

# Horizon Europe & Aotearoa New Zealand

## Cluster 5: Climate, Energy and Mobility

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New Zealand Government

# Where do I start? No. 1: What are they funding?

- EU is MUCH more directed than NZ research. **It is NOT ‘curiosity’ driven it is Calls For Proposals**
- Cluster 5, Climate, Energy and Mobility can be understood as *the specific research gaps identified to help Europe achieve political goals related to carbon neutrality by 2050*
- Under Cluster 5, there are almost 200 separate calls of between Euros 3 - 16m for each call
- They sequence these so some are *closed, some open, and some forthcoming*

<b>Call - Climate sciences and responses .....</b>	<b>25</b>
Conditions for the Call .....	25
Earth system science .....	26
HORIZON-CL5-2023-D1-01-01: Further climate knowledge through advanced science and technologies for analysing Earth observation and Earth system model data .....	26
HORIZON-CL5-2023-D1-01-02: Climate-related tipping points .....	28
HORIZON-CL5-2023-D1-01-03: Climate impacts of a hydrogen economy .....	31
HORIZON-CL5-2023-D1-01-04: Improved knowledge in cloud-aerosol interaction .....	33
Climate change mitigation, pathways to climate neutrality .....	36
HORIZON-CL5-2023-D1-01-05: Science for successful, high-integrity voluntary climate initiatives .....	36
HORIZON-CL5-2023-D1-01-06: Broadening the range of policy options in transition pathway analysis .....	38
Climate change impacts and adaptation .....	41
HORIZON-CL5-2023-D1-01-07: Modelling for local resilience - Developments in support of local adaptation assessments and plans.....	41
Social science, citizen science and behavioural science for climate action .....	44
HORIZON-CL5-2023-D1-01-08: Solar Radiation Modification: governance of research .	44
HORIZON-CL5-2023-D1-01-09: Behavioural change and governance for systemic transformations towards climate resilience .....	46
HORIZON-CL5-2023-D1-01-10: Improving the evidence base regarding the impact of sustainability and climate change education and related learning outcomes .....	49
International cooperation.....	52
HORIZON-CL5-2023-D1-01-11: Needs-based adaptation to climate change in Africa ....	52

# Where do I start? No. 2: How do I find the calls?

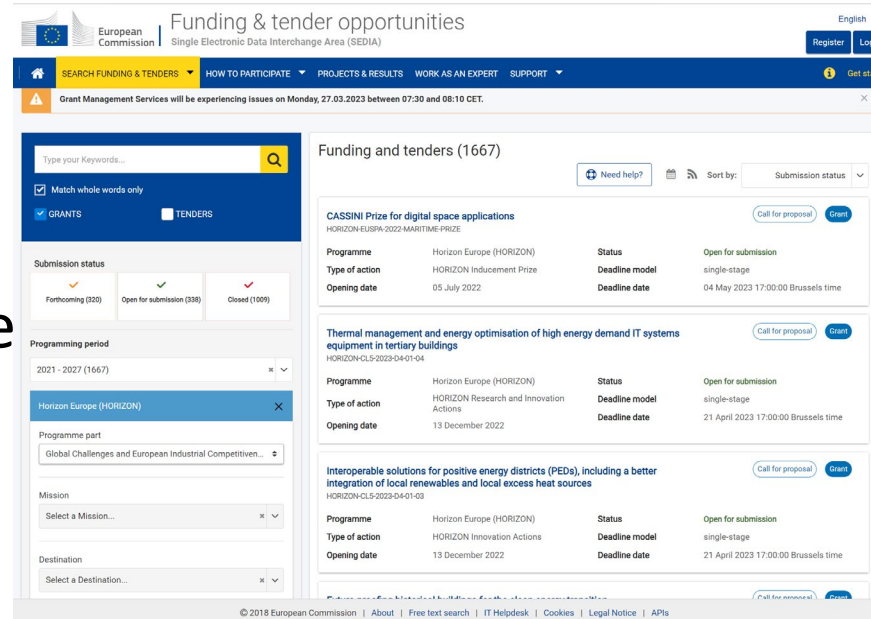
- Find the BIG list of CL5 calls in downloadable pdf [here](#). (540 pages)

or

- Google 'Horizon Europe Funding and Tenders' [Portal](#) and search by keyword or cluster + filter by 'open' or 'forthcoming'

