# **How to make the most of the European Partnerships in Horizon Europe?**7.11.2022

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### **Future calls**

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	Conditions for the Call	. 22
	Manufacturing Industry	. 24
	HORIZON-CL4-2023-TWIN-TRANSITION-01-02: High-precision OR complex produ	act
	manufacturing – potentially including the use of photonics (Made in Europe and Photoni	ics
	Partnerships) (IA)	
	HORIZON-CL4-2023-TWIN-TRANSITION-01-04: Factory-level and value chain	
	approaches for remanufacturing (Made in Europe Partnership) (IA)	27
	HORIZON-CL4-2023-TWIN-TRANSITION-01-07: Achieving resiliency in value	
	networks through modelling and Manufacturing as a Service (Made in Europe Partnership	ip)
	(RIA)	. 29
	HORIZON-CL4-2023-TWIN-TRANSITION-01-08: Foresight and technology transfer f	for
	Manufacturing as a Service (Made in Europe Partnership) (CSA)	31
	Energy Intensive Process Industries	33
	HORIZON-CL4-2023-TWIN-TRANSITION-01-31: Energy efficiency breakthroughs in	1
	the process industries (Processes4Planet partnership) (RIA)	33
	HORIZON-CL4-2023-TWIN-TRANSITION-01-33: Electrification of high temperature	e
	heating systems (Processes4Planet Partnership) (IA)	35
	HORIZON-CL4-2023-TWIN-TRANSITION-01-36: Modelling industry transition to	
	climate neutrality, sustainability and circularity (Processes4Planet partnership) (RIA)	37
	HORIZON-CL4-2023-TWIN-TRANSITION-01-37: Hubs for circularity for near zero	
	emissions regions applying industrial symbiosis and cooperative approach to heavy	
	industrialized clusters and surrounding ecosystems (Processes4Planet partnership) (IA) .	40
	HORIZON-CL4-2023-TWIN-TRANSITION-01-40: Sustainable and efficient industrial	
	water consumption: through energy and solute recovery (Processes4Planet partnership)	
	(RIA)	. 43
	HORIZON-CL4-2023-TWIN-TRANSITION-01-42: Circular economy in process	
	industries: Upcycling large volumes of secondary resources (Processes4Planet partnersh	ip)

Call - TWIN GREEN AND DIGITAL TRANSITION 2024
Conditions for the Call
Manufacturing Industry
HORIZON-CL4-2024-TWIN-TRANSITION-01-03: Manufacturing as a Service:
Technologies for customised, flexible, and decentralised production on demand (Made in
Europe Partnership) (RIA)
HORIZON-CL4-2024-TWIN-TRANSITION-01-05: Technologies/solutions to support
circularity for manufacturing (Made in Europe Partnership) (RIA)
Energy Intensive Process Industries
HORIZON-CL4-2024-TWIN-TRANSITION-01-32: Optimisation of thermal energy flows
in the process industry (Processes4Planet partnership) (IA)
HORIZON-CL4-2024-TWIN-TRANSITION-01-34: Renewable hydrogen used as
feedstock in innovative production routes (Processes4Planet Partnership) (RIA)
HORIZON-CL4-2024-TWIN-TRANSITION-01-35: Turning CO2 emissions from the
process industry to feedstock (Processes4Planet partnership) (IA)
HORIZON-CL4-2024-TWIN-TRANSITION-01-38: Hubs for circularity for industrialised
urban peripheral areas (Processes4Planet partnership) (IA)
HORIZON-CL4-2024-TWIN-TRANSITION-01-41: Breakthroughs to improve process
industry resource efficiency (Processes4Planet partnership) (RIA)



### **Statistics CL4**

Topic code	Topic name	Type(s) of action	Number of submitted proposals	Expected to be funded	Budget in million
HORIZON-CL4	-2021-TWIN-TRANSITION-01 (17): TWIN GREEN AND DIGITAL TRANSITION 2021				
	Deadline: 23 September 2021				
Topic code	Topic name	Type(s) of action	Number of submitted proposals	Expected to be funded	Budget
	All enhanced robotics systems for				
HORIZON-CL4-2021-TWIN-TRANSITION-01-01	smart manufacturing (AI, Data and Robotics - Made in Europe Partnerships)	IA	22	3	€ 28.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-02	Zero-defect manufacturing towards zero-waste (Made in Europe Partnership)	IA	48	3	€ 27.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-03	Laser-based technologies for green manufacturing (Photonics - Made in Europe Partnerships)	RIA	39	4	€ 26.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-05	Manufacturing technologies for bio-based materials (Made in Europe Partnership)	RIA	58	4	€ 20.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-07	Artificial Intelligence for sustainable, agile manufacturing (AI, Data and Robotics - Made in Europe Partnerships)	IA	23	3	€ 18.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-08	Data-driven Distributed Industrial Environments (Made in Europe Partnership)	IA	21	3	€ 24.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-10	Digital permits and compliance checks for buildings and infrastructure	IA	8	3	€ 15.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-11	Automated tools for the valorisation of construction waste	RIA	12	3	€ 21.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-12	Breakthrough technologies supporting technological sovereignty in construction	RIA	16	3	€ 24.00
	Deploying industrial-urban symbiosis solutions for the utilization of energy, water, industrial waste and by-				
HORIZON-CL4-2021-TWIN-TRANSITION-01-14	products at regional scale (Processes4Planet Partnership)	RIA	15	3	€ 28.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-16	Hubs for Circularity European Community of Practice (ECoP) platform (Processes4Planet Partnership)	CSA	2	1	€ 2.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-17	Plastic waste as a circular carbon feedstock for industry (Processes4Planet Partnership)	IA	7	3	€ 39.00
	Carbon Direct Avoidance in steel:				
HORIZON-CL4-2021-TWIN-TRANSITION-01-18	Electricity and hydrogen-based metallurgy (Clean Steel Partnership)	IA	2	3	€ 28.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-19	Improvement of the yield of the iron and steel making (Clean Steel Partnership)	IA	6	4	€ 14.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-20	Reducing environmental footprint, improving circularity in extractive and processing value chains	IA	8	3	€ 36.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-21	Design and optimisation of energy flexible industrial processes (Processes4Planet Partnership)	IA	8	3	€ 39.00
HORIZON-CL4-2021-TWIN-TRANSITION-01-22	Adjustment of Steel process production to prepare for the transition towards climate neutrality	IA	1	3	€ 14.00
			296	52	€ 403.00





