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Energía en Horizonte Europa

EU Policy Strategies que hay que conocer

2020

8 Jul



14 Oct



19 Nov



División de
Programas de la UE



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Estrategia de Integración del Sistema Energético

A more **efficient** and
“circular” system

Where **waste energy** is captured and re-used

A **cleaner power system**

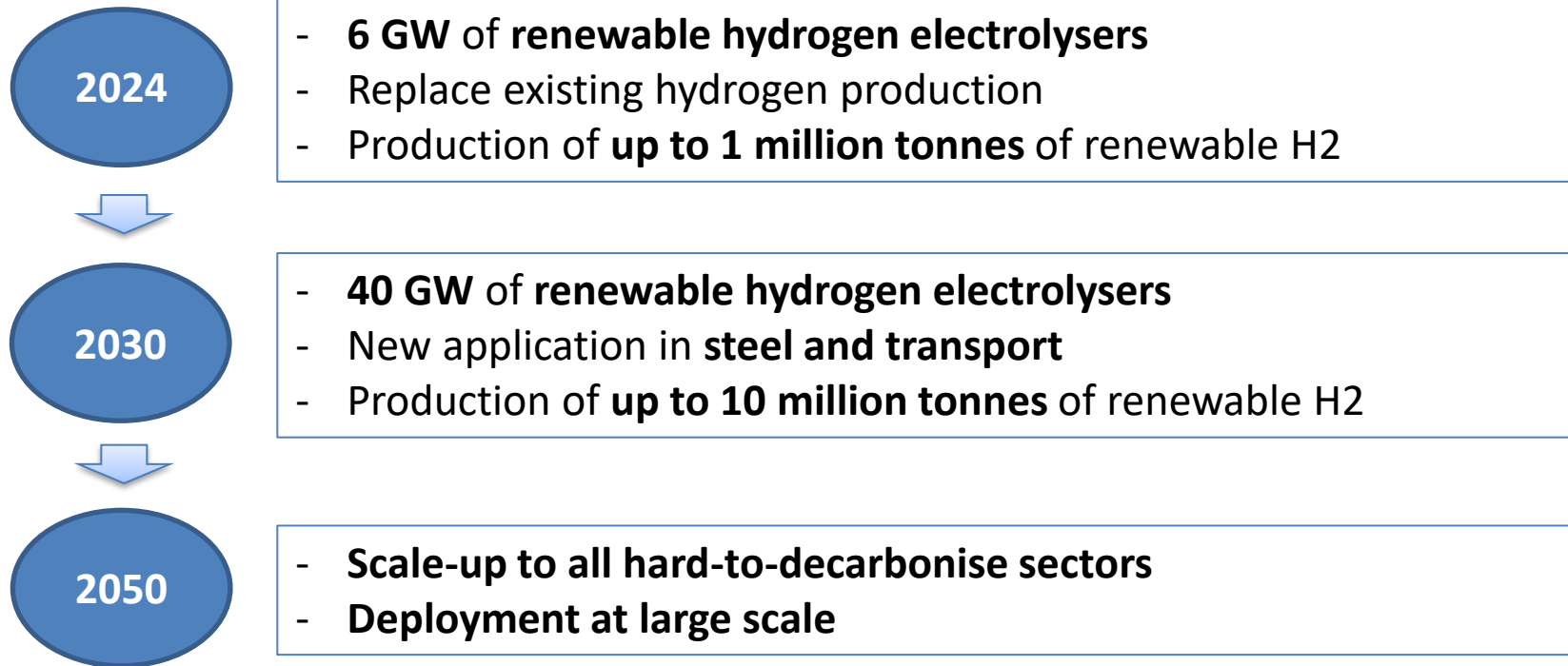
With more direct **electrification of end-use sectors** such as industry, heating of buildings and transport

A **cleaner fuel system**

For hard-to-electrify sectors like heavy industry or transport

https://ec.europa.eu/energy/topics/energy-system-integration/eu-strategy-energy-system-integration_en

Estrategia de Hidrógeno



https://ec.europa.eu/energy/topics/energy-system-integration/hydrogen_en

Estrategia Renovation Wave

Prioridades de la Estrategia de Renovación



Tackling **energy poverty**
and **worst-performing**
buildings



Renovation of **public**
buildings such as schools,
hospitals and public
administrations



