



# Lecture et décryptage

Supporting public authorities in driving the energy transition LC-SC3-EC-5-2020

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Quelques rappels...





## L'énergie dans Horizon 2020

#### **Excellence scientifique**

ERC (13,1 Mds€)

Actions Marie Sklodowska-Curie (6,2 Mds€)

> FET (2,7 Mds€)

Infrastructures (2,5 Mds€)

24,4 Mds€

#### Primauté industrielle

TIC (7,6 Mds€)

NMP + Biotechs (4,3 Mds€)

> Espace (1,7 Mds€)

Accès au financement à risque (2.8 Mds€)

> Innovation PME (0,6 Md€)

> > 17 Mds€

#### Défis sociétaux

Santé, bien être et vieillissement (7,5 Mds€)

Sécurité alimentaire, bioéconomie (3,9 Mds€)

Energies sûres, propres, efficaces (5,9 Mds€)

Transport intel., verts, intégrés (6,3 Mds€)

Climat, env., matières premières (3,1 Mds€)

Sociétés inclusives et novatrices (1,3 Md€)

Sociétés sûres (1,7 Md€)

29,7Mds€

Institut européen d'innovation et de technologie (EIT)

Centre de recherche commun (JRC)

Diffusion de l'excellence et élargissement / Science





ENR (PV, Wind...)

Réseau

Stockage

Biocarburants Market-uptake

Euratom





# Défi sociétal n°3 = Energie

	2019	2020
Energy Efficiency = EE/B4E	113 M€	86,5 M€
Renewable energy solutions = RES	216 M€	248 M€
Energy Consumer & Energy system = EC & ES	125,65M€	155 M€
Smart Cities and Communities = SCC	83 M€	75 M€
Nearly-zero CO2 emissions from fossil fuels = NZE	53 M€	29 M€
Joint actions among countries = JA	21 M€	15 M€
Cross-cutting issues	12 M€	15 M€
	623,65M€	623,5M€
Pour mémoire : budget 2018 = 537,3M€		

## Les différents types d'appels à projets

#### **Recherche & Innovation (RIA)**

**TRL 2 à 5** 

- activités visant à établir de nouvelles connaissances, à travers des recherches fondamentales ou appliquées
- peuvent inclure du développement et de l'intégration de technologies, des essais et la validation d'un prototype à petite échelle

Taux de financement 100%

### Innovation (IA)

TRL 5 à 8

- activités visant directement à produire des plans, arrangements ou concepts pour un produit, procédé ou service nouveau ou amélioré : prototypage, démonstration ou pilotes, validation du produit à grande échelle, première commercialisation
- peuvent inclure des activités limitées de recherche et de développement

Taux de financement 70% pour le privé (100% public)

#### **Coordination & Support (CSA)**

 Activités visant à améliorer les savoir-faire ou mobilisant des budgets considérables ou facilitant la mise en œuvre des politiques de l'Union

Taux de financement 100%







## Taux de financement

Taux de financement des coûts directs éligibles			
	Entités à but non lucratif	Entreprises	
RIA	100%	100%	
IA	100%	70%	
CSA	100%	100%	



Couts indirects: forfaitairement **25%** des coûts directs pour tous les partenaires (hors sous-traitance et contributions en nature)

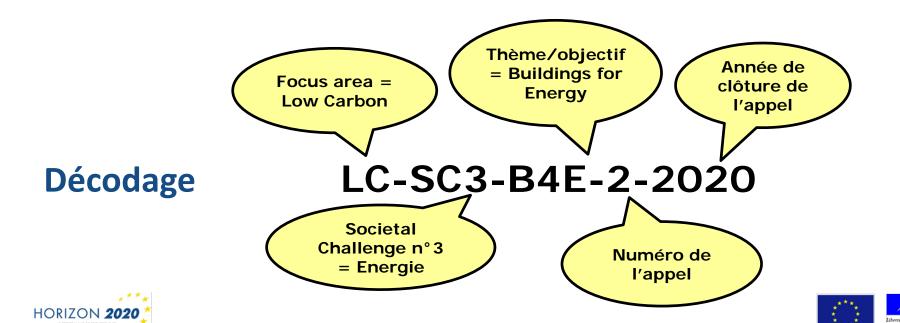






## Les grandes priorités pour 2020

- Building a low-carbon, climate resilient future = LC
- 2. Digitising and transforming European industry and services = **DT**
- Connecting economic and environmental gains the Circular Economy = CE
- 4. Boosting the effectiveness of the Security Union = **SU**