#### **Statistics CL4**

HORIZON-CL4-2022-TWI	N-TRANSITION-01 (13): CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION 2022				
	Deadline: 30 March 2022				
Topic code	Topic name	Type(s) of action	Number of submitted proposals	Expected to be funded	Budget
HORIZON-CL4-2022-TWIN-TRANSITION-01-01	Rapid reconfigurable production process chains (Made in Europe Partnership)	IA	17	3	€ 27.50
HORIZON-CL4-2022-TWIN-TRANSITION-01-02	Products with complex functional surfaces (Made in Europe Partnership)	RIA	42	4	€ 21.50
HORIZON-CL4-2022-TWIN-TRANSITION-01-03	Excellence in distributed control and modular manufacturing (Made in Europe Partnership)	RIA	19	4	€ 21.50
HORIZON-CL4-2022-TWIN-TRANSITION-01-04	Intelligent work piece handling in a full production line (Made in Europe Partnership)	RIA	23	4	€ 21.50
HORIZON-CL4-2022-TWIN-TRANSITION-01-06	ICT Innovation for Manufacturing Sustainability in SMEs (I4MS2) (Made in Europe Partnership)	IA	18	4	€ 30.00
HORIZON-CL4-2022-TWIN-TRANSITION-01-07	Digital tools to support the engineering of a Circular Economy (Made in Europe Partnership)	RIA	48	3	€ 22.00
HORIZON-CL4-2022-TWIN-TRANSITION-01-09	Demonstrate the use of Digital Logbook for buildings .	IA	22	2	€ 9.00
HORIZON-CL4-2022-TWIN-TRANSITION-01-10	Circular flows for solid waste in urban environment (Processes4Planet Partnership)	IA	16	3	€ 42.50
HORIZON-CL4-2022-TWIN-TRANSITION-01-11	Valorisation of CO/CO2 streams into added-value products of market interest (Processes4Planet Partnership)	IA	10	3	€ 42.50
HORIZON-CL4-2022-TWIN-TRANSITION-01-13	Raw material preparation for clean steel production (Clean Steel Partnership)	IA	3	3	€ 14.00
HORIZON-CL4-2022-TWIN-TRANSITION-01-15	New electrochemical conversion routes for the production of chemicals and materials in process industries (Processes4Planet Partnership)	RIA	15	3	€ 30.00
HORIZON-CL4-2022-TWIN-TRANSITION-01-16	Modular and hybrid heating technologies in steel production (Clean Steel Partnership)	IA	4	3	€ 10.00
HORIZON-CL4-2022-TWIN-TRANSITION-01-17	Integration of hydrogen for replacing fossil fuels in industrial applications (Processes4Planet Partnership)	IA	15	3	€ 42.50
			252	42	€ 334.50





#### Different aspects to consider

**Lump Sum calls vs Traditional** funding calls 1 stage, 2 stages: anonym or open **Page limits** Lack of attachments **Gender section change GEP** requirement for selected organisation types **PP** template **TRLs** 

Scope of the application
Use of human embryonic stem cells (hESC)
Activities excluded from funding
Do no significant harm
Exclusive focus on civil applications
Artificial Intelligence
The six environmental objectives:



Climate change mitigation



Sustainable use & protection of water &



Pollution prevention & control



Climate change adaptation



Transition to a circular economy



Protection and restoration of biodiversity & ecosystems

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/horizon/lump-sum/guidance





### **Evaluation criteria (RIAs and IAs)**

#### **EXCELLENCE**

- ✓ Clarity and pertinence of the project's objectives, and the extent to which the proposed work is ambitious, and goes beyond the state-of-the-art.
- ✓ Soundness of the proposed methodology, including the underlying concepts, models, assumptions, interdisciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

#### **IMPACT**

- ✓ Credibility of the pathways to achieve the expected outcomes and impacts specified in the work programme, and the likely scale and significance of the contributions due to the project.
- ✓ Suitability and quality of the measures to maximize expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

## QUALITY AND EFFICIENCY OF THE IMPLEMENTATION

- ✓ Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.
- ✓ Capacity and role of each participant, and extent to which the consortium as a whole brings together the necessary expertise.







