Le Programme Energie Horizon 2020

06 octobre 2017, Lyon

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HORIZON 2020
LE PROGRAMME DE RECHERCHE ET D'INNOVATION DE L'UNION EUROPÉENNE

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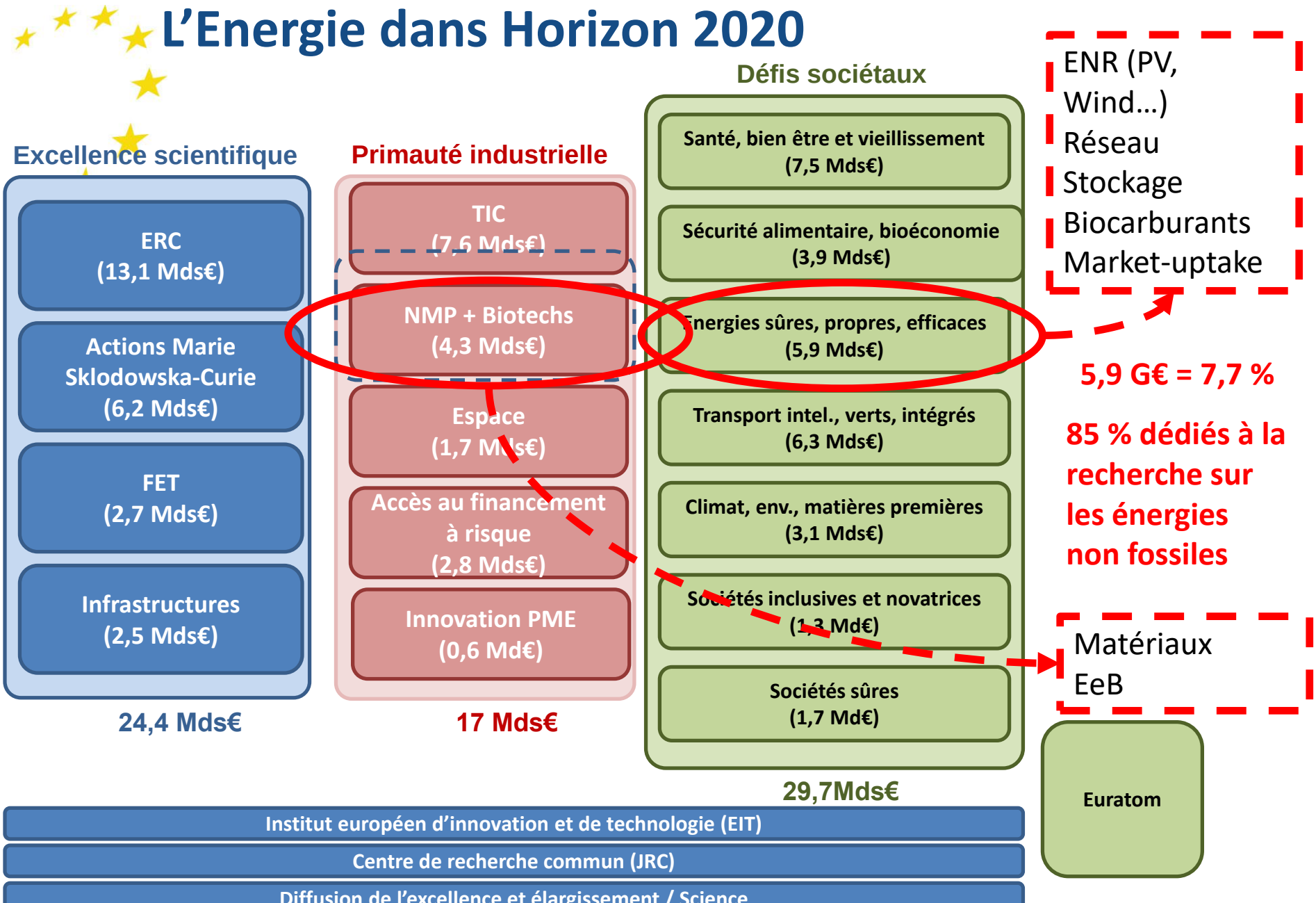
L'Energie dans Horizon 2020



L'échelle TRL
Technology readiness Levels

- TRL 1: basic principles observed
- TRL 2: technology concept formulated
- TRL 3: experimental proof of concept
- TRL 4: technology validated in lab
- TRL 5: technology validated in relevant environment
- TRL 6: technology demonstrated in relevant environment
- TRL 7: system prototype demonstration in operational environment
- TRL 8: system complete and qualified
- TRL 9: actual system proven in operational environment

Les différents type d'action

- **Recherche & Innovation (RIA)**

  → nouvelles connaissances

  Taux de financement 100%

- **Innovation Actions (IA)**

  → Démonstrations

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

- **Coordination & Support Actions (CSA)**

  → Compétences, standardisation, dissémination, sensibilisation et communication, mise en œuvre des politiques..

  Taux de financement 100%

Que finance H2020 ?

Quels taux de financement ?

Taux de financement des coûts directs éligibles		
	« Non-profit » organisations	Entreprises
Recherche & Innovation	**100%**	**100%**
Innovation	**100%**	**70%**

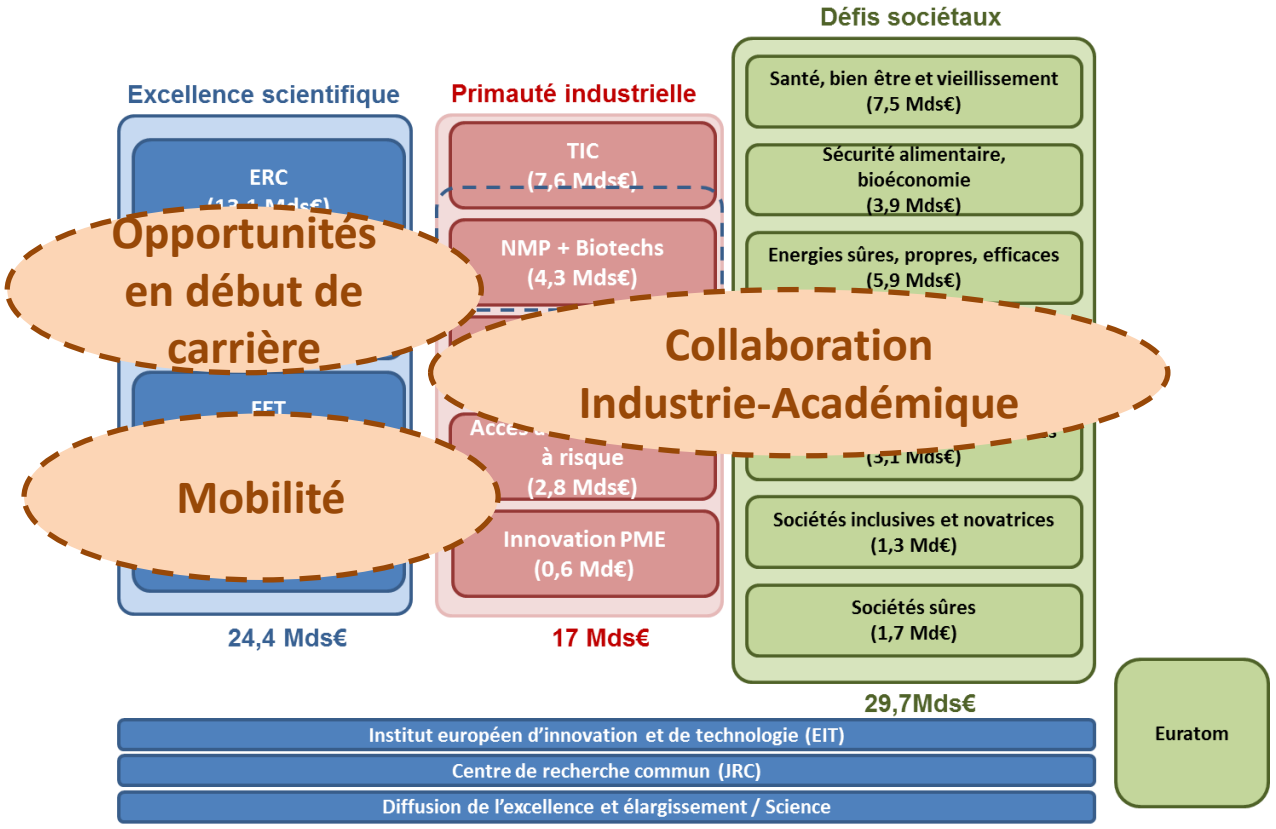
✚

Couts indirects: **25%** des coûts directs pour toutes les entités légales (hors sous-traitance et contributions en nature)

Qui peut participer ?

TOUS les acteurs de la recherche et de l'innovation, indépendamment de leur personnalité juridique, de leur Etat d'appartenance

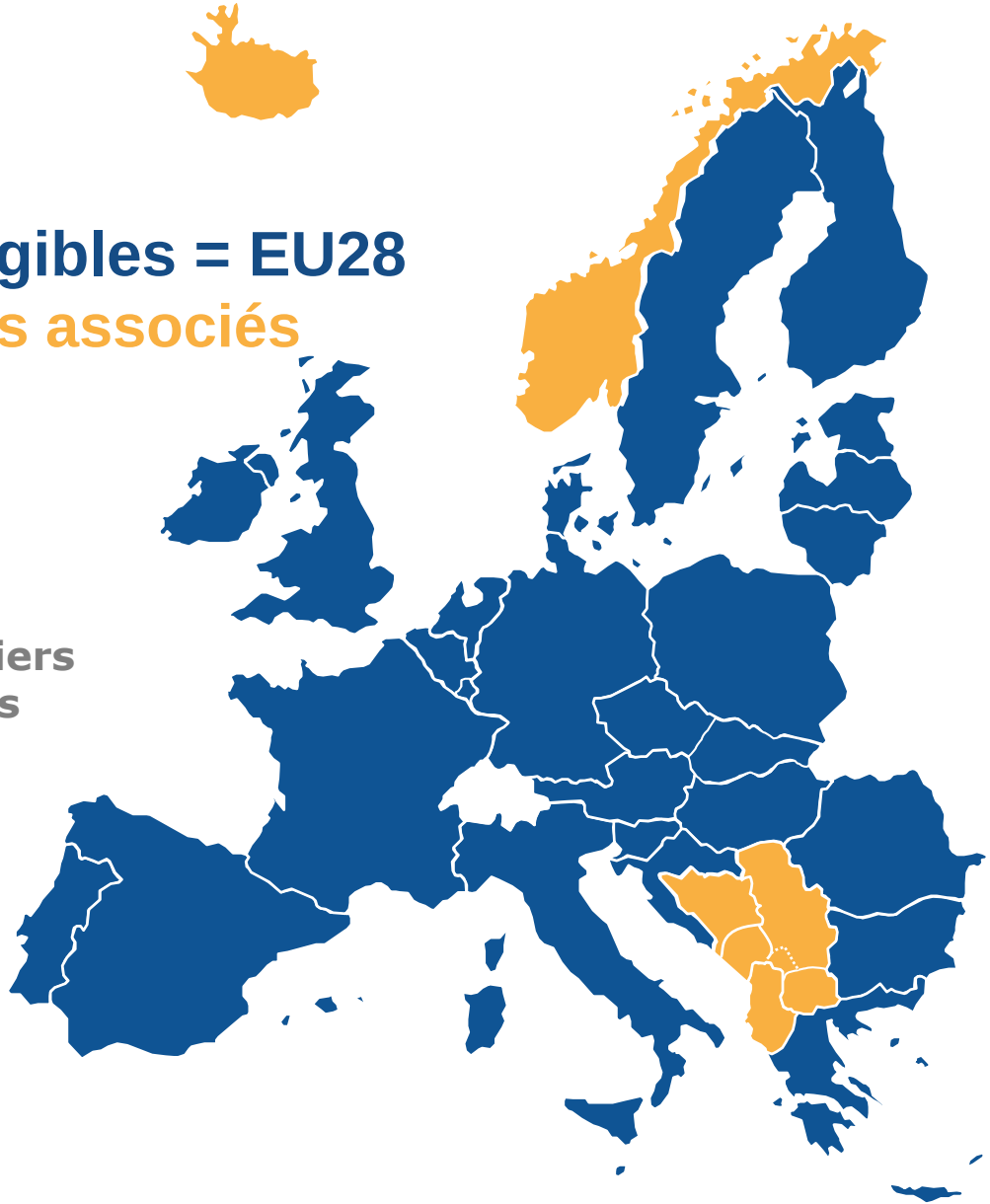
TOUS les chercheurs indépendamment de leur expérience



Qui peut participer ?