## Lire un appel à projet

Réf. du sujet Et réf. de l'appel

LCE-12-2017: Near-to-market solutions for the use of solar heat in industrial processes

Défi à relever

<u>Specific Challenge</u>: The potential for the use of solar heat for industrial purposes is still largely untapped. The challenge is to reduce the technical complexity and develop cost effective solutions.

<u>Scope</u>: Proposals shall demonstrate less complex and cost effective technical solutions which significantly increase the share of solar heat in industrial processes and which can be easily integrated into existing industrial plants.

TRL 7 shall be achieved at the end of project activities (please see part G of the General

Indication des TRLs

**Périmètre** 

Opening the project's test sites, pilot and demonstration facilities, or research infrastructures for practice oriented education, training or knowledge exchange is encouraged.

The Commission considers that proposals requesting a contribution from the EU of between EUR 5 to 8 million would allow this proif and allow it be addressed appropriate. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts

<u>Expected Impact</u>: The action will result in solutions which demonstrate that solar heat can be a reliable energy source for industrial processes, therefore bringing significant prospects for the market uptake of this renewable energy source and for the decarbonisation of industrial processes.

Type of Action: Innovation action

Indication du montant de subvention disponible par projet

Type of action = Schémas de financement

Type of Action

+ informations sur le budget disponible

+ la date limite pour soumettre une proposition



**Impact** 

attendu





# Évaluation



- La Commission fournit aux évaluateurs son interprétation de l'appel considéré.
- Aucune discussion/négociation avec les évaluateur et/ou la Commission n'est possible. Le dossier n'est pas modifiable après le dépôt final.
- L'évaluateur évalue le dossier sur la base de ce qu'il contient et rien de plus.
- La Commission attend de l'évaluateur qu'il passe 3/4 heures à lire le dossier et à écrire son rapport.









LC-SC3-EC-5-2020

Lecture et décryptage





# Archéologie



- <u>EE-09-2016-2017</u> Engaging and activating public authorities
- Energy Savings Calculation Methods under Article 7 of the Energy Efficiency Directive (JRC Report)





# Quelques projets précurseurs



mPOWER will enable an in-depth, wide-scale and systematic peer-to-peer learning programme among at least 100 local public authorities, in order to replicate innovative best practices in municipal energy, and developing ambitious energy transition plans.

**COMPETE4SECAP** is designed to deliver a systematic approach to energy savings in local authorities using energy management systems (EnMS) according to ISO 50001 or European Energy Award with dedicated online monitoring tool and energy saving competitions.

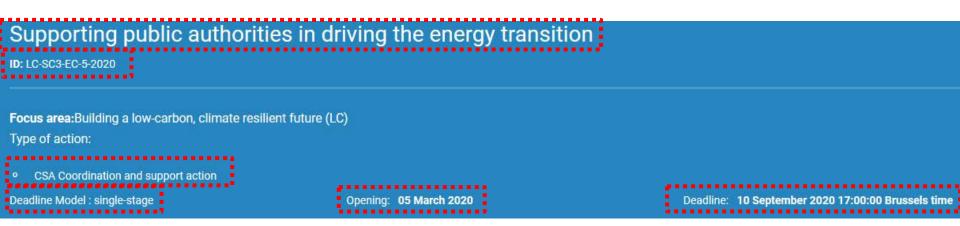
<u>EPATEE</u> tackes the lack of EE quantitative data that impedes evidence-based analysis. It aims at tackling this problem by raising the capacity of policymakers and implementers to assist Members States to fulfil their obligation under energy related Directives.

