

Horizon Europe 2021-2027



BLUE MARITIME CLUSTER

GLOBAL CENTRE OF EXPERTISE
NORWAY



Norwegian Centres of Expertise

NCE Blue Legasea

Per Ingeberg

EU Advisor

per.ingeberg@aakp.no



EU-rådgiver`s rolle

- Informerer klyngene om Horisont Europa-programmene
 - Webinarer og Workshops
- 1:1 møter for tematiske utlysninger og SMB-program
(Små-Mellomstore Bedrifter)
- Veiledning i søknadsprosessen
 - Søknadsanalyse (utlysn vs kandidat)
 - Partnersøk
 - Søknadsutvikling (mentor) → finne skrivehjelp
 - Innhente annen støtte (eks PES)



Horizon Europe		
Pillar 1	Pillar 2	Pillar 3
<i>Total budget: EUR 95,5 billion</i>		
 Excellent Science	 Global Challenges and European Industrial Competitiveness	 Innovative Europe
European Research Council (ERC)	Clusters <ol style="list-style-type: none">1. Health2. Culture, Creativity and Inclusive Societies3. Civil Security for Society4. Digital, Industry & Space5. Climate, Energy and Mobility6. Food, Bioeconomy, Natural Resources, Agriculture & Environment	European Innovation Council (EIC)
Marie Skłodowska-Curie Actions (MSCA)		Innovation ecosystems
Research Infrastructures		EU Joint Research Centre (JRC)
Widening participation and strengthening the European research area (EUR 2.1 billion)		
Widening participation and spreading excellence. Reforming and enhancing the European R&I system.		

Research & Innovation for a better Europe



➤ Horizon Europe – Pillar 2

- 9th framework programme for R&I
- 2021 – 2027 → 95,5 billion euros
- Min 3 countries / min 1 EU (NO ass)
- Typical budget ~ 3-10 mill € → 3-4 yrs
- IA up to 60/70% +25% overhead
- RIA up to 100% + 25% overhead
- Thematic Calls – Single Stage or 2 Stage
- Individual Proposal deadlines

Action	Funding*	Technology Readiness Level	Main Characteristics
RIA – Research & Innovation Action	100% + 25%	Low TRL (4-6)	Basic and applied research , technology development and integration, testing and validation - small-scale prototype in laboratory or simulated environment
IA – Innovation Action	70% + 25%	High TRL (6-8)	Prototyping , testing, demonstrating, piloting, large-scale product validation and market replication
CSA - Coordination & Support Action	100% + 25%		Networking , coordination or support services , policy dialogues and mutual learning exercises and studies

* Non-profit: always 100% + 25% overhead

➤ Typical Consortium

- System owners & end users
- Technology providers & other experts
- Universities & Research institutions
- Regulatory bodies
- Other specialists
- Project coordinators



Horizon Europe Work Programme 2021 - 2022

Pillar 2 → Cluster 5 → Thematic Calls Sustainable, secure and competitive energy supply

Merk: Det kan fortsatt komme endringer i denne oversikten, siden arbeidsprogrammet ennå ikke er endelig fastsatt og godkjent av EU-kommisjonen. Åpning av hver enkelt utlysning i kommisjonens «Funding & Tender Portal» vil bli nærmere annonsert.

Calls 2021-2022	Category	Opening	Deadline	Comments
Pillar 2 / Cluster 5				
Destination 3 <i>Sustainable, secure and competitive energy supply</i>				
HORIZON-CL5-2021-D3-02-05: Energy Sector Integration: Integrating and combining energy systems to a cost-optimised and flexible energy system of systems	IA TRL 6-8	TBC	5.1.22	“Projects should demonstrate the benefits of the integration of different elements. This includes in particular electricity and gas networks, district heating and cooling, and long term energy storage systems (for example Hydrogen, power-to-X, thermal storage, hydro-storage).” Est funding per project → € 10 mill (3) Funding 70%
HORIZON-CL5-2021-D3-03-16: Innovative biomethane production as an energy carrier and a fuel	IA TRL 6-8	TBC	23.2.22	“Proposals will demonstrate cost-effective and innovative biomethane production through thermochemical, biochemical, chemical, electrochemical, biological pathways including sustainable biomass and biogenic wastes gasification, CO2 effluents from anaerobic digestion or fermentation processes combined with renewable hydrogen or water.” Est funding per project → € 10 mill (2) funding 70%
HORIZON-CL5-2022-D3-01-01: Demonstration of cost-effective advanced biofuel technologies utilizing existing industrial plants	IA TRL 6-7	TBC	26.4.22	“Proposals should demonstrate cost-efficient advanced biofuel technologies which improve the economic viability of the advanced biofuel production.” Est funding per project → € 10 mill (2) Funding 70%



