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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**

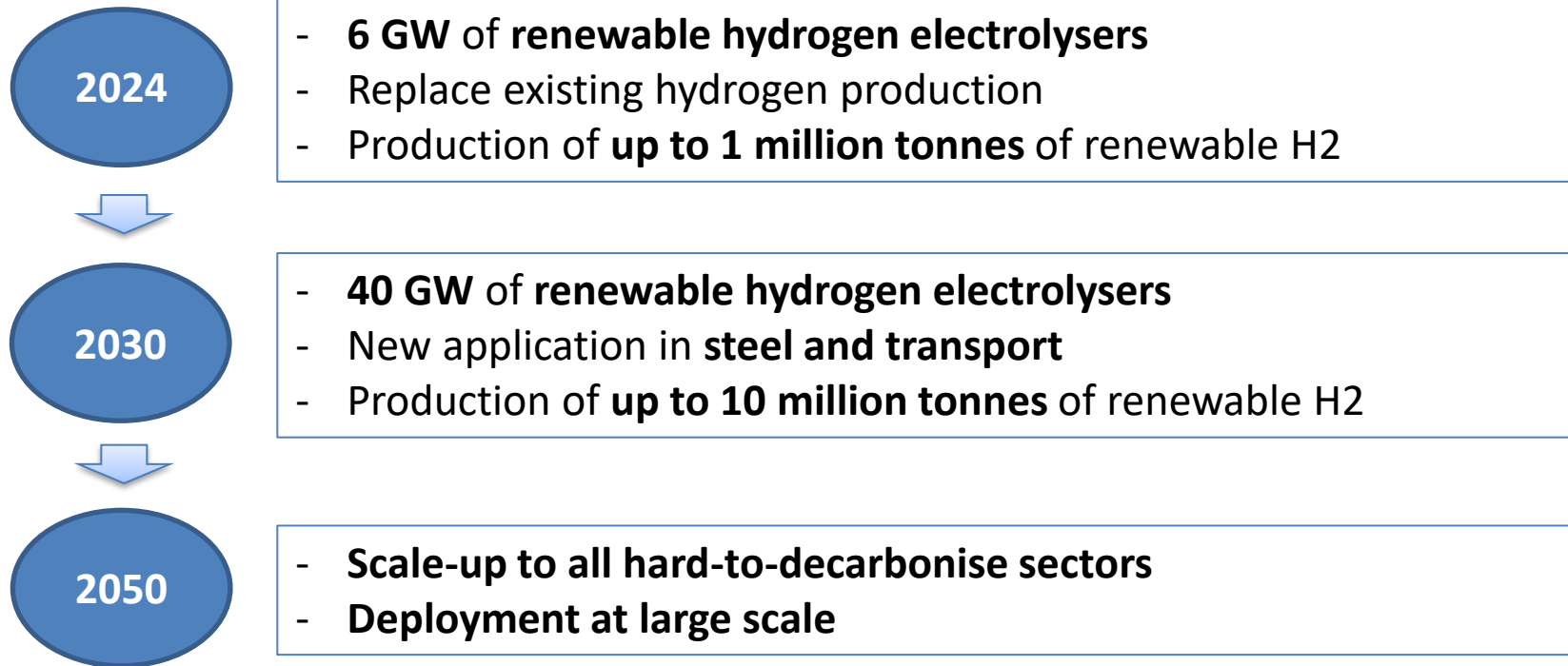
With more direct **electrification of end-use sectors** such as industry, heating of buildings and transport

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](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](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](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**

