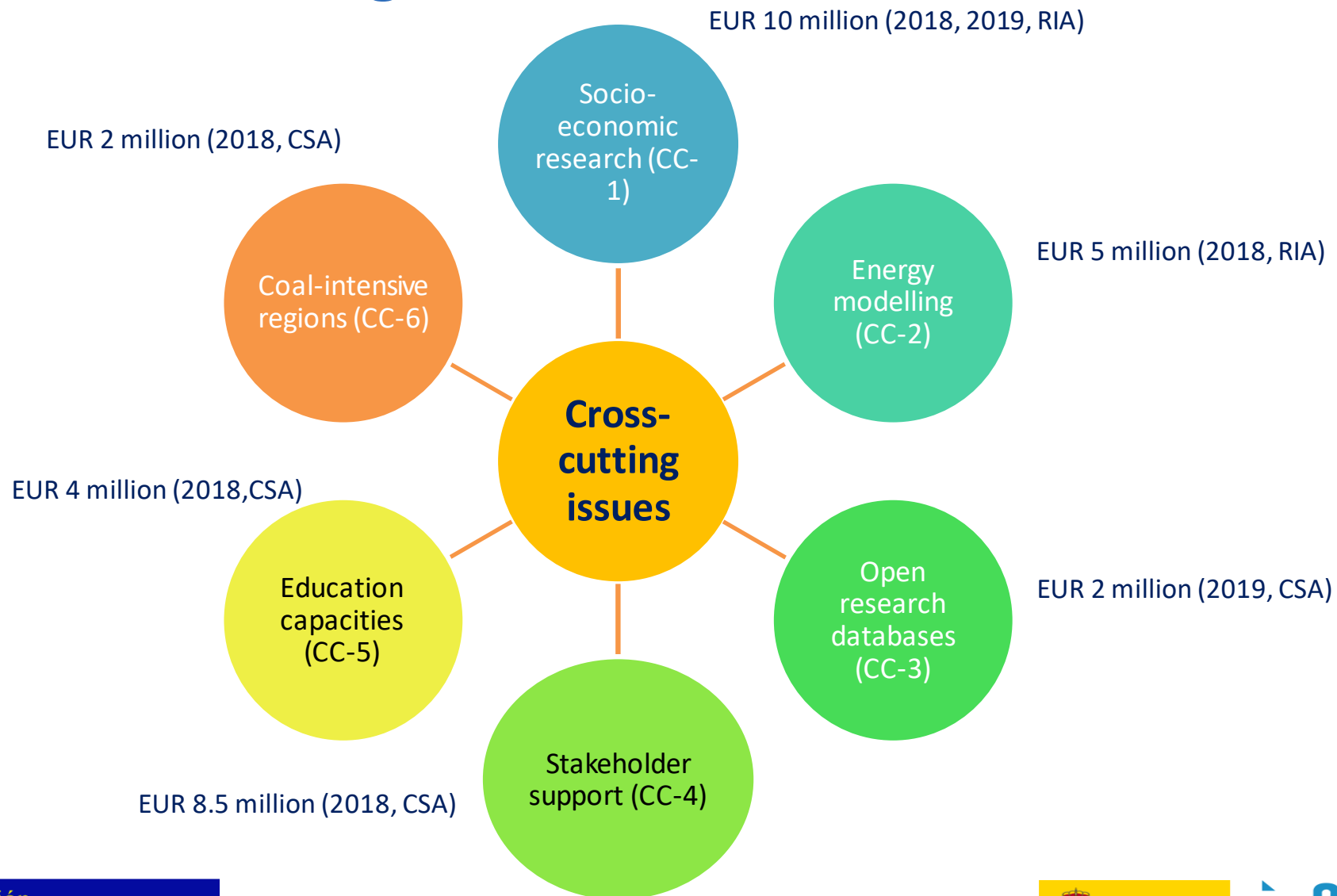
## EU-Africa cooperation on renewables

- JA-4-2018 (CSA for preparing a European Joint Programme)
- JA-5-2019 (European Joint Programme)

