Horizon 2020 Guideline

Version 1.0

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Horizon 2020, the successor to Framework Programme 7 (FP7), is the European Union joint effort to support research and development for the next seven years, from 2014 to 2020. It is intended to boost Europe’s knowledge-driven economy, and tackle issues that will make a difference in people’s lives. It provides a unique opportunity for researchers in Europe, and beyond, to undertake projects, improve international networks, strengthen interdisciplinary collaboration, widen their fields of expertise and open new areas of research and participate in pan-European consortia.

Horizon 2020 is part of the European Commissions (EC) wider Multiannual Financial Framework 2014-2020, the key challenge of which is to stabilise the financial and economic system while taking measures to create economic opportunities and respond to the economic crisis. It aims to help implement the Europe 2020 strategy, the Innovation Union, and the realization of the European Research Area which is the EC goal of creating a single market for knowledge research and innovation.

On the 11th of December 2013, the EC published the Work Programmes for the first two year period 2014-15 which detail the calls for applications. An exception is the European Research Council (ERC) part of Horizon 2020, which publishes separate annual Work Programmes, the first of which was also published at the same time.

1.1 The Horizon 2020 Budget

Horizon 2020 combines three previously separate funding programmes for research and innovation; the 7th Research Framework Programme (FP7), innovation aspects of the Competitiveness and Innovation Framework Programme (CIP), and the EU contribution to the European Institute of Innovation and Technology (EIT).

The majority of the Horizon 2020 budget is divided into 3 themes or “pillars”; Excellent Science, Industrial Leadership, and Societal Challenges.

Outside of the three pillars, the European Institute of Innovation and Technology (EIT) will receive around € 2.5 billion to fund its existing Knowledge and Innovation Communities (KICs) and the formation of five new ones, of which one on Healthy Living is due to launch in 2014, and another on Food in 2016. The Euratom nuclear research programme will receive approximately € 1.6 billion euros.
### HORIZON 2020 BUDGET (in current prices)

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
<th>Amount (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Excellent science, of which:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The European Research Council</td>
<td>31.73</td>
<td>€24.4B</td>
</tr>
<tr>
<td>2. Future and Emerging Science and Technologies</td>
<td>17.00</td>
<td>€13.07B</td>
</tr>
<tr>
<td>3. Marie Curie Actions</td>
<td>3.50</td>
<td>€2.86B</td>
</tr>
<tr>
<td>4. European research infrastructures</td>
<td>8.00</td>
<td>€6.10B</td>
</tr>
<tr>
<td><strong>II. Industrial leadership, of which:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Leadership in enabling and industrial technologies</td>
<td>3.23</td>
<td>€2.49B</td>
</tr>
<tr>
<td>2. Access to risk finance</td>
<td>3.69</td>
<td>€2.84B</td>
</tr>
<tr>
<td>3. Innovation in SMEs</td>
<td>0.60</td>
<td>€0.06B</td>
</tr>
<tr>
<td><strong>III. Societal challenges, of which:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Health, demographic change and wellbeing</td>
<td>9.70</td>
<td>€7.47B</td>
</tr>
<tr>
<td>2. Food quality and marine research</td>
<td>5.00</td>
<td>€3.85B</td>
</tr>
<tr>
<td>3. Safer, clean and efficient energy</td>
<td>7.70</td>
<td>€5.93B</td>
</tr>
<tr>
<td>4. Smart, green and integrated transport</td>
<td>8.23</td>
<td>€6.33B</td>
</tr>
<tr>
<td>5. Climate action, resources and raw materials</td>
<td>4.00</td>
<td>€3.08B</td>
</tr>
<tr>
<td>6. Inclusive, innovative societies</td>
<td>1.70</td>
<td>€1.31B</td>
</tr>
<tr>
<td>7. Secure societies</td>
<td>2.20</td>
<td>€1.66B</td>
</tr>
<tr>
<td>Science for and with society</td>
<td>6.52</td>
<td>€4.22M</td>
</tr>
<tr>
<td>European Institute of Innovation and Technology</td>
<td>5.82</td>
<td>€2.71B</td>
</tr>
<tr>
<td>Non-nuclear direct actions of the JRC</td>
<td>2.47</td>
<td>€1.9B</td>
</tr>
<tr>
<td>Spreading Excellence and Widening Participation</td>
<td>6.16</td>
<td>€818M</td>
</tr>
</tbody>
</table>