- Current/open (close 5<sup>th</sup> Sep):

- 2024-D2-02 3 calls
- 2024-D6-01 13 calls



HORIZON-CL5-2023-D2-02-01: Advanced materials and cells development enabling large-scale production of Gen4 solid-state batteries for mobility applications (Batt4EU Partnership) ..... ]  
 HORIZON-CL5-2023-D2-02-02: New Approaches to Develop Enhanced Safety Material for Gen 3 Li-Ion Batteries for Mobility Applications (Batt4EU Partnership) ..... ]  
 HORIZON-CL5-2023-D2-02-03: Creating a digital passport to track battery materials, optimize battery performance and life, validate recycling, and promote a new business model based on data sharing (Batt4EU Partnership) ..... ]

## Call - Safe, Resilient Transport and Smart Mobility services for passengers and good

Conditions for the Call .....  
 Connected, Cooperative and Automated Mobility (CCAM) .....  
 HORIZON-CL5-2023-D6-01-01: User-centric development of vehicle technologies and solutions to optimise the on-board experience and ensure inclusiveness (CCAM Partnership) .....  
 HORIZON-CL5-2023-D6-01-02: Generation of scenarios for development, training, vir testing and validation of CCAM systems (CCAM Partnership) .....  
 HORIZON-CL5-2023-D6-01-03: Infrastructure-enabled solutions for improving the continuity or extension of Operational Design Domains (ODDs) (CCAM Partnership) ..  
 HORIZON-CL5-2023-D6-01-04: Integrating European diversity in the design, development and implementation of CCAM solutions to support mobility equity (CCAM Partnership) .....  
 HORIZON-CL5-2023-D6-01-05: CCAM effects on jobs and education, plans for skills match the CCAM development, and prerequisites for employment growth (CCAM Partnership) .....  
 Multimodal transport, infrastructure and logistics .....  
 HORIZON-CL5-2023-D6-01-06: Zero-emission e-commerce and freight delivery and return choices by retailers, consumers and local authorities .....  
 HORIZON-CL5-2023-D6-01-07: Operational automation to support multimodal freight transport .....  
 HORIZON-CL5-2023-D6-01-08: Future-proof GHG and environmental emissions facto for accounting emissions from transport and logistics operations .....  
 HORIZON-CL5-2023-D6-01-09: Climate resilient and safe maritime ports .....  
 Safety and resilience .....  
 HORIZON-CL5-2023-D6-01-10: Better infrastructure safety on urban and secondary ru roads throughout a combination of adaptable monitoring and maintenance solutions .....  
 HORIZON-CL5-2023-D6-01-11: Aviation safety - Uncertainty quantification for safety and risk management .....  
 HORIZON-CL5-2023-D6-01-12: New ways of reducing serious injuries and the long-te consequences of road crashes .....  
 Cross-cutting actions .....  
 HORIZON-CL5-2023-D6-01-13: Support for dissemination events in the field of Trans Research .....