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# Cross-cutting issues



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# Resultados Energía 2014-2016

**2012 propuestas, 1.100 con presencia ES (54,7%)  
307 coordinadas ES (15,3%)**

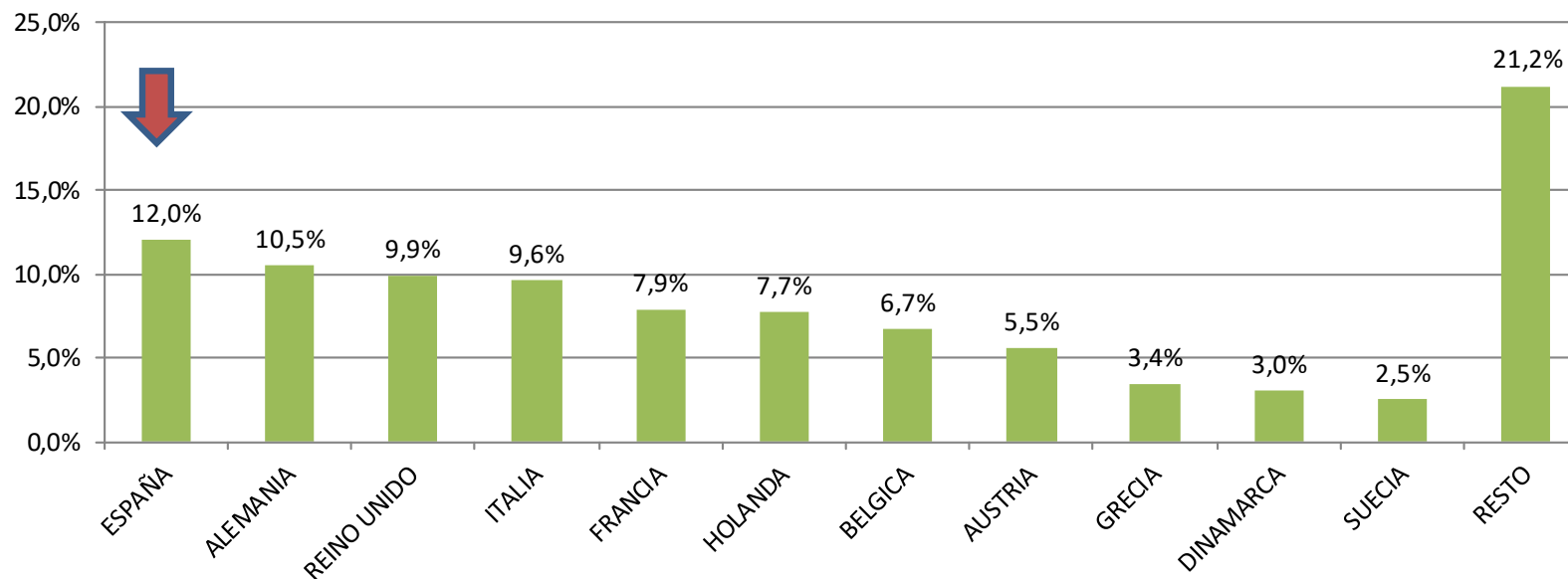
**325 proyectos, 178 con presencia ES (54,8%)  
48 coordinadas ES (14,8%)**

**Tasa de éxito ES 16,2% - En línea con la media europea  
16,2%**

**187,1 M€ para ESPAÑA. 3º puesto por detrás de Alemania  
y Reino Unido**

# H2020- SC 3-Energy Efficiency (EE)

% Retorno por países



202,3 M.€ Adjudicados. España: 24,36 M.€ (12%)

