



HORIZON 2020

Work Programme 2016-2017 Societal Challenge 2

**Food security, sustainable agriculture and
forestry, marine, maritime and inland water
research, and the bioeconomy**

- SC2 (and the BG call)



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WP 2016/17 Societal Challenge 2 at a glance

4 challenges

Increase by 60% our global agricultural production to feed 9 billion people by 2050

Unlock the potential of seas which cover 70% of the earth's surface & host 50% of known species

Foster innovation in rural areas which account 55% of jobs in EU & 46% of the Gross Added Value

Boost bio-based market to create over 3% growth / year in this sector & 90.000 new jobs

4 objectives

Ensure global food nutrition & security by more efficient primary production and related industry

Demonstrate the innovative potential of the oceans by bringing technology to market

Develop rural and coastal areas through new territorial approaches and business models

Re-industrialise EU through new bio-based value-chains, securing sustainable biomass

4 calls

Sustainable food security
€431,5M

Blue Growth
€129M

Rural renaissance
€128M

Bio-based innovation for sustainable goods and services
€27M

4 deliverables

Resource-efficient value chains, climate smart primary production, healthy/safe food & diets

Innovation for emerging Blue growth activities, healthy oceans for healthy people

New governance, new value chains and business models, rural innovation and skills

Sustainable biomass supply, biobased markets of the future

INNOVATION, DEMONSTRATION and INVESTMENT

R&I closer to markets:

FRAMEWORK CONDITIONS

- for new bio-based markets
(widening regional up-take, sustainability schemes, demand side measures...)
- for rural and coastal development
(skills, new value chains and business models, logistics, on farm demonstrators...)

POLICIES

*Modernisation of rural economies,
Integrated management of natural resources,
Regionalisation of fisheries policies,
Forest ecosystem services...*

INTERNATIONAL CO- OPERATION

*tackling key challenges with global
partners:*

Africa, The Arctic, Mediterranean Countries,
China, Asia

ERA and ALIGNMENT

*aligning Public and Private research
around key objectives:*

- investments in Co-fund
- Complementarity with BBI JU

Responsible R&I, SSH

*Stakeholders engagement, reinforced
multi-actor approach, mobilisation and
mutual learning on bio-based products,
interactive Agriculture Knowledge and
Innovation Systems, education...*