Decarbonisation of
heating and **cooling**

https://ec.europa.eu/energy/sites/ener/files/eu_renovation_wave_strategy.pdf

Estrategia Energías Renovables Marinas

Principales elementos de la estrategia



Inversiones

**Cooperación
Regional**



Seguridad jurídica

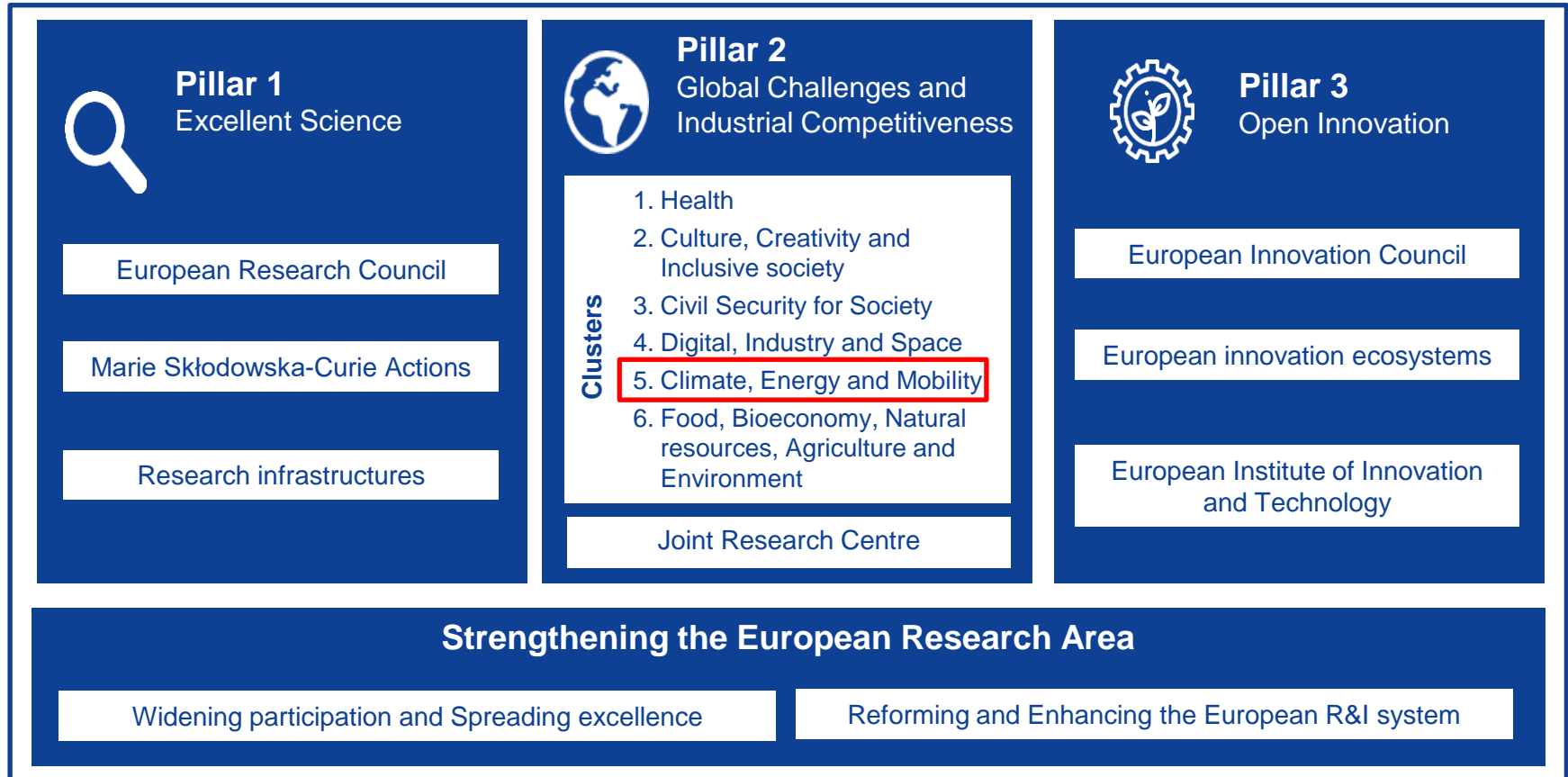


**Fortalecer cadena de valor e
Innovación**

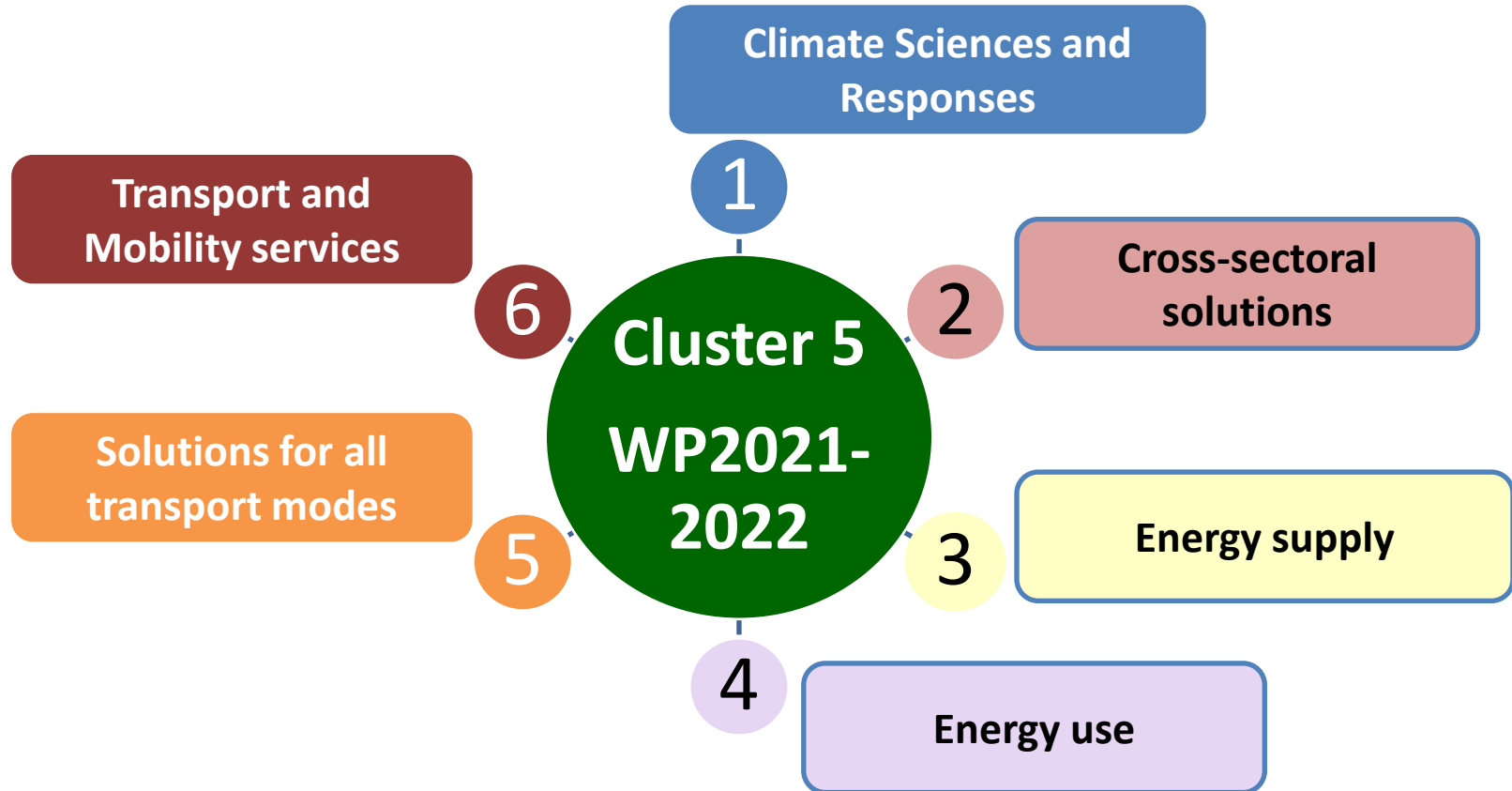
https://ec.europa.eu/energy/topics/renewable-energy/eu-strategy-offshore-renewable-energy_en

Horizon Europe (2021-2027)