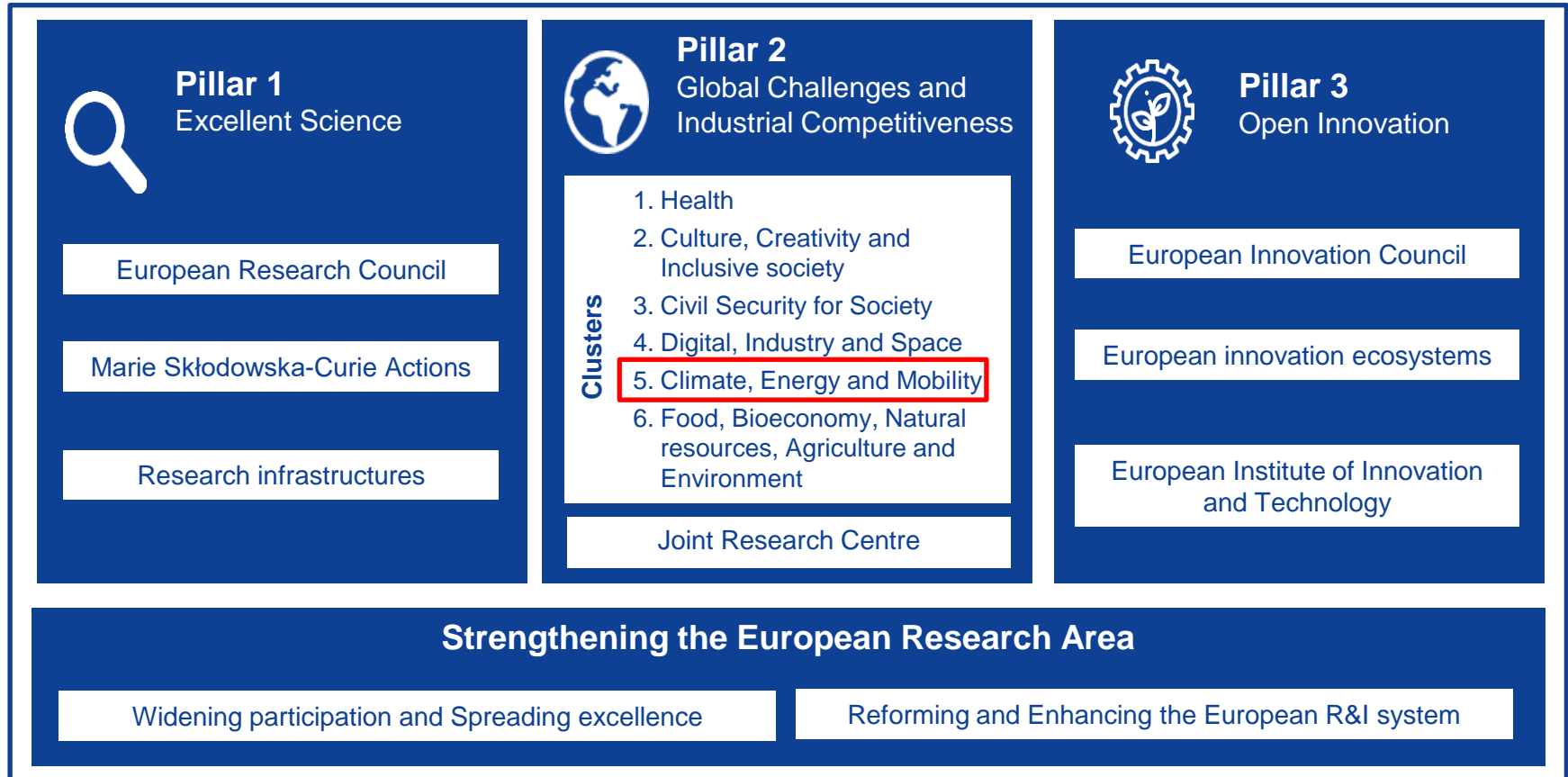


**Fortalecer cadena de valor e  
Innovación**

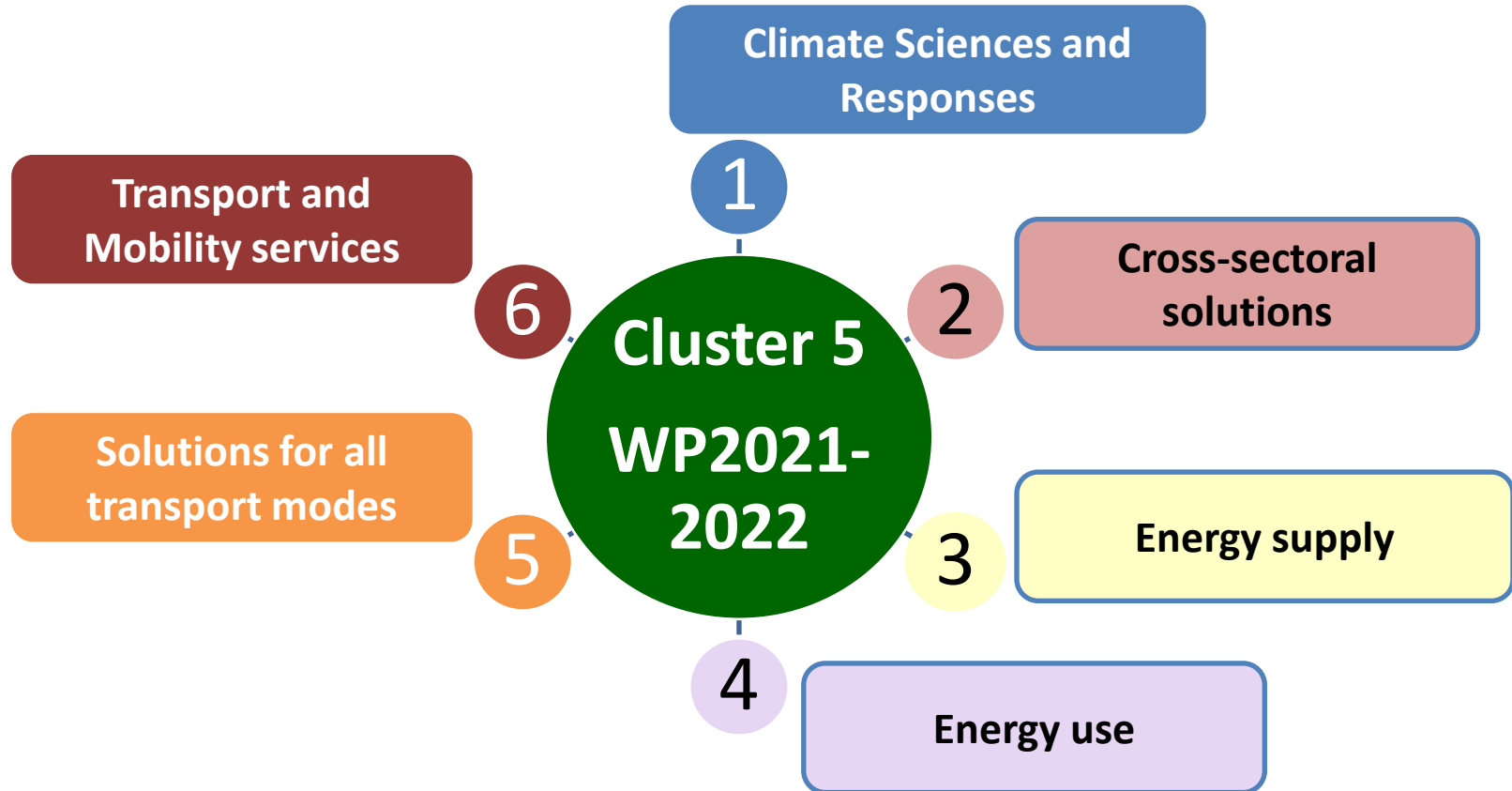
[https://ec.europa.eu/energy/topics/renewable-energy/eu-strategy-offshore-renewable-energy\\_en](https://ec.europa.eu/energy/topics/renewable-energy/eu-strategy-offshore-renewable-energy_en)