<u>C-Track 50</u> aims to mobilize and guide public authorities in defining long-term energy policy priorities, promote multi-level governance and support regional and local authorities in developing, financing and implementing ambitious integrated sustainable energy and climate policy action plans in order to achieve climate resilience and carbon neutrality by 2050

Qq autres encore sont <u>ici</u>.







https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-ec-5-2020







# Challenge

- The Energy Union targets requires the full engagement of the public sector at all governance levels.
- Local and regional public authorities have a crucial role in setting ambitious energy
  efficiency strategies, for instance in the framework of the <u>Covenant of Mayors</u> for
  <u>Climate & Energy and Smart Cities & Communities</u> or the <u>Clean Energy for EU islands</u>
  initiative.
- Support should continue and be reinforced in **building capacity of public authorities** and empowering them to take up their role of energy transition **leaders**.
- Member States have yet to fully implement <u>the Directive</u> and additional support in building capacity and know-how is needed.







## Scope

### a/ Support to local and regional public authorities

The Commission considers it to be equally relevant to address one or more of the following bullet points:

- ✓ Enhance decision-making processes of regional and local authorities. [...] Proposals should demonstrate political commitment and lead to subsequent institutionalisation of the improved processes in support of the Energy Union Governance Regulation.
- ✓ Support public authorities in the development of policy scenarios and transition roadmaps (2050 targets) and inform the ongoing implementation of SEAPs/SECAPs or similar plans and the development of future plans/targets for 2030 and beyond. Actions should link closely to the Covenant of Mayors initiative and the Energy Union Governance Regulation, where relevant.
- ✓ Innovative ways to enable public engagement in the energy transition, developing interface capacities within public authorities to engage with civil society.
- ✓ Deliver innovative capacity-building programmes for cities and/or regions to step up their capacity to drive the sustainable energy transition in their respective territories. The proposed actions should include a strategy to replicate results across Europe and a solid impact monitoring.







## Scope

### b/ Supporting the delivery of the Energy Efficiency Directive

Proposers should focus their proposed action on actions assisting Member States to fulfil their obligations under the Energy Efficiency Directive (EED) and – where relevant to the implementation of the EED – under the Energy Union Governance Regulation.

Proposals should support efficient implementation by taking into account existing effective practices and experiences from across Europe.

Proposals may address, for example, the harmonisation of energy savings calculations under **Article 3**, the effective **implementation of Article 7** including consistent monitoring and verification systems, higher efficiency of the generation under **Article 14** and of transmission or distribution systems under **Article 15** or an efficient development and continuous reporting of <u>Integrated National Energy and Climate Plans</u>.







## **Expected Impact**

Proposals are expected to demonstrate the impacts listed below, using quantified indicators and targets wherever possible:

- Primary energy savings, renewable energy production and investments in sustainable energy triggered in the territory of participating parties by the project (respectively in GWh/year and in million Euro);
- Number of institutionalised collaborations on the energy transition between public authorities;
- Numbers of stakeholders active in delivering the energy transition;
- Number of <u>public authorities</u> and <u>public officers</u> with improved capacity/skills in delivering the energy transition;
- Number of <u>policies</u> influenced through the action;
- Number of <u>Member States</u> with improved implementation of the EED and linked Energy Union Governance Regulation, clearly attributable to project activities.







# Quelques recommandations





# Répondre à un appel à projets



## Comprendre l'appel à projets

- 1. Lire en détail l'appel à projets et les éléments de son contexte (Programme de travail).
- 2. Assister à la <u>journée d'information</u> organisée par la Commission (*Infoday*) (souvent disponible sous forme vidéo après la présentation).