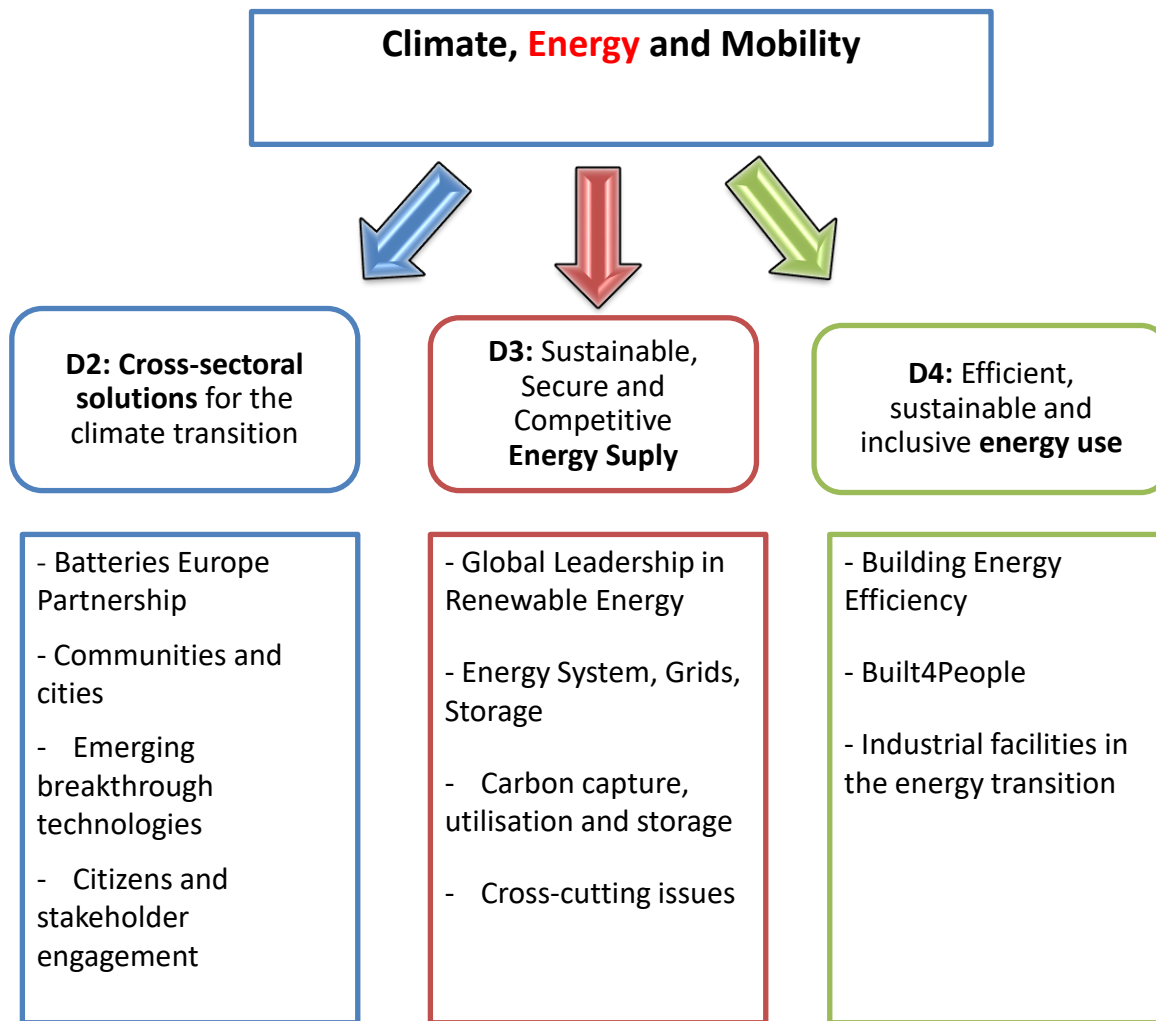
Estructura



Cluster 5 – 6 Destinations



Cluster 5: Climate, **Energy**, Mobility



Destination 2: Cross-sectoral solutions for the climate transition

Borrador

A competitive and sustainable European battery value chain

- Raw materials
- Advanced materials
- Manufacturing processes
- Recycling technologies