**HORIZON 2020 (excl. EURATOM) TOTAL** 100.00 €76.06B

**EURATOM** €1.6B

**HORIZON 2020 PACKAGE** €78.6B

Source: European Commission
1.2 The three pillars in Horizon 2020

Pillar 1: Excellent Science

The Excellent Science pillar aims to promote world-class research in Europe, by developing, attracting and retaining research talent in Europe, and ensuring they have access to the best infrastructures. The major mechanisms of Pillar I, the ERC and Marie-Sklodowska Curie Actions (MCSA) remain largely similar to Framework Programme 7, providing bottom-up funding through open competition. The ERC has received a significant increase in funding, and will finance individual researchers for frontier research projects chosen only on the basis of excellence. MCSA funding levels remain roughly the same and will continue to provide mobility and career development opportunities throughout the career path.

Future and Emerging Technologies (FET) will fund collaborative research on high-risk projects to open up new and promising fields of research with potential for real technological and social impact. Research infrastructures aims to ensure world-class research infrastructures in Europe (including e-infrastructures) accessible to all researchers in Europe and beyond.

Pillar 2: Industrial Leadership

The Leadership in Enabling and Industrial Technologies (LEIT) programme aims to make strategic investments in key technologies, thus promoting innovation in existing and emerging sectors. There will be access to risk finance through loans and guarantees for high-risk projects available through a debt facility operated by the European Investment Bank and the European Investment Fund, and venture capital and business angel investment in early and growth stages will be supported through an equity facility. There is also dedicated support for innovative SMEs in three different stages covering the whole innovation cycle (feasibility, demonstration and testing, and commercialisation phases).

Pillar 3: Societal Challenges

Pillar Three has the largest share of the budget and is broken down into seven groups of policy driven challenges. It aims to address the concerns of citizens and society/EU policy objectives through interdisciplinary collaborations including social sciences and humanities, thus creating a critical mass of knowledge and resources in order to deal with the societal challenges. It encompasses the entire cycle from basic research to market uptake with a stronger output orientation compared to Framework Programme 7.

1.3 What is different to FP7?

- Stronger focus on innovation and close-to-market activities than Framework Programme 7, closing the gap between knowledge and market, stronger participation of SMEs. Often with a “multi-actor approach”.
- Substantial increase in funding for the ERC
- Orientation on Societal Challenges and on socio-economic impact
- Stronger linkage with Technology Readiness Levels
- Topics in the Societal Challenges are described more openly than in Framework Programme 7 and in general do not prescribe a certain approach. Allows freedom of choice regarding methodical approach but may mean higher chance of oversubscription. Therefore the budget for an individual proposal is indicative only. The total call budget is the maximum for all supported actions under that call.
- Single IT Participant Portal: http://ec.europa.eu/research/participants/portal. For calls, information, documents, and support covering the entire project cycle. Registration as potential evaluator. Login required for closed area with ECAS Account (European Commission Authentication Service).

- Simple evaluation criteria: Excellence – Impact – Implementation (Excellence only, for the ERC)

- The time to grant will be shortened to eight months, from an average of one year under Framework Programme 7. The Commission has committed to inform applicants after five months and allow three more months to sign a grant agreement. There is flexibility to exceed these time limits for the ERC, complex projects or where participants request more time for negotiations.

- Open access will be mandatory for published papers based on research funded under Horizon 2020. The costs of publication will be considered as eligible costs.

1.4 Rules for Participation

Eligibility for Funding - EU 28 and Associated Countries: Turkey, Macedonia (FYR), Serbia, Montenegro, Bosnia & Herzegovina, Switzerland, Israel, Liechtenstein, Albania, Republic of Moldova, Iceland, Norway, Faroe Islands.

Requirements for participation: Consortium of three independent legal entities - each of these shall be established in a different Member State or associated country. Exceptions: Calls of the European Research Council (ERC), Marie-Sklodowska-Curie Actions, Coordination and support Actions, the SME-Instrument (when the action has a clear European added value), programme co-fund actions, in justified cases provided for in the Work Programme or work plan.

International Cooperation is cooperation with researchers and organisations from third countries and international organisations. Third countries are neither a member state of the EU, nor an associated country. There are various chances for international cooperation in all parts of Horizon 2020. Participants from international organisations or industrialised countries and emerging economies are eligible for funding if:

- provision is made in the call text

- provided for under a bilateral scientific and technological agreement or any other arrangement

- the participation is deemed essential for carrying out the action by the Commission.

