## Ocean Energy

# Funding opportunities in Horizon 2020

Jan Schiereck
EU research funding

#### Horizon 2020

Work Programme 2018-2020

Secure, clean and efficient energy

Draft

Finalized Spring 2019

code	title	type	TRL	M€, proposals	M€, topic	deadline
LC-SC3-JA-3- 2019	European Pre-Commercial Procurement Programme for Wave Energy Research & Development	PCP	-	15 - 20	20	27 August 2019
LC-SC3-CC-1- 2018-2019- 2020	Social Sciences and Humanities (SSH) aspects of the Clean-Energy Transition	RIA	-	1 - 3	10, 10	27 August 2019, 1 September 2020
LC-SC3-RES-16- 2019	Development of solutions based on renewable sources that provide flexibility to the energy system	RIA	3-4 → 4-5	3 - 5	15	29 August 2019
LC-SC3-RES-19- 2020	Demonstration of innovative technologies for floating wind farms	IA	4-5 → 6-7	10 - 15	25	11 December 2019
LC-SC3-ES-3- 2018-2020	Integrated local energy systems (Energy islands)	Inn	-	5 – 6	24	29 January 2020
LC-SC3-ES-4- 2018-2020	Decarbonising energy systems of geographical Islands	Inn	5 - 8	5 – 7	40	29 January 2020
SC3-RES-1- 2019-2020	Developing the next generation of renewable energy technologies	RIA	→ 3-4	2 - 4	45	21 April 2020
LC-SC3-RES-32- 2020	New test rig devices for accelerating ocean energy technology development	RIA	"low TRL"	2 - 4	8	21 April 2020
LC-SC3-RES-31- 2020	Basic science technology development for offshore wind	RIA	<b>→</b> 4-5	2 – 4	8	21 April 2020
LC-SC3-RES-34- 2020	Demonstration of innovative and sustainable hydropower solutions targeting unexplored small-scale hydropower potential in Central Asia	IA	6-7 → 7-8	7 – 10	10	1 September 2020

#### Pretty straightforward

code	title	type	TRL	M€, proposals	M€, topic	deadline
LC-SC3- RES-16- 2019	Development of solutions based on renewable sources that provide flexibility to the energy system	RIA U	3-4 → 4-5 ow-head hater; envir	nydro; se onment	ally	29 August 2019
SC3- RES-1- 2019- 2020	Developing the next generation of renewable energy technologies	RIA Smal ti	→ 3-4 I-scaly hyd dal; algae	2 - 4 ro;	45	21 April 2020
LC-SC3- RES-32- 2020	New test rig devices for accelerating ocean energy technology development	RIA	"low TRL"	2 - 4	8	21 April 2020
LC-SC3- RES-31- 2020	Basic science technology development for offshore wind	RIA	<b>→</b> 4-5	2 – 4	8	21 April 2020

### Not so straightforward, yet interesting

code	title	type	TRL	M€, proposals	M€, topic	deadline
LC-SC3-JA-3- 2019	European Pre-Commercial Procurement Programme for Wave Energy Research & Development	PCP	-	15 - 20	20	27 August 2019
LC-SC3-RES- 19-2020	Demonstration of innovative technologies for <b>floating wind farms</b>	IA	4-5 → 6-7	10 - 15	25	11 December 2019
LC-SC3-ES-3- 2018-2020	Integrated local <b>energy systems</b> (Energy islands)	Inn	5 - 8	5 – 6	24	29 January 2020
LC-SC3-ES-4- 2018-2020	Decarbonising <b>energy systems</b> of geographical Islands	Inn	5 - 8	5 – 7	40	29 January 2020
LC-SC3-RES- 34-2020	Demonstration of innovative and sustainable hydropower solutions targeting unexplored small-scale hydropower potential in Central Asia	IA	6-7 → 7-8	7 – 10	10	1 September 2020

- Users/buyers take the lead
- Project: 2 phases:
  - 1: preparation: call for tenders
  - 2: execution: 3 prototypes tested, close to expected performance
    - One of these: test in operational environment at commercial scale
- Expected impacts
  - Tech convergence; tech validation for the sector; knowledge transfer
  - Resources pooling
  - Effective use of public resources for research and demonstration

- Scaling-up power to > 10 MW
- Floaters, moorings, electrical systems
- Industrial designs, manufacturing process, installation, operation & maintenance
- Expected impact:
  - Cost reduction
  - Market growth
  - Improve reliability, perofrmance, efficiency
  - System value for society and market
  - Technology convergence

- Integrate renewable sources
- Electricity, heating/cooling, transport, industry
- Include preliminary local case analysis
- Replication potential
- Optional: collaboration with Indian partners (receiving Indian funding)
- Expected impacts:
  - Validate local decarbonisation solutions
  - Involve local actors, with attention for new business models
  - System validation, with renewable sources and multiple functions

- Involve local renewable sources
- Smart grid, energy storage, heating/cooling
- Demand and supply forecasting
- Gender, inclusiveness
- 2 or more islands involved, as partner
- Expected impacts:
  - Developing renewable energy based system, cheaper than diesel
  - Replicability
  - Enhance autonomy for grid connected islands
  - Identify indicators for measuring progress

LC-SC3-RES-34-	Demonstration of innovative and	IA	6-7 → 7-8	7 – 10	10	1 September 2020
2020	sustainable hydropower solutions targeting					
	unexplored small-scale hydropower					
	potential in Central Asia					

- Address cross-border water/food/energy/climate issues
- Demonstrate innovative hydropower equipment
- Action in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan or Uzbekistan
- Socio-economic and environmental impact
- Expected impacts:
  - Improve competitiveness of EU hydropower sector
  - Support cooperation with developing countries

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Further enquiries on opportunities in Horizon 2020?



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