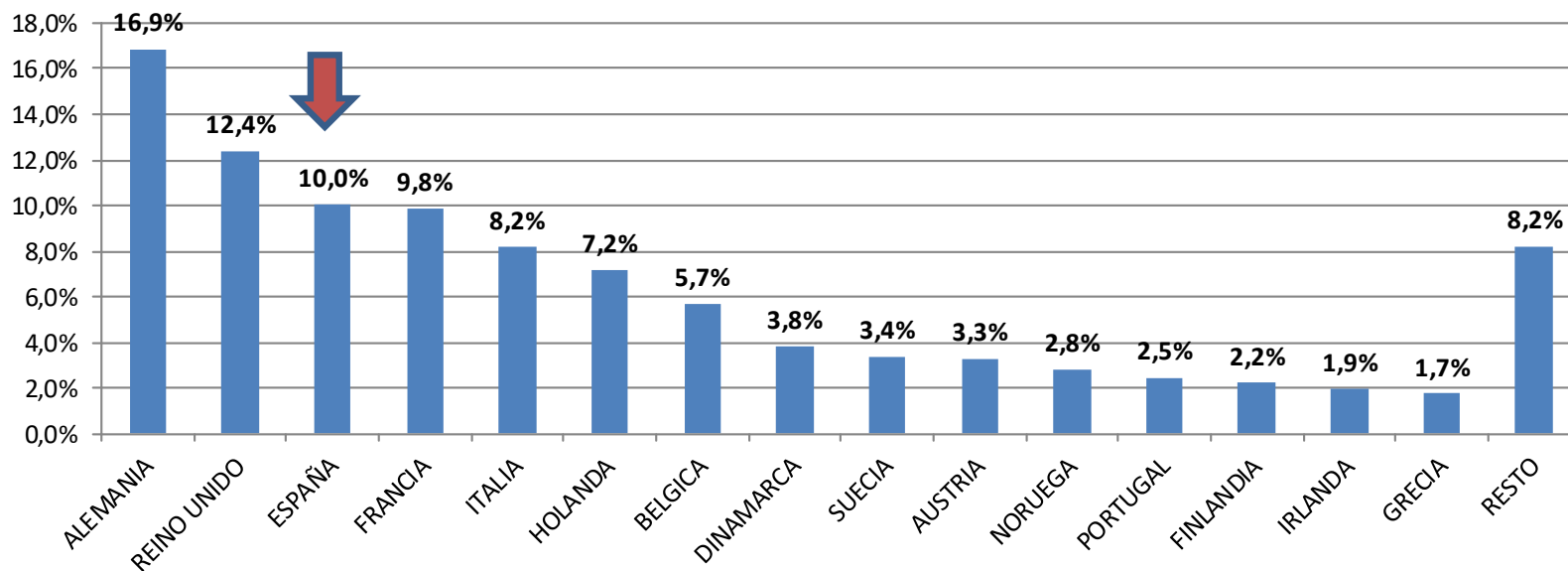
En 65 propuestas de las 108 financiadas hay participación ES (60,2%)

ES lidera 18 proyectos (16,7%)