Reimbursement

The reimbursement model has been simplified in Horizon 2020. Reimbursement on the basis of actual costs (personnel costs, subcontracting, travel costs, equipment, etc). Reimbursement is variable:

- Universities and research and technology organisations will receive one hundred per cent of direct eligible costs with a 25% flat rate of direct costs for their indirect costs.

- Industry participants and SMEs will receive 100% reimbursement for direct eligible costs of R&D activities and 25% of direct cost for their indirect costs, but only 70% of direct eligible costs for close to market or co-funded activities, plus a flat rate of 25% of these [70%] direct eligible costs for indirect costs.
There is a broader acceptance of participants accounting practices for direct costs with the lowest possible level of requirements for submission of audit certificates without undermining sound financial management. There will be no time-sheets for personnel working full time on a project.

Under the Horizon 2020 rules the budget table would look like this:

<table>
<thead>
<tr>
<th>Participant short name</th>
<th>Estimated eligible costs</th>
<th>Total costs</th>
<th>Requested EU contribution (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct costs</td>
<td>Indirect costs (25%)</td>
<td></td>
</tr>
<tr>
<td>University A</td>
<td>862.500</td>
<td>215.625,00</td>
<td>1,078.125,00</td>
</tr>
<tr>
<td>Foundation B</td>
<td>828.230</td>
<td>207.057,50</td>
<td>1,035.287,50</td>
</tr>
<tr>
<td>University C</td>
<td>641.001</td>
<td>160.250,25</td>
<td>801.251,25</td>
</tr>
<tr>
<td>Enterprise E</td>
<td>486.486</td>
<td>121.621,50</td>
<td>608.107,50</td>
</tr>
<tr>
<td>SME F</td>
<td>582.722</td>
<td>140.680,50</td>
<td>703.402,50</td>
</tr>
<tr>
<td>Total</td>
<td>3,846.564</td>
<td>961.641,00</td>
<td>4,808.205,00</td>
</tr>
</tbody>
</table>

Source: European Commission

A revised control strategy

an ex-ante financial capacity check required only for private coordinators in projects of more than EUR 500,000.

da reduction of the number of certificates on the financial statements by: (i) not requiring interim certificates (only one at the end of the project per participant reaching the triggering ceiling); (ii) basing the triggering ceiling only on actual costs (i.e. excluding flat rates, lump sums, etc).

da single-audit concept for all Commission services and a reduction of the period for ex-post audits from five to two years after the payment of the balance.

This revised approach should translate into a maximum of 7% of Horizon 2020 beneficiaries being subject to audit over the whole programming

2. Horizon 2020 instruments

2.1 Pillar 1 Excellent Science

European Research Council (ERC)

The ERC is supporting the highest quality frontier research in Europe on the basis of the only criteria of scientific excellence of applications from individual researchers with no specific required topics. It is done through three main calls covering three stages of the career of researchers: called "Starters" (2 to 7 years after the PhD) with up to € 1.5 million for 5 years; Mid-career researchers called "Consolidators" (over 7 to 12 years after the PhD) with up to € 2 million for 5 years; Senior researchers called "Advanced" with up to € 2.5 million for 5 years. Additional funding can be requested if the Principal Investigator is moving from a third country to EU or needs to purchase major equipment and/or access large facilities (€ 0.5 million for the Starters; € 0.75 million for
Consolidators; € 1 million for Advanced). This needs to be justified in the call proposal. ERC Principal Investigators will also continue to be able to apply for the Proof of Concept Grant, first introduced under the revised Work Programme 2011.

Twenty five scientific panels composed of top European and international scientists select the applications for each call, covering all the fields of science.

The ERC opportunity is going to increase since the budget of ERC, which was € 7.5 billion in the Framework Programme 7, will raise to € 13 billion with the Horizon 2020 programme.

**Marie Skłodowska Curie Actions (MSCA)**

The Marie Skłodowska-Curie Actions (MSCA) has been allocated a budget of € 6.2 billion (at current prices), a budget increase of 30% compared to 2007-2013 which is expected to fund 65,000 researchers, including 25,000 PhD candidates.

MSCA aims to help foster a new European culture of dynamic mobile researchers, and collaboration between countries, disciplines and sectors. Of the European funding mechanisms it is the most diverse, having financed over 50,000 researchers from 130 countries till now, including funding of 10,000 PhD students in the last seven years. It is also the most gender equal, with nearly 40% of grants going to women. Funding is open to all research fields of basic research and innovation and mobility is a key requirement, researchers only receive funding if they move from one country to another according to the MSCA mobility rule.

The funding levels and key features of the predecessor programme in FP7 are maintained in the MSCA. Therefore it remains a bottom up initiative focused on mobility and career development.

