



**Policy Stakeholders Conference
on EU-EaP STI Cooperation in Addressing Energy,
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**Energy research in the EU
– recent developments**

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General outline

*EU political context in energy research 2015
(Energy Union, the SET Plan)*

*Topics targeted on the EU level
(10 key actions)*

*Horizon 2020 and other financial tools for the EU
neighbours*

2015 – Energy Union



European
Commission

NEW TECHNOLOGY FOR TOMORROW'S ENERGY

TODAY:

The EU has **LOST GROUND** on clean,
LOW-CARBON TECHNOLOGIES.



WITH THE ENERGY UNION:

LOWER BILLS for EU citizens.



EUROPEAN COMPANIES
to be world leading on renewable
and low-carbon technologies.



#EnergyUnion

Energy Union: 5 Pillars

- **Energy security**, solidarity and trust
- A fully **integrated** European **energy market**
- **Energy efficiency** contributing to moderation of demand
- **Decarbonising** the economy
- **Research, Innovation and Competitiveness**

Energy Union: 5th Pillar

An integrated R&I and Competitiveness Strategy:

- *an upgraded Strategic Energy Technology Plan (SET Plan)*
- *a strategic transport R&I agenda (STRIA)*
- *an initiative on EU global Technology and Innovation Leadership on energy and climate to boost growth and jobs (TILI)*



2015 Communication: The Integrated SET Plan



What is new?

**A more
targeted
focus (10
actions)**

**A more
integrated
approach**

**New
Management**

**Increased
Accountability**



The Integrated SET Plan priorities

Energy Union Priorities

Ten Actions to Accelerate the Energy System Transformation

4 Core priorities

No1 in Renewables

1. Performant renewable technologies integrated in the system
2. Reduce costs of technologies

Smart EU energy system,
with consumer at the
centre

3. New technologies & services for consumers
4. Resilience & security of energy system

Efficient energy systems

5. New materials & technologies for buildings
6. Energy efficiency for industry

Sustainable transport

7. Competitive in global battery sector (e-mobility)
8. Renewable fuels



The Integrated SET Plan priorities

**Energy Union
Priorities**

**Ten Actions to Accelerate the Energy
System Transformation**

2 Priorities for interested Member States

**9 Driving ambition in
carbon capture storage and use deployment**

**10 Increase safety in
the use of nuclear energy**

The Integrated SET Plan management



4. Transparency, indicators and periodic reporting

- Annual KPIs:
 - Level of investments – public and private sector
 - Trends in patents
 - Number of researchers active in the sector
- Every 2 years, progress should be measured on:
 - Technology developments
 - Cost reduction
 - Systemic integration of new technologies
- State of the Energy Union Report

5. Monitoring and knowledge sharing

- Strengthening SETIS (Strategic Energy Technology Information System)

<https://ec.europa.eu/jrc/en/news/new-strategic-energy-technology-plan-set-plan-communication>

Next Steps?

