## Horizon 2020 – Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing

## Topics 2018-2020 Budget and Deadlines

	Budget and Deadlines	Decident CM	D. adlian	
	Call Topic  OPEN INNOVATION TEST BEDS	Budget €M	Deadline	
OPEN INNOVATION TEST BEDS  DT-NMBP-01-2018				
D1-MWDF-01-2018	multifunctional composite materials and components (IA)	project	(First Stage)	
	materialistic and composite materials and components (12)	project	(inst stage)	
			28 Jun 2018	
			(Second Stage)	
DT-NMBP-02-2018	Open Innovation Test Beds for Safety Testing of Medical	<b>€7-15M</b> per	23 Jan 2018	
	Technologies for Health	project	(First Stage)	
			20.1 2010	
			28 Jun 2018	
DT-NMBP-03-2019:	Open Innovation Test Beds for nano-enabled surfaces and	<b>€7-15M</b> per	(Second Stage) 22 Jan 2019	
D1-WWDF-03-2013.	membranes (IA)	project	(First Stage)	
	memoranes (ii i)	project	(i ii se seage)	
		Total Call Budget	03 Sep 2019	
		€50M	(Second Stage)	
DT-NMBP-04-2020	Open Innovation Test Beds for bio-based nano-materials and	No Information av	ailable yet	
	solutions (IA)	_		
DT-NMBP-05-2020	Open Innovation Test Beds for functional materials for building			
DT-NMBP-06-2020	envelopes (IA)	-		
D1-NWBP-06-2020	Open Innovation Test Beds for nano-pharmaceuticals production (IA)			
	MATERIALS CHARACTERISATION and COMPUTATIONAL M	ODELLING		
DT-NMBP-07-2018	Open Innovation Test Beds for Characterisation (IA)	<b>Up to 9€M</b> per	23 Jan 2018	
		project	(First Stage)	
			28 Jun 2018	
			(Second Stage)	
DT-NMBP-08-2019	Real-time nano-characterisation technologies (RIA)	€4-5M per	22 Jan 2019	
		project	(First Stage)	
			03 Sep 2019	
			(Second Stage)	
DT-NMBP-09-2018	Accelerating the uptake of materials modelling software (IA)	<b>Up to 4€M</b> per	23 Jan 2018	
		project	(First Stage)	
			28 Jun 2018	
DT NAADD 12 2212			(Second Stage)	
DT-NMBP-10-2019	Adopting materials modelling to challenges in manufacturing	Up to 5€M per	22 Jan 2019	
	processes (RIA)	project	(First Stage)	
		Total Call Budget	03 Sep 2019	
		€20M	(Second Stage)	
	Open Innovation Test Beds for Materials Modelling (IA)		22 Jan 2019	
DT-NMBP-11-2020	Open innovation rest beds for Materials Modelling (IA)		22 Jan 2019	

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			03 Sep 2019 (Second Stage)
DT-NMBP-12-2019	Sustainable Nano-Fabrication (CSA)	Up to 5€M per	03 Sep 2019
	, ,	project	
G	OVERNANCE, SCIENCE-BASED RISK ASSESSMENT AND REGULA	ATORY ASPECTS	
NMBP-13-2018	Risk Governance of nanotechnology (RIA)	Up to 5€M per	23 Jan 2018
		project	(First Stage)
NMBP-14-2018	Nanoinformatics: from materials models to predictive toxicology	<b>Up to 6€M</b> per	
	and ecotoxicology (RIA)	project	28 Jun 2018
			(Second Stage)
NMBP-15-2019	Safe by design, from science to regulation: metrics and main	<b>€5-6M</b> per	22 Jan 2019
	sectors (RIA)	project	(First Stage)
		Total Call Budget	03 Sep 2019
		€27.8M	(Second Stage)
NMBP-16-2020	Safe by design, from science to regulation: behaviour of multi- component nanomaterials (RIA)	No Information av	ailable yet
NMBP-17-2020	Regulatory science for medical technology products (RIA)		
	FACTORIES OF THE FUTURE (FOF)		
DT-FOF-01-2018	Skills needed for new Manufacturing jobs (CSA)	<b>€1-2M</b> per	22 Feb 2018
		project	
DT-FOF-02-2018	Effective Industrial Human-Robot Collaboration (RIA)	<b>€6-8M</b> per	
		project	
DT-FOF-03-2018	Innovative manufacturing of opto-electrical parts (RIA)	<b>€6-8M</b> per	
		project	
DT-FOF-04-2018	Pilot lines for metal Additive Manufacturing (IA 50%)	<b>€12-15M</b> per	
		project	
DT-FOF-05-2019	Open Innovation for collaborative production engineering (IA)	<b>€4-6M</b> per	21 Feb 2019
		project	
DT-FOF-06-2019	Refurbishment and re-manufacturing of large industrial	<b>€12-15M</b> per	
	equipment (IA)	project	
DT-FOF-07-2020	Reliable and accurate assembly of micro parts (RIA)	No Information av	ailable yet
DT-FOF-08-2019	Pilot lines for modular factories (IA 50%)	<b>€12-15M</b> per	21 Feb 2019
		project	
DT-FOF-09-2020	Holistic energy-efficient factory management (IA)	No Information av	ailable yet
DT-FOF-10-2020	Pilot lines for large-part high-precision manufacturing (IA 50%)		
DT-FOF-11-2020	Quality control in smart manufacturing (IA)		
DT-FOF-12-2019	Handling systems for flexible materials (RIA)	<b>€6-8M</b> per	21 Feb 2019
		project	
DT-NMBP-18-2019	Materials, manufacturing processes and devices for organic and	<b>€4-5M</b> per	22 Jan 2019
	large area electronics (IA)	project	(First Stage)
DT-NMBP-19-2019	Advanced materials for additive manufacturing (IA)	<b>€6-8M</b> per	
		project	03 Sep 2019
			(Second Stage)
DT-NMBP-20-2018	A digital 'plug and produce' online equipment platform for	Lump Sum €7.5M	08 Mar 2018
	manufacturing (IA)	per project	
	Biotechnology		
BIOTEC-01-2018	Standardisation in Synthetic Biology (CSA)	Up to €2M per	22 Feb 2018
		project	

