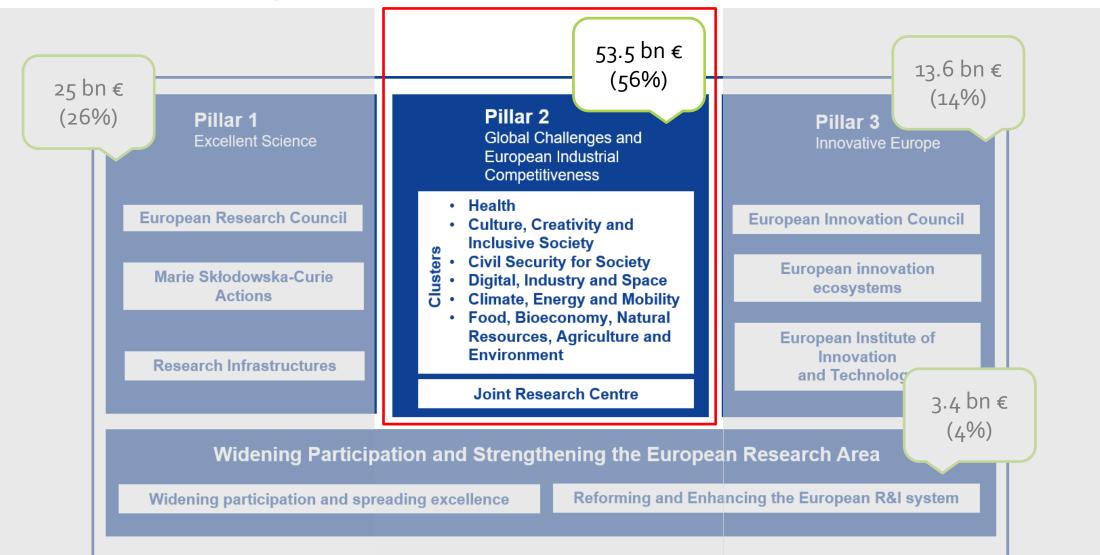
Horizon Europe – Funding opportunities for bioenergy projects

Markku Pekonen NCP: Cluster 5 and EU Missions: Climate-neutral and Smart Cities and Adaptation to Climate change Business Finland

HORIZON EUROPE

EU RESEARCH AND INNOVATION PROGRAMME

Horizon Europe 2021-2027: 95.5 billion €





Horizon Pillar II: Collaborative projects



- **Global Challenges and** European Industrial Competitiveness
- Culture, Creativity and Inclusive
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre

- ✓ Companies, universities, research centers, third sector etc. all over the world
- ✓ At least 3 participants from 3 countries
- \checkmark Pre-defined calls
- ✓ 1-2 calls yearly
- ✓ 70-100% funding rate
- ✓ Typical funding for consortia is 4-10 M€
- ✓ <u>Work Program</u> > Reference documents



Project life cycle: Horizon Europe collaborative project



Horizon Europe Cluster 5 Destinations 2023-2024

 D1: Climate sciences and responses for the transformation towards climate neutrality Earth system science Climate change mitigation Climate change adaptation Social, citizen and behavioural science 	 D2: Cross-sectoral solutions for the climate transition A competitive and sustainable European battery value chain 	 D3: Sustainable, secure and competitive energy supply Global leadership in renewable energy Energy systems, grids & storage
 D4: Efficient, sustainable and inclusive energy use Highly energy-efficient and climate neutral European building stock 	 D5: Clean and competitive solutions for all transport modes Zero-emission road transport Aviation Waterborne transport Rail Industry (EU-Rail) 	 D6: Safe, Resilient Transport and Smart Mobility services for passengers and goods Connected, Cooperative and Automated Mobility (CCAM) Multimodal transport, infrastructure and logistics Innovative digital tools and solutions to monitor and improve the management and operation of transport infrastructure Safety and resilience



Cluster 5 budget distribution 2023-2024

Climate science 221 Batteries 220 Cross-cutting 26 DUT Partnership (co-fund) Renewable energy 605 Energy systems, grids & storage 281,6 CET Partnership (co-fund) 68 CCUS 70 Buildings 94 78 standard topics Industry 26 Zero-emission transport 136,5 Waterborne transport 19,5 CCAM 135,55 Aviation 111 2ZERO Transport-related health and environment 17 Batt4EU Connected mobility 102 Multimodal transport 79 Built₄People Safety and resilience ZEWT 600 0 100 200 300 400 500