To develop and deliver on the 10 actions

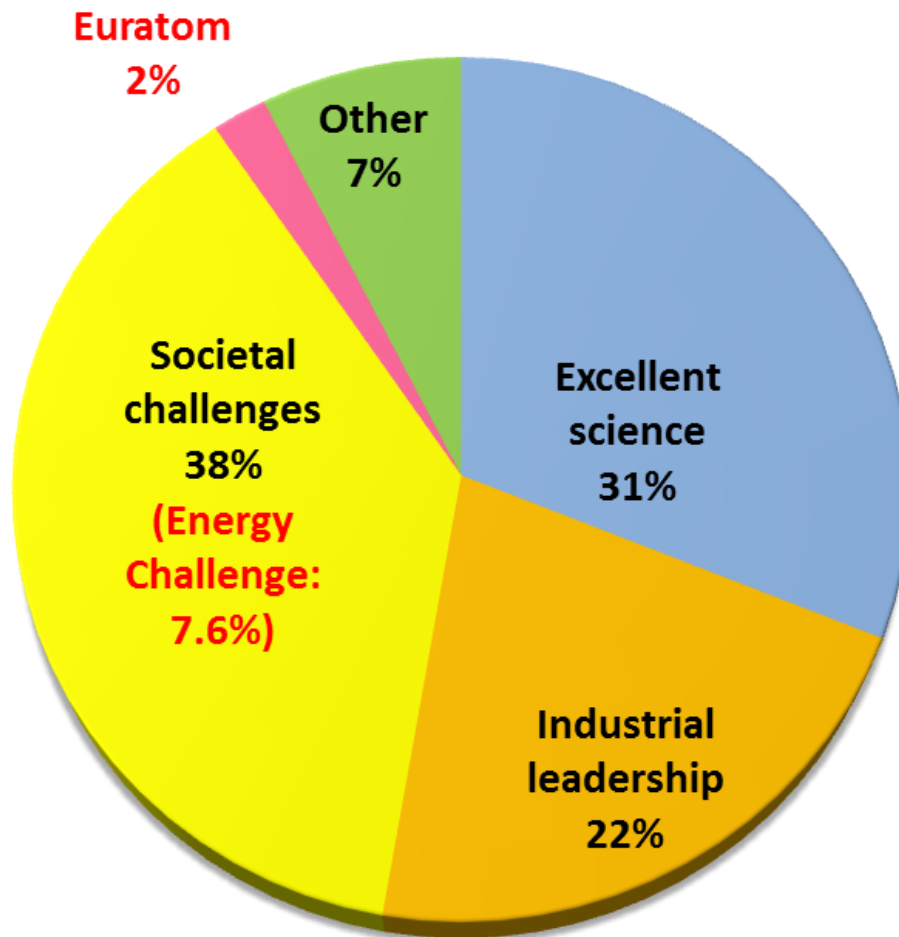
Stakeholders

Commitment of the
Member States and
Associated Countries

For each 10 priorities to define:

1. The level of ambition in terms of priorities and funding;
2. The modalities of the implementation
3. Expected deliverables and timing for achieving results

Horizon 2020 – Overall budgets



Total budget H2020:
EUR 74,83 billion

Budget of the
Energy Challenge:
EUR 5,69 billion

The 2016-2017 calls of the Energy Challenge

Energy Efficiency (EE)

- Heating and Cooling
- Engaging consumers
- Buildings
- Industry, services and Products
- Innovative financing

Competitive low-carbon energy Technologies (LCE)

- Energy system (grids, storage)
- Renewable energies
- Decarbonising fossil fuels
- Socio-economic research
- European Research Area in energy

Smart Cities and Communities (SCC)

- Light-house demonstration projects

SME instrument (SIE)

Call budgets (in Mio €)

Call	2016	2017
EE	93	101
LCE	352,66	367,62
SCC	60	71,50
SME	46	50

Energy **outside** the Energy Challenge



Cross-thematic priorities

- Materials, Key Enabling Technologies
- ICT
- Energy-efficiency in buildings/industry
- Biomass production
- Energy in transport
- Socio-economics
- Access to risk finance
- Research Infrastructures

Bottom-up activities

- European Research Council (ERC)
- Marie Skłodowska-Curie actions
- Future and Emerging Technologies (FET)
- Fast-track to Innovation



Horizon Prizes in Energy

New instrument to generate breakthroughs and induce innovation in low carbon energy technologies

Title	Budget (EUR million)	Publication of the contest	Submission of proposals
CO2 reuse (Innovative products utilising CO ₂)	€1.5	3 quarter 2016	Until 2nd quarter 2019
Combined Heat and Power(CHP) Installation with 100% RES (hospital with a perfectly integrated CHP installation)	€ 1.0	3 quarter 2016	Until 2nd quarter 2019
Integrated Photovoltaic System (European protected historic urban district with PV system in its buildings)	€ 0.75	3 quarter 2016	Until 3rd quarter 2018

International Cooperation

Open to the World

General opening

- Participation to all international partners
- Common interest, mutual benefits
- Direct participants to grant agreements or as third parties

Dedicated Actions

Targeted openings & Coordinates calls

- Encouraged or required participation
- Specific international partners

Other cooperation

- Exploring other types of cooperation (on-going)



COST – an opportunity to join **excellent** research networks

- *COST is the longest-running European framework supporting trans-national cooperation among researchers, engineers and scholars across Europe.*
- *COST is welcoming researchers from its Near Neighbour Countries and International Partner Countries in COST Actions on the basis of **ascertained mutual benefit**.*
- *Researchers from **Near Neighbour Countries** can benefit of participation in COST Actions on the same basis as the COST Member Countries.*

For more details please visit

http://www.cost.eu/about_cost/strategy/international_cooperation



National Contact Points (NCPs)

NCPs are in the front line for providing specialist advice and on-the-ground guidance to potential applicants

Main services:

- Guidance on choosing relevant H2020 topics and types of action;
- Advice on administrative procedures and contractual issues;
- Training and assistance on proposal writing;
- Assistance in partner search.

Find your national NCP:

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

Network of Energy NCPs: www.C-energy2020.eu



Thank you for your attention!