## Rédiger un excellent dossier

- Rédiger un <u>papier de cadrage</u> permet de constituer un <u>noyau de consortium</u> (*lean and mean*) ou de rejoindre un consortium en cours de formation (cf. planches suivantes);
- Si l'on coordonne, étoffer le consortium avec parcimonie;
- Mettre en place un <u>retro-planning réaliste</u>;
- Deux semaines avant le dépôt, faire relire sur le <u>fond</u> (par un « expert » non impliqué dans le projet) et sur la <u>forme</u> (si possible par un anglophone natif);
- Télécharger le dossier en l'état <u>la veille de la date limite</u> et le jour même à midi.







# Trouver/compléter un consortium (1)

- Consulter le site Webgate.ec.europa.eu pour voir quelles ont été les propositions gagnantes en réponse à des appels voisins de celui auquel je souhaite postuler : <a href="https://webgate.ec.europa.eu/dashboard/sense/app/93297">https://webgate.ec.europa.eu/dashboard/sense/app/93297</a> a69-09fd-4ef5-889f-b83c4e21d33e (H2020 projects);
- puis aller sur le site Cordis pour les details sur le consortium





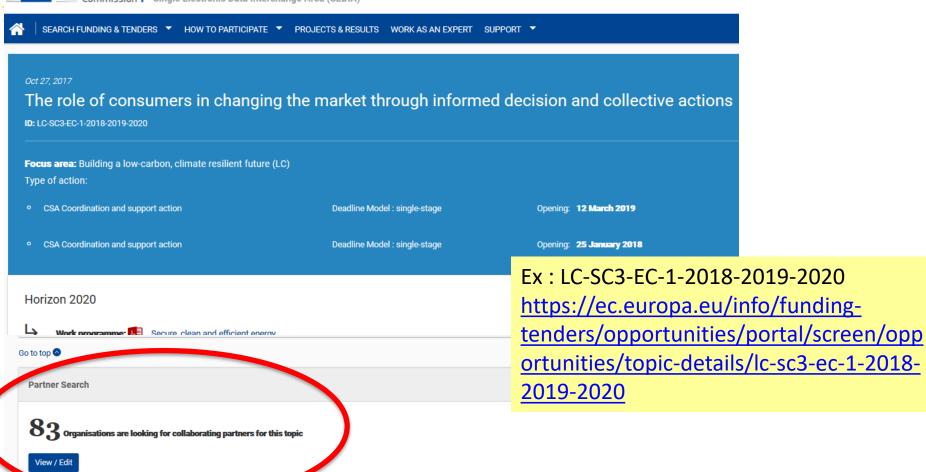


# 🔭 💆 Trouver/compléter un consortium (2)



#### Funding & tender opportunities

Single Electronic Data Interchange Area (SEDIA)



quests for open and forthcoming topics after logging into this Portal.



nt Administrators or self-registrants can publish parts





# Trouver/compléter un consortium (3)





http://c-energy2020.eu/









# Trouver/compléter un consortium (4)



RECHERCHER ...



Accueil > Horizon 2020 > Défis sociétaux > Energie

> Recherche avancée multicritères

#### **AGENDA**

#### 09 JUIN

Rencontre lauréats-candidats FET Proactive

PARIS

#### 15 JUIN

Journée nationale d'information "Les PME dans Horizon 2020"

PARIS

#### Recherches de partenaires et offres de compétences en énergie

**ENERGIE** 



Le P.C.N. énergie propose la consulation des recherches de partenaires et des offres de compétences pour les prochains appels du défi 3, grâce à sa collaboration avec ses homologues européens.

http://www.horizon2020.gouv.fr/cid77777/recherchespartenaires-offres-competences-energie.html