Horizon Europe Work Programme 2021 - 2022

Pillar 2 → Cluster 5 → Thematic Calls Enabling climate neutral, clean, smart and competitive Waterborne Transport

Merk: Det kan fortsatt komme endringer i denne oversikten, siden arbeidsprogrammet ennå ikke er endelig fastsatt og godkjent av EU-kommisjonen. Åpning av hver enkelt utlysning i kommisjonens «Funding & Tender Portal» vil bli nærmere annonsert.

Calls 2021-2022			
Pillar 2 / Cluster 5	Category	Deadline	Comments
Destination 5			
Enabling climate neutral, clean, smart, and competitive waterborne transport			
HORIZON-CL5-2021-D5-01-07: Enabling the safe and efficient on-board storage and integration within ships of large quantities of ammonia and hydrogen fuels	IA TRL 6-7	14.9.21	€ 10 mill (2) (60%/100%)
HORIZON-CL5-2021-D5-01-11: Hyper powered vessel battery charging system	IA TRL 6-7	14.9.21	€ 7 mill (2) (60%/100%)
HORIZON-CL5-2022-D5-01-01: Exploiting electrical energy storage systems and better optimising large battery electric power within fully battery electric and hybrid ships	IA TRL 7	26.4.22	€ 8 mill (2) (60%/100%)
HORIZON-CL5-2022-D5-01-04: Transformation of the existing fleet towards greener operations through retrofitting	IA TRL 7-8	26.4.22	€ 5 mill (5) (60%/100%)
HORIZON-CL5-2022-D5-01-06: Computational tools for shipbuilding	IA TRL 7-8	26.4.22	€ 7 mill (1) (60%/100%)



Horizon Europe Work Programme 2021 - 2022

Pillar 2 → Cluster 5 → Thematic Calls

Merk: Det kan fortsatt komme endringer i denne oversikten, siden arbeidsprogrammet ennå ikke er endelig fastsatt og godkjent av EU-kommisjonen. Åpning av hver enkelt utlysning i kommisjonens «Funding & Tender Portal» vil bli nærmere annonsert.

Research- and Innovation Actions (RIA)

Prosjekt 2021-2022			
Pillar 2 / Cluster 5	Category	Deadline	Comments
Destination 5			
Enabling climate neutral, clean, smart, and competitive waterborne transport			
HORIZON-CL5-2021-D5-01-10: Innovative on-board energy saving solutions	RIA TRL 5	14.9.21	€ 5 mill
HORIZON-CL5-2021-D5-01-13; Digital Twin models to enable green ship operations	RIA TRL 5	7.9.21	€ 7 mill
HORIZON-CL5-2022-D5-01-02: Innovative energy storage systems on-board vessels	RIA TRL 5	26.4.22	€ 5 mill
HORIZON-CL5-2022-D5-01-05: Seamless safe logistics through an autonomous waterborne freight feeder loop service	RIA TRL 5	26.4.22	€ 15 mill

Research & Innovation for a better Europe



Horizon Europe → Pillar 3 → SME Programs
(Small-Medium size Entities)

➤ Innovative SME`s

- EUREKA and EU collaboration
- Min 2 Eurostars R&D partners
- R&D-performing SME in lead
- Typical budget ~ 1,4 mill € → 3 yrs
- Market intro 2nd year
- 50% funding for SME (lead)
- Bottom-up thematic areas