Communities and cities

- Mobility services, urban mobility
- Positive Energy Districts
- Zero-pollution, nature-based solutions
- Digitalisation, urban platforms
- Social innovation, lifestyle changes

Destination 2: Cross-sectoral solutions for the climate transition

Borrador

Emerging breakthrough technologies and climate solutions

- Emerging technologies for a climate neutral Europe
- Methane cracking to usable hydrogen and carbon
- Technologies for non-CO2 greenhouse gases removal
- Direct atmospheric carbon capture and conversion

Citizens and stakeholder engagement

- Fostering a **just transition** in Europe
- Strengthening **Social Sciences and Humanities** research communities in climate, energy and mobility disciplines
- Accelerating the **climate transition in difficult contexts**: transition super-labs (pilot)

Destination 3: Sustainable, secure and competitive energy supply

Borrador

Global leadership in renewable energy

- Concentrated Solar Power, Photovoltaics
- Wind, Ocean, Hydropower, Geothermal
- Renewable fuels, bioenergy, synthetic fuels, solar fuels
- Combined heat and power, renewable heating and cooling

Energy systems, grids and storage

- Energy sector integration
- Electricity system reliability and resilience
- Transmission of energy
- Green digitalisation of the energy system – interoperability and data
- Storage development and integration

Destination 3: Sustainable, secure and competitive energy supply

Carbon capture, utilization and storage (CCUS)

- Integration of CCUS in hubs and clusters
- Decarbonising industry with CCUS
- Cost reduction of CO2 capture

Cross-cutting issues

- Support to the activities of the European Geological Services
- Support to the activities of the European Technology Platforms and technology areas of the SET-Plan

Borrador

Destination 4: Efficient, sustainable and inclusive energy use

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Highly energy-efficient and climate neutral EU building stock

- **Building Energy Efficiency:** energy performance, smartness
- People-centric, cost-effective and sustainable **renovation**
- Solutions for an inclusive, resilient, sustainable and modern built environment

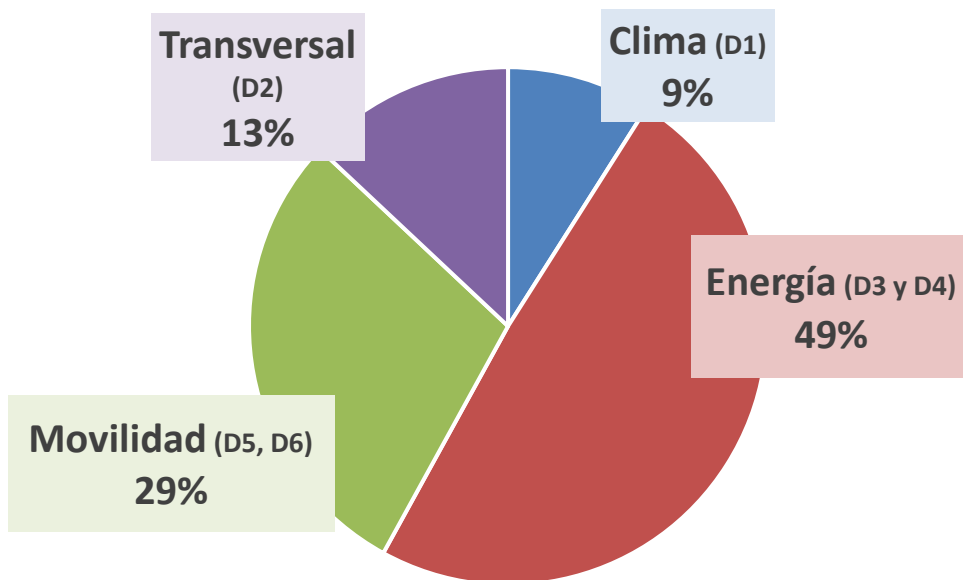
Industrial facilities in the energy transition

- Full-scale demonstration of **heat upgrade technologies** with supply temperature in the range 90-160°C
- Development and pilot demonstration of **heat upgrade technologies** with supply temperature in the range 150-250°C
- Development of high temperature **thermal storage for industrial applications**
- Industrial excess **(waste) Heat-to-Power conversion** based on organic Rankine cycles