No incluye datos de la JTI-FCH

# H2020- SC 3- Low Carbon Energy (LCE)

% Retorno por países



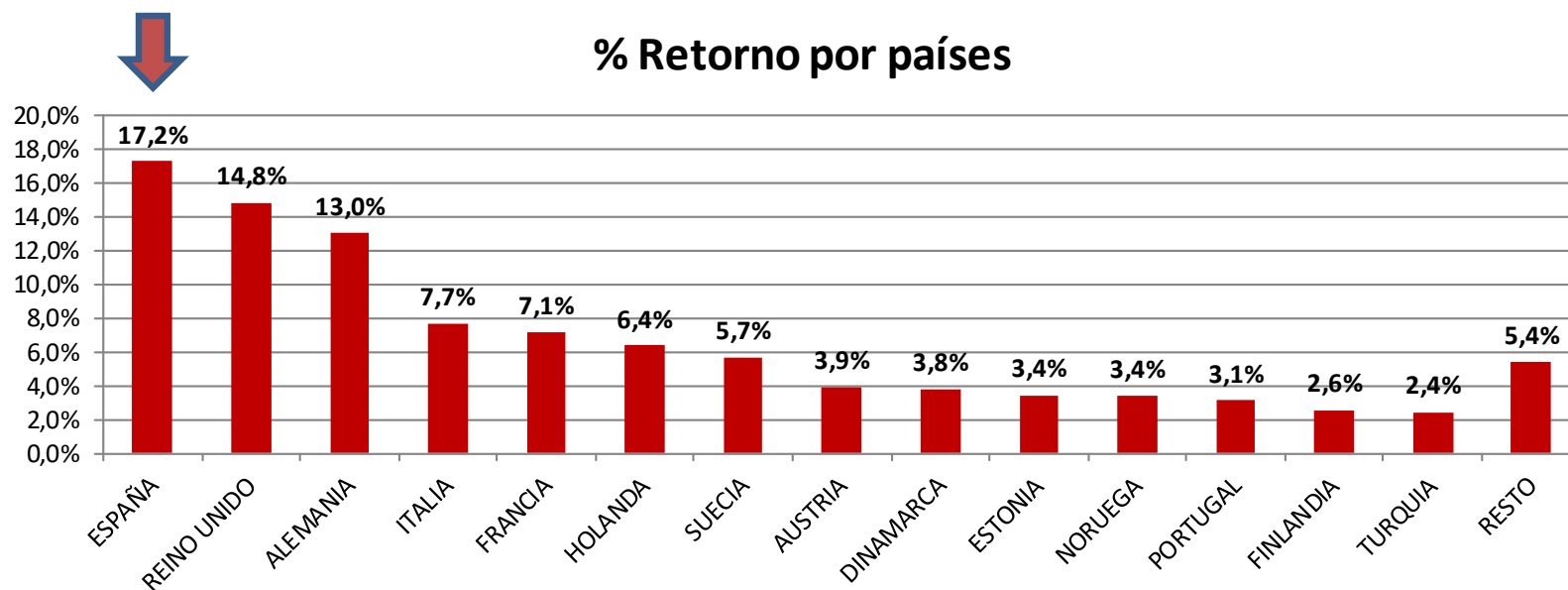
1.187 M.€ Adjudicados. España: 119,25 M.€ (10%)

En 93 propuestas de las 178 financiadas hay participación ES (52,2%)

ES lidera 26 proyectos (14,6%)

