

Raw Materials Week

12-16 November 2018



RAW MATERIALS IN HORIZON 2020 WP 2019 1,2,3

Topic	Type of Action	TRL	Indic. EC contrib., M€	Budget, M€	Deadline
CE-SC5-07-2018-2019-2020: Raw materials innovation for the					
circular economy: sustainable processing, reuse, recycling and					
recovery schemes:					
a) Sustainable processing and refining of primary and/or					
secondary raw materials	IA	6-7	8-13	30	
b) Recycling of raw materials from end-of-life products					
c) Recycling of raw materials from buildings					
d) Advanced sorting systems for high-performance recycling					19 Feb 201
of complex end-of-life products					(CSA and
CE-SC5-08-2018-2019-2020: Raw materials policy support					First stage of
actions for the circular economy:	CSA		3	3	RIA/IA)
c) Responsible sourcing of raw materials in global value	CJA		3		
chains					04 Sep 201
SC5-09-2018-2019: New solutions for the sustainable					(Second
production of raw materials:	RIA	3-5	3-7	30	stage of
b) Digital mine	NIA	3-3	3-7	30	RIA/IA)
c) Recovery of metals and minerals from sea resources					_
SC5-10-2019-2020: Raw materials innovation actions:					
exploration and Earth observation in support of sustainable					
mining:	IA	6-7	8-13	20	
a) Integrated exploration solutions	IA	0-7	9-13	20	
b) Services and products for the extractive industries life					
cycle					

Useful Links	
Funding & Tender opportunities Portal	https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/h2020
Network of National Contact Points (NCPs)	https://ec.europa.eu/research/participants/portal/desktop/en/support/national_contact_points.html
NCP CaRE (National Contact Points for SC5)	http://www.ncps-care.eu/
EU Raw Materials Policy	http://ec.europa.eu/growth/sectors/raw-materials/
EIP on Raw Materials	https://ec.europa.eu/growth/tools-databases/eip-raw-materials/en
EIT Raw Materials	https://eitrawmaterials.eu https://eitrawmaterials.eu/call-for-projects-2019/

 $^{^{1}}$ CSA – Coordination and Support Action, IA – Innovation Action, RIA – Research and Innovation Action

 $^{^{2}}$ TRL: Technology readiness level. See definitions in Annex G of General Annexes of Work Programme 2018-2020.

³ Raw materials in scope under Societal Challenge 5 are minerals, metals, wood-based and natural rubber



RELEVANT TOPICS UNDER OTHER PARTS OF HORIZON 2020

Raw materials are the key enablers of most industrial value chains. Below you can find examples of relevant topics on aspects such as circularity and decarbonisation of raw materials sector or energy-intensive industries, the bio-economy, development of advanced materials, batteries or innovation in SMEs. We invite you to consult the different parts of Programme Horizon 2020 to discover more funding opportunities fitting your particular interests.

Societal Challenge 5 - Circular Economy, Earth Observation, Support aspects

Topic	Type of Action	TRL	Indic. EC contrib., M€	Budget, M€	Deadline
CE-SC5-04-2019: Building a water-smart economy and society a) Symbiosis between industry and water utilities b) Large scale applications with multiple water users at various relevant scales	IA	5-7	10-15	72	19 Feb 2019
SC5-16-2019: Development of commercial activities and services through the use of GEOSS and Copernicus data					(CSA and First stage of
a) Coordination of European innovators in the domain of Earth observation	CSA		1	1	- IA)
b) Designing Earth observation services and products of the future, building on GEOSS and Copernicus assets	IA	5-7	2-3	15	04 Sep 2019(Secondstage of IA)
SC5-22-2019: Assessing and fostering the impacts of Research					- stage of IA)
and Innovation Actions (RIA) and Innovation Actions (IA) granted by Societal Challenge 5 in 2014-2015	CSA		0.6	0.6	

Societal Challenge 2 - Bio-based materials and bioeconomy

Topic	Type of Action	TRL	Indic. EC contrib., M€	Budget, M€	Deadline
LC-RUR-11-2019-2020: Sustainable wood value chains. A. [2019] Building with wood	IA	4-7	10	20	23 Jan 2019

Leadership in Enabling and Industrial Technologies - Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing

Topic	Type of Action	TRL	Indic. EC contrib., M€	Budget, M€	Deadline
DT-FoF-06-2019: Refurbishment and re-manufacturing of large industrial equipment.	IA	5-7	12-15	106.60 (shared)	
CE-SPIRE-04-2019: Efficient integrated downstream processes	IA	5-7	10-14		21 Feb 2019
CE-SPIRE-05-2019: Adaptation to variable feedstock through retrofitting	IA 50%	5-7	8-12	65.80	
CE-NMBP-25-2019: Photocatalytic synthesis	RIA	3-5	5-7	18.46	
DT-NMBP-19-2019: Advanced materials for additive manufacturing	IA	4-6	6-8	20.40	22 Jan 2019
LC-NMBP-29-2019: Materials for non-battery based energy storage	RIA	3-5	4-6	41.10	(1st Stage)03 Sep 2019(2nd Stage)
LC-NMBP-32-2019: Smart materials, systems and structures for energy harvesting	RIA	3-5	5-7	41.10	(Ziiu Stage)
LC-EeB-01-2019: Integration of energy smart materials in non-residential buildings	IA	5-7	4-6	53.50 (shared)	21 Feb 2019