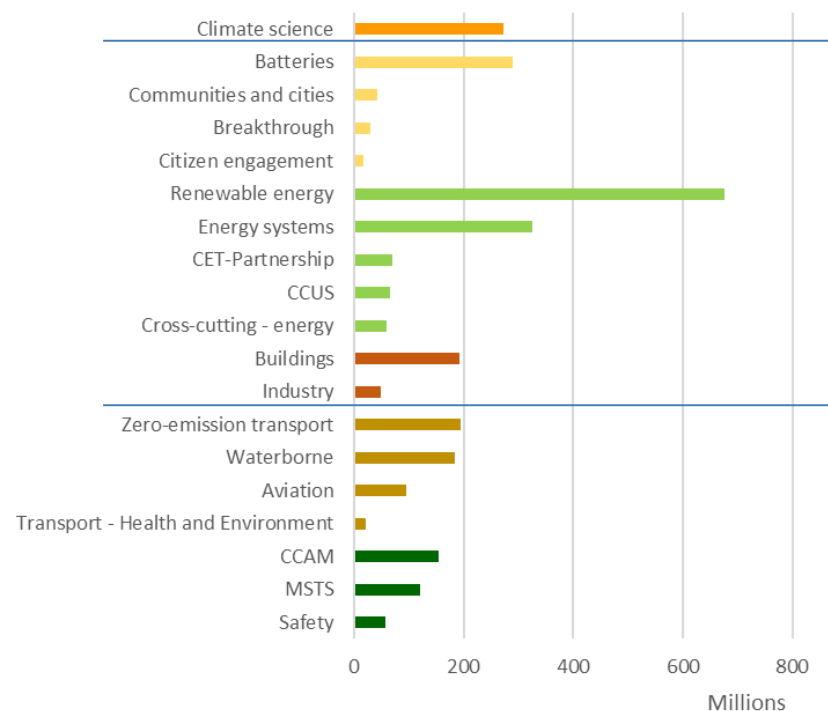
Cluster 5 - Budget allocation

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Budget allocation per Destination
(2021 and 2022)



Budget allocation per thematic heading
(2021 and 2022)



Horizon Europe – Partnerships D2, D3 y D4

Institutional Partnerships

- **Clean Hydrogen Europe (CHE)**

Co-programmed Partnerships

- **Built4People** | People-centric sustainable built environment
- **Batteries** | For stationary applications and e-mobility

Co-funded Partnerships

- **Driving urban transitions to a sustainable future (DUT)**
- **Clean Energy Transition (CET)**

Partnerships D2, D3 y D4

¿Dónde encontrar las convocatorias?

Partenariados

- **Institutional Partnerships** => lanzan sus propias convocatorias
- **Co-Programmed Partnerships** => en el Programa de Trabajo
- **Co-Funded Partnerships** => lanzan sus propias convocatorias



Co-fund “Driving Urban Transitions” (DUT) Borrador

Partnership Concept



Positive Energy Districts and Neighbourhoods
transforming the urban energy system



Downsizing District Doughnuts
an integrated approach for urban greening and circularity transitions