In Horizon2020 the MSCA is simplified from 8 funding schemes to 4 major components:

- Innovative Training Networks (ITN)
- The Individual Fellowship (IF)
- Research and Innovation Staff Exchange (RISE)
- Co-funding of regional, national and international programmes (COFUND)

**Innovative Training Networks (ITN)**

ITN is the main EU programme for structured PhD training, and is proposed by international networks of at least 3 organisations from public and/or private sectors.

The aim of the Innovative Training Networks (ITN) is to train a new generation of creative, entrepreneurial and innovative early-stage researchers. ITN supports joint research training and/or doctoral programmes, implemented by partnerships of universities, research institutions, research infrastructures, businesses, SMEs, and other socio-economic actors from different countries across Europe and beyond.

The ITNs have three subcategories:

- European Training Networks (ETN)
- European Industrial Doctorates (EID)
- European Joint Doctorates (EJD)

Support is for early stage researchers only through fellowships of 3-36 months, with a maximum of 540 researcher months per consortium (180 for EID between 2 partners).
Individual Fellowship (IF)

For post-docs and more experienced researchers, the Individual Fellowship (IF) scheme will combine European Fellowships for Career Development, International Incoming Fellowships, International Outgoing Fellowships and Career Integration Grants programmes.

The fellowships are designed to create opportunities for experienced researchers, enhancing their creative and innovative potential through international and inter-sector mobility, and helping facilitate career moves.

This is achieved through the following means:
- European Fellowships of 12-24 months
- Global Fellowships of 12-24 months, plus a mandatory return phase of 12 months
- Career Restart Panel and Integration Panel and Reintegration Panel
- Secondments, most notably in the non-academic sector

Research and Innovation Staff Exchange (RISE)

The RISE action aims to promote international and inter-sectoral collaboration through research and innovation staff exchanges, sharing of knowledge and sustainable collaborations among the participants.

RISE involves organisations from the academic and non-academic sectors (in particular SMEs), based in Europe (EU Member States and Associated Countries) and outside Europe (third countries). Support is provided for the development of partnerships in the form of joint research and innovation project between the participants. This is aimed at knowledge sharing via international as well as inter-sectoral mobility, based on secondments of research and innovation staff of 1-12 months (exchanges).

Co-funding of regional, national and international programmes (COFUND)

The fourth action, COFUND, aims to integrate the principles of MSCA – international mobility, training and career development – into existing regional, national, and international programmes.

This is achieved by co-funding new or existing programmes to open up to, and provide for, international, inter-sectoral and interdisciplinary research training, as well as transnational and cross-sectoral mobility of researchers at all stages of their career.

Doctoral programmes are funded for early stage researchers and fellowship programmes for experienced researchers, who should comply with the mobility rules of MSCA. The actions are implemented to a sole beneficiary for minimum period of three months, with EU contributions covering the living allowance and management costs, and 50% co-funding of established unit costs.

All the EU contributions of the MSCA are based on unit costs calculated on the basis of person-months. There are unit costs for research, training and networking as well as for management and overheads.

MSCA website:
Research Infrastructures

The Research infrastructures programme aims to ensure Europe has world-class research infrastructures (including e-infrastructures) accessible to all researchers in Europe and beyond, promoting cooperation within Europe and internationally.

Research Infrastructures website:

2.2 Pillar 2: Industrial Leadership

One of the three objectives under Horizon 2020, 'Industrial leadership and competitive frameworks' has a budget of € 17.01 billion. It aims to make Europe a more attractive location for businesses, large and small, to invest and set the research and innovation agenda. Three key elements will support this goal:

Leadership in enabling and industrial technologies

will support the development of technologies underpinning innovation across a range of sectors, including ICT and space. Horizon 2020 will have a strong focus on developing European industrial capabilities in Key Enabling Technologies (KETs) with a budget of €5.96 billion. These includes e.g. Biotechnology. Development of these technologies requires a multi-disciplinary, knowledge and capital intensive approach.

Fast Track to Innovation pilot action (FTI)

will be implemented in the form of a full scale pilot action to be launched in an FTI call in 2015. 100 proposals are foreseen to be funded under the new pilot action. It will support innovation actions under the specific objective "Leadership enabling and industrial technologies" and under the societal challenges, relating to any technology field, on the basis of a continuously open call, and time to grant not exceeding six months. Proposals may be submitted at any time. The Commission shall initiate three cut-off dates per year to evaluate proposals. Any legal entity may apply, with a minimum of 3 up to a maximum of 5 in any action.