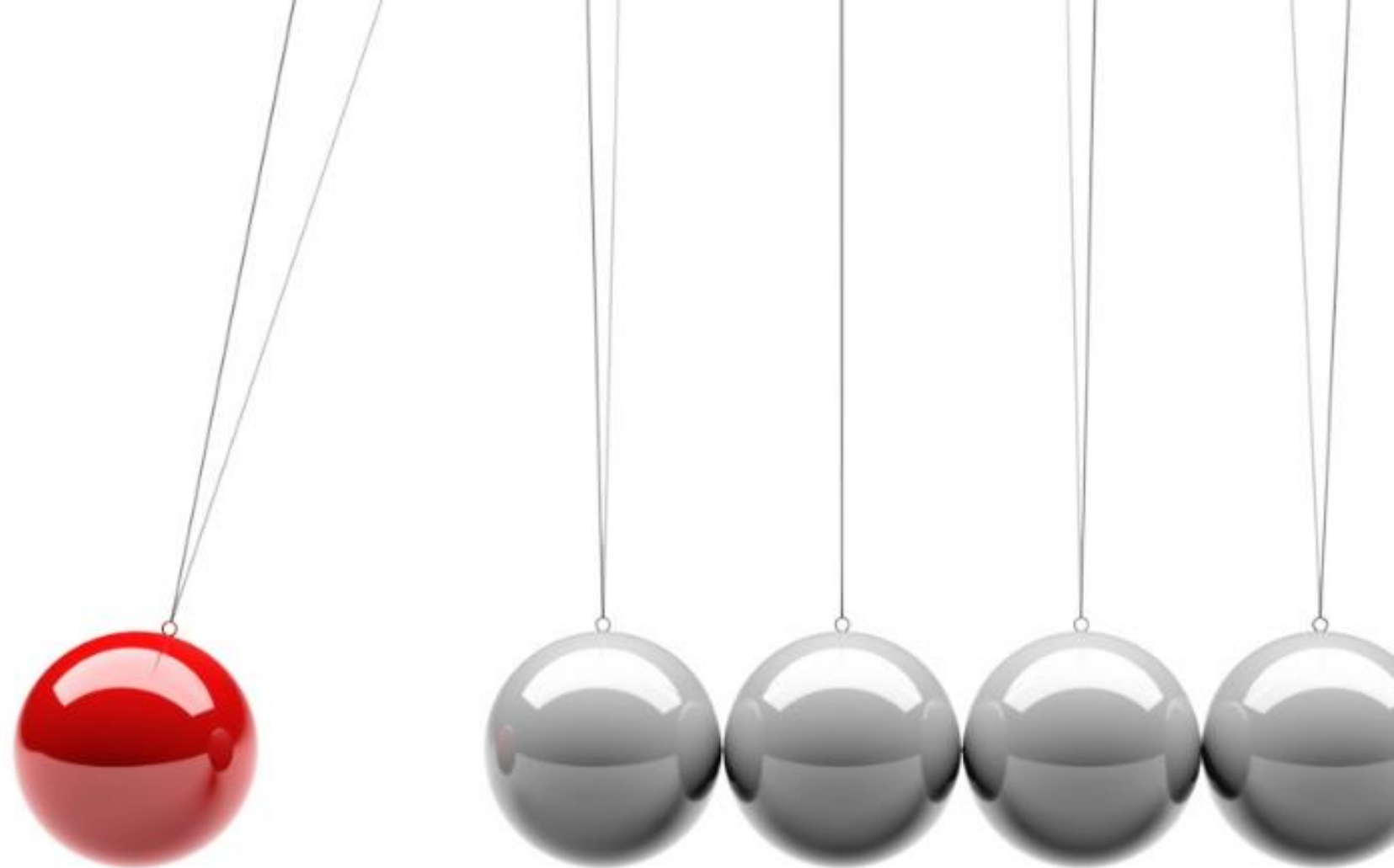
➤ EIC Accelerator Pilot

- Breakthrough innovations (TRL 5/6)
- Single SME applicant
- Funding + blended financing
- 2,5 + 15,0 MEUR
- Open- or specific challenges (2)
- Market intro 2nd year
- 70% funding + 25% overhead



aakp

Creates opportunities



Per Ingeberg

EU Advisor

per.ingeberg@aakp.no