# Where do I start? No. 3: What is forthcoming?

## Open 17 Sep-4th Feb 2025

### • D3-02 13 calls

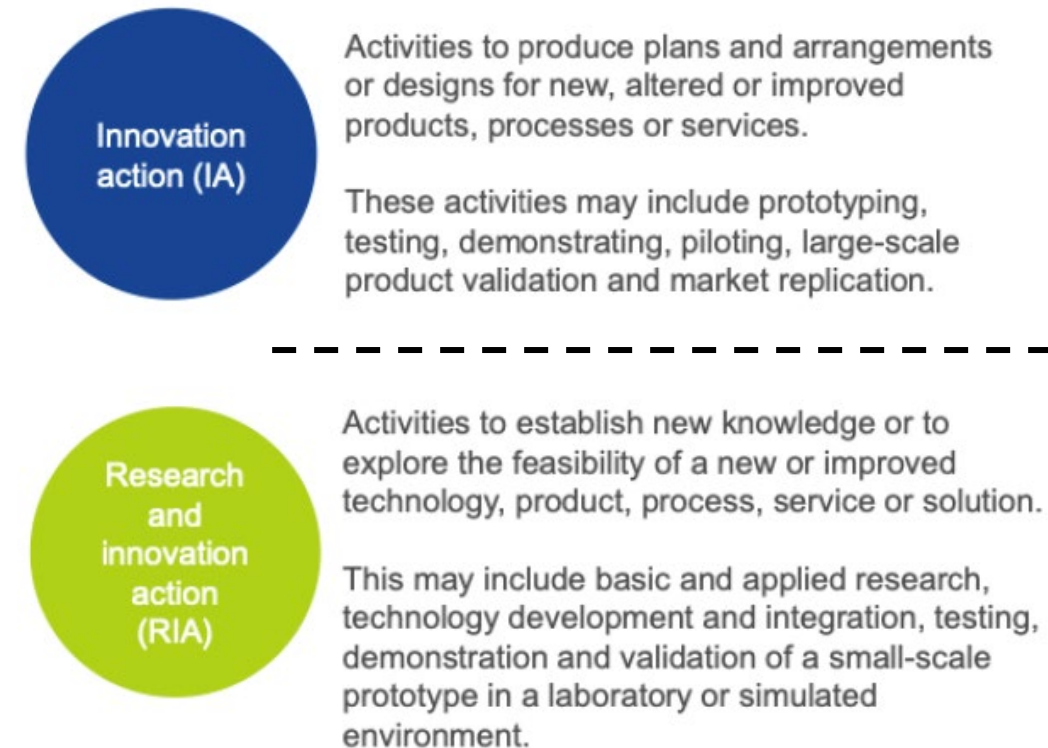
<b>Call - Sustainable, secure and competitive energy supply</b> .....
Conditions for the Call .....
Global leadership in renewable energy .....
HORIZON-CL5-2024-D3-02-01: Digital tools for CSP and solar thermal plants .....
HORIZON-CL5-2024-D3-02-02: Development of next generation synthetic renewable technologies.....
HORIZON-CL5-2024-D3-02-03: Development of smart concepts of integrated energy driven bio-refineries for co-production of advanced biofuels, bio-chemicals and biomaterials .....
HORIZON-CL5-2024-D3-02-04: Critical technologies for the future ocean energy farm .....
HORIZON-CL5-2024-D3-02-05: PV-integrated electric mobility applications .....
HORIZON-CL5-2024-D3-02-06: Innovative, Community-Integrated PV systems.....
HORIZON-CL5-2024-D3-02-07: Resource Efficiency of PV in Production, Use and Disposal .....
HORIZON-CL5-2024-D3-02-08: Minimisation of environmental, and optimisation of socio-economic impacts in the deployment, operation and decommissioning of offshore wind farms.....
HORIZON-CL5-2024-D3-02-09: Demonstrations of innovative floating wind concepts .....
HORIZON-CL5-2024-D3-02-10: Market Uptake Measures of renewable energy system .....
HORIZON-CL5-2024-D3-02-13: Support to the activities of the SET Plan Key Action 4: Renewable fuels and bioenergy.....
Carbon Capture, Utilization and Storage (CCUS) .....
HORIZON-CL5-2024-D3-02-11: CCU for the production of fuels .....
HORIZON-CL5-2024-D3-02-12: DACCS and BECCS for CO2 removal/negative emissions .....