The challenges and the Calls



Societal Challenge 2 Calls

**Sustainable
food security**

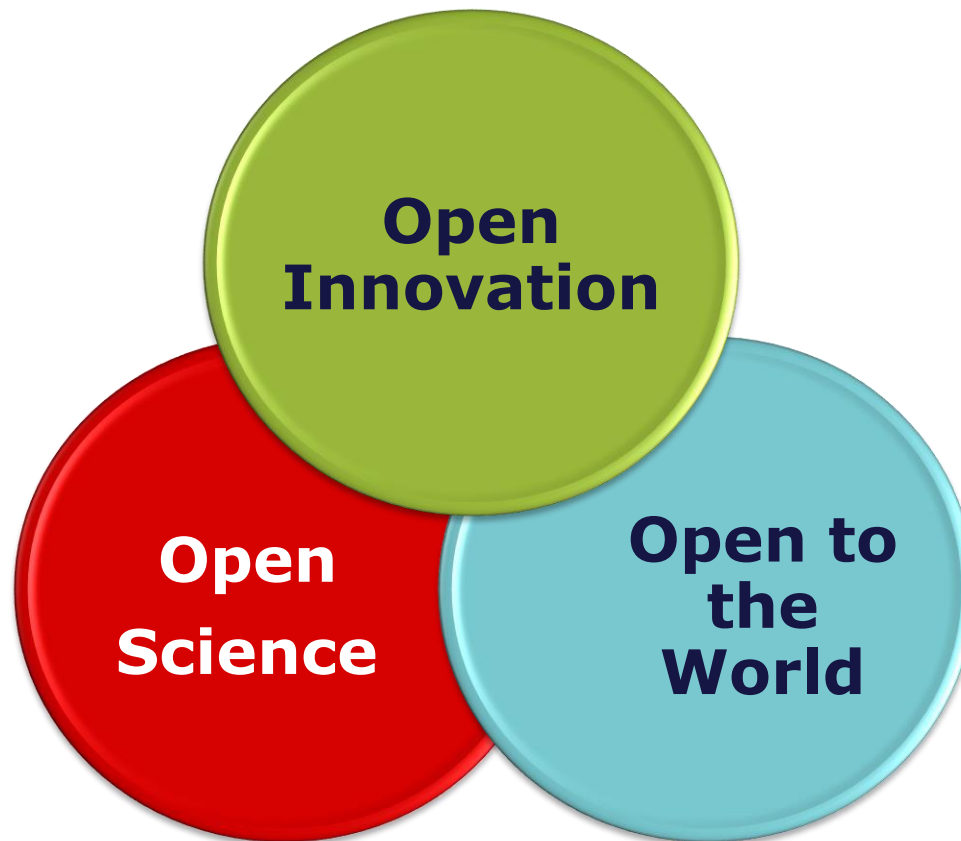
**Blue
Growth**

**Rural
Renaissance**

**Bio-based
innovation
for
sustainable
goods and
services**



The Work Programme addresses three priorities of Commissioner



Open Innovation

- **Boosting private investment in research and innovation by maximising the use of EFSI and InnovFin**
- **Bringing research and innovation closer to markets by dedicating 1/3 of the budget dedicated to SMEs, demonstration and financial instruments**
- **Widening regional uptake**



Open Science

- **Open access to data**
- **Responsible Research and Innovation in particular through engagement and gender equality**



Open to the world

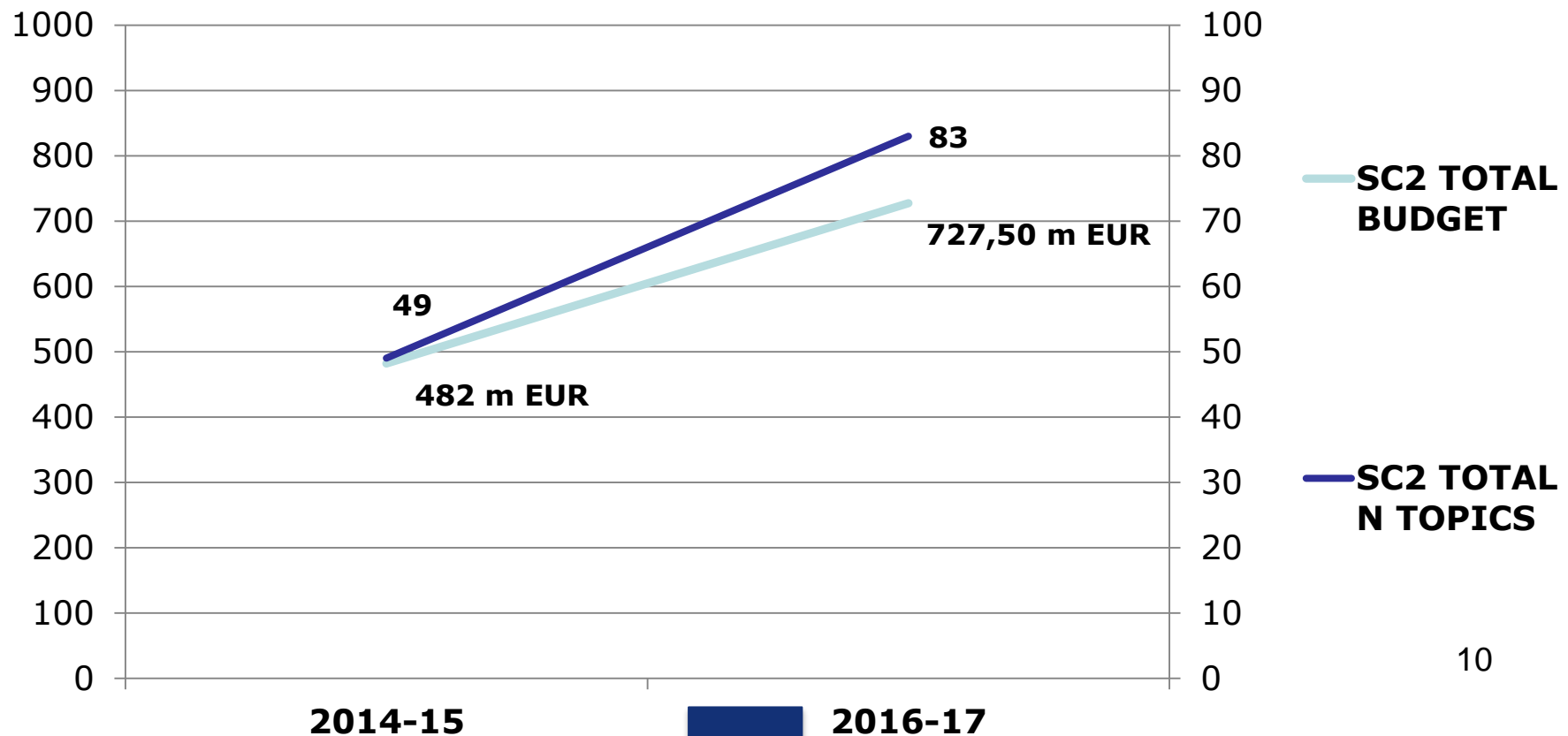
- **Tackling key challenges with global partners: Africa, South-East Asia, China, the Arctic**