Les pays éligibles = EU28

+ les pays associés



+ tous les pays tiers (sous certaines conditions)

+ Turquie, Israel, Moldavie

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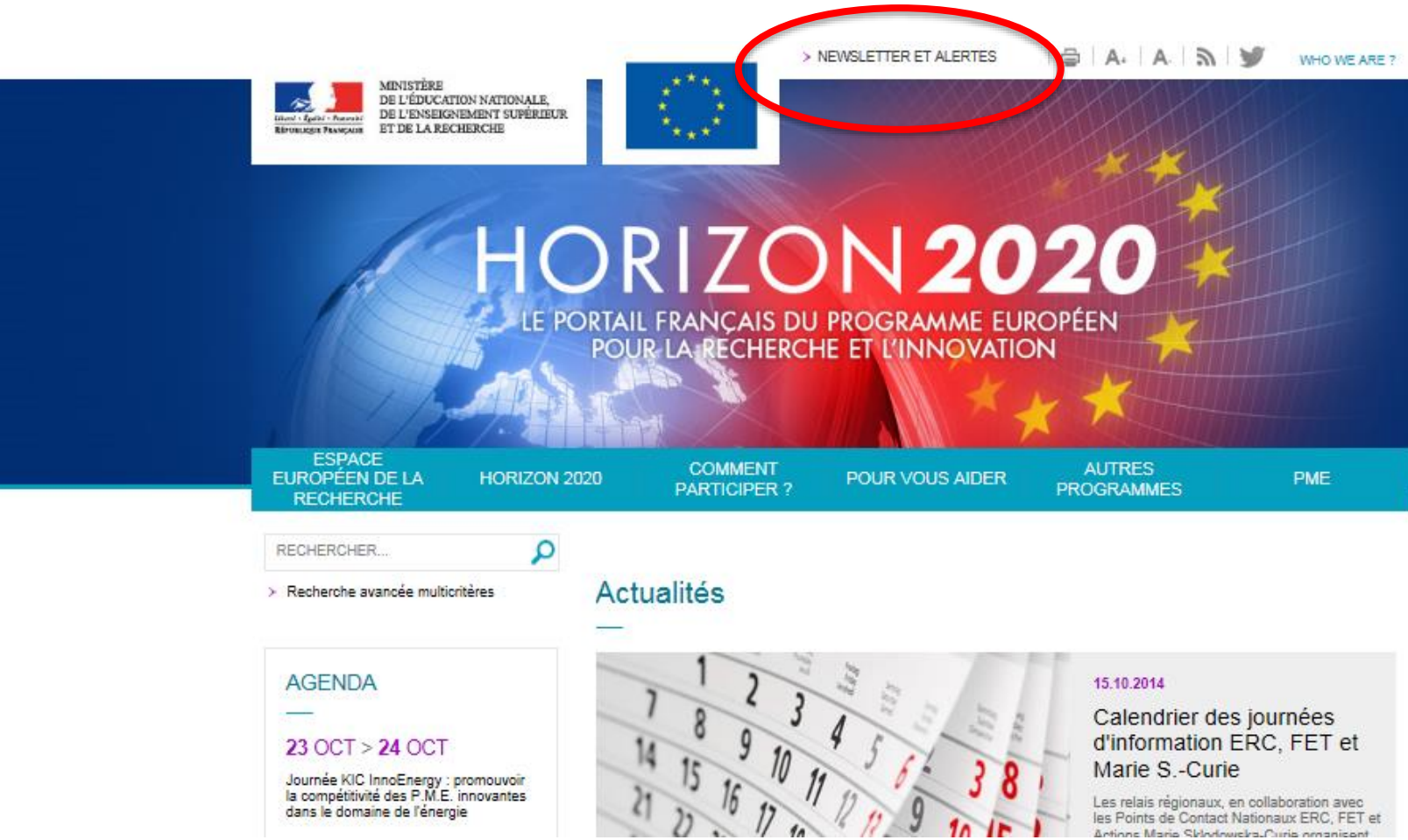
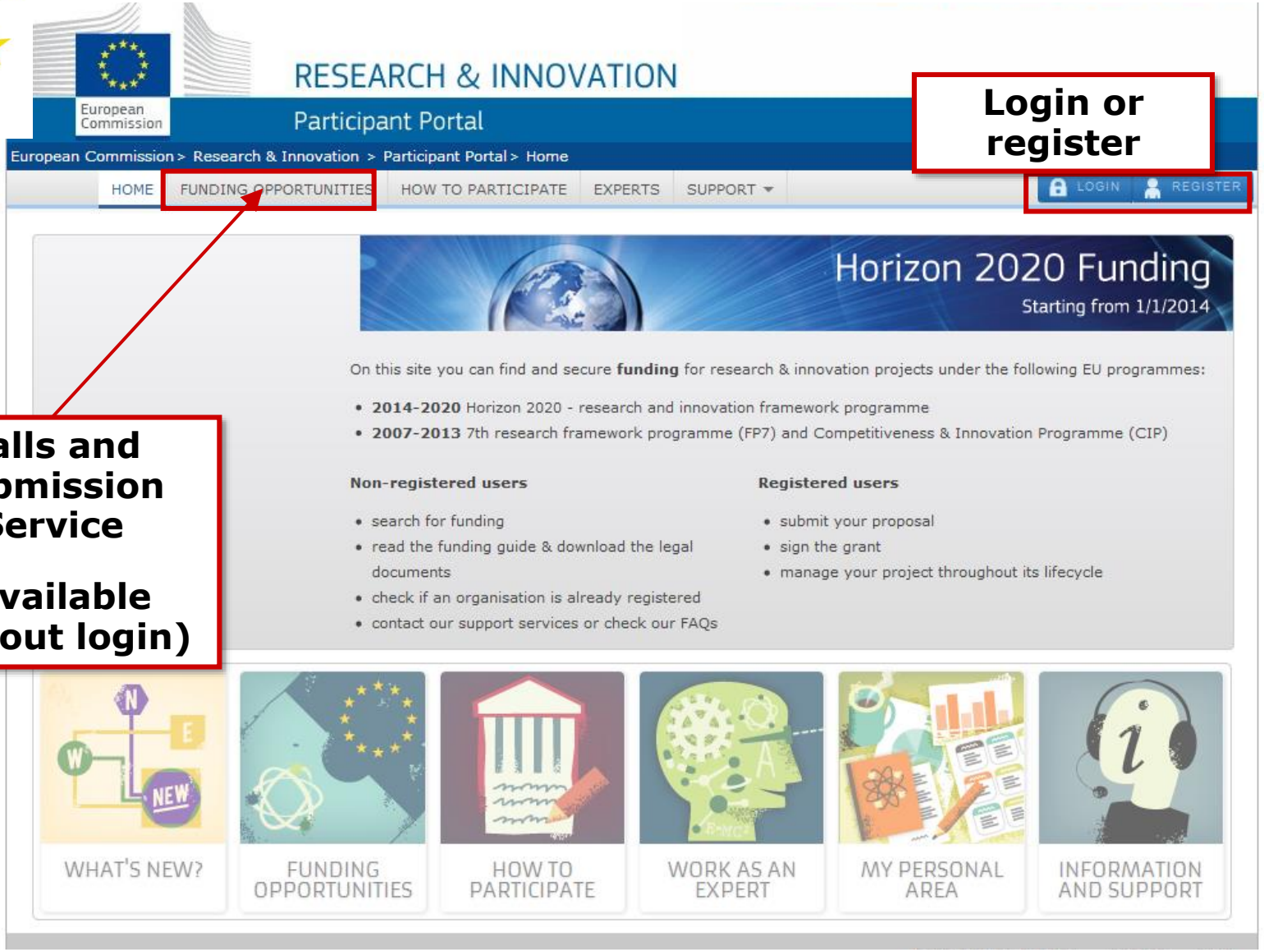
Pour trouver des infos

www.horizon2020.gouv.fr



Pour trouver des infos



Login or register

Calls and Submission Service

(Available without login)

http://ec.europa.eu/research/participants/portal

Consortium du PCN Energie

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

- Pascal Newton (MESRI & RCP) Coordinateur
- Michel Viktorovitch (METS/DGEC & RCP)
- Grégoire Postel-Vinay (MEIN)
- Michel Pasquier (METS/CGDD)
- David Argenti (Université Grenoble Alpes)
- Marie-Cécile Barras (Insavalor)
- Michel Pons (CNRS)
- Miguel-Angel Ayllon (Université de Pau)
- Argyro Karathanou (Université Bourgogne/Franche Comté)
- Nicolas Dupuy (Université de Lorraine)

INFORMENT

http://www.horizon2020.gouv.fr/cid73963/le-point-contact-national-energie.html

Déposants potentiels publics et privés français

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Pour vous aider :

les Points de contact nationaux (PCN)

charges de diffuser l'information et de sensibiliser la communauté de la recherche et de l'innovation aux programmes européens.

Énergie

PCN - Horizon2020

http://www.horizon2020.gouv.fr/cid73963/le-point-contact-national-energie.html

Le Point de Contact National **Energie** est en charge du défi "**Energie propre, sûre et efficace**".

Vos contacts PCN Energie :

Contact (adresse courriel générique pour contacter les membres du PCN)

Prénom - NOM	Rôle	Etablissement	Téléphone
N.	Coordination du PCN	ADEME - Agence de l'environnement et de la maîtrise de l'énergie	
 Pascal NEWTON	Représentant au Comité de Programme	Ministère de l'Enseignement supérieur, de la Recherche et de l'Innovation	33 1 55 55 81 61
Pascal BARTHE	Représentant au Comité de Programme	Ministère de la transition écologique et solidaire	33 1 40 81 96 63
Michel PASQUIER	Expert	Ministère de la transition écologique et solidaire	33 1 40 81 63 36
 Grégoire POSTEL-	Expert	Ministère de l'Economie	33 1 79 84 33 79

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Trouver un partenaire (site français)

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

HORIZON 2020

LE PORTAIL FRANÇAIS DU PROGRAMME EUROPÉEN POUR LA RECHERCHE ET L'INNOVATION

ESPACE EUROPÉEN DE LA RECHERCHE | HORIZON 2020 | COMMENT PARTICIPER ? | POUR VOUS AIDER | AUTRES PROGRAMMES | PME

RECHERCHER...

> Recherche avancée multicritères

AGENDA

09 JUIN

Rencontre lauréats-candidats FET Proactive

PARIS

15 JUIN

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

PARIS

Tous les évènements

APPELS EN COURS

Accueil > Horizon 2020 > Défis sociétaux > Energie

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.

Actualité
17.03.2014

HORIZON 2020

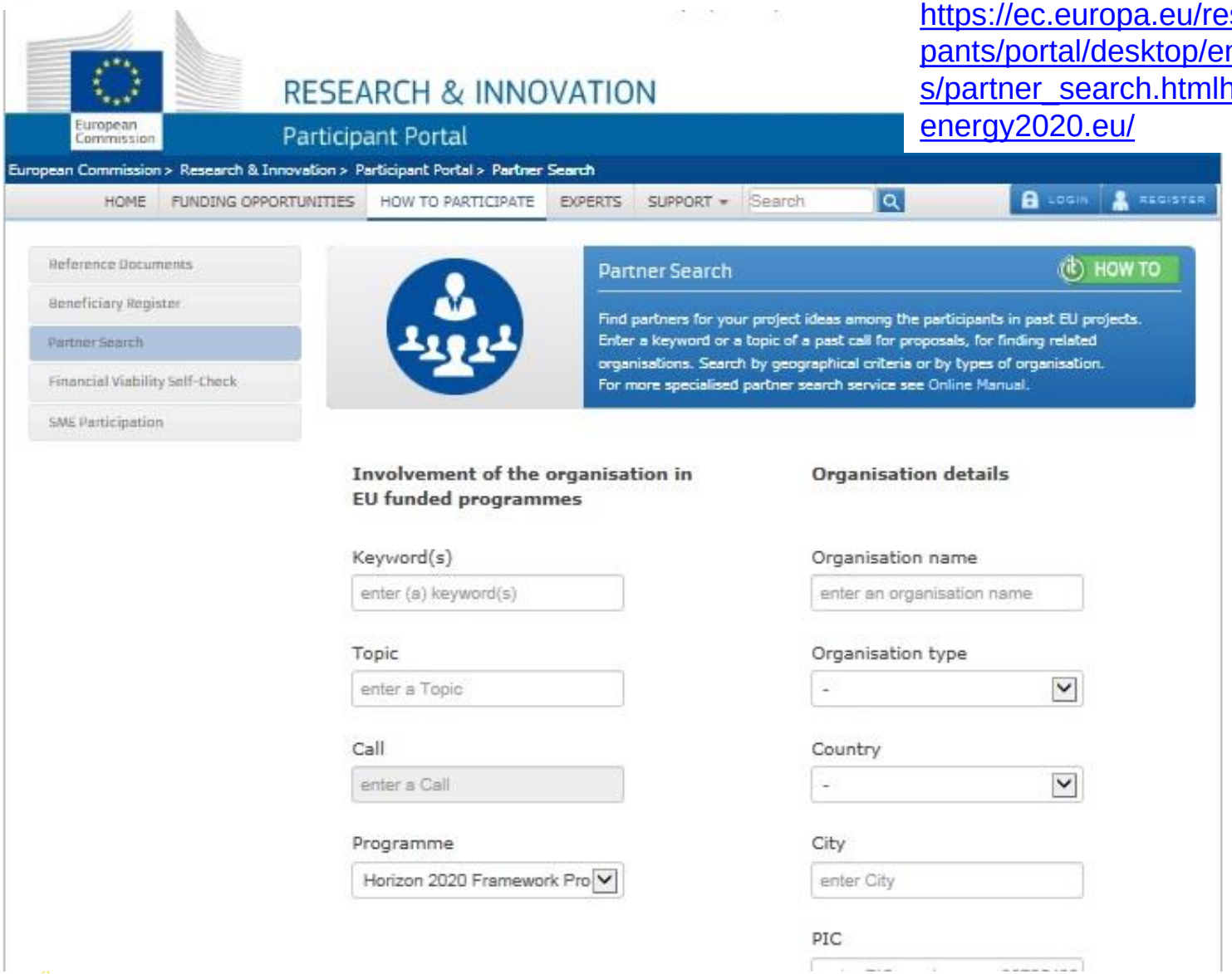
Trouver un partenaire (site européen)