Leadership in Enabling and Indus	trial Technologies - Space

Topic	Type of Action	TRL	Indic. EC contrib., M€	Budget, M€	Deadline
DT-SPACE-01-EO-2018-2020: Copernicus market uptake	IA		1-2	9	
LC-SPACE-04-EO-2019-2020: Copernicus evolution – Research activities in support of cross-cutting applications between Copernicus services	RIA		2-3	8	-
LC-SPACE-05-EO-2019: Copernicus evolution —a gap analysis to prepare future activities for Copernicus data and information validation and quality enhancement	CSA		2	2	12 March 2019
DT-SPACE-06-EO-2019: International Cooperation Copernicus – Designing EO downstream applications with international partners	RIA		1-2	5	-
LC-SPACE-14-TEC-2018-2019: Earth observation technologies	RIA		2-3		-

Societal Challenge 3: Secure, clean and efficient energy

Topic	Type of Action	TRL	Indic. EC contrib., M€	Budget, M€	Deadline
LC-SC3-EE-6-2018-2019-2020: Business case for industrial waste heat/cold recovery. 2019: Symbiosis in industrial parks and clusters- non-technological barriers	CSA		1-2	5	03 Sep 2019
LC-SC3-RES-7-2019: Solar Energy in Industrial Processes	RIA	4-5	3-5	10	27 Aug 2019
LC-SC3-RES-23-2019: Development of next generation biofuel and alternative renewable fuel technologies for aviation and shipping	CSA	3-5	3-5	20	27 Aug 2019
LC-SC3-RES-24-2019: Boosting pre-commercial production of advanced aviation biofuels	IA	5-7	15-20	20	11 Dec 2018
LC-SC3-NZE-5-2019-2020: Low carbon industrial production using CCUS	IA	6-7	10-12	33	27 Aug 2019

Cross-cutting activities. Call - Building a Low-Carbon, Climate Resilient Future: Next-Generation Batteries

Topic	Type of Action	TRL	Indic. EC contrib., M€	Budget, M€	Deadline
LC-BAT-1-2019: Strongly improved, highly performant and safe all solid state batteries for electric vehicles	RIA	3-6	6-8	25	_
LC-BAT-2-2019: Strengthening EU materials technologies for non-automotive battery storage	RIA	4-6	6-8	24	
LC-BAT-3-2019: Modelling and simulation for Redox Flow Battery development	RIA		2	5	25 April
LC-BAT-4-2019: Advanced Redox Flow Batteries for stationary energy storage	RIA	3-5	3-4	15	2019
LC-BAT-5-2019: Research and innovation for advanced Li-ion cells (generation 3b)	RIA	5-6	5-12	30	-
LC-BAT-6-2019: Li-ion Cell Materials & Transport Modelling	RIA	5	3-6	13	-
LC-BAT-7-2019: Network of Li-ion cell pilot lines	CSA		1-2	2	



Innovation in small and medium-sized enterprises					
Topic	Type of Action	TRL	Indic. EC contrib., M€	Budget, M€	Deadline
INNOSUP-01-2018-2020: Cluster facilitated projects for new industrial value chains	IA		2.5-5	22.85	03 Apr 2019 (first stage) 12 Sep 2019 (second Stage)

European Innovation Council (EIC) pilot		
Topic	Overall indicative budget for 2019, M€	Deadline/Indicative timetable
SME Instrument	552.26	Four cut-off dates for Phases 1 and 2 during 2019
Fast Track to Innovation (FTI)	100 (up to 3 M per project)	Three cut-off dates during 2019
FET-Open Novel ideas for radically new technologies. FETOPEN-01-2018- 2019-2020. FET-Open Challenging Current Thinking	160.40 per cut-off date (~ EC contrib. 3 M€).	Two cut-off dates in January and September 2019
EIC Horizon Prize for 'Innovative Batteries for eVehicles'. Inducement prize	10	Fourth quarter of 2020
EIC Horizon Prize for 'Blockchains for Social Good'. Inducement prize. (inc. solutions for demonstrating the origin of raw materials or products)	5 (~ 5 awards of 1 M)	Second quarter of 2019

Topic	TRL	Overall indicative budget, M€	Deadline
Second joint call for transnational research and innovation projects on "Raw materials for the sustainable development and the circular economy". Needs-driven research covering life cycle of primary and secondary resources as well as substitution of critical raw materials. Five thematic areas: 1. Supply of raw materials from exploration and mining 2. Design 3. Processing, Production and Remanufacturing 4. Recycling and Re-use of End-of-Life Products 5. Cross-cutting topics www.era-min.eu	1-9 (depending on funding agency)	~14 M	31 Jan 2019