No incluye datos de la JTI-FCH

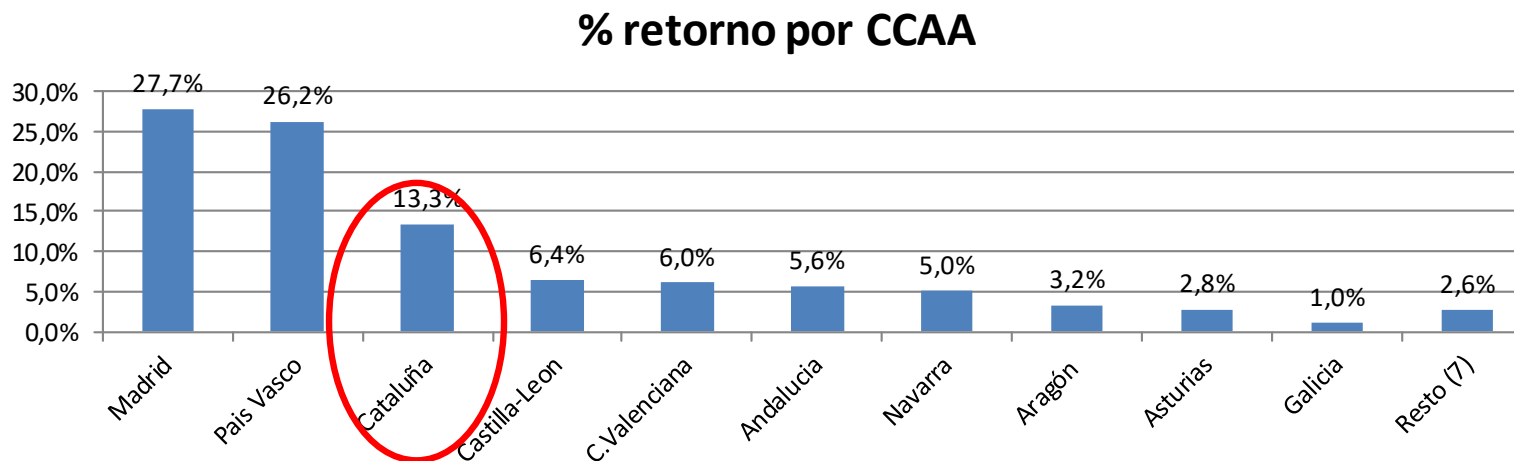
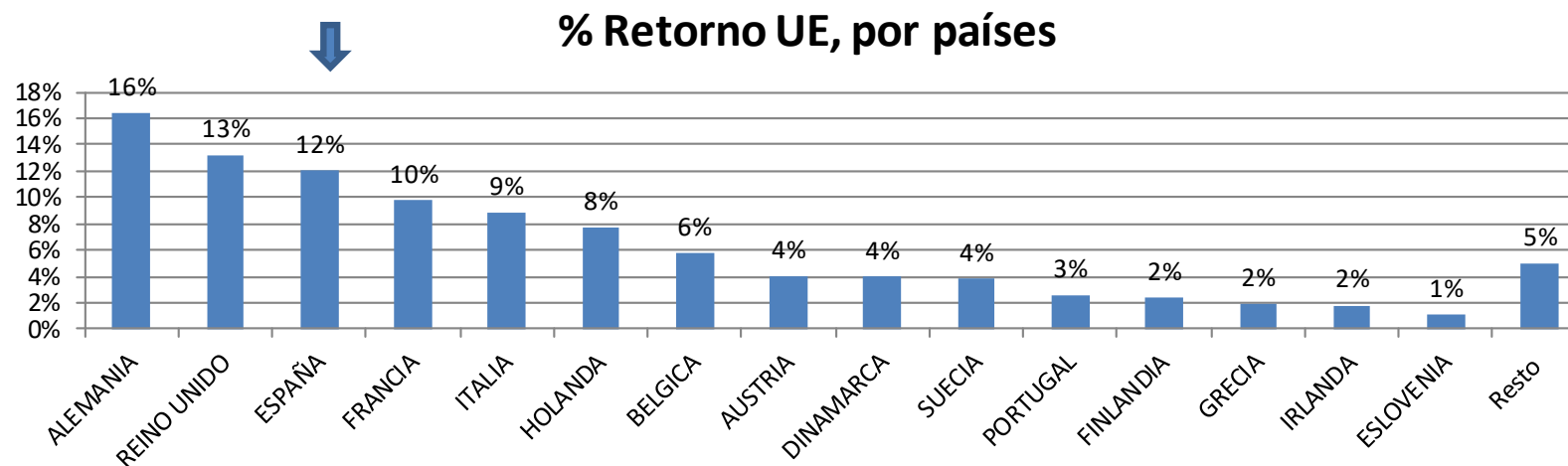
# H2020- SC 3- Smart Cities and Communities (SCC)



240,8 M.€ Adjudicados. España: 41,5 M.€ (17,2%)  
En 13 propuestas de las 17 financiadas hay participación ES (76,5%)  
ES lidera 4 proyectos (23,5%)  
No incluye datos de la JTI-FCH



# Análisis RESULTADOS Calls ENERGY 2014-2016



# SC3 en España



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# ESHORIZONTE2020

Portal español del Programa Marco de Investigación e Innovación de la Unión Europea

## ¡GRACIAS!

**WP 2018-2020:** [http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-energy\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-energy_en.pdf)

**Information Day Bruselas:** [https://ec.europa.eu/easme/en/horizon-2020-secure-clean-and-efficient-energy-info-day?pk\\_campaign=energy-nwl-2017-10](https://ec.europa.eu/easme/en/horizon-2020-secure-clean-and-efficient-energy-info-day?pk_campaign=energy-nwl-2017-10)