# Horizon Europe (2021-2027)

## Estructura

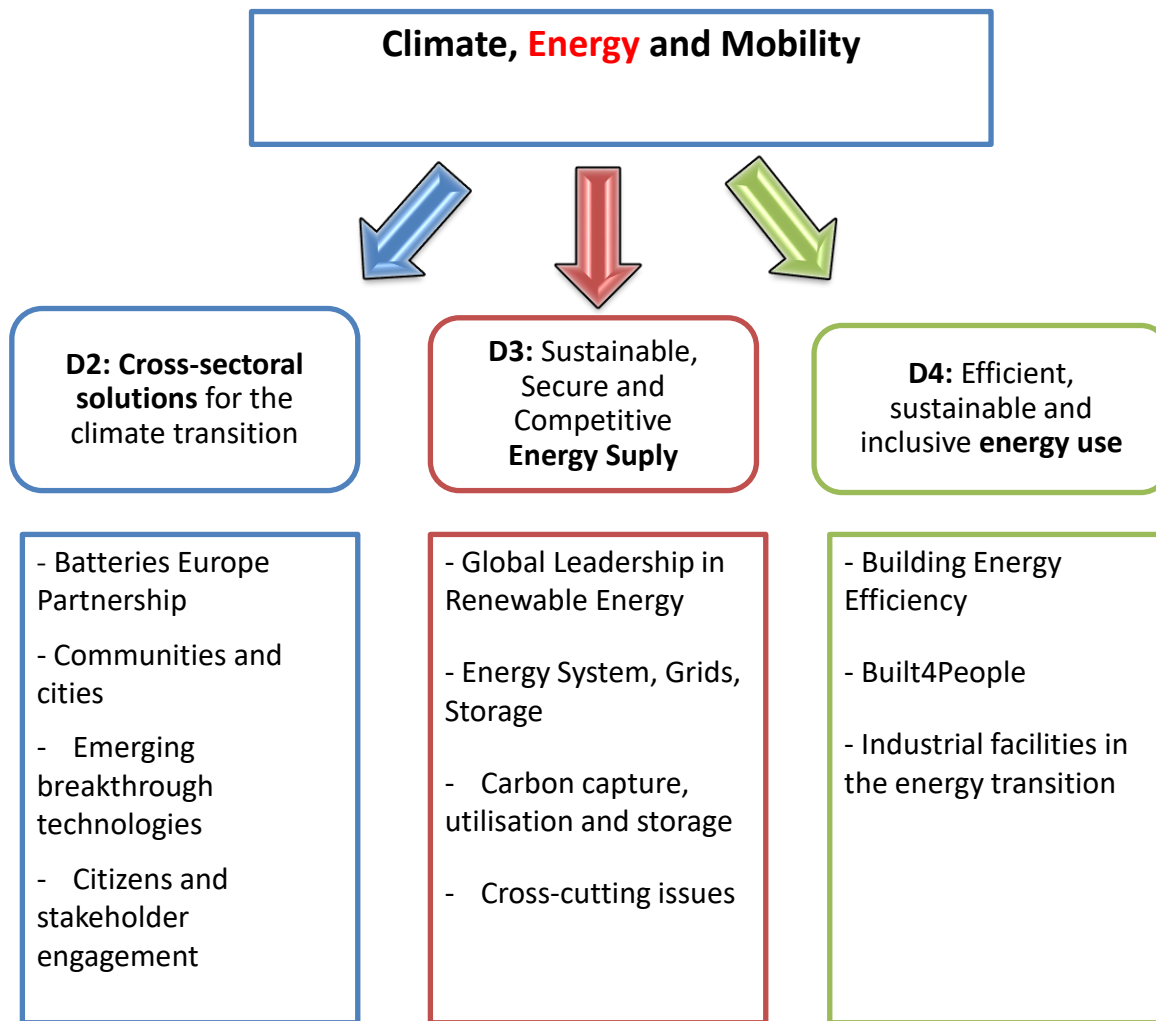


# Cluster 5 – 6 Destinations





# 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

**Borrador**

### 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

# Destination 4: Efficient, sustainable and inclusive energy use

Borrador