The 15 Minutes Cities
rethinking the urban mobility system and space

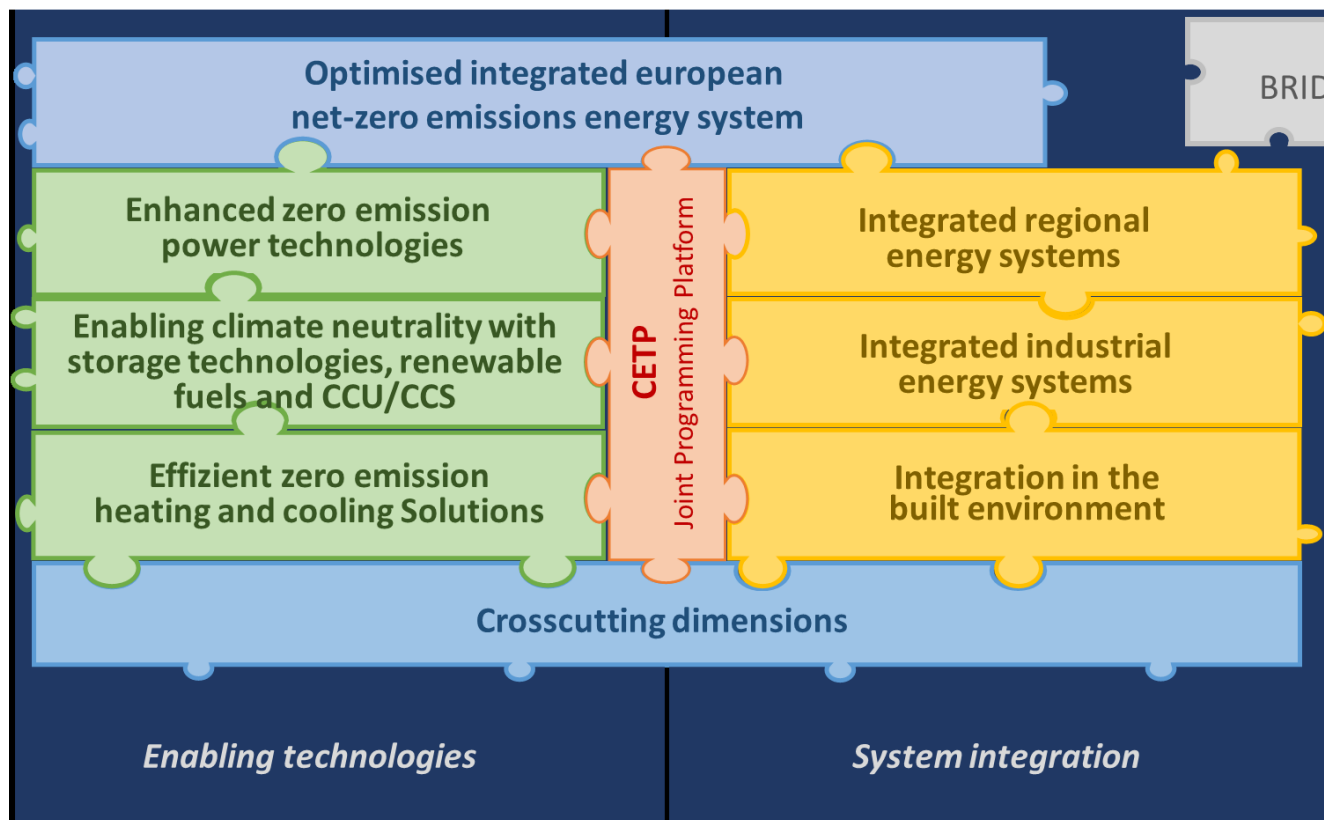


<https://ipi-urbaneurope.eu/app/uploads/2019/02/SRIA2.0.pdf>

Co-fund “Clean Energy Transition” (CET)