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# Jornada Connect-EU

6 de novembre del 2017  
Palau de Congressos de Catalunya

Impulsa el teu projecte d'**R+D**  
i **innovació** a Europa

# DEXMA R&D Strategy – H2020

November 2017



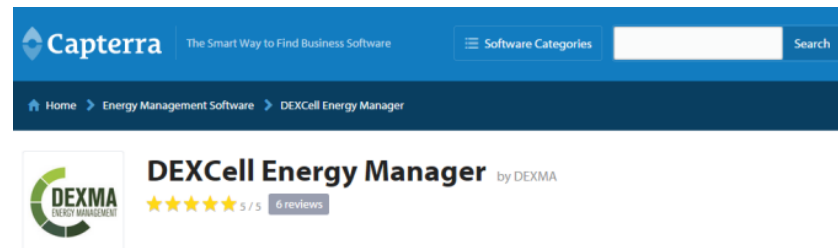
# DEXMA Activity

- **DEXMA provides an Energy Management Software (EMS)** for corporate, commercial, public administration and industrial sectors
- **DEXCell Energy Manager is a SaaS, cloud & web-based energy management analytics software**, hardware-neutral, that aims **to reduce energy use and cost**, through continuous & multisite monitoring, analytics, alarms, reports, awareness and control – customizable based on the type of user
- DEXCell is an evolving and **flexible solution** with an **App. market continually growing thanks to an open API**
- DEXMA offers its software **worldwide through a Global Partners Network** with more than +215 companies, mostly Energy Services Company, Integrators and VARs

## Recognitions & mentions



## TOP1 EMS by reviews





# Markets & Customers



**Retail**                      **Universities**                      **Hotels**                      **Telecom, Leisure & Restaurant**                      **Banks**



**Museums**                      **Public administration**                      **Industry, Food & beverage**                      **Energy**                      **Construction & Pharma**