### D4-02 5 calls

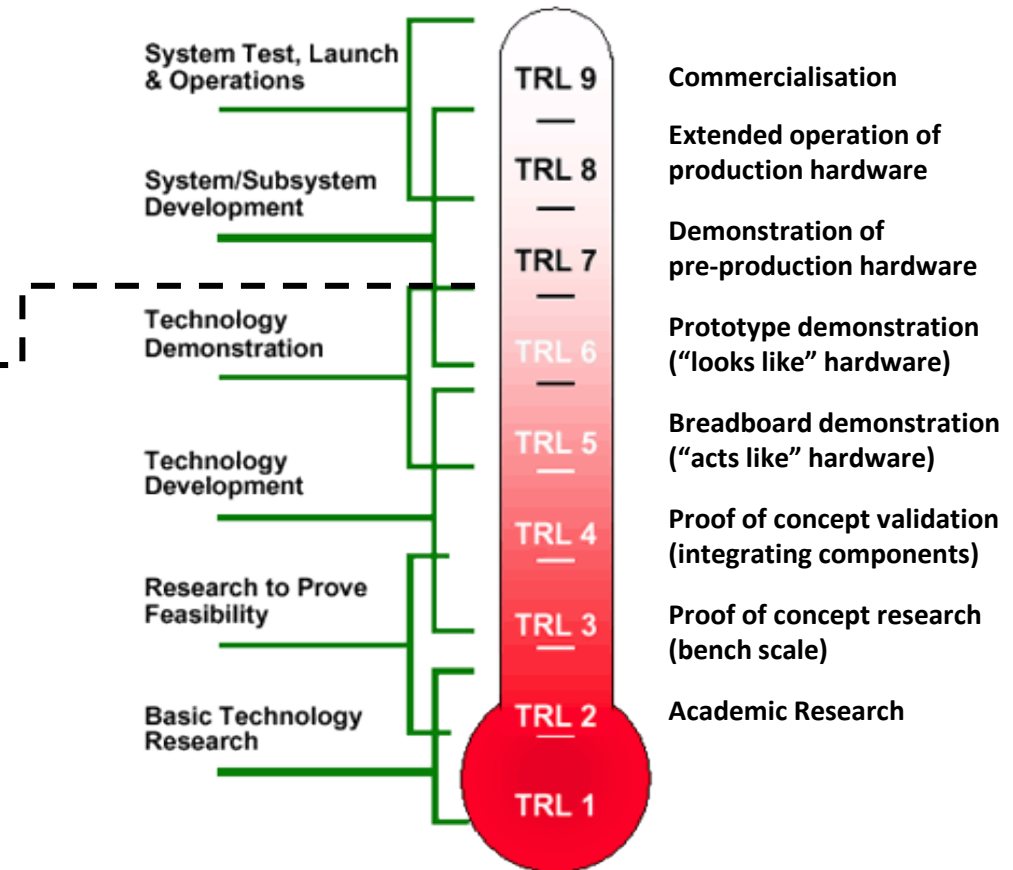
<b>Call - Efficient, sustainable and inclusive energy use</b> .....
Conditions for the Call .....
Highly energy-efficient and climate neutral European building stock.....
HORIZON-CL5-2023-D4-02-01: Innovative uses of lifecycle data for the management of buildings and buildings portfolios (Built4People Partnership) .....
HORIZON-CL5-2023-D4-02-02: Solutions for the identification of vulnerable buildings and people-centric built environment, and for improving their resilience in disruptive events and altered conditions in a changing climate (Built4People Partnership) .....
HORIZON-CL5-2023-D4-02-03: Demonstrate built-environment decarbonisation pathways through bottom-up technological, social and policy innovation for adaptive integrated sustainable renovation solutions (Built4People Partnership).....
HORIZON-CL5-2023-D4-02-04: Fast-tracking and promoting built environment construction and renovation innovation with local value chains (Built4People Partnership) .....
HORIZON-CL5-2023-D4-02-05: Supporting the creation of an accessible and inclusive built environment (Built4People Partnership).....