http://c-energy2020.eu/

Trouver un partenaire :

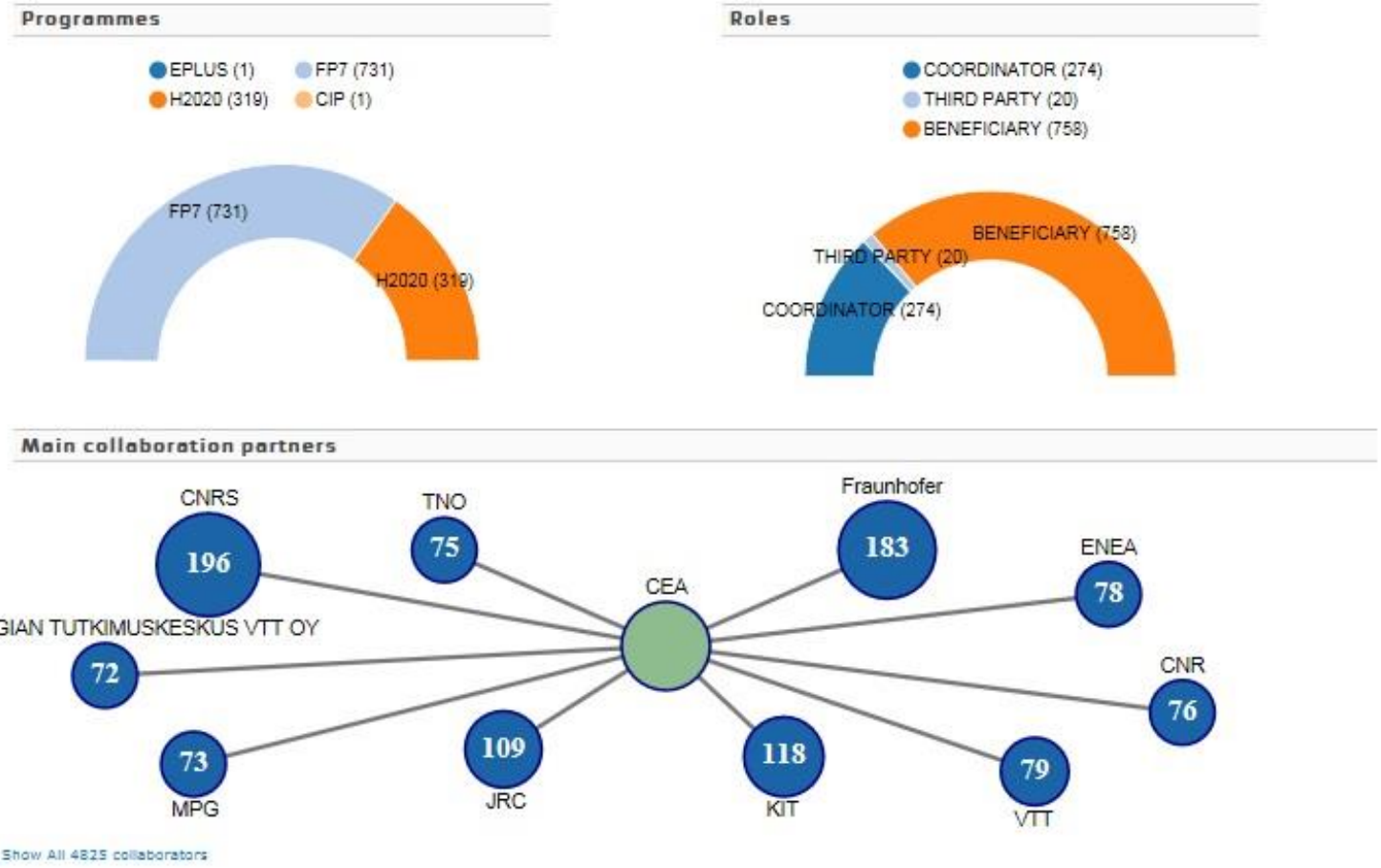
Nouvel outils sur le Participant Portal

https://ec.europa.eu/research/participants/portal/desktop/en/organisations/partner_search.htmlhttp://c-energy2020.eu/



Trouver un partenaire :

Nouvel outils sur le Participant Portal



Les AAP liés aux Smart Cities

06 octobre 2017, Lyon

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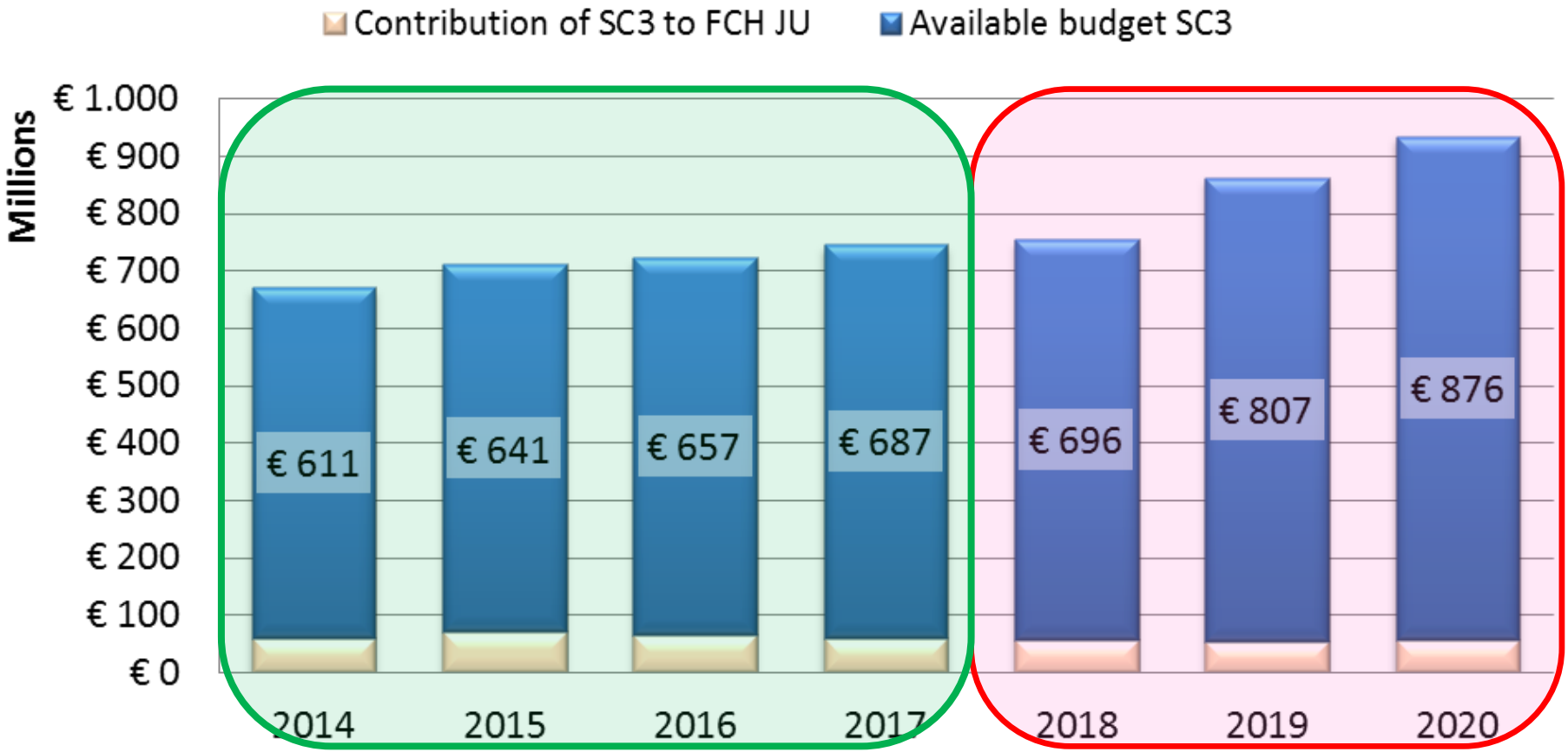
Work programme 2018-2020



~2,6 G€

~2,4 G€

Focus Areas in the Work Programme 2018-2020

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

Le programme Energie 2018-2020

- Energy Efficiency = EE
- Renewable energy solutions = RES
- Energy Consumer & Energy system = EC & ES
- Smart Cities and Communities = SCC
- Transforming the energy sector through digitisation
- Nearly-zero CO2 emissions from fossil fuels = NZE
- Joint actions among countries = JA
- Cross-cuttin

Focus area = Low Carbon

Renewable Energy Solutions

Année de clôture de l'appel

Code des topics : Ex = LC-SC3-RES-24-2019

Societal Challenge N°3 = Energie

Un appel dans le programme de travail

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

Specific Challenge: 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.

Scope: 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.

Périmètre

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

Indication des TRLs

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 specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts

Indication du budget du projet

Impact attendu

Expected Impact: 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

Type of action = Schémas de financement

+ informations sur le budget disponible + la date limite pour soumettre une proposition

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MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR, DE LA RECHERCHE ET DE L'INNOVATION

Evaluations

- 3 critères d'évaluation:
    1. Excellence
    2. Impact
    3. Qualité et efficacité de la mis
- Les scores: chaque critère noté sur 5, seuil individuel de 3, seuil global de 10
- Pas de négociation → Seules les meilleures propositions (autoporteuses, convaincantes) sont sélectionnées
- **Impact X1,5 pour les Actions d'innovation**

Réunion du POINT d'INFORMATION NATIONAL Villes sur tous les appels H2020 et autres concernant les villes (Smart cities & Communities)

10 Novembre 2017 de 13h30 à 17h30

CPU (Conférence des Présidents des Universités
103, boulevard Saint-Michel 75005 PARIS

Accès :

- Transports en commun
- RER B station "Luxembourg", sortie côté "Rue de l'Abbé de l'Épée"
- bus n° 38 et 82 station "Auguste Comte"
- bus n° 21 et 27 station "Luxembourg RER"

- Contact : **alain.zarli@cstb.fr**

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Energie

Principaux calls 2018 : **Smart Cities & Communities**

LCE-SC3-**SCC-1-2018**-2019-2020	Smart Cities & Communities (5/12/2017-5/04/2108)	IA	43 M€
LCE-SC3-**SCC-1**-2018-**2019**-2020	(5/09/2018 -05/02/2019)	IA	73 M€
LCE-SC3-**EE-16-2018**-2019-2020	Supporting public authorities to implement the Energy Union (25/01/2018 – 04/05/2018 1st Stage)	CSA	8 M€
LCE-SC3-**EE-16-**2018-**2019**-2020	Supporting public authorities to implement the Energy Union (24/01/19 -03/09/19 1st Stage)	CSA	10 M€
LCE-SC3-**EE-17-2019**	European City facility - European Cities as key innovation hubs to unlock finance for energy efficiency (24/01/2019 – 03/09/2019)	CSA	12M€

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Energie

Principaux calls 2018 : **Smart Cities & Communities & Energy**

LCE-SC3-**ES-3-2018**-2020	Energy islands (5/12/2017 – 05/04/2018)	IA	32.30 M€
LCE-SC3-**RES-8-**2019	Combining Renewable Technologies for a Renewable District Heating and/or Cooling System (05/09/2018 – 11/12/2018)	IA	15M€

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LC-SC3-SCC-1-2018-2019-2020**: Smart Cities and Communities.** It is expected that this topic will continue in 2020**.**

Typically, projects should have a duration of 48 to 60 months. (15 to 20 millions)

✯ Scope:

- **Integrated innovative solutions for Positive Energy Blocks/Districts** => developed and tested and performance-monitored in the Lighthouse Cities
- => the interaction and integration between the buildings, the users and the larger energy system as well as implications of increased electro-mobility, its impact on the energy system and its integration in planning.
- =>Lighthouse Cities should collaborate with the Follower Cities and should act as exemplars helping to plan and initiate the replication of the deployed solutions in the Follower cities, adapted to different local conditions
- =>As a sustainable energy transition will see increased electro-mobility, its impact on the energy system needs to be understood and well integrated in planning
- => each Lighthouse City + Follower City + industry => build its own bold city-vision for 2050 (urban, technical, financial and social)
- => produce a guide for the city on how to move from planning, to implementation, to replication and scaling up of successful solutions.