Access to Risk Finance

under Horizon 2020, a total amount of € 2.84 billion is budgeted for financial instrument facilities, and accompanying measures, for research and innovation. At least one-third of this amount is expected to be absorbed by SMEs and small mid-caps. A leverage of up to 5 is envisaged, meaning that for every Euro provided through the financial instruments, additional finance of up to 5 Euro will be generated.

Access to Risk Finance website:

Innovation in SMEs

will help SMEs with growth potential to grow into the multinationals of tomorrow. SME participation across Horizon 2020 will be stimulated using a new dedicated SME instrument. It will provide easy access with simple rules and procedures. Through this integrated approach it is expected that a minimum of 20% (around € 8.64 billion -) of the combined budgets of the societal challenges and leadership in enabling and industrial technologies will go to SMEs.
The SME Instrument

The new instrument aims to fill gaps in funding for early-stage, high-risk research and innovation by SMEs as well as stimulating breakthrough innovation, regardless of whether they are high-tech and research-driven or non-research conducting, social or service companies. It will be used across all societal challenges and the enabling and industrial technologies specific objective. It will encourage SMEs to put forward their most innovative ideas with an EU dimension.

Only SMEs will be able to apply for funding. Even single company support will be possible to ensure market relevance and to increase commercialisation of project results. SMEs can decide how best to organise the project and with whom to collaborate, including subcontracting tasks if they lack in-house capabilities.

Support is provided in three different stages covering the whole innovation cycle. A feasibility part will allow for an assessment of the technological and commercial potential of a project (proof of concept). Funding is provided in the form of a lump sum. A main grant will support an innovation project focusing on activities such as demonstration, testing, prototyping, pilot lines, scale-up studies, miniaturisation, design, performance verification etc. and market replication. The commercialisation phase is supported indirectly through facilitated access to debt and equity financial instruments as well as various other measures, for example on IPR protection.

A coaching and mentoring scheme is provided exclusively to beneficiaries of the instrument in order to accelerate the impact from the funding provided, thus equipping the company with the skills and capacities for innovation-driven growth. The service will be provided by specially-recruited business practitioners and will be accessible through the Enterprise Europe Network.

The SME Instrument

SEAMLESS BUSINESS INNOVATION SUPPORT FROM IDEA TO MARKET...

<table>
<thead>
<tr>
<th>PHASE I</th>
<th>PHASE II</th>
<th>PHASE III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept &amp; Feasibility Assessment</td>
<td>Demonstration Market Replication R&amp;D</td>
<td>Commercialisation Market-Maturity to Market Launch</td>
</tr>
<tr>
<td>Idea to Concept</td>
<td>Concept to Market-Maturity</td>
<td>Market Success</td>
</tr>
</tbody>
</table>

...YOUR HIGHWAY TO DELIVER INNOVATION ON THE MARKET!

Apply at any time! 6 months > 12-24 months > Market Success

ACTIVITIES SUPPORTED

PROOF OF CONCEPT
- ✓ Prove Technical and Commercial Viability
- ✓ Explore IP regime
- ✓ Design Study
- ✓ Develop Pilot Application
- ✓ Risk Assessment

DEMONSTRATION OF COMMERCIAL POTENTIAL via
- ✓ Prototyping
- ✓ Testing
- ✓ Piloting
- ✓ Miniaturisation
- ✓ Scaling-up
- ✓ Application Development

GO-TO-MARKET
- ✓ EU Quality Label (Promotion & Networking with Financial/Customers)
- ✓ Investment Readiness Training
- ✓ SME window in the EU Financial Facilities (debt & equity backed by EIB/EFF)
- ✓ Link to Public Procurement Networks

Source: European Commission
SME Instrument website:

Future and Emerging Technologies (FET)

under the objective “Excellent Science”, € 2.69 billion will be allocated to Future and Emerging Technologies (FET) which supports collaborative research across scientific and engineering disciplines with a clear final goal or purpose. Researchers may be investigating the foundations for radically new technologies, or working towards a breakthrough, which could transfer new ideas from science into technology. Under Horizon 2020, FET is an integral part of this objective and open to collaborative projects in any technological area (for example material science or health).

Industrial Leadership website:

Knowledge Innovation Communities (KICs)

The European Institute of Innovation and Technology (EIT) focuses on creating Knowledge Innovation Communities (KICs) across Europe by bringing together top-level academic and business partners around major innovation challenges. It complements other European initiatives in the areas of education, research and innovation and will be an integral part of the new Horizon 2020 Framework Programme for Research and Innovation. KICs are highly integrated partnerships, bringing together excellent universities, research centres, small and large companies and other innovation actors on a long-term basis around specific societal challenges.