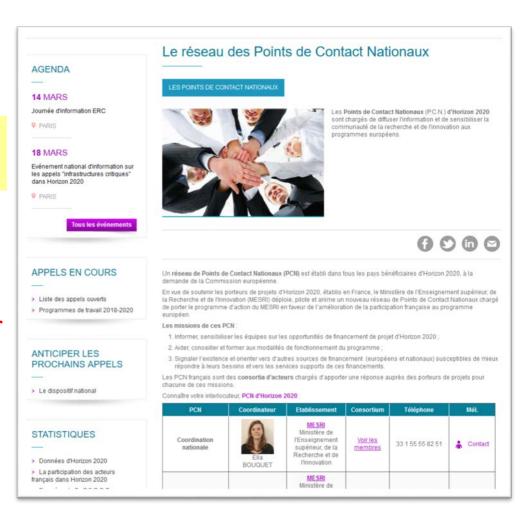


## Pour vous aider : les Points de contact nationaux (PCN)



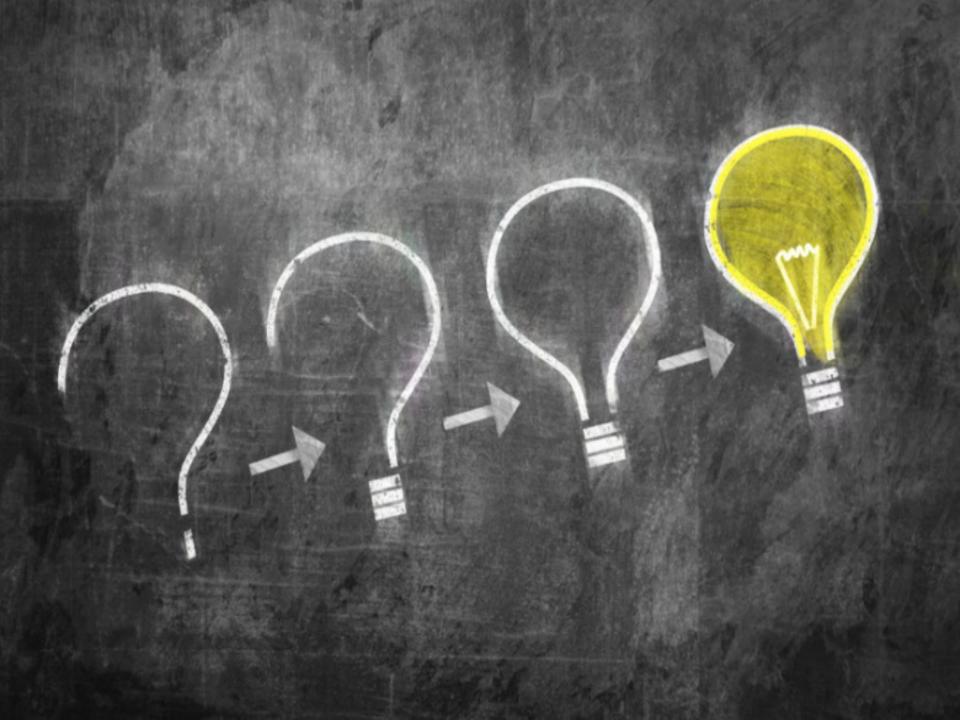
http://www.horizon2020.gouv.fr/cid74103/le-reseau-des-pcn.html

# <u>Pour nous contacter</u>: pcn-energie@recherche.gouv.fr









# Annexe 1







#### **Specific Challenge:**

The delivery of the Energy Union targets requires the full engagement of the public sector at all governance levels.

Local and regional public authorities have a crucial role in setting ambitious energy efficiency strategies, for instance in the framework of the Covenant of Mayors for Climate & Energy and Smart Cities & Communities or the Clean Energy for EU islands initiative. The political commitment at local level should be enhanced and the focus should turn to implementation and effective monitoring of concrete energy efficiency solutions and actions, which can contribute to modernise and decarbonise the European economy. Synergies should be sought, whenever possible, with local and regional air quality plans[1] and air pollution control programmes[2] to reduce costs since these plans rely to a large extent on similar measures and actions[3].

Support should continue and be reinforced in building capacity of public authorities and empowering them to take up their role of energy transition leaders at regional and local level, by permanently improving their skills as public entrepreneurs and supporters of market transformation towards more efficient energy systems.