**+1,200** | Active customers (and growing!)

# Global footprint



**+215** Active Partners  
(and growing!)





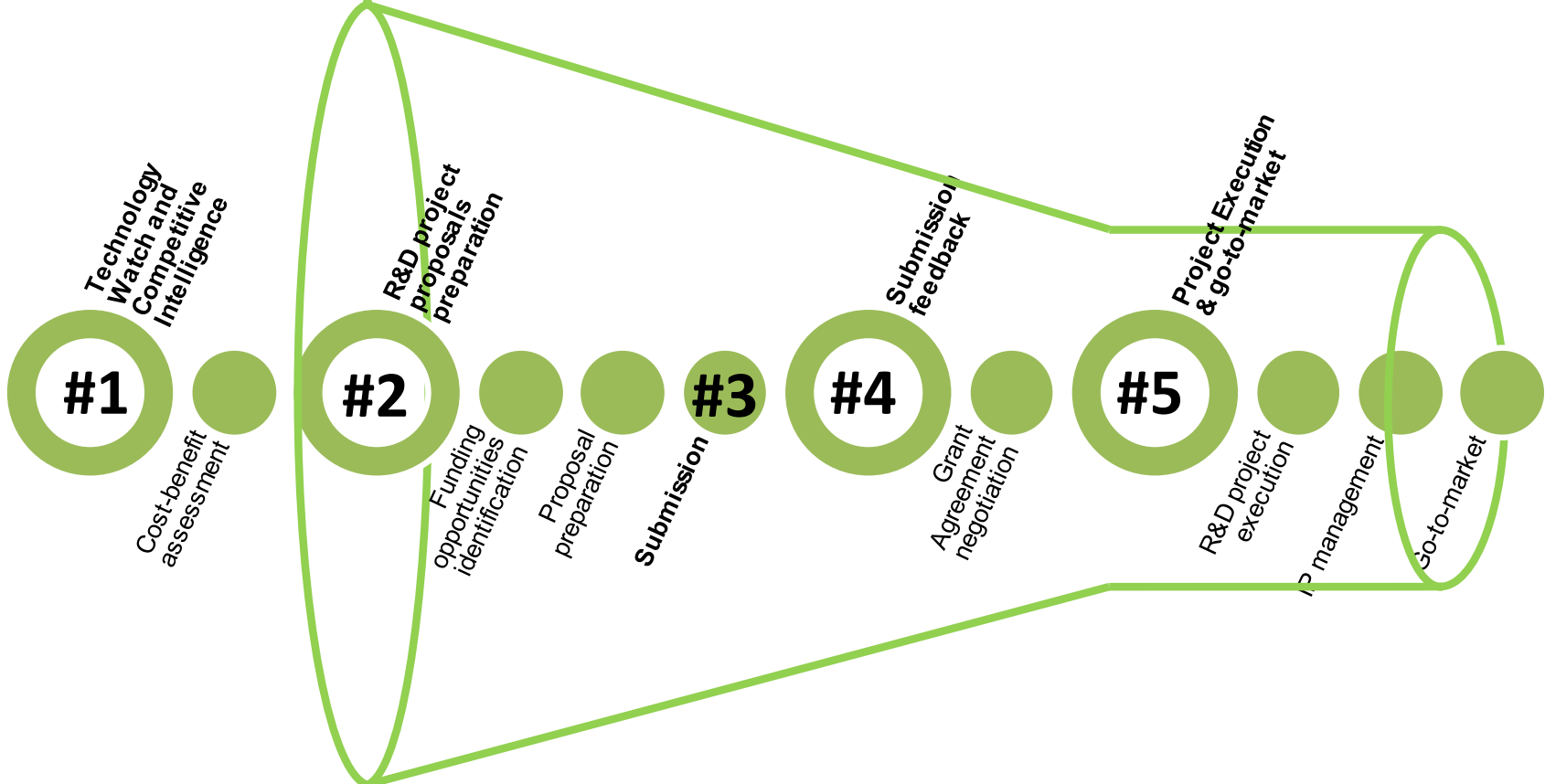
# R&D Strategy

## From raw ideas to new products and services





# Tip 1: R&D funnel → Be selective with proposals



Private Investment  
Own funding, partnerships



European Commission  
H2020 funding



National Funding  
CDTI Programmes



Regional Funding  
FEDER funding



# DEXMA Example: 3 steps to Energy Management



**DETECT**  
savings...

Use the Energy Grader to get an accurate figure based on our Big Data algorithms

**ANALYSE**  
consumption...

With our advanced suite, you can monitor and analyse any variable that affects your energy consumption

**CONTROL** your  
facility...

Harness your power using our hardware-agnostic control system and maximize your energy savings



No need of investment

Low-medium investment  
ROI: 1-2 years

High-medium investment  
ROI: 2-3 years

# Tip 2: Involve all the team!

## Executive Team



**Joan Piñol**  
CEO / co-Founder  
Software Engineer  
SaaS, IT and Energy specialist



**Guillem Corominas**  
Development / co-Founder  
Software Engineer  
Big data specialist



**Daniel Utges**  
Product Director  
Industrial Engineer  
Energy markets specialist



**Maria Fernandez**  
Marketing Director  
Advertisement and PR  
Inbound marketing specialist



**Xavier Novella**  
Operations Director  
Telecommunications Engineer  
SaaS and IT specialist



**Miguel Cruz**  
R&D Director  
Industrial Engineer  
Energy markets specialist



**Joan Gumma**  
CFO  
MBA  
Energy market specialist



**Laura Martínez**  
R&D Project Manager



**Iker de Loma**  
R&D Project Engineer

## Key Advisors

**Ignacio Fonts**  
Executive  
Inveready First Capital

- Currently technology Venture Capitalist
- Former head of HP global ink business
- Extensive experience in channel strategy, product management, business processes

**Gregory Lee**  
Founder and Board Member  
Diamond Wood China

- Serial technology entrepreneur for over 20 years
- Extensive experience in SaaS, B2B marketing and sales, and early-stage private equity financing

## Tip 3: Write a 2-3 pager about

- Objectives
- Target group
- Major steps (work packages)
- Intended consortium
- Use it for internal reality check (consortium) + external check with stakeholders



## Tip 4: Select the proper H2020 mechanism

- Do you want to go alone or with a consortia? Where are my partners from?
- Which resources do I have to prepare the proposal?
- Where my proposal will fit better?
  - Can I “sell” a clear unique project objective?
  - Clear set a clear path to make a difference?
- Which are my expectations with regards to:
  - Success rate – time to get the project approved?
  - Funding rate?