# Constructing a consortium 1: Types of actions

## Main types of actions



## Technology Readiness Levels



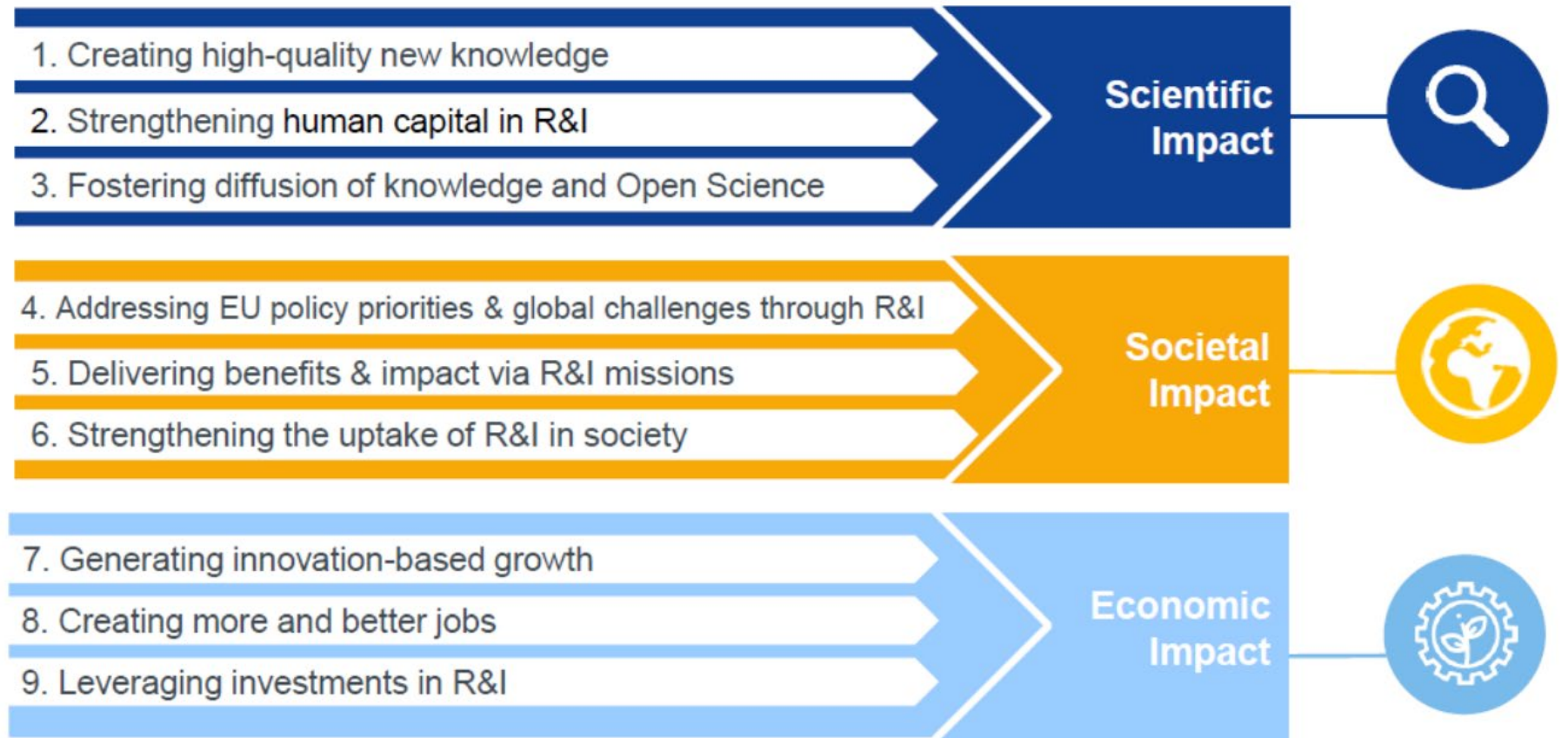
# Constructing a consortium 2: Impact

Less 'curiosity' driven, *the expected Impact is detailed in the research call.*

9 Impact Pathways are defined.

This is much more categorised and defined than we are used to in NZ. **Variety of pathways offers interdisciplinary opportunities**