LC-SC3-SCC-1-2018-2019-2020: Smart Cities and Communities

- Proposals should also:
  - Focus on mixed use urban districts and positively contribute to the overall city goals;
  - Develop solutions that can be replicated/gradually scaled up to city level. The technical, financial, social, and legal feasibility of the proposed solutions should be demonstrated in the actual proposal.
  - Make local communities and local governments (particularly city planning departments) an active and integral part of the solution, increase their energy awareness and ensure their sense of ownership of the smart solutions. This should ensure sustainability of Positive Energy Blocks/Districts;
  - Promote decarbonisation, while improving air quality.
  - Incorporate performance monitoring (ideally for more than 2 years) of deployed solutions from the earliest feasible moment. All relevant performance data must be incorporated into the Smart Cities Information System database (SCIS).

- Projects should also deliver:
  - Effective business models for sustainable solutions;
  - Practical recommendations arising from project experience on:
    - regulatory, legal aspects and data security/protection
    - gender and socio-economics (Social Sciences and Humanities);
    - storage solutions (from short-term to seasonal);
    - big data, data management and digitalisation;
    - electro-mobility: i) its impact on energy system and ii) appropriate city planning measures to support large scale roll-out.

LC-SC3-SCC-1-2018-2019-2020: Smart Cities and Communities.

- **Eligible costs** are primarily those that concern the innovative elements of the project needed to:
  - connect and integrate buildings;
  - enable Positive Energy Blocks/Districts;
  - foster innovative systems integration;
  - complement the wider energy system.

- **Costs of commercial technologies are not eligible**, for example:
  - Buildings: purchase, construction, retrofitting and maintenance;
  - Electric vehicles and charging stations: purchase, installation and maintenance;
  - City-level ICT platforms: purchase, development and maintenance ;
  - Standard, commercially-available RES: purchase, development and maintenance.

- Projects are expected to cooperate with other Smart Cities and Communities projects funded under Horizon 2020 as well as the European Innovation Partnership on Smart Cities and Communities (EIP-SCC).
- Therefore, proposals should foresee a work package for cooperation with other selected projects and earmark appropriate resources (5% of the requested EU contribution) for common actions that become necessary to increase impact during the project.

LC-SC3-SCC-1-2018-2019-2020: Smart Cities and Communities

✯ Impacts :

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

- The higher the replicability of the solutions across Europe, the better.
- Consortia shall be composed of 2 lighthouse cities and at least 5 follower cities.
- By the call deadline, all lighthouse cities must have a validated: i) Sustainable Energy Action Plans (SEAP) or ii) Sustainable Energy (and Climate) Action Plans (SECAP) or iii) a similar, at least equally ambitious plan.
- A city can be funded as a lighthouse city only once under Horizon 2020. .

LC-SC3-EE-16-2018-2019-2020: Supporting public authorities to implement the Energy Union (It is expected that this topic will continue in 2020) (1 to 1,5Millions)

Scope:

a) Support to local and regional public authorities

- Proposers should aim to focus their proposed action on one of the following points:
  - Deliver higher quality and consistency of energy efficiency measures implemented through enhanced coordination of different administrative levels. Actions should lead to politically approved and jointly applied monitoring and verification schemes of energy efficiency measures across local and regional authorities, enhanced and better coordination of the energy efficiency measures implemented and more efficient use of public spending in energy efficiency;
  - Support public authorities in the development of 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 and/or Smart Cities and Communities initiatives;
  - Innovative ways to enable public engagement in the energy transition, developing interface capacities within public authorities to engage with civil society;
  - Deliver large-scale and action-oriented peer-to-peer learning programmes targeting cities and/or regions, with a strong replication potential European-wide. Proposals should develop transparent, effective and compelling programmes, building on existing initiatives and real needs and ensure embedded conditionalities such as institutionalisation of the skill base and impact monitoring. Programmes should deliver public entrepreneurs able to drive the sustainable energy transition in their respective territories within the Covenant Mayors and beyond.

LC-SC3-EE-16-2018-2019-2020: Supporting public authorities to implement the Energy Union

- b) *Supporting the delivery of the Energy Efficiency Directive*
  - Support will be provided to actions that are assisting Member States to fulfil their obligations under the Energy Efficiency Directive and help with its efficient implementation taking into account existing effective practices and experiences from across Europe. Actions may address, for example, the harmonisation of energy savings calculations under Article 3, implementing Energy Efficiency Obligation Schemes or alternative measures and setting up effective and consistent monitoring and verification systems under Article 7 or the removal of barriers to higher efficiency of the generation, transmission, distribution systems including demand response under Article 15.
- Proposals should link into existing, relevant initiatives such as ManagEnergy and target a specific sector with high energy saving potential such as buildings, transport mobility, heating and cooling, or water infrastructure operation etc., as seen relevant by applicants.

✯ Impacts :

- 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 public officers with improved capacity/skills;
  - Number of policies influenced through the action;
  - Number of Member States with improved implementation of Art 7. (Energy Efficiency Obligation schemes or alternative measures) / Energy savings achieved through successfully implemented Energy Efficiency Obligation schemes or alternative policy measures;
  - Number of Members States with improved and consistent monitoring and verification systems for energy savings across governance levels.

LC-SC3-EE-17-2019: European City facility - European Cities as key innovation hubs to unlock finance for energy efficiency *(10 millions)*

Scope :

Proposals are expected to set up and run a 'European City Facility' which offers financial support and services to cities and municipalities or their groupings:

- The City Facility should offer financial support to develop innovative investment concepts within a limited period of time, covering, inter-alia: a clear identification of the potential project pipeline, legal analysis, governance analysis, a description of how the investments will be financed and a design of the process to launch the investments.
- Proposals should foresee to provide support to third parties ('support scheme') as described in part K of the General Annexes of the Work Programme. At least 80% of the budget should directly benefit cities, municipalities or their groupings.
- Proposals should demonstrate the ability to run a support scheme at large scale in accordance with H2020 standards and that they are able to select the most cost-efficient and appropriate city and community applications.
- Proposers should be deeply rooted in the ecosystems of municipal sustainable energy planning and the challenge of finance of energy efficiency. Proposals should demonstrate that they are able to mobilise a critical mass of cities or their groupings and have a sound and inclusive outreach strategy to cities and communities across Europe.
- Proposals have to foresee services to underpin European added value and earmark appropriate resources (10% of the requested EU contribution) as contingency for common actions that will underpin European added value.
- In order to qualify for support through the City Facility, cities and communities should demonstrate proof of political commitment, demonstrate additionally to existing planning processes and resources, a minimum population covered of 100.000 inhabitants (single or in groupings of municipalities), ambitious scale of potential investment and level of energy savings based on a politically approved SEAP, SECAP or plan of similar ambition, investment sector targeted and type of financial solution envisaged, governance to develop the investment concept, a plan for long-term capacity building within the public administration, a plan on how they will engage with representatives of the key segments and citizens and commitment for monitoring for 2 years.
- The Commission considers that proposals requesting a contribution from the EU of around EUR 10 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

LC-SC3-EE-17-2019: European City facility - European Cities as key innovation hubs to unlock finance for energy efficiency

✯ Impacts :

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

- Demonstration and documentation of increased leveraging of finance into energy efficiency investments by public authorities;
- Overall, the action should trigger for every million Euro of Horizon 2020 support energy efficiency investments worth at least EUR 20 million;
- Number of investment concepts delivered, and number of concepts that turned into tangible investments after the provided support;
- Number of public authority staff with increased capacity for developing investible energy efficiency projects;
- Innovation uptake by potential replicators;
- Primary energy savings, renewable energy production and investments in sustainable energy triggered by participating public authorities after the support of the action (respectively in GWh/year and in million Euro of investments).

LC-SC3-ES-3-2018-2020: Integrated local energy systems (Energy islands) (*5-6 millions)*

TRL will range typically between 5 and 8

Scope

- Proposals will develop and demonstrate solutions which analyse and combine, in a well delimited system, all the energy vectors that are present and interconnect them where appropriate.
- Proposals should present a preliminary analysis of the local case as part of the content of the proposal and propose to develop solutions and tools for the optimisation of the local energy network, but having a high replication potential across Europe.
- Local consumers, small to medium industrial production facilities and commercial buildings should be involved in the projects from the start.
- In several international contexts such as the Clean Energy Ministerial, the Mission Innovation initiative launched in COP21, the International Energy Agency Implementing Agreement on Smart Grids (ISGAN), bi-lateral discussions between India and the EU identified this topic as being of common interest owing to its potential for decarbonisation. In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), international cooperation is encouraged, in particular with India.

LC-SC3-ES-3-2018-2020: Integrated local energy systems (Energy islands)

✯ Impacts

- The supported projects are expected to contribute to:
  - validate solutions for decarbonisation of the local energy system while ensuring a positive impact on the centralised energy infrastructure, on the local economy and local social aspects;
  - enhance the involvement of local energy consumers and producers, create energy communities in the development and the operation of local energy systems and test new business models;
  - validate approaches to safe and secure local energy system that integrates significant shares of renewables (electricity, heating, cooling, water, wastes, etc.). For variable renewables, this entails the development of an accurate prediction system for the local generation of energy and adequate solutions to match the generation with local consumption as a function of time;
  - benchmark technical solutions and business models that can be replicated in many local regions and that are acceptable by local citizens.
  - Proposals are invited to identify and substantiate to which of the above impacts they contribute and include ad-hoc indicators to measure the progress against specific objectives of their choice that could be used to assess the progress during the project life.

LC-SC3-RES-8-2019: Combining Renewable Technologies for a Renewable District Heating and/or Cooling System

TRL 6 *(8-15 millions)*

☆Scope:

- Support will be given to cost-effective solutions for district heating and/or cooling systems which allow satisfying at least 50% of the energy demand of the system by the use in the district of one or more renewable energy technologies. The integration of sources of otherwise wasted excess heat is in the scope.
- The solutions should be demonstrated in real conditions within an operational district heating and/or cooling system.
- The consortium is expected to engage operators and final users (in particular if the users need different supply temperatures) so that they can contribute for an optimal and cost-effective design. The requirements of the final users (e.g., in terms of metering) for the day-to-day operation shall be taken into account.

LC-SC3-RES-8-2019: Combining Renewable Technologies for a Renewable District Heating and/or Cooling System

✯ Impacts:

A reduced dependency of district heating and/or cooling systems on fossil fuels and reduced greenhouse gas emissions are expected. Furthermore, the project should improve the attractiveness of "renewable" district heating and/or cooling systems, especially in those EU countries where such systems currently have very limited or no application.

Energie

Principaux calls 2018 : **NMBP**

Ouverture = 2/5/2018 ; clôture = 6/9/2018

		TYPE/GOAL	Project/ Total
LC-EeB-01-2019	Integration of energy smart materials in non-residential buildings	IA/ 7	10 M€
LC-EeB-02-**2018**	Building information modelling adapted to efficient renovation	RIA/ 6	5-7/
LC-EeB-03-2019	New developments in plus energy houses	IA/ 7	
LC-EeB-04-2020	: Industrialisation of building envelope for the renovation market	?	?

