

CCUS Policy & Future Funding Opportunities

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NOT LEGALLY BINDING

European Green Deal

- To be the first climate-neutral continent in the world
- make the EU's economy sustainable
- boost the efficient use of resources
- restore biodiversity and cut pollution
- March 2020: European Climate Law to ensure a climate neutral European Union by 2050
- July 2020: Adoption of the EU strategies for energy system integration and hydrogen
- Sept. 2020: The 2030 Climate Target Plan-Increasing ambition of Greenhouse gas emission targets



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The 2030 Climate Target Plan

- Presents rationale of an EU-wide, economy-wide GHG target of at least 55% by 2030 in the context of the EU objective of climate-neutrality by 2050.
- The new target is based on a comprehensive **Impact Assessment** of the social, economic and environmental impacts.
- Prepares the ground for a public debate in autumn 2020 to increase the EU's contribution to the Paris Agreement
- Detailed legislative proposals by June 2021, including to increase

>> share of renewables to 38.5%

>> energy efficiency to 36%

Main impacts on the energy technologies

- Increasing opportunities for our **clean technologies leadership** and for gaining **competitive advantage** on the world markets.
- Developing new value chains and expanding others will improve the open **strategic autonomy** of Europe's industrial ecosystems.
- Providing sufficient incentives for demand for renewable energy
- Developing an **holistic approach** that goes beyond single technologies
- **Horizon Europe** Cluster 5 will see at least 35% of its funds supporting the achievement of the climate goals

H2020 → Horizon Europe

Last <u>H2020</u> calls on CCUS closed on 1.9.2020

- Geological Storage Pilots
- Low carbon industrial production using CCUS

Next funding programme: <u>Horizon Europe</u>

- from 2021 to 2027
- EC proposed budget of € 100 billion
- EC preparing work programme
- September/October 2020 discussion with MS
- Before end of 2020 decision about budget
- Decision about number of calls and projects
- 1st call for proposals first half 2021



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Horizon Europe Cluster 5

- CCUS will play crucial role in Horizon Europe/EU Green Deal in particular for the transition of energy-intensive industries and the power sector towards climate neutrality
- Particularly important in those industries where other alternatives do not yet exist
- If CCUS combined with sustainable biomass, it could create negative emissions
- Low carbon hydrogen from natural gas with CCUS
- Demonstration of the full CCUS chain
- Conversion of captured CO2 to useful products



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Expected Impacts

- Infrastructure for CCUS hubs and clusters
- Connecting industrial CO2 sources with potential 'bankable storage sites
- Integrating CO2 capture, CO2 storage and CO2 use in industrial facilities
- Reducing cost of carbon capture



European Partnership *Cluster 5* **Clean Energy Transition**

Form: co-funded partnership

Partners: Member States (national / regional research funders)

Lead DG(s): R&I, ENER

Predecessor: individual ERA-NET co-funds H2020 such as ACT

Draft Proposal: April 2020

SRIA development process:

- May-Sept: dialogue with stakeholders
- Sept: Draft SRIA
- Jan 2021: Final SRIA

Launch: WP 2021/22 (in 2021)



Rationale and objectives

- The pace of the energy transition needs to accelerate to meet climate goals
- The Clean Energy Transition Partnership is expected to be a transformative Research and Innovation Programme across Europe boosting and accelerating the energy transition in all its dimensions

Specific Objectives (by 2030)

- Jointly implement pan-European topics through annual joint calls by 2022
- Pave the way for Europe's knowledge economy to access global markets by leveraging CETP's reach to partners from outside Europe, e.g. IEA, Mission Innovation, Clean Energy Ministries
- Support the implementation of the NECPs providing evidence-based solution.
- Support piloting, demonstration and validation of implementable solutions for energy transition with a balanced geographical coverage

State of Play

SRIA: Stakeholder Dialogues, public consultation over summer. To be adopted at SET-Plan Conference on 23-24/11/2020



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Expected impact, coherence and synergies

Expected Impact

 Enabling the energy transition from regional to national and global level, co-transformed by industry, public organisations, research and citizen organisations; making Europe a frontrunner by becoming the first climateneutral continent.

Coherence with other European Partnerships

- Driving urban transitions to a sustainable future
- Built environment and construction
- Clean Hydrogen
- European industrial battery value chain
- EIT-KICs: Climate and InnoEnergy

Synergies

- Cohesion funds
- European Fund for Strategic Investments
- Linked with the implementation of the SET Plan



Preparation of co-funded partneships

Tentative timeline, subject to MFF adoption

• **Model Grant Agreement** (MGA) is in preparation and is expected to be ready within (4-6) weeks

• Member States are **consulted** via the usual channel for consultation

- **Call topics** for programme co-fund actions for the implementation of the Co-funded European Partnerships included in the Horizon Europe Work Programme 2021-22
- **Submission of proposals** in 2021 (2022), launch of partnerships with signature of Grant Agreement (submission plus 8 month)
- Q4/2021: launch of co-funded European Partnerships (signature Grant Agreement with a consortium of national research funders)



Thank you for your attention!

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