EIT & KIC website:
http://eit.europa.eu/kics/

Public-Private Partnerships (PPPs)

Horizon 2020 includes provisions to continue supporting public-private partnerships. These can take the form of institutionalised public-private partnerships, such as Joint Technology Initiatives (JTIs) and other Joint Undertakings. These allow businesses and other stakeholders to join together to set and organise their own research and innovation agenda. The Commission has proposed an investment of €17.5 billion into the following JTIs: Innovative Medicines 2 (IMI2), Fuel Cells and Hydrogen 2 (FCH2), Clean Sky 2 (CS2), Bio-based Industries (BBI) and Electronic Components and Systems for European Leadership (ECSEL).

The Commission also intends to strengthen industrial engagement in Horizon 2020 through further public-private partnerships based on contractual agreements, such as in the areas of Green Cars, Energy Efficient Buildings, Factories of the Future, Sustainable Process Industries, Robotics and Photonics.

2.3 Pillar 3: Societal Challenges

The largest proportion, 38.5%, of the Horizon 2020 budget will be dedicated to research on societal challenges, reflecting the policy priorities of the Europe 2020 strategy. A challenge-based approach will bring together resources and knowledge across different fields, technologies and disciplines, including social sciences and the humanities. This will cover activities from research to market with a new focus on innovation-related activities, such as piloting, demonstration, test-beds, and support for public procurement and market uptake. It will include establishing links with the activities of the European Innovation Partnerships (EIPs).
The seven Societal Challenges

SC1: Health, demographic change and well-being;

SC2: Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bioeconomy;

SC3: Secure, clean and efficient energy;

SC4: Smart, green and integrated transport;

SC5: Climate action, environment, resource efficiency and raw materials;

SC6: Europe in a changing world - inclusive, innovative and reflective societies;

SC7: Secure societies - protecting freedom and security of Europe and its citizens.

Focus Areas

In addition to the societal challenges the EC developed focus areas for the Work Programmes for the years 2014-16. Each focus area should be addressed by several societal challenges jointly. Therefore in each Societal Challenge Work Programme you will find calls named after a focus area and calls named after the societal challenge itself.

For example in SC2 there are calls on “Sustainable Food Security” and “Blue Growth, unlocking the power of the oceans”, both focus areas, and “Innovative, Sustainable and Inclusive Bioeconomy” which consists of all topics tackling this societal challenge beyond the focus areas.

Societal Challenge 2

Food Security, sustainable agriculture and forestry, marine and maritime resources & the bioeconomy

The second societal challenge provides the most opportunities for plant and food related research. The specific objective of SC2 is to secure sufficient supplies of safe and high quality food and other bio-based products, by developing productive and resource efficient primary production systems, fostering related ecosystem services, alongside competitive and low carbon supply chains. This will accelerate the transition to a sustainable European bio-economy.

The involvement of end-users including farmers, fishers, consumers, public authorities (including at local and regional levels), and society at large will be key to contributing to possible changes in our society, economy and environment. Often this involves “multi-actor approaches” (e.g. European Innovation Partnership Operational Groups).

Multi-Actor Approach

The multi-actor approach aims at more demand-driven innovation through the genuine and sufficient involvement of various actors (end-users such as farmers/farmers’ groups, fishers/fisher’s groups, advisors, enterprises, etc.) all along the project: from the participation in the planning of work and experiments, their execution up until the dissemination of results and the possible demonstration phase. The adequate choice of key actors with complementary types of knowledge (scientific and practical) should be reflected in the description of the project proposals and result in a broad implementation of project results. The multi-actor approach is more than a strong dissemination requirement or what a broad stakeholders’ board can deliver: it should be illustrated with sufficient quantity and quality of knowledge exchange activities and a clear role for the different actors in the work. This should generate innovative solutions that are more likely to be applied thanks to the cross-fertilisation of ideas between actors, the co-creation
and the generation of co-ownership for eventual results. A multi-actor project needs to take into account how the project proposal's objectives and planning are targeted to needs / problems and opportunities of end-users, and the complementarity with existing research. Facilitation between actors and openness to involve additional actors/groups of actors during the project, for instance relevant EIP operational groups, are strongly recommended.

References:
European Commission - Factsheets
European Plant Science Organisation – Horizon 2020 Briefing