Energie

Principaux calls 2018 : **NMBP**

Ouverture = 2/5/2018 ; clôture = 6/9/2018

			Project/Total
LC-EeB-05-2019-20	Integrated storage systems for residential buildings	IA/7	6-8/
LC-EeB-06-**2018**-20	ICT enabled, sustainable and affordable residential building construction, design to end of life (IA 50%)	IA/7	6-8/

HORIZON 2020
LE PROGRAMME DE RECHERCHE ET D'INNOVATION DE L'UNION EUROPÉENNE

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LC-EeB-01-2019: Integration of energy smart materials in non-residential buildings (IA)

Innovation TRL 5->7 *(4-6 millions)*

Scope:

Proposals should address all of the following:

- development of lightweight components for the construction of building envelopes with integral means for combined active/passive management of energy transfer, i.e., for active insulation, heath diversion, storage and directional transfer;
- solutions capable for use in both new buildings and for retrofitting existing ones;
- solutions allowing for installation without modifying the structure of the building (or without overloading existing structures) and demonstrating a high replication and industrial potential;
- modelling of the materials and components as well as to the development of novel testing methodologies oriented towards assessing the long-term performance of the elements. This should include the estimation of durability and service life;
- reduced maintenance costs, possibility of use in a wide range of environmental conditions, favour renewable resources, respect of sustainability principles (International Reference Life Cycle Data System - ILCD Handbook), and the possibility of reuse at the end of service life.
- Contribute to standardisation and certification activities.
- Resources should be envisaged for clustering with other projects funded under the call, in order to facilitate research cohesion and inter-consortia cooperation.
- Include actions designed to facilitate cooperation with other projects; to enhance user involvement; and to ensure the accessibility and reusability of data produced in the course of the project.

LC-EeB-01-2019: Integration of energy smart materials in non-residential buildings (IA)

✯ Impacts:

- When compared to state of the art, the newly developed ones should bring:
  - Improvement by at least 25% of the insulation properties at component level for a given weight, when in isolation (passive) mode;
  - 10% improvement in energy-storage capability when in active mode(s);
  - Water and air tightness should be at least 10% higher than existing solutions (When it is proposed a controllable solution);
  - Cost increase of less than 15% in order to allow market uptake and contribute to social affordability.
  - Relevant indicators and metrics, with baseline values, should be clearly stated in the proposal.

LC-EeB-02-2018: Building information modelling adapted to efficient renovation (RIA)

Innovation TRL 4-6 *(5-7 millions)*

✯ Scope:

- Proposals should address advanced solutions, including all of the following:
  - To harmonise and provide common data exchange formats regarding the components and equipment of a building (e.g. the type of materials and the Heating, Ventilation and Air Conditioning (HVAC) systems in relation to the most actual standards).
  - The modelling of the building energy should include existing parameters, as well as the environmental and GIS data.
  - Be flexible in coupling the overall BIM system with other additional types of models (e.g. buildings acoustics; including calculator for economic evaluation of various renovations scenarios).
  - Be flexible to adapt to work planning, as-buildings documentation and procedures to process changes.
  - Allow the development of applications to benefit from inputs of inhabitants.
  - A close cooperation with standardisation bodies is required in order to validate the new BIM tools.
  - Proposals submitted under this topic should include actions designed to facilitate cooperation with other projects; to enhance user involvement; and to ensure the accessibility and reusability of data produced in the course of the project.

LC-EeB-02-2018: Building information modelling adapted to efficient renovation (RIA)

✯ Impacts :

- Proposals should address all the following:
  - A reduction of the renovation working time of at least 15 -20 % compared to current practices with the baseline defined in the proposal.
  - Acceleration of the market uptake by speeding-up industrial exploitation, in particular amongst constructing/ renovations companies with a target of 50% of their renovation business based on BIM.
  - Creation of best practice examples for the construction retrofitting sector with benefits for the operators and associated stakeholders (architects, designers, planners, etc.)
  - Relevant indicators and metrics, with baseline values, should be clearly stated in the proposal.

LC-EeB-03-2019: New developments in plus energy houses (IA)

Innovation TRL 5->7 *(6-8 millions)*

Scope:

- New designs, making use of already developed and validated materials and components and smarter control systems ready to treat vast amounts of data are needed. The surplus of energy should come from renewable sources (geothermal heat, photovoltaics, wind, etc.), obviously optimizing the dynamic character of the energy balance all along the year.
- Each proposal should be expected to involve pioneer cities (demonstrations in a multi- storey apartment building situated in each of the 4 climatic zones in Europe). Such buildings should be properly managed and connected to the neighbourhood grid. Proposals should take the lead by levering funding with other energy efficiency schemes, including the private sector. Erecting buildings at such pioneer cities should not encounter regulatory problems. For this reason, the proposal will identify any bottlenecks in the existing regulations and standards concerned by the locations chosen.
- Proposals submitted under this topic should include actions designed to facilitate cooperation with other projects; to enhance user involvement; and to ensure the accessibility and reusability of data produced in the course of the project.

LC-EeB-03-2019: New developments in plus energy houses (IA)

✯ Impacts attendus:

- Proposals address all the following:
  - Similar costs as compared to the 2020 nZEB as an incentive to erect energy-plus-houses.
  - Increase of the share of plus-energy houses with the aim of 10% market uptake by 2030
  - Contribute reducing of CO2 emissions in the residential sector by 88% in 2050 compared to the 1990 levels
  - Improved indoor environment leading to higher rate of users' satisfaction based on their demand and behaviour.
  - Relevant indicators and metrics, with baseline values, should be clearly stated in the proposal.

LC-EeB-05-2019-20: Integrated storage systems for residential buildings (IA
ICT enabled, sustainable and affordable residential building construction, design to end of life (IA 50%)

Innovation TRL 5-7 *(6-8 millions)*

✯ Scope:

- Proposals should address advanced solutions including the following elements:
  - Use of high energy density storage materials allowing storage densities up to 10 times higher than water (based on overall system efficiency).
  - Reach improved heat exchange in and between storage material and heat carrier as well as high performing storage reactor over time.
  - With respect to the entire storage system, advanced energy management is needed, Not only regarding the building needs but also taking in account external conditions such as grid constraints and price signals.
  - The overall system should be easy to maintain with low cost associated to this activity.
  - The demonstration should include several prototypes operating in three different climatic conditions with compactness as a crucial boundary condition.

LC-EeB-05-2019-20: Integrated storage systems for residential buildings (IA
ICT enabled, sustainable and affordable residential building construction, design to end of life (IA 50%)

- Impacts:

  - Demonstrate solutions that have a stable, reliable long term performance in multi-cyclic seasonal and use of at least 20 years.
  - Deliver compact systems with the potential to fit in the limited space available in a single building in the existing housing stock or new buildings. The storage material volume per dwelling should not exceed 1 m3.
  - Solutions should demonstrate a potential to reduce the net energy consumption of a building by at least 25 % and a have return-on-investment period below 10 years.
  - Relevant indicators and metrics, with baseline values, should be clearly stated in the proposal.

LC-EeB-06-2019-20: Integrated storage systems for residential buildings (IA
ICT enabled, sustainable and affordable residential building construction, design to end of life (IA 50%)

Innovation TRL 5-7 *(6-8 millions)*

✯ Scope:

Existing generic software tools have limited flexibility and lack interoperability concerning models and design cultures. Vertically integrated life cycle design is still missing, mainly due to a fragmented design culture across the various disciplines. ICT tools should be provided for energy and environmental performance related design, analysis and decision-making in early planning phases for new buildings or renovation of buildings. Clear evidence of technical and economic viability should be provided by validating and demonstrating the proposed ICT-driven construction processes in either new or retrofitting projects. For existing buildings, significant effort will be required to first retrieve all relevant information, and to compile and structure it in a meaningful form to be used by new solutions.

- Proposals should:
  - Develop an advanced digitalised and industrialised construction and building process utilising smart combinations of materials/components;
  - Address the overall life cycle of construction, in order to deliver more efficient buildings in terms of sustainability and construction, maintenance and operation costs;
  - Provide for fully integrated systems to be compact, exchangeable, and easy to commission and to operate and demonstrate business solutions for operating such building life-time ICT solutions;

  Proposals should address Social Sciences and Humanities (SSH) elements regarding public perception and acceptance of advanced building life solutions at the level of the construction sector in Europe.

  Proposals submitted under this topic should include actions designed to facilitate cooperation with other projects; to enhance user involvement; and to ensure the accessibility and reusability of data produced in the course of the project.

  The funding rate for direct costs is 50% of the eligible costs for beneficiaries and linked third parties that are profit legal entities, and, as an exception from General Annex H for grants awarded under this topic, 100% of the eligible costs for beneficiaries and linked third parties that are non-profit legal entities.

LC-EeB-06-2019-20: Integrated storage systems for residential buildings (IA
ICT enabled, sustainable and affordable residential building construction, design to end of life (IA 50%)

✯ Impacts:

- Proposals should address all the following:
  - Reduction of CO2 with 15 -20 % for the total life-cycle compared to current situation shown through Life Cycle Assessment;
  - construction cost reductions of at least 15 % compared to current situation;
  - buildings shortened construction time (reduced by at least 10 -15 % compared to current State of the art);
  - reduction of the gap between predicted and actual energy consumption;
  - improved indoor environment;
  - significantly improved integration of the value chain (design, procurement, manufacturing, construction, operation and maintenance);
  - contribution to new standards and regulations;
  - demonstration of large scale replicability potential;
  - Relevant indicators and metrics, with baseline values, should be clearly stated in the proposal.

Les AAP liés aux Smart Cities

06 octobre 2017, Lyon

david.argenti@univ-grenoble-alpes.fr

HORIZON 2020

LE PROGRAMME DE RECHERCHE ET D'INNOVATION DE L'UNION EUROPÉENNE

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR, DE LA RECHERCHE ET DE L'INNOVATION

Les achats publics innovants

- Les achats publics = 15-20% du PIB et 30% des dépenses publiques

  ⇒ en France =

  71 Mds€/an (Etat)

  200 Mds€ /an (Collectivités)

  objectif de 2% d'achats innovants

  ⇒ dans le monde =

  2,5 Mds€/an d'achats publics de R&D en Europe

  50 Mds€/an d'achats publics de R&D aux Etats-Unis

Nécessite de rapprocher les acheteurs

et les donneurs d'ordre

Définitions

Achats Publics avant Commercialisation (APAC)

Pre-Commercial Procurement (PCP)

Lorsque le produit/service n'est pas présent sur le marché

Encourager le développement de solutions concrètes pour les besoins du secteur public ou défis sociétaux

PI partagée voire laissée aux entreprises

Achats Publics de solutions innovantes

Public Procurement of Innovative solutions (PPI)