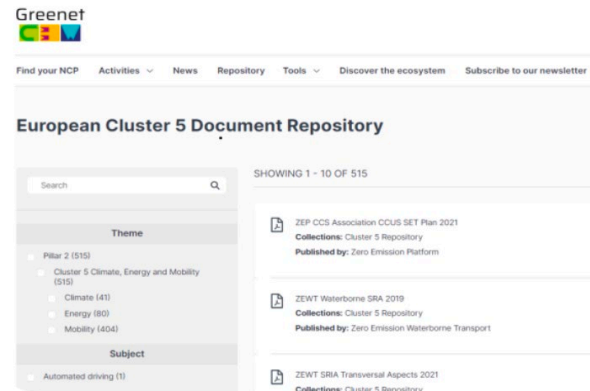
## Key impact pathways to track progress



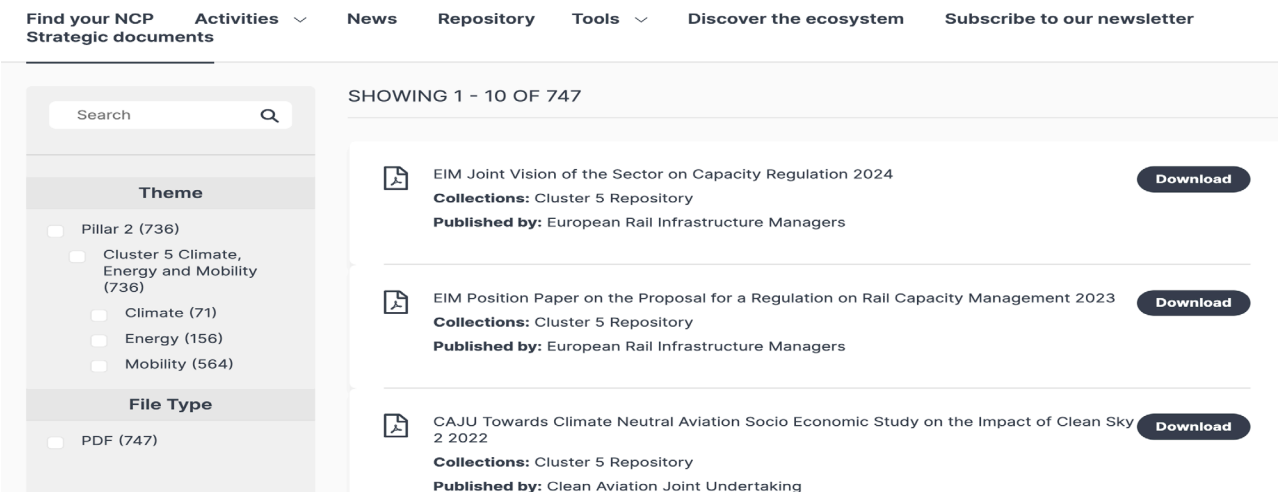
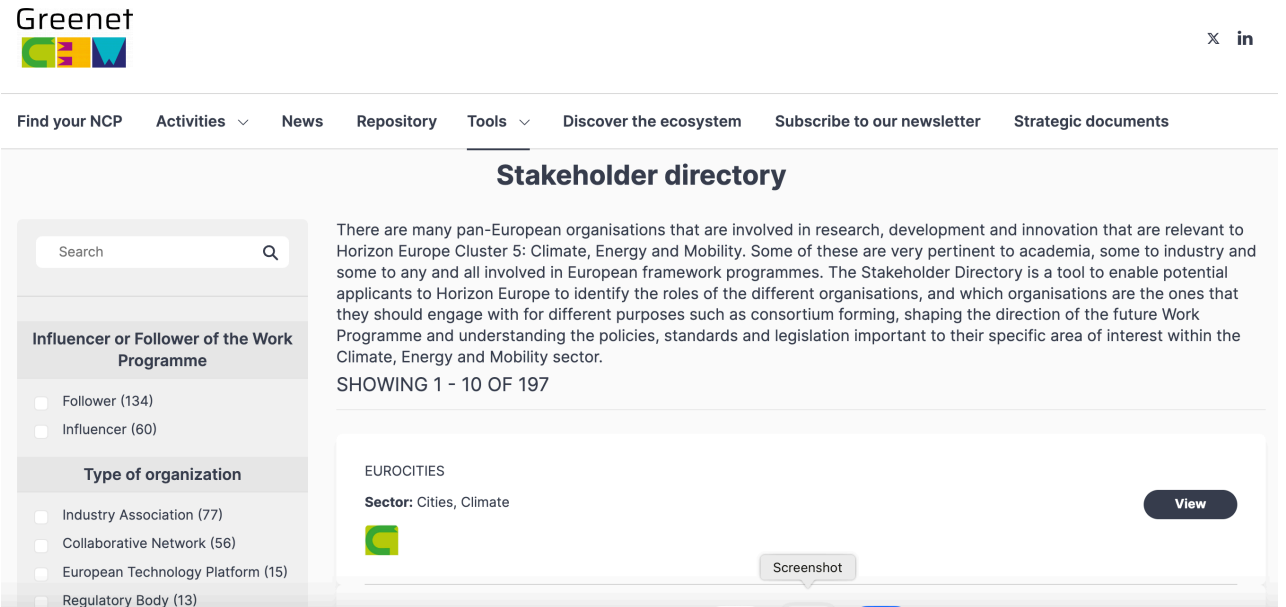
# Constructing a consortium 3: Partner search