EU contribution per thematic area (2023-2024, in M€)

European Partnerships:

- 60 out of 189 topics (32% of all cluster 5 topics)
- > 688 M€ out of 2 383 M€ (29% of cluster 5 budget)

Co-programmed Partnerships:

M€



Cluster 5 call structure 2023-2024

	1/12/	2022 2/03	/2023 1/0	06/2023 3 ⁻	1/08/2023	30/11/2023	29/02/2024	30/05/2024	29/08/2024
Climate sciences	HORIZON-CL5-2023-D1-01	13/12/2022 – 18/0	04/2023						
	HORIZON-CL5-2023-D1-01	13/12/2022 - 18/0	04/2023						
	HORIZON-CL5-2024-D1-01				12/09)/2023 – 05/03/2024			
Cross-cutting actions	HORIZON-CL5-2023-D2-01	13/12/2022 – 18/0	94/2023						
	HORIZON-CL5-2023-D2-02		04/	05/2023–05/09/202	23				
	HORIZON-CL5-2024-D2-01					07/12/20	023–18/04/2024		
	HORIZON-CL5-2024-D2-02							07/05/2024–05,	/09/2024
Energy supply	HORIZON-CL5-2023-D3-01	.3/12/2022 - 30/3/2	2023						
	HORIZON-CL5-2023-D3-02		04/	05/2023–05/09/202	23				
	HORIZON-CL5-2023-D3-03		04/	05/2023 – 10/10/202	3				
	HORIZON-CL5-2024-D3-01				12/09/2	023 – 16/01/2024			
	HORIZON-CL5-2024-D3-02							07/05/2024 – 05,	/09/2024
Energy use	HORIZON-CL5-2023-D4-01	13/12/2022 - 20/0	04/2023						
	HORIZON-CL5-2023-D4-02		04/	05/2023–05/09/202	23				
	HORIZON-CL5-2024-D4-01					07/12/20	023–18/04/2024		
	HORIZON-CL5-2024-D4-02							07/05/2024 – 05,	/09/2024
Sustainable/	HORIZON-CL5-2023-D5-01	13/12/2022 - 20/0	04/2023						
competitive transport Mobility systems	HORIZON-CL5-2024-D5-01					07/12/20	023–18/04/2024		
	HORIZON-CL5-2023-D6-01		04/	05/2023–05/09/202	23				
	HORIZON-CL5-2024-D6-01							07/05/2024–05	/09/2024



Some examples of call topics for Horizon Europe Cluster 5:

HORIZON-CL5-2024-D3-01-03: Demonstration of improved **intermediate renewable energy carrier technologies for transport fuels**

HORIZON-CL5-2024-D3-01-04: Improvement of light harvesting and carbon fixation with synthetic biology and/or bio-inspired//biomimetic pathways for renewable direct solar fuels production

HORIZON-CL5-2024-D3-01-05: Development of carbon fixation technologies for biogenic flue gases

HORIZON-CL5-2024-D3-02-03: Development of **smart concepts of integrated energy driven bio-refineries** for coproduction of advanced biofuels, bio-chemicals and biomaterials

HORIZON-CL5-2023-D3-02-07: Development of **next generation advanced biofuel technologies**

HORIZON-CL5-2023-D3-02-08: Development of **microalgae and/or direct solar fuel production** and purification technologies for advanced aviation and /or shipping fuels

8

HORIZON-CL5-2024-D3-02-12: DACCS and **BECCS** for CO2 removal/negative emissions



Take home messages:



- ✓ So many opportunities that something matches to you needs!
- ✓ Start preparing **now**
- ✓ Reserve time and effort
- ✓ **Stay informed**: participate in information events & educate yourself
- ✓ Contact your current network
- ✓ Participate in matchmaking events
- ✓ **Partner Search** tool in portal
- ✓ Ask for help!
- ✓ All relevant info in Funding & Tenders -portal



PROJECTS & RESULTS WORK AS AN EXPERT



Business Finland's role:



- ✓ <u>EUTI</u> in Business Finland is the home base for national Horizon Europe coordination
- Free-of-charge-support for applicants throughout the project lifecycle
 - ✓ Upcoming calls
 - \checkmark Training and events
 - ✓ Coaching & pitching
 - ✓ Reading & commenting proposals
 - Assistance in negotiation, reporting, payments, legal affairs

✓ Preparatory funding available



Thank you!

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