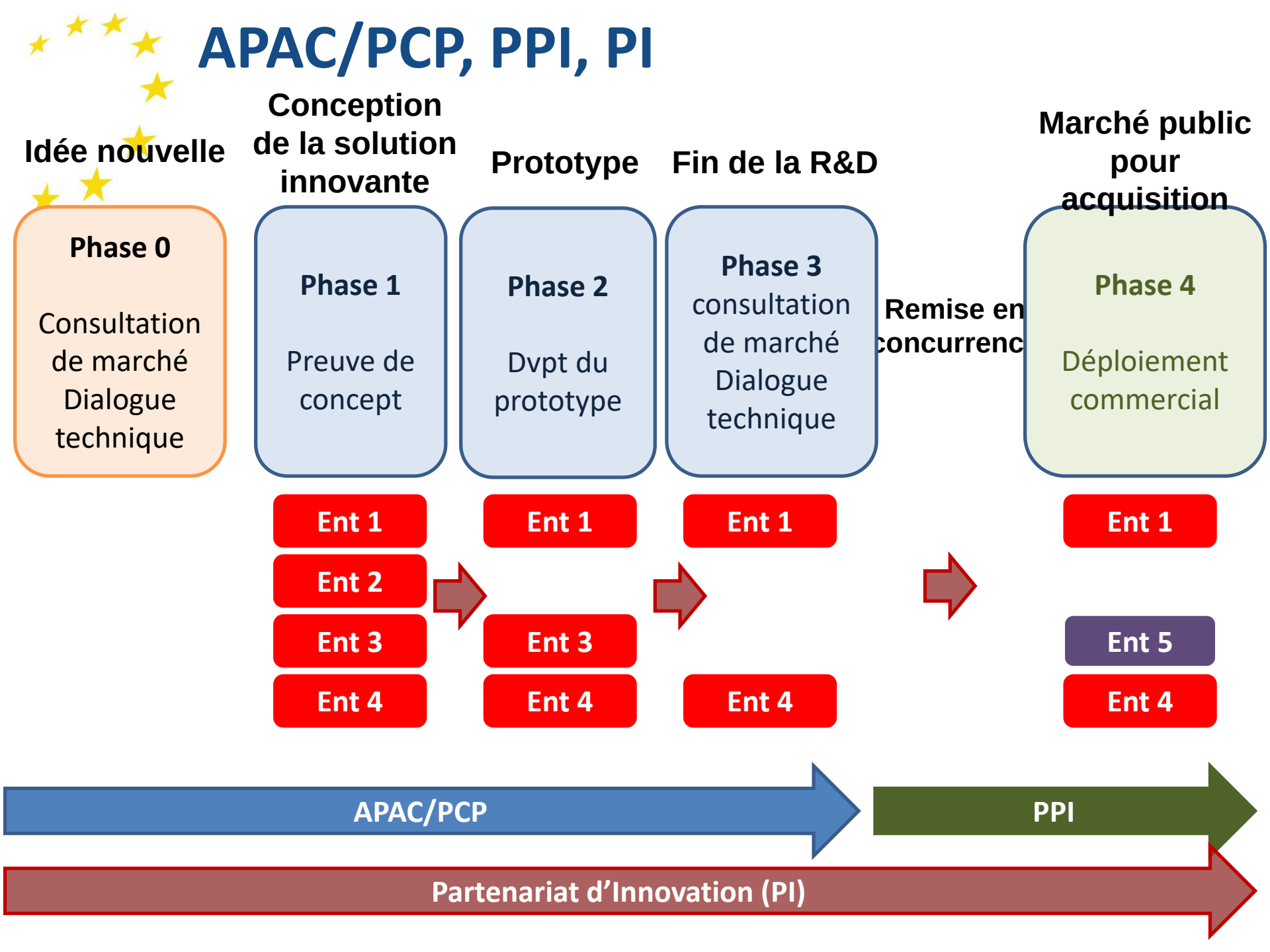
Lorsque le produit/service est proche du marché (<2 ans)

Le secteur public est le 1er acheteur (catalyseur) de produits arrivant ou prêts à être mis sur le marché

Focus sur la phase d'industrialisation/déploiement

Partenariat d'innovation (PI)ou innovation Partnership (IP)

APAC/PCP, PPI, PI



Avantages

Pour l'acheteur public :

- Produit adapté aux besoins
- Suivi du développement du produit
- Prix intéressant : -20 à 30%
- Mutualisation des coûts
- Accélération des mises aux normes / prénormatif
- Créer un marché compétitif = développer plusieurs idées en parallèles
- Sécuriser la PI (en cas de défection)
- Intégrer les services public à la chaîne de l'innovation
- Attirer les investisseurs étrangers (label qualité sur les entreprises)

Avantages

Pour l'entreprise :

- Anticiper la demande de solutions innovantes
- Accès à un marché international, élargissement de la clientèle
- Accélération de la mise sur le marché (validation et reconnaissance)
- Augmentation de la capacité d'innovation de l'entreprise
- Attirer des investisseurs : réputation d'excellence d'Horizon 2020
- PME innovantes privilégiées

Exemple d'appels H2020 PCP/PPI pour 2018-2020

Programme Energie :

LC-SC3-EE-12-2019-2020 : Innovation procurement for energy efficiency = PPI

Programme TIC :

ICT-39-2018-2019: Pre-Commercial Procurement open = PCP

Programme Sécurité :

SU-GM02-2018-2020 : Strategic pre-commercial procurements of innovative, advanced systems to support security

SU-GM03-2018-2019-2020 : Pre-commercial procurements of innovative solutions to enhance security

Exemple d'appels H2020 PCP/PPI pour 2018-2020

Programme Santé :

BHC-10-2019 : Innovation procurement : Next generation sequencing (NGS) for routine diagnosis = PCP

DTH-05-2019 : Large scale implementation of digital innovation for health and care in an ageing society = PPI

DTH-10-2019 : eHealth care services = PCP

Programme Infrastructures :

INFRAEDI-04-2020: Support to Public Procurement of innovative HPC systems

Mise en œuvre via Horizon 2020

- PCP, PPI et réseaux d'acheteurs dès le FP7 (2007-2013)

- Horizon 2020 :
  - **Réseaux (CSA)** => 100% des coûts
  - **PCP** => 90% des coûts
  - **PPI** => 35% des coûts

- Minimum 3 partenaires (3 Pays membres ou associés)

+ 2 acheteurs publics (2 Pays membres ou associés)

- Association variées : acheteurs privés (ONG…), labos, consultants…
- Localisation d'au moins 50% R&D dans l'Union

- La PI appartient aux entreprises
- Accès gratuit à la PI par les acheteurs publics

Exemple de réseaux européens

Actions de coordinations de réseaux d'acheteurs publics ou études de faisabilité

FP7 :

- Sustainable cities : *http://www.sci-network.eu*
- INSPIRE : International Network supporting Procurement of innovation via resources and education in e-health, active ageing and independent living : *http://inspirecampus.eu/*

H2020 :

- EURECA Green data centers : *http://eureca-project.eu/home*
- WaterPIPP développement d' initiatives d'achats innovants dans le domaine de l'eau : *http://www.waterpipp.eu/*

Exemple de PCP/PPI européens

Exemples de PPI européens :

- Happi- Achats publics innovants pour le bien vieillir (Resah, BPI) HAPPI Healthy Ageing : http://www.happi-project.eu
- SYNCROMOBILITY-développer des systèmes routiers intelligents (CCI Grenoble, CG Isère)

Exemples de PCP européens :

- V-CON – Virtual Construction for Roads (avec CSTB ; fin oct 2016)
- SMART@FIRE – Solutions intégrées pour vêtements intelligents des personnels de secours (avec Dpt pompiers Bouches du Rhône ; fin 04/2016)
- ENIGMA – Illumination et innovation dans les villes par les PCP (association LUCI)
- PRACE 3IP – (IT, DE, FI, FR, UK)-efficacité énergétique dans le HCP (9M€-Phase 2 mai 2015)

Liens utiles

Portail partenaire (topics for PCP-PPI) :

- *http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/ftags/innov_proc.html#c,topics=flags/s/InnovationProcurement/1/1&+callStatus/asc*

FAQ :

- *https://ec.europa.eu/digital-agenda/en/news/frequently-asked-questions-about-pcp-and-ppi*

Exemples/infos :

- *http://ec.europa.eu/digital-agenda/en/innovation-procurement*

Plateforme PPI :

- *http://www.innovation-procurement.org/*

Recherche de partenaires :

- *https://procurement-forum.eu/*

European assistance for innovative procurement :

- *http://www.eafip.eu*

Public Procurement 34 : Support for the planning and deployment of efficient, low carbon District Heating and Cooling in cities

2nd Quarter 2018 **0.60 Millions € (T 31, 28 / 2018)**

- The advanced implementation of the first smart cities projects with a special focus on DHC and the good replication policy created a great interest for the DHC sector in numerous cities.
- The aim of this action is to support our cities in their endeavour to plan and deploy new, efficient DHC systems or extend, refurbish existing ones to higher standards allowing greater uptake of renewables, recovering of excess heat, improving the overall efficiency of the systems.
- The objective is to facilitate the deployment of smart DHC with planning tools, trainings, best practices and tailor made technical and financial expertise.
- This activity directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders is excluded from the delegation to Executive Agencies and will be implemented by the Commission services.

Public Procurement 36. Support Services for the Covenant of Mayors for Climate and Energy

4th Quarter 2019 EUR 4 million **(T : 35, 09 / 2019)**

- Initially launched as *"Covenant of Mayors"* in 2008 the new *"Covenant of Mayors for Climate and Energy"* was endorsed in October 2015, merging the Covenant of Mayors with its sister initiative - Mayors Adapt and extending cities commitments to energy and climate changes actions to 2030.

- This bottom-up movement currently brings together 7406 signatory towns and cities that through formal municipal council decisions commit to exceeding the objectives of EU energy and climate policy in terms of reducing CO2 emissions through *i.a.* enhanced energy efficiency and cleaner energy production and use. Since 2015 new signatories pledge in particular to reduce CO2 emissions by at least 40% by 2030 and to adopt an integrated approach to tackling mitigation and adaptation to climate change. To achieve this, *"Covenant of Mayors"* signatories (cities, municipalities, provinces or regions) commit to developing and implementing Sustainable Energy and Climate Action Plans (SECAPs) within This activity directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders is excluded from the delegation to Executive Agencies and will be implemented by the Commission services.
- two years following the signature and to inform the Commission on progress of their implementation, through the monitoring reports, to be submitted every 2 years. The SECAPs are scrutinised by the Joint Research Centre (JRC) of the Commission and signatories failing to produce SECAPs are suspended

Following the success of the Covenant of Mayors in Europe and the European neighbourhood (CoM – East) regional Covenants were launched in 2017 by the Commission: in i) North America and Mexico; ii) Latin America and Caribbean; iii) Japan; iv) China; v) India; vi) South-East Asia; and vii) sub-Saharan Africa, as part of the International Urban Cooperation Programme , with the exception of sub-Saharan Africa, where Covenant of Mayors is a separate initiative.

- Since 2017, the Covenant of Mayors office providing support services to the EU Covenant of Mayors for Climate and Energy acts also as central support unit for the IUC programme.
- In parallel, Covenant of Mayors merged with the Compact of Mayors into a Global Covenant of Mayors (GCoM). This merger creates a single coalition of cities taking action on climate change and brings together the signatories of the EU-funded Covenants (CoM Europe and Regional Covenants) and the Compact of Mayors.
- To guarantee continuation of the Covenant of Mayors for Climate and Energy initiative in this changed context a new updated contract is needed to extend the support services, in particular, the operations of its Brussels-based office as from end 2020 when the current contract expires.
- The services to be covered by a new tender will include amongst others:
  - Promotion of the Covenant of Mayors for Climate and Energy to encourage new signatories
  - Communication activities, including web-based and in media
  - Technical assistance to signatories of the Covenant of Mayors for Climate and Energy,
  - Organisation of workshops, seminars and tailor-made training and information events
  - Capacity building and networking with relevant stakeholders and supporting structures
  - Supporting synergies and interactions with relevant EU urban energy actions and policies and with initiatives covering islands, coastal and remote regions
  - Cooperating with the Secretariat of the Global Covenant of Mayors
  - Facilitate signatories' access to finance for implementation of actions from their SEAPs/SCEAPs.
  - Ensuring of operation of technical and administrative capacity of the Covenant of Mayors Office;
  - Providing central support in relation to the IUC programme to Offices on different regions
- Given that scope of activities includes services that were previously covered by Mayors Adapt initiative as well as support to IUC programme contribution from corresponding Programmes to the can be expected to complement the indicated budget.

Public procurement 37. Support for events of the Covenant of Mayors Investment Forum

1st and 3rd Quarter 2018 & 2019 (2019)

EUR 0.30 million (2018) 0,30 million

- The Covenant of Mayors investment forum consists of a series of events organised in different cities across Europe in the next two years. The investment forum aims to bring together mayors and city representatives, Commission, industry and financial institutions. The events will This activity directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders is excluded from the delegation to Executive Agencies and will be implemented by the Commission services.
- showcase best practices and innovative financing solutions from concrete projects and aim at catalysing major investments in energy efficiency, renewable and smart energy projects in cities, municipalities and regions of Covenant of Mayors' members.
- This conference is the second in a series of at least four investment for a. It is planned to organise the event in Eastern Europe with a specific focus on energy efficiency and energy poverty. The event will be held over 1 full day. It will consist of a plenary session with high level speeches from representatives of the host country, the Commission and financial institutions as well as a showcase project from the region. That high level session will be followed by a networking lunch. The afternoon will be more interactive, with a number of specific parallel panels or break-out sessions in which different successful projects will be presented by cities or regions. Such panels could be organised around specific technologies and financial architectures. In parallel to the panels, projects as well as industry and financial institutions will present their projects in open stands. This will allow participants to engage directly with projects to learn directly about key success factors and especially how they were financed. In addition, stands will be set up in which Commission experts can explain bilaterally to participants the possible funding instruments and the EIB representatives can explain innovative financing instruments.