[LINK HERE](#)

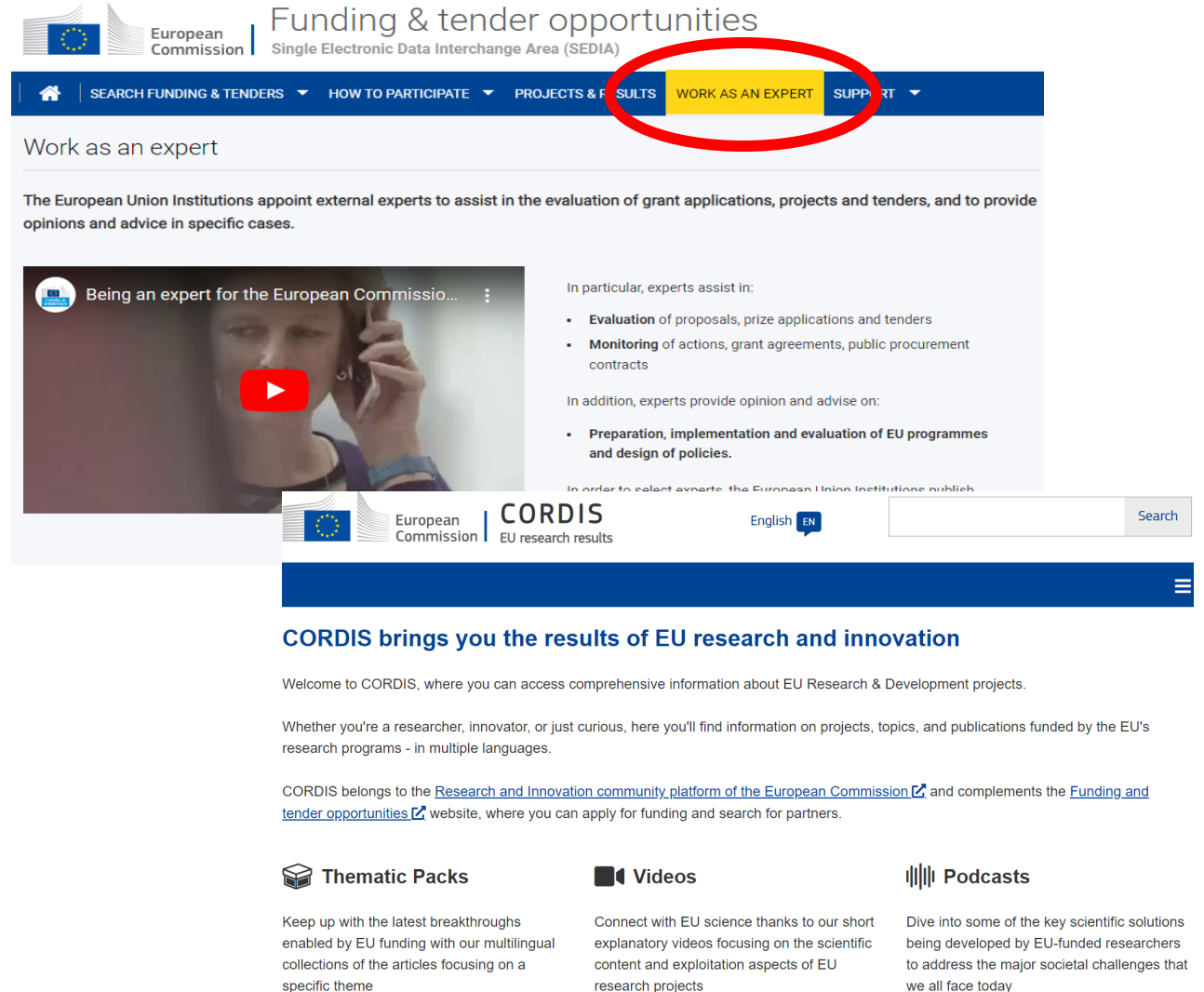


[CL5 Document repository link](#)



# Where do I start? No. 4: Who is active in your area?

- Register with European Commission as an expert reviewer to understand what 'good' looks like, see who is active in your areas, and should also be good for PBRF purposes
- Look at previous successful bids at 'CORDIS'. <https://cordis.europa.eu/>
- This is perfect for seeing:
  - Which groups have been successful in your area
  - Who could be putting a bid together
  - What you need to build on
  - Who to network with



The screenshot shows the European Commission website. The top navigation bar includes 'SEARCH FUNDING & TENDERS', 'HOW TO PARTICIPATE', 'PROJECTS & RESULTS', 'WORK AS AN EXPERT' (highlighted with a red circle), and 'SUPPORT'. Below this, the 'Work as an expert' section features a video thumbnail titled 'Being an expert for the European Commission...' and a list of expert roles: Evaluation of proposals, Monitoring of actions, and Preparation, implementation and evaluation of EU programmes. The bottom section is the 'CORDIS' header, which includes the text 'CORDIS brings you the results of EU research and innovation' and a welcome message. Below the welcome message, there are three columns: 'Thematic Packs', 'Videos', and 'Podcasts', each with a brief description of the content.



# Final Messages...

- **Become familiar with the portal.** Google 'Horizon Europe Fundings and tenders portal'. Navigate to 'Funding' tab and 'Calls for Proposals'. Play around with filters – e.g. 'open/forthcoming' or 'keyword'.
- **Think less short-term projects, more long term strategy.** Think about your own personal research plan – i.e. Work towards joining a consortium in 2025 and what a NZ/Canada case study could look like
- **Think about developing your networks.** Reach out to EU contacts. Sabbaticals, visits, University partner institutions, industry organisations, etc, etc