At national level, the Energy Efficiency Directive[4] has triggered numerous positive developments in the Member States by setting targets to incentivise and enable investment in energy efficiency programmes across all sectors. However, Member States have yet to fully implement the Directive and additional support in building capacity and know-how is needed.







#### Financing for energy efficiency investments - Smart Finance for Smart Buildings

#### Scope

a) Support to local and regional public authorities

The Commission considers it to be equally relevant to address one or more of the following bullet points, as appropriate:

- Enhance decision-making processes of regional and local authorities, to deliver a higher quality, coherence and consistency of energy efficiency measures and accelerate reaching targets. Actions should foster horizontal and vertical integration of different governance levels, joint application of the energy efficiency measures across local and regional authorities, improved monitoring and verification schemes, and more efficient use of public spending. Proposals should demonstrate political commitment and lead to subsequent institutionalisation of the improved processes in support of the Energy Union Governance Regulation.
- Support public authorities in the development of policy scenarios and transition roadmaps that clearly outline the path to the European long-term 2050 targets and inform the ongoing implementation of SEAPs/SECAPs or similar plans and the development of future plans/targets for 2030 and beyond. Actions should link closely to the Covenant of Mayors initiative and the Energy Union Governance Regulation, where relevant.
- Innovative ways to enable public engagement in the energy transition, developing interface capacities within public authorities to engage with civil society.
- Deliver innovative capacity-building programmes for cities and/or regions to step up their capacity to drive the
  sustainable energy transition in their respective territories. Proposals should foster a sustained increase in the skill
  base of public authorities, adapted to their needs and challenges, and support the diffusion of the learning within
  participating organisations and beyond. The proposed actions should include a strategy to replicate results across
  Europe and a solid impact monitoring.

Proposals should build on existing initiatives such as the Covenant of Mayors[5], ManagEnergy[6] or any other relevant initiative as appropriate.





#### Financing for energy efficiency investments - Smart Finance for Smart Buildings

b) Supporting the delivery of the Energy Efficiency Directive

Proposers should focus their proposed action on:

Actions assisting Member States to fulfil their obligations under the Energy Efficiency Directive (EED) and – where relevant to the implementation of the EED – under the Energy Union Governance Regulation. Proposals should support efficient implementation by taking into account existing effective practices and experiences from across Europe. Proposals may address, for example, the harmonisation of energy savings calculations under Article 3, the effective implementation of Article 7 including consistent monitoring and verification systems, higher efficiency of the generation under Article 14 and of transmission or distribution systems under Article 15 or an efficient development and continuous reporting of Integrated National Energy and Climate Plans.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 and 1.5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.







#### Financing for energy efficiency investments - Smart Finance for Smart Buildings

#### **Expected Impact:**

Proposals are expected to demonstrate, depending on the scope addressed, the impacts listed below, using quantified indicators and targets wherever possible:

- Primary energy savings, renewable energy production and investments in sustainable energy triggered in the territory of participating parties by the project (respectively in GWh/year and in million Euro);
- Number of institutionalised collaborations on the energy transition between public authorities;
- Numbers of stakeholders active in delivering the energy transition;
- Number of public authorities and public officers with improved capacity/skills in delivering the energy transition;
- Number of policies influenced through the action;
- Number of Member States with improved implementation of the EED and linked Energy Union Governance Regulation, clearly attributable to project activities.

**Cross-cutting** Priorities: Socio-economic science and humanities

[1]Directive 2008/50/EC

[2]Directive 2016/2284

[3] Second State of the Energy Union, page 13.