## 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

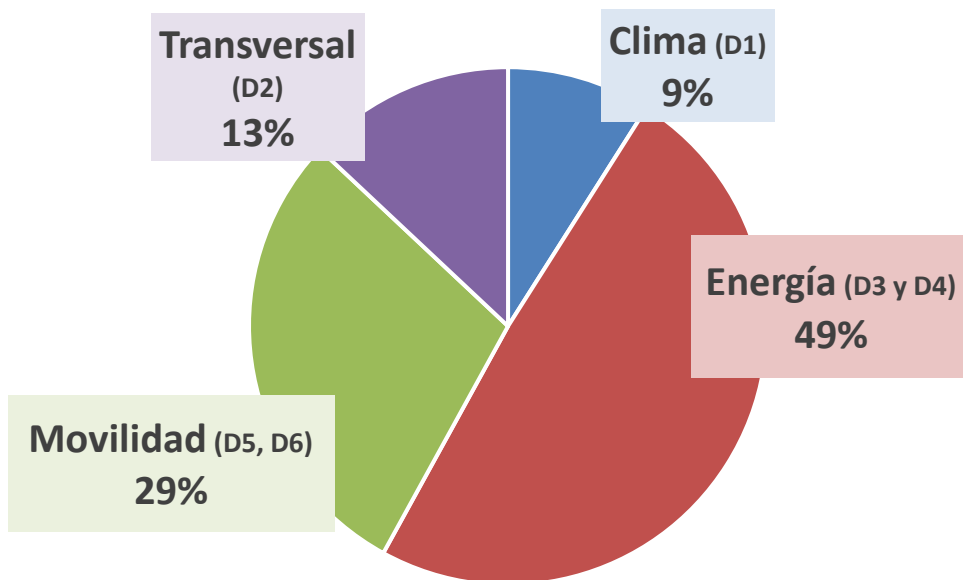
## Industrial facilities in the energy transition

- 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

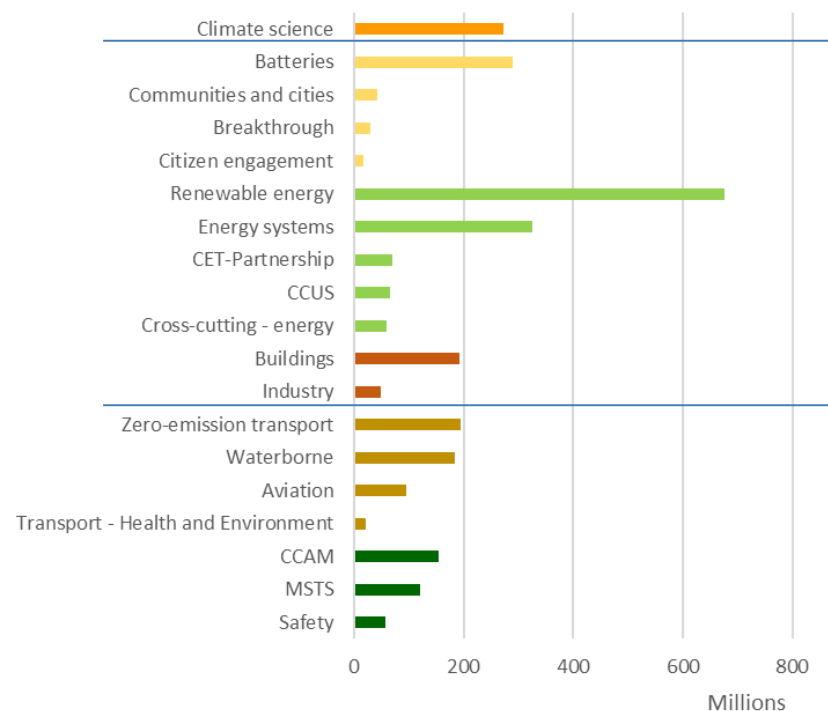
# Cluster 5 - Budget allocation

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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