SC2 Topics & Budget change: 2014-15 to 2016-17

Whole Societal Challenge 2: four Calls, 83 topics, 727.5M €

Proportional increase in budget and topics vs 2014-15



SC2 Calls 2016 - DATES

Publication	Submission		<u>Deadlines</u>	Information to applicants	Grant Agreements
14 OCT 2016	two-stage submission (RIA with some exceptions)	1st stage	17 Feb 2016	May 2016	-
		2nd stage	13 Sept 2016	Nov 2016	May 2017
	single stage submission (IA, CSA, ERA Net)	Single stage	17 Feb 2016	May 2016	October 2016

Work Programme pre-publication

Draft versions of the Horizon 2020 work programmes for 2016-2017 are made public just before the adoption process.

This version is not yet endorsed by the Commission and it does not in any way prejudice the final decision of the Commission.

The adoption and the publication of the work programme by the Commission are expected in mid-October 2015. Only the adopted work programme will have legal value.

<https://ec.europa.eu/programmes/horizon2020/en/draft-work-programmes-2016-17>

CALL

Blue Growth (BG)

Blue Growth



Scope



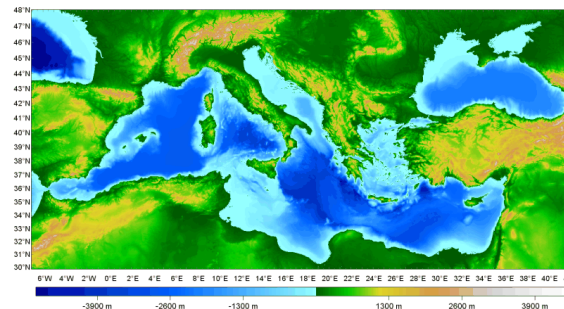
Offshore



Cleaning the Sea



The Med Initiative



Blue Growth CALL

€ 129 million from different parts of Horizon 2020 to:

- ➡ Demonstrate the innovative potential of the oceans by bringing technologies to the market
- ➡ Ensure a healthy ocean for healthy people
- ➡ Seize the opportunities of integrated sea basin Strategies (the Mediterranean and the Arctic)