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BIOTEC-02-2019	Boosting the efficiency of photosynthesis (RIA)	<b>€6-8M</b> per	23 Jan 2018
		project	(First Stage)
			20 1 2010
			28 Jun 2018
DIOTES SS 2046		66.014	(Second Stage)
BIOTEC-03-2018	Synthetic biology to expand diversity of nature's chemical	<b>€6-8M</b> per	22 Jan 2019
	production (RIA)	project	(First Stage)
			00.0
			03 Sep 2019
			(Second Stage)
CE-BIOTEC-04-2018	New biotechnologies for environmental remediation (RIA)	<b>Up to €5M</b> per	25 Apr 2018
		project	
CE-BIOTEC-05-2019	Microorganism communities for plastics bio-degradation (RIA)	<b>Up to €5M</b> per	24 Apr 2019
		project	
BIOTEC-06-2020	Reprogrammed microorganisms for biological sensors (IA)	No Information a	vailable yet
BIOTEC-07-2020	Multi-omics for the optimisation of genotype-phenotype		
	associations (RIA)		
	MEDICAL TECHNOLOGY INNOVATIONS		
NMBP-21-2020	Custom-made biological scaffolds for specific tissue regeneration	No Information a	vailable yet
	and repair (RIA)		
NMBP-22-2018	Osteoarticular tissues regeneration (RIA)	<b>€4-6M</b> per	23 Jan 2018
		project	(First Stage)
			28 Jun 2018
			(Second Stage)
DT-NMBP-23-2020	Next generation organ-on-chip (RIA)	No Information a	vailable yet
	SUSTAINABLE PROCESS INDUSTRY (SPIRE)		
CE-SPIRE-01-2020	SUSTAINABLE PROCESS INDUSTRY (SPIRE) Industrial symbiosis (IA)	No Information a	vailable yet
CE-SPIRE-01-2020 CE-SPIRE-02-2018	Industrial symbiosis (IA)	No Information a €6-10M per	vailable yet 22 Feb 2018
	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)	<b>€6-10M</b> per project	
CE-SPIRE-02-2018	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy	€6-10M per project €8-12M per	
CE-SPIRE-02-2018 CE-SPIRE-03-2018	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)	€6-10M per project €8-12M per project	
CE-SPIRE-02-2018	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive	€6-10M per project €8-12M per project €10-14M per	22 Feb 2018
CE-SPIRE-02-2018 CE-SPIRE-03-2018	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)	€6-10M per project €8-12M per project €10-14M per project	22 Feb 2018
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)	€6-10M per project €8-12M per project €10-14M per project €8-12M per	22 Feb 2018
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)	€6-10M per project €8-12M per project €10-14M per project €8-12M per project	22 Feb 2018
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €8-12M per project €6-8M per	22 Feb 2018
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project	22 Feb 2018  21 Feb 2019
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €8-12M per project €6-8M per	22 Feb 2018  21 Feb 2019
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019  CE-SPIRE-07-2020	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances contained therein (IA)	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project	22 Feb 2018  21 Feb 2019
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances contained therein (IA)  Improved Industrial Processing using novel high-temperature	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project	22 Feb 2018  21 Feb 2019
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019  CE-SPIRE-07-2020  CE-SPIRE-08-2020	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances contained therein (IA)  Improved Industrial Processing using novel high-temperature resistant materials (RIA)	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project	22 Feb 2018  21 Feb 2019
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019  CE-SPIRE-07-2020	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances contained therein (IA)  Improved Industrial Processing using novel high-temperature resistant materials (RIA)  Making the most of mineral waste, by-products and recycled	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project	22 Feb 2018  21 Feb 2019
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019  CE-SPIRE-07-2020  CE-SPIRE-08-2020  CE-SPIRE-09-2020	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances contained therein (IA)  Improved Industrial Processing using novel high-temperature resistant materials (RIA)  Making the most of mineral waste, by-products and recycled material as feed for high volume production (IA)	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project No Information a	22 Feb 2018  21 Feb 2019  available yet
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019  CE-SPIRE-07-2020  CE-SPIRE-08-2020	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances contained therein (IA)  Improved Industrial Processing using novel high-temperature resistant materials (RIA)  Making the most of mineral waste, by-products and recycled	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project No Information a	22 Feb 2018  21 Feb 2019
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019  CE-SPIRE-07-2020  CE-SPIRE-08-2020  CE-SPIRE-09-2020	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances contained therein (IA)  Improved Industrial Processing using novel high-temperature resistant materials (RIA)  Making the most of mineral waste, by-products and recycled material as feed for high volume production (IA)  Efficient recycling processes for plastic containing materials (IA)	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project No Information a	22 Feb 2018  21 Feb 2019  available yet
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019  CE-SPIRE-07-2020  CE-SPIRE-08-2020  CE-SPIRE-09-2020  CE-SPIRE-10-2018	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances contained therein (IA)  Improved Industrial Processing using novel high-temperature resistant materials (RIA)  Making the most of mineral waste, by-products and recycled material as feed for high volume production (IA)  Efficient recycling processes for plastic containing materials (IA)	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project No Information a	22 Feb 2018  21 Feb 2019  available yet  22 Feb 2018
CE-SPIRE-02-2018  CE-SPIRE-03-2018  CE-SPIRE-04-2019  CE-SPIRE-05-2019  DT-SPIRE-06-2019  CE-SPIRE-07-2020  CE-SPIRE-08-2020  CE-SPIRE-09-2020	Industrial symbiosis (IA)  Processing of material feedstock using non-conventional energy sources (IA)  Energy and resource flexibility in highly energy intensive industries (IA 50%)  Efficient integrated downstream processes (IA)  Adaptation to variable feedstock through retrofitting (IA 50%)  Digital technologies for improved performance in cognitive production plants (IA)  Recovery of industrial water, thermal energy and substances contained therein (IA)  Improved Industrial Processing using novel high-temperature resistant materials (RIA)  Making the most of mineral waste, by-products and recycled material as feed for high volume production (IA)  Efficient recycling processes for plastic containing materials (IA)	€6-10M per project €8-12M per project €10-14M per project €8-12M per project €6-8M per project No Information a	22 Feb 2018  21 Feb 2019  available yet