Public procurement 39. Support to the European Innovation Partnership on Smart Cities and Communities and its Market Place

4th Quarter 2019 **3 Millions € (T : 35, 09 / 2019)**

- This action shall ensure constant and high quality support to the Market Place of the European Innovation Partnership on Smart Cities and Communities:
- Maintenance and further development of the interactive web site of the above mentioned Market Place;
- Further development and improvement of the match making dimension of the above mentioned Market Place (allowing for project and investment focussed matches between cities, companies and financing entities);
- Providing Programme Management Office services to handle daily logistics, communications, social network contributions, etc.;
- Individual streamlined support to each Action Cluster in terms of content as well as logistics;
- Policy analysis and modelling of the Smart Cities context system to allow for sound decision making with regard to novel solutions, new market designs, business models, players and policy instruments (this shall provide assessments of the costs and other impacts of Smart City related policies, policy instruments, including the social, environmental and economic impacts of policy decisions);
- Regular reports containing meaningful up-to-date figures and information to be used for marketing the European Innovation Partnership on Smart Cities and Communities further.

FUEL CELLS AND HYDROGEN JOINT UNDERTAKING

3 membres

Engie (Chair), Air Liquide, Areva, Michelin, Nissan, Saint Gobain, IPV, CETH2, Ceram Hyd, SymbioFC, Safran, Persée, Zodiac Aerospace, Mahytec, MacPhy et IPV

CEA (Chair), CNRS, Mines Paris tech Université de Lorraine

Un Conseil d'Administration

- **10 membres avec droits de vote**
  - **3** représentants de la Commission, 50% des voix
  - **6** représentants des Industriels (dont 1 PME), 43 % des voix
  - **1** représentant de la Recherche, 7 % des voix

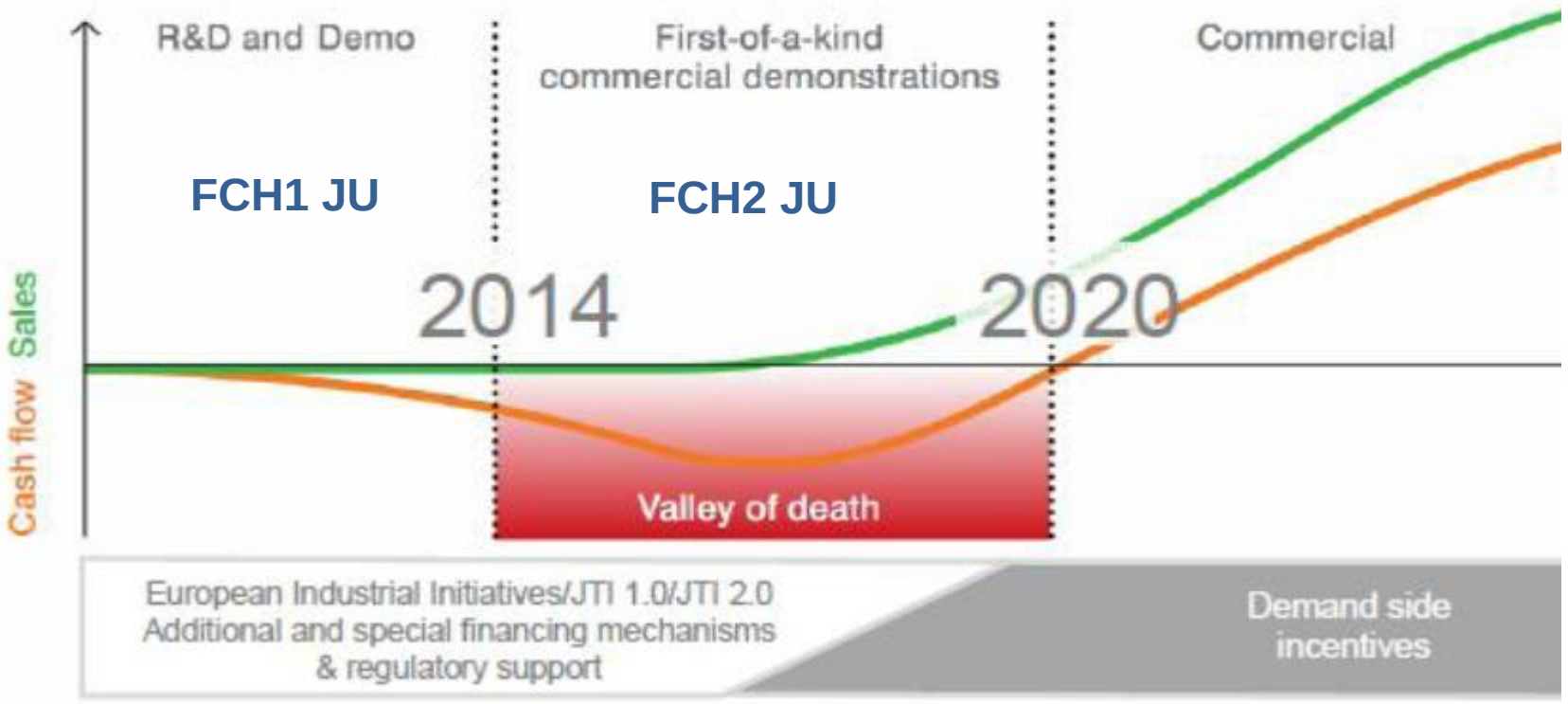
- **Rôle :** orientation stratégique et des opérations, supervision des activités de l'entreprise, règles financières, approbation du budget annuel, approbation des programmes de travail multi-annuel (MAWP) et annuel (AWP), nomination du Conseil Scientifique…

- **Observateurs :** Président du States Representative Group + le Directeur exécutif

Objectif : Accélérer la mise sur le marché

FP 7 → Horizon 2020

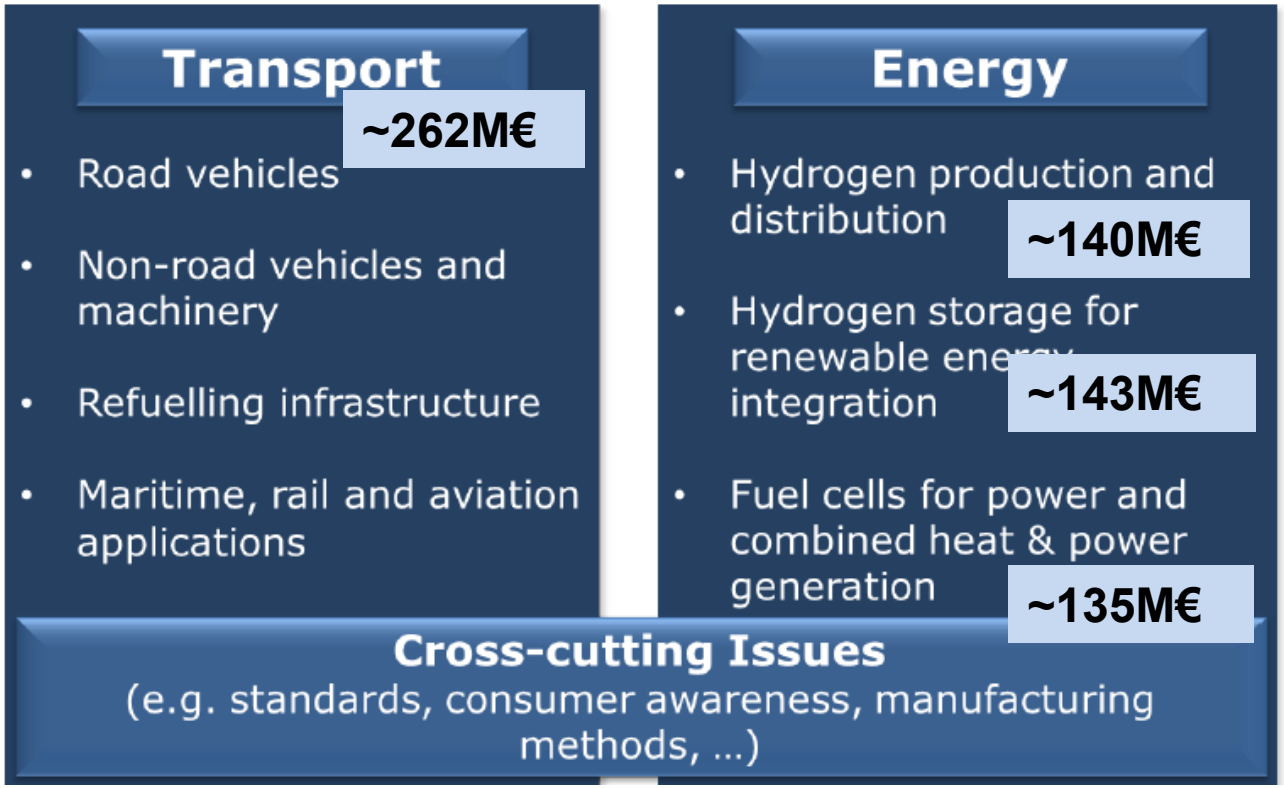
Figure 1 – Evolution of sales and cash flow along the innovation



- FCH JU 2 = démonstration-déploiement (30-35 % de recherche),
  - Pas de recherche amont (TRL<3)

la FCH JU2 (2014-2020) : 665 M€ UE

Objectifs: réduire les coûts de production, accroître la durée de vie, améliorer l'efficacité, réduire l'usage de matériaux critiques



- FCH JU 2 plus axé sur la démonstration déploiement (30-35 % de recherche), TRL plus hauts, pas de recherche amont (TRL<3)
- Forte volonté de combiner les financements : financements nationaux, Régions/Feder, BEI (une personne au Programme Office dédiée)c

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la FCH JU2 (2014-2020) : 665 M€ UE

- Appels 2014 (clôture nov 2014) - 57 propositions – 93 M€
- Appels 2015 (clôture août 2015) - 62 propositions – 123 M€
- Appels 2016 : (clôture mai 2016) - 76 propositions – 117 M€
- Appels 2017 : (clôture avril 2017) - 70 propositions – 116 M€
- **Appels 2018 : (clôture ~ avril 2018) - en cours d'élaboration – ~70 M€**

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Pour les porteurs de projets FCH JU 2

FCH2 JU : http://www.fch.europa.eu/

HYDROGEN EUROPE : www.hydrogeneurope.eu

N.ERGHY : http://www.nerghy.eu

RESEARCH ON FUEL CELLS & HYDROGEN

HORIZON 2020

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MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR, DE LA RECHERCHE ET DE L'INNOVATION

L'Hydrogène dans Horizon 2020

R&D + Intégration

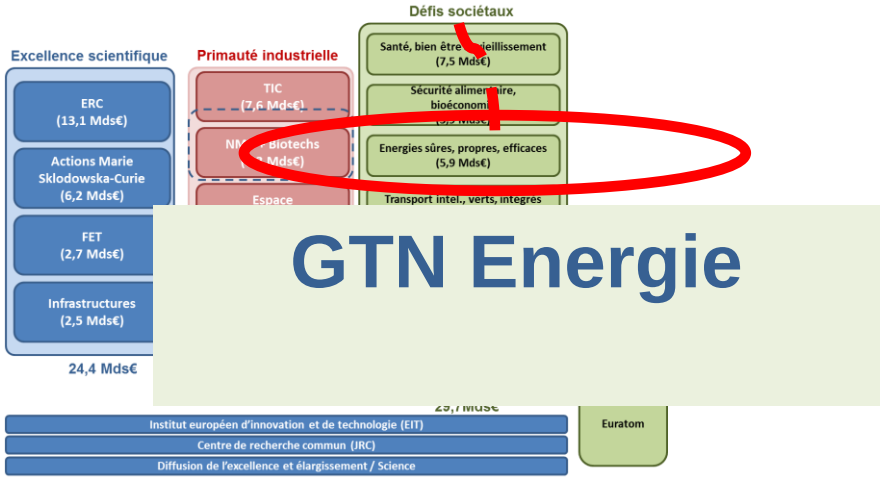
FUEL CELLS AND HYDROGEN JOINT UNDERTAKING

+

Groupe miroir FR de la FCH2 JU

Intégration

Activities specifically targeting Fuel Cells and Hydrogen are not supported under this work programme, but through calls for proposals of the Fuel Cells and Hydrogen JU. However, as regards topics included under the area "Smart citizen-centred energy" and "Smart Cities and Communities", system costs related to the **integration of mature hydrogen based technologies** for the purpose of integrated demonstration in a topic are eligible.