Blue Growth - AREAS



➤ **Scope of the topics**

- Broad and non-prescriptive
- Cross-disciplinary and cross-sectorial
- Innovation-oriented

➤ **Expected impacts**

- EU added value
- Scientific excellence
- Technological innovation
- Economic advantage
- Societal benefit

Blue Growth TOPICS summary

Boosting innovation for emerging Blue Growth activities

- Large-scale integrated algae bio-refineries
- High value-added specialised vessel concepts
- Multi-use of the oceans marine space, offshore and near-shore:
 - Legal and environmental issues
 - Enabling technologies
- ERANET cofund on Marine technologies

5 topics 57 M€

Linking healthy oceans and seas for healthy people

- Interaction between people, oceans and seas:
- Blue green innovation for clean coasts and seas
- Innovative sustainable solutions for improving the safety and dietary properties of seafood

3 topics 21 M€

The Arctic Dimension

- An integrated Arctic observing system
- Impact of Arctic changes on the weather and climate of the Northern Hemisphere
- Climate impacts on Arctic permafrost and its socio-economic impact, with a focus on coastal areas

3 topics 40 M€

Valorising the Mediterranean Sea basin

- Towards an integrated Mediterranean Sea Observing System
- Support to the **BLUEMED Initiative:** Coordination of marine and maritime research and innovation activities in the Mediterranean

2 topics 11 M€

Blue Growth– TOPICS AND BUDGET

**Boosting
Innovation for
emerging Blue
Growth activities**



Five topics. Examples:

- Large-scale algae biomass integrated bio-refineries
- High value-added specialised vessel concepts enabling more efficient servicing of emerging coastal and offshore activities

Total: 57M€

Blue Growth– TOPICS AND BUDGET

**Linking healthy
oceans and seas
for healthy people**



Three topics:

- Interaction between people, oceans and seas: a strategic approach towards healthcare and well-being
- Blue green innovation for clean coasts and seas
- Innovative sustainable solutions for improving the safety and dietary properties of seafood

Total: 21M€

Blue Growth– TOPICS AND BUDGET



The Arctic Dimension

Three topics. Examples:

- An integrated Arctic observation system
- Impact of Arctic changes on the weather and climate of the Northern Hemisphere
- Climate impacts on Arctic permafrost and its socio-economic impact, with a focus on coastal areas

Total: 40M€

Blue Growth– TOPICS AND BUDGET

**Valorising the
Mediterranean Sea
basin**



Two topics:

- Towards an integrated Mediterranean Sea Observing System
- Support to the BLUEMED Initiative: Coordination of marine and maritime research and innovation activities in the Mediterranean

Total: 11M€

Marine & Maritime Research in other parts of H2020

•**SOCIETAL CHALLENGES:**

- SC3 (Energy): 2 topics on ocean energy under Competitive Low Carbon Energy call & mentions across other 8 others.
- SC4 (Transport): 2 topics on waterborne transport under Mobility for Growth & mentions in 6 others.
- SC5 (Climate): 4 topics under Climate Services encompassing oceanic measurements, ocean climate, coastal areas, and plastic-free seas and oceans.

LEIT- NMBP

Two topics on materials for buildings and infrastructure including offshore and on biotechnology opportunities for industry.

and other relevant parts of H2020

SFS Topics on Fisheries and Aquaculture



6 TOPICS – 41M€

SFS 20	Towards a science-based regionalisation of the Common Fisheries Policy (RIA)
SFS 21	Advancing basic biological knowledge and improving management tools for commercially important fish and other seafood species (RIA)
SFS 22	Smart fisheries technologies for an efficient, compliant and environmentally friendly fishing sector (IA)
SFS 23	Improving the technical performance of Mediterranean aquaculture (RIA)
SFS 24	Reinforcing international cooperation on sustainable aquaculture production with countries from South-East Asia (CSA)
SFS 32	Promoting and supporting eco-intensification of aquaculture production systems: inland (including fresh water), coastal zone and offshore (RIA)