## Tip 4: Find good travel companions!

- Be consistent: cover the entire value chain of your project idea. Are they the voice of the market??
- Be selective: R&D “believers”, interested in results exploitation, fully involved in the proposal preparation.
- Keep consortium motivated - agree a working method for the proposal phase



## Tip 5: Write the best proposal

- High competition: 10% of success rate / 20% chances if you pass the threshold.
- Help the reviewers: 8-10 proposals each, ½ per proposal review...
- Invest in:
  - **Excellence:** make choices, focus, have a clear direction
  - **Impact:** drive towards indicators given in the work programme
  - **Implementation:** Work packages → convince the reviewers that you can “do” your vision



# Tip 7: Start early – a good proposal needs time

- 2-3 pager ready 6-8 months in advance
- Partners consortia: 4-6 months in advance
- First “almost final” version at least 2 months in advance
- First draft of project budget 2 months in advance... and prepare it bottom-up: define tasks > estimate efforts > translate person-months into EUR



## Final polishing: 2 months!

- Check consistency of the work plan, including WPs, Deliverables, Milestones, management structure...
- Ask an “informed outsider” for critical reading and feedback. Also a native speaker (if possible)
- Abstract is key. Must be fully aligned with the rest of the project

# Tip 8: Last but not least... be in close contact with your innovation agency & NCPs!

- Be updated on the upcoming calls fitting your R&D strategy
- Validate your strategy before submitting your proposals
- Ask for support to find your partners!
- Ask ask ask...





# Jornada Connect-EU

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Impulsa el teu projecte d'**R+D**  
i **innovació** a Europa

## ACCIÓ



Generalitat  
de Catalunya

macruz@dexmatech.com  
(+34) 93 181 01 95



- **European Union Energy Day. Clean energy solutions for decarbonisation, economic growth and jobs.** November 16th, 2017 – Bonn – web.  
<http://www.euenergyday.eu/bonn2017/>
- **ERRIN Horizon 2020 project development workshops Week .** 20 - 24 November 2017 – topics of: Bioeconomy, Blue innovative growth, Energy, Health, ICT, Smart cities, Transport & Water - web. <http://errinh2020pdw.eu/>



<https://h2020-energy-info-days.b2match.io/>

- **SET Plan - The 10th Year Anniversary Central European Energy Conference 2017 .** 29 November - 1 December 2017 . BRATISLAVA – web.  
<https://www.setplan2017.sk/>





## Entitats catalanes participants



## GrowSmarter

From 2015-01-01 to 2019-12-31, ongoing project

## Project details

**Total cost:**

EUR 34 846 533,36

**EU contribution:**

EUR 24 820 974,38

**Coordinated in:**

Sweden

**Topic(s):**

[SCC-01-2014 - Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse \(large scale demonstration - first of the kind\) projects](#)

**Call for proposal:**

H2020-SCC-2014 [See other projects for this call](#)

**Funding scheme:**

IA - Innovation action

<http://www.grow-smarter.eu>



[web](#)

*Entitats catalanes participants*



## Personalised ICT-tools for the Active Engagement of Consumers Towards Sustainable Energy

From 2017-10-01 to 2020-12-31, ongoing project

### Project details

**Total cost:**

EUR 2 521 566,10

**EU contribution:**

EUR 1 964 145,38

**Coordinated in:**

Germany

**Topic(s):**

[EE-07-2016-2017 - Behavioural change toward energy efficiency through ICT](#)

**Call for proposal:**

H2020-EE-2017-RIA-IA [See other projects for this call](#)

**Funding scheme:**

IA - Innovation action

## A broad range of services for growth-oriented SMEs



*Business Support on Your Doorstep*

### INTERNATIONAL PARTNERSHIPS

Partnership database

Brokerage events

Company missions

### ADVISORY SUPPORT

Advice on EU laws and standards

Market intelligence

IPR expertise

### INNOVATION SUPPORT

Access to finance and funding

Innovation Management Services

Technology transfer

**[www.een.cat](http://www.een.cat)**