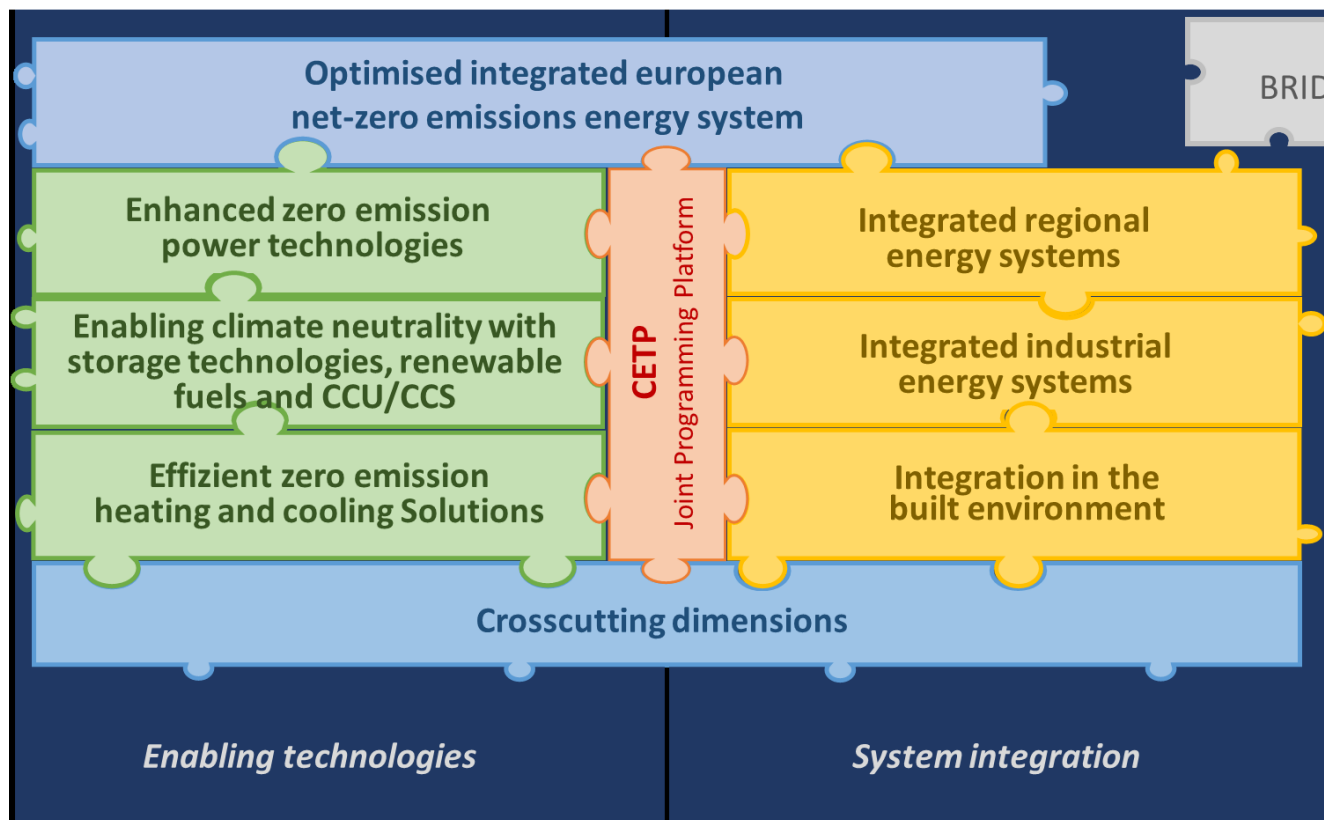


<https://ipi-urbaneurope.eu/app/uploads/2019/02/SRIA2.0.pdf>

# Co-fund “Clean Energy Transition” (CET)

Borrador

## Challenges



# Horizon Europe - Missions

Misiones de  
investigación e  
innovación

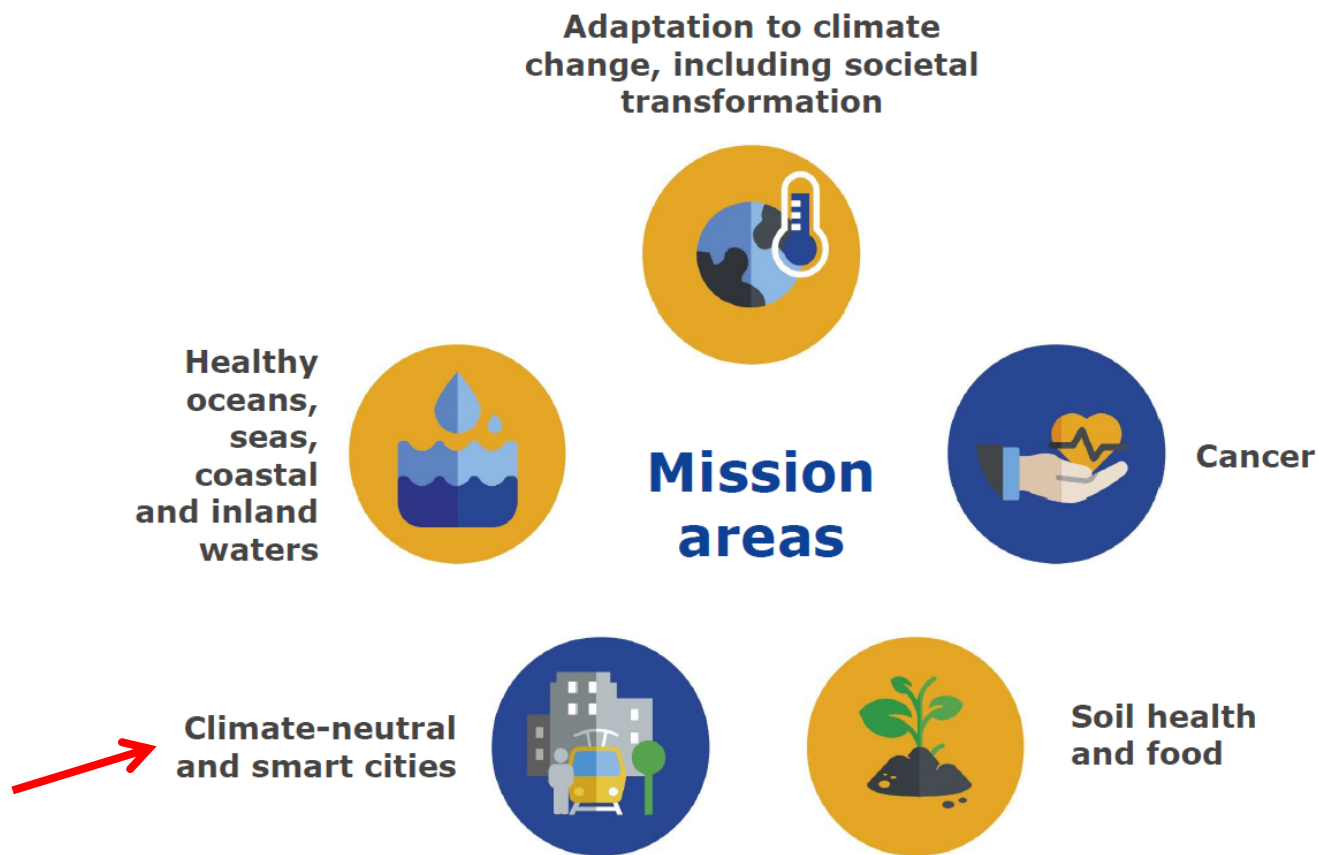
Relacionar mejor la investigación e innovación de la UE con las necesidades de la sociedad y la ciudadanía, con una gran visibilidad e impacto.



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.

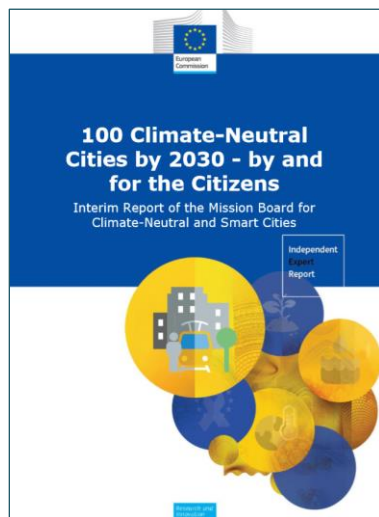
€ 5 billion (tbc) (max. 10% del presupuesto del Pilar 2)  
para convocatorias de misiones en los 3 primeros años

# Horizon Europe – 5 Mission areas



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

Borrador



- 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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