[4]To be added

[5]www.eumayors.eu

[6]www.managenergy.eu







# Annexe 2









# **H2020** Key Performance Indicators (KPI)

		#	Key performance indicator <sup>2</sup>	Definition of the indicator	Type of data required	Baseline at the start of Horizon 2020 (latest available) <sup>3</sup>	Target at the end of Horizon 2020
	SOCIETAL CHALENGES	14	Societal Challenges - Publications in peer-reviewed high impact journals in the area of the different Societal Challenges	The percentage of publications published in the top 10% impact ranked journals by subject category	Publications from relevant funded projects (DOI: Digital Object Identifiers); Journal impact benchmark (ranking) data to be collected by commercially available bibliometric databases	[ <u>new</u> <u>approach</u> under Horizon 2020]	[On average, 20 publications per €10 million funding (for all societal challenges)]
		15	Societal Challenges - Patent applications and patents awarded in the area of the different Societal Challenges	Number of patent applications by theme; Number of awarded patents by theme	Patent application number	[new approach under Horizon 2020]	On average, 2 per €10 million funding (2014 - 2020)
		16	Societal Challenges - Number of prototypes and testing activities	Number of prototypes, testing (feasibility/ demo) activities, clinical trials	Reports on prototypes, and testing activities, clinical trials	[ <u>new approach</u> under Horizon 2020]	[To be developed on the basis of first Horizon 2020 results]
	SOCIETAL CHALENGES	17	Societal Challenges - Number of joint public-private publications	Number and percentage of joint public-private publications out of all relevant publications	Properly flagged publications data (DOI) from relevant funded projects	[new approach under Horizon 2020]	[To be developed on the basis of first Horizon 2020 results]
	SOCIETAL	18*	New products, processes, and methods launched into the market	Number of projects with new innovative products, processes and methods	Project count and drop down list allowing to choose the type processes, products and methods	[new approach under Horizon 2020]	[To be developed on the basis of first Horizon 2020 results]
* 0		19*	Percentage of the overall Energy challenge funds allocated to the following research activities: renewable energy, end user energy- efficiency, smart grids and energy storage activities	Percentage of the overall Energy challenge funds allocated to the following research activities: renewable energy, end user energy- efficiency, smart grids and energy storage activities	Financial data related to the funds allocated to the mentioned activities under Societal Challenge "Secure, clean and efficiency energy"	[new approach under Horizon 2020]	85%







### **CSA Award criteria**

	Excellence The following aspects will be taken into account, to the extent that the proposed work corresponds to the topic description in the work programme:	Impact	Quality and efficiency of the implementation
All types of action	Clarity and pertinence of the objectives; Soundness of the concept, and credibility of the proposed methodology;	The extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the work programme under the relevant topic;	Quality and effectiveness of the work plan, including extent to which the resources assigned to work packages are in line with their objectives and deliverables; Appropriateness of the management structures and procedures, including risk and innovation management; Complementarity of the participants and extent to which the consortium as whole brings together the necessary expertise; Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role.
Coordination & support actions (CSA)	Quality of the proposed coordination and/or support measures.	<ul> <li>Quality of the proposed measures to:</li> <li>Exploit and disseminate the project results (including management of IPR), and to manage research data where relevant.</li> <li>Communicate the project activities to different target audiences</li> </ul>	







### **RIA Award criteria**

Award criteria RIA and IA grants			
Excellence	Impact	Implementation	orizon <b>2020</b>
Clarity and pertinence of the objectives  Soundness of the concept, and credibility of the proposed methodology	The extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the work programme under the relevant topic	Quality and effectiveness of the work plan, including extent to which the resources assigned to work packages are in line with their objectives and deliverables  Appropriateness of the management structures and procedures, including risk and innovation management  Complementarity of the participants and extent to which the consortium as a whole brings together the necessary expertise  Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role	
Extent that proposed work is beyond the state of the art, and demonstrates innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models)  Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge	Any substantial impacts not mentioned in the work programme, that would enhance innovation capacity, create new market opportunities, strengthen competitiveness and growth of companies, address issues related to climate change or the environment, or bring other important benefits to society  Quality of the proposed measures to:  Exploit and disseminate the project results (including management of IPR), and to manage research data where relevant  Communicate the project activities to different target audiences		