GTN Energie

European Commission

OPEN RESEARCH DATA
IN HORIZON 2020

Research and Innovation

CHALLENGE

Wider access to scientific facts and knowledge helps researchers, innovators and the public find and re-use data, and check research results:

offers better value for EU research funds

a public benefit

encourages research across scientific fields

essential for solving today's complex societal challenges

SOLUTION

Horizon 2020 already mandates open access to **all scientific publications**

From 2017,
research data is **open by default,**
with possibilities to **opt out**

AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY

Grantees have the right to **opt-out**, but need to say **why**

RESEARCH DATA – OPEN BY DEFAULT

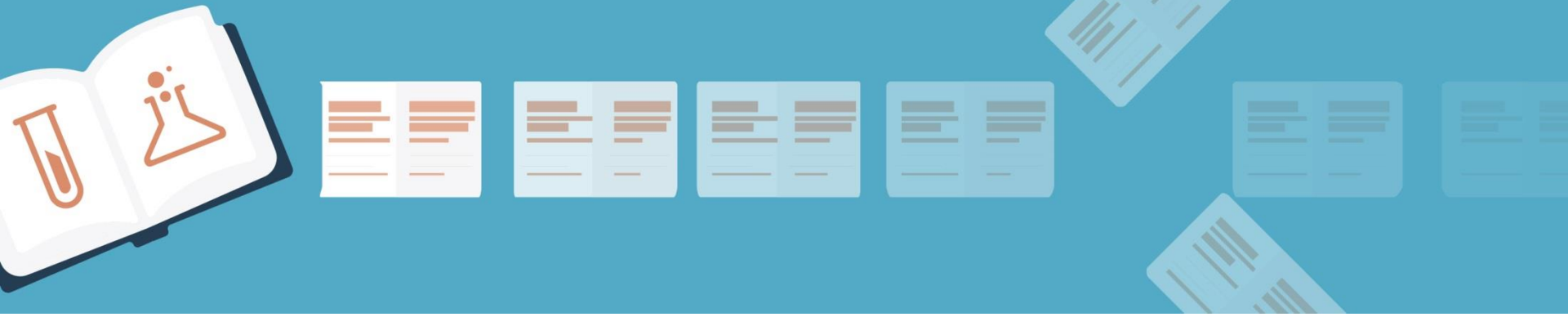
RESEARCH DATA – OPEN BY DEFAULT

Horizon 2020 grantees are required

take measures to ensure open access to the **data underlying their scientific publications**

provide open access to **any other research data of their choice**

Horizon 2020 grantees are **encouraged to also share datasets** beyond publication



RESEARCH DATA – OPEN BY DEFAULT

Projects must have

Provides information on:

the data the research will generate

how to ensure its curation, preservation and sustainability

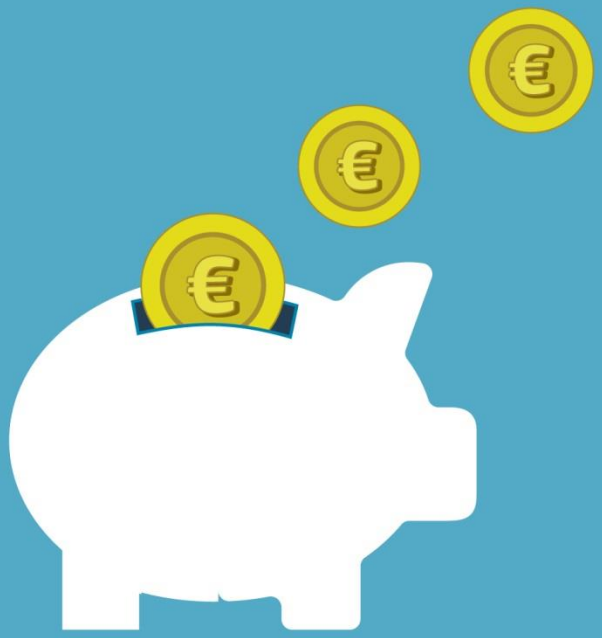
what parts of that data will be open (and how)

HOW IT WORKS


Get funding
Write DMP
Gather data during research
Finish research
Publish results
Choose repository and deposit data
Inform OpenAIRE the EU-funded Open Access portal

RESEARCH DATA – OPEN BY DEFAULT

Data management costs are fully eligible for funding



No repository imposed: deposit data where you want

AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY

The approach has been tested during a Horizon 2020 pilot action

2015

of 431 signed projects

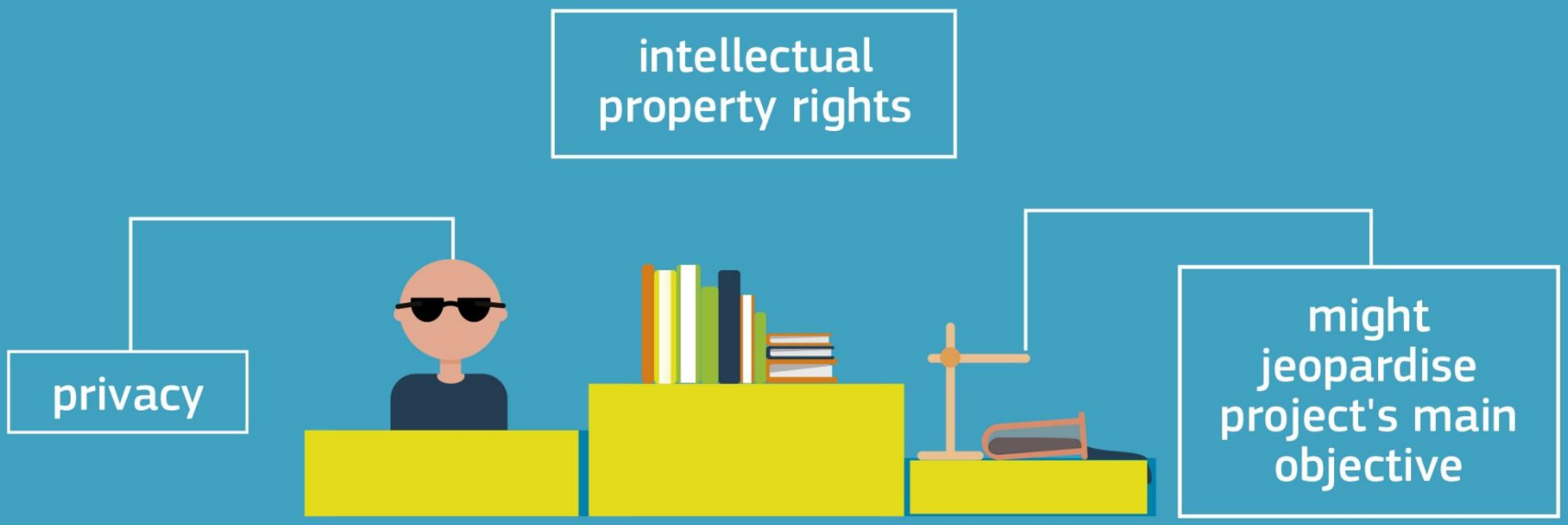
opted to share data

from 2017

the current
Open Research Data Pilot
expands to cover all areas
of Horizon 2020,
with the same rules

AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY

Top three reasons for **opt-out**:



Extended Open Research Data Pilot in Horizon 2020

?

If selected, applicants will by default participate in the Pilot on Open Research Data in Horizon 2020[1] , which aims to improve and maximise access to and re-use of research data generated by actions.

However, participation in the Pilot is flexible in the sense that it does not mean that all research data needs to be open. After the action has started, participants will formulate a Data Management Plan (DMP), which should address the relevant aspects of making data FAIR – findable, accessible, interoperable and re-usable, including what data the project will generate, whether and how it will be made accessible for verification and re-use, and how it will be curated and preserved. Through this DMP projects can define certain datasets to remain closed according to the principle "as open as possible, as closed as necessary". A Data Management Plan does not have to be submitted at the proposal stage.

Furthermore, applicants also have the possibility to opt out of this Pilot completely at any stage (before or after the grant signature). In this case, applicants must indicate a reason for this choice (see options below).

Please note that participation in this Pilot does not constitute part of the evaluation process. Proposals will not be penalised for opting out.

We wish to opt out of the Pilot on Open Research Data in Horizon 2020.	○ Yes	◉ No

Further guidance on open access and research data management is available on the participant portal: http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-dissemination_en.htm and in general annex L of the Work Programme.

[1] *According to article 43.2 of Regulation (EU) No 1290/2013 of the European Parliament and of the Council, of 11 December 2013, laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)" and repealing Regulation (EC) No 1906/2006.*

Le Programme Energie Horizon 2020

10 octobre 2017, Lyon

david.argenti@univ-grenoble-alpes.fr

Préparer une proposition

1. Obtenir (et lire en détails) le programme de travail de l'AP

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

- **Identifier le (ou les) topic qui vous intéresse**
- **Evaluer l'opportunité d'une proposition:** intérêt pour l'organisme, bénéfice attendu, objectif scientifique et technique, moyens à mobiliser
- Contacter si besoin le « project officer » en charge du sujet, pour s'assurer que votre projet est bien dans le « scope ». Le PCN peut également vous aider.

2. Identifier et rechercher les partenaires potentiels (ci-après)

Il faut tout d'abord vous **positionner** comme**:**

- **coordinateur** (expérience requise) et rechercher des partenaires
- **partenaire** et chercher à intégrer un consortium

3. Commencer à préparer la proposition et définir le budget

- rigueur: what, why, when, who, how, vérifier la pertinence
- clarté: des objectifs, moyens, résultats attendus
- factuel: infos vérifiables, mesurables, éviter le déclaratif
- pertinence: entre objectifs / partenariat / moyens demandés

Rechercher des partenaires

Développez et utilisez avant tout VOTRE réseau

- **Utilisez les réseaux de spécialistes des projets européens**
  - Le site Horizon2020.gouv.fr (rubrique Energie)
  - Le site des PCN Energie européens C-Energy
  - Les réseaux régionaux : EEN, CCI, Régions et via le PCN PME

    http://een.ec.europa.eu/index_fr.htm

    Le service Cordis: **http://cordis.europa.eu/partners-service/home_fr.html**

- **Participez aux évènements de recherche de partenaires**
  - Organisés par les PCN ***(type brokerage event)***
  - Dans le cadre des conférences spécialisées ***(annonce sur site national)***
  - De la Commission Européenne ***(ex: infodays, seminars,…)***

Soumettre une proposition

Soumission électronique
à partir du portail du participant:
http://ec.europa.eu/research/participants/portal/desktop/en/home.html

1/ **enregistrer son organisme** et récupérer son Code d'Identification (PIC) :
http://ec.europa.eu/research/participants/portal/desktop/en/organisations/register.html

2/ **s'enregistrer** en tant que proposant et récupérer son code ECAS (perso):
https://webgate.ec.europa.eu/cas/eim/external/register.cgi

3/ **sélectionner** « How to participate » pour soumettre électroniquement votre proposition
http://ec.europa.eu/research/participants/portal/desktop/en/funding/index.html

aide en ligne:
- site « enquiries service »: http://ec.europa.eu/research/index.cfm?pg=enquiries
- pour question sur la PI : http://ec.europa.eu/research/participants/api//contact/index.html

Retour des évaluateurs (1/3)

L'évaluateur :

- A une idée du taux (faible) de sélection des projets
- Dispose de peu de temps

Il identifie d'abord les faiblesses pour éliminer le plus possible de propositions :

- **Pas très clair :**
  - Confus
  - Mal étayé

<u>Conseil</u> : faire relire par quelqu'un d'extérieur
être précis, factuel, bien étayer ses affirmations, quel est le progrès apporté ? chiffrer les objectifs, schémas, tableaux, description des sites pilotes, cartes….
Clarté de la vision globale

Retour des évaluateurs (2/3)

- **Manque de cohérence :**
  - Cohérence globale de la présentation (ex.: indications entre formulaires A et B)
  - Cohérence entre objectifs et ressources demandées – organisation du consortium
  - Gestion du risque, gestion de la PI

Conseil pour s'assurer de la cohérence : partir de l'impact
Impact recherché -> moyen pour y arriver -> verrou à lever

- **Lien faible avec les exigences du topic :**

Conseil: lecture mot à mot du topic s'assurer de la cohérence lors de la relecture finale. Renseigner TOUS les items.

La plupart des propositions sont éliminées sur ces faiblesses,
C'est donc déterminant pour passer les seuils

Retour des évaluateurs (3/3)

- **Convaincre sur la capacité de R&D et d'Innovation des partenaires :**

Conseil: Importance du contenu des fiches de l'annexe B pour se rendre compte des capacités d'innovation et de R&D des partenaires (surtout SMEs).

L'évaluateur :

Pour classer les (bonnes) propositions restantes, il s'intéresse à l'originalité de la proposition, à la nouveauté qu'elle apporte

Conseil: susciter l'attention de l'évaluateur avec des propositions susceptibles de se démarquer. Etre ambitieux mais crédible.