Borrador

Challenges



Horizon Europe - Missions

Misiones de
investigación e
innovación

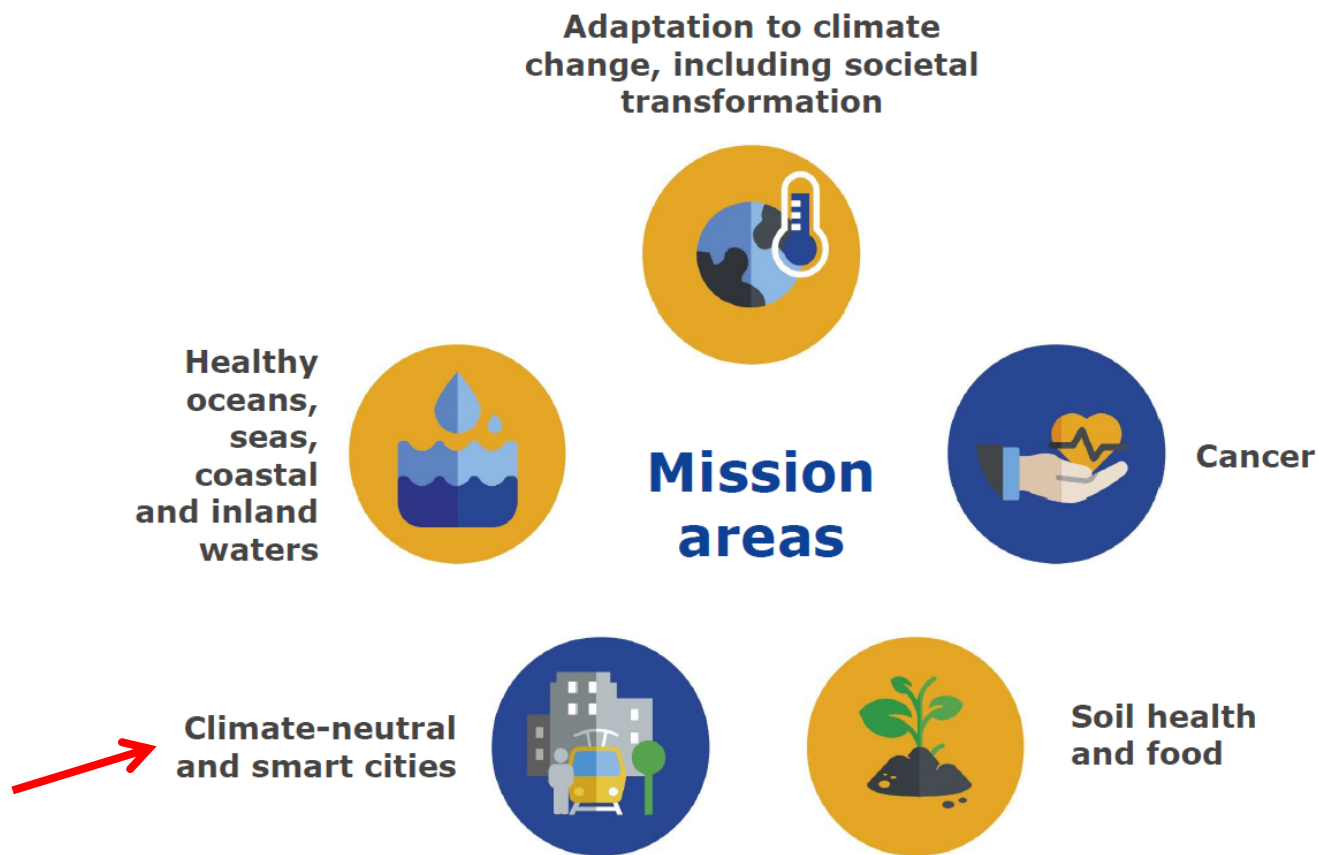
Relacionar mejor la investigación e innovación de la UE con las necesidades de la sociedad y la ciudadanía, con una gran visibilidad e impacto.



A mission is a portfolio of actions across disciplines intended to achieve a **bold and inspirational and measurable goal** within a set timeframe, with **impact** for society and policy making as well as relevance for a significant part of the European population and wide range of European citizens.

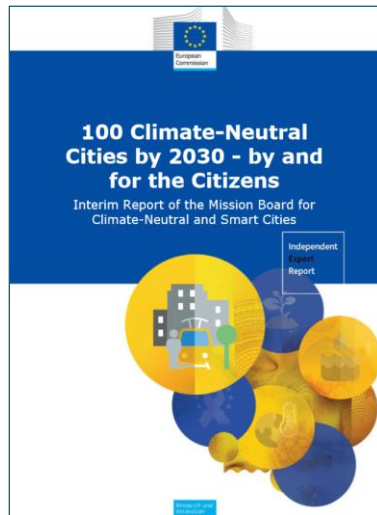
€ 5 billion (tbc) (max. 10% del presupuesto del Pilar 2)
para convocatorias de misiones en los 3 primeros años

Horizon Europe – 5 Mission areas



100 Climate-neutral cities by 2030 by and for the citizens

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- Process formalised in a **Climate City Contract**
- **Co-design and co-implementation with citizens**, as users, producers, consumers and owners
- **Removal of barriers** to participatory governance
- Help for cities to design an **investment strategy** and access to funding
- Cross-sectoral and **systemic transformation**, encompassing transport, energy, built environment, digitalisation, etc
- Strong **business case** for transforming how products are designed, produced, used and recycled

Identification of R&D activities to be implemented in the first Work Programme (2021-2022) of Horizon Europe

Conclusiones

Cluster 5 Energía => Destination 3, Destination 4 y parte Destination 2

WP Cluster 5 + WP JTI CHE + Co-funds + WP Misión Ciudades

Convocatorias en Abril 2021. Deadlines en Agosto y en Octubre!

Para cualquier consulta

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[CDTI Listas de Distribución](#)