LC-EEB-04-2020	Industrialisation of building envelope for the renovation market (IA)	No Information	avaliable yet
LC-EEB-03-2019	New developments in plus energy houses (IA)	€6-8M per project	21 Feb 2019
	(RIA	project	
LC-EEB-02-2018	(IA)  Building information modelling adapted to efficient renovation	project €5-7M per	22 Feb 2018
LC-EEB-01-2019	Integration of energy smart materials in non-residential buildings	<b>€4-6M</b> per	21 Feb 2019
	ENERGY-EFFICIENT BUILDINGS (EEB)		(Second Stage)
			28 Jun 2018 (Second Stage)
111101 33 2010	conservation of cultural heritage (IA)	project	(First Stage)
NMBP-33-2018	Innovative and affordable solutions for the preventive	<b>€4-6M</b> per	23 Jan 2018
	CULTURAL HERITAGE		(Second Stage)
			03 Sep 2019 (Second Stage)
	(RIA)	project	(First Stage)
LC-NMBP-31-2020	Smart materials, systems and structures for energy harvesting	€5-7M per	22 Jan 2019
LC-NMBP-31-2020	Materials for off shore energy (IA)	No Information	(Second Stage)
			28 Jun 2018
LC-NMBP-30-2018	Materials for future highly performant electrified vehicle batteries (RIA)	<b>€6-8M</b> per project	23 Jan 2018 (First Stage)
			03 Sep 2019 (Second Stage)
		project	(First Stage)
LC-NMBP-29-2019	Materials for non-battery based energy storage (RIA)	<b>€4-6M</b> per	22 Jan 2019
LC-NMBP-28-2020	Advanced materials for innovative multilayers for durable photovoltaics (IA)	No Information	avaliable yet
LC NIMPD 20 2020		No Inference to	03 Sep 2019 (Second Stage)
	battery storage (RIA)	project	(First Stage)
LC-NMBP-27-2019	Strengthening EU materials technologies for non-automotive	.3 €6-8M per	22 Jan 2019
	CLEAN ENERGY THROUGH INNOVATIVE MATERIAL	<u> </u>	(Second Stage)
			28 Jun 2018
CL-14141DF -20-2013	design (RIA)	project	(First Stage)
CE-NMBP-26-2018	Smart plastic materials with intrinsic recycling properties by	<b>€4-6M</b> per	03 Sep 2019 (Second Stage) 23 Jan 2018
		project	(First Stage)
CE-NMBP-25-2019	Photocatalytic synthesis (RIA)	<b>€5-7M</b> per	22 Jan 2019
			(Second Stage)
			28 Jun 2018

LC-EEB-05-2019-20	Integrated storage systems for residential buildings (IA)	<b>€6-8M</b> per	21 Feb 2019
		project	
LC-EEB-06-2018-20	ICT enabled, sustainable and affordable residential building	<b>€6-8M</b> per	22 Feb 2018
	construction, design to end of life (IA 50%)	project	