



Gabinete de Promoção dos
Programa Quadro ID&I

Segurança alimentar, Agricultura e Silvicultura sustentável, Investigação marinha, marítima e de águas interiores e a Bioeconomia

Maria João Fernandes
mariajoao.fernandes@fct.pt

IPCB, Castelo Branco

28 de Janeiro de 2015

HORIZONTE 2020



DS1. Saúde

DS2. Bioeconomia

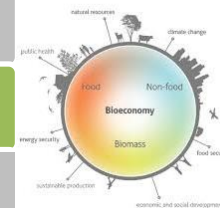
DS3. Energia

DS4. Transportes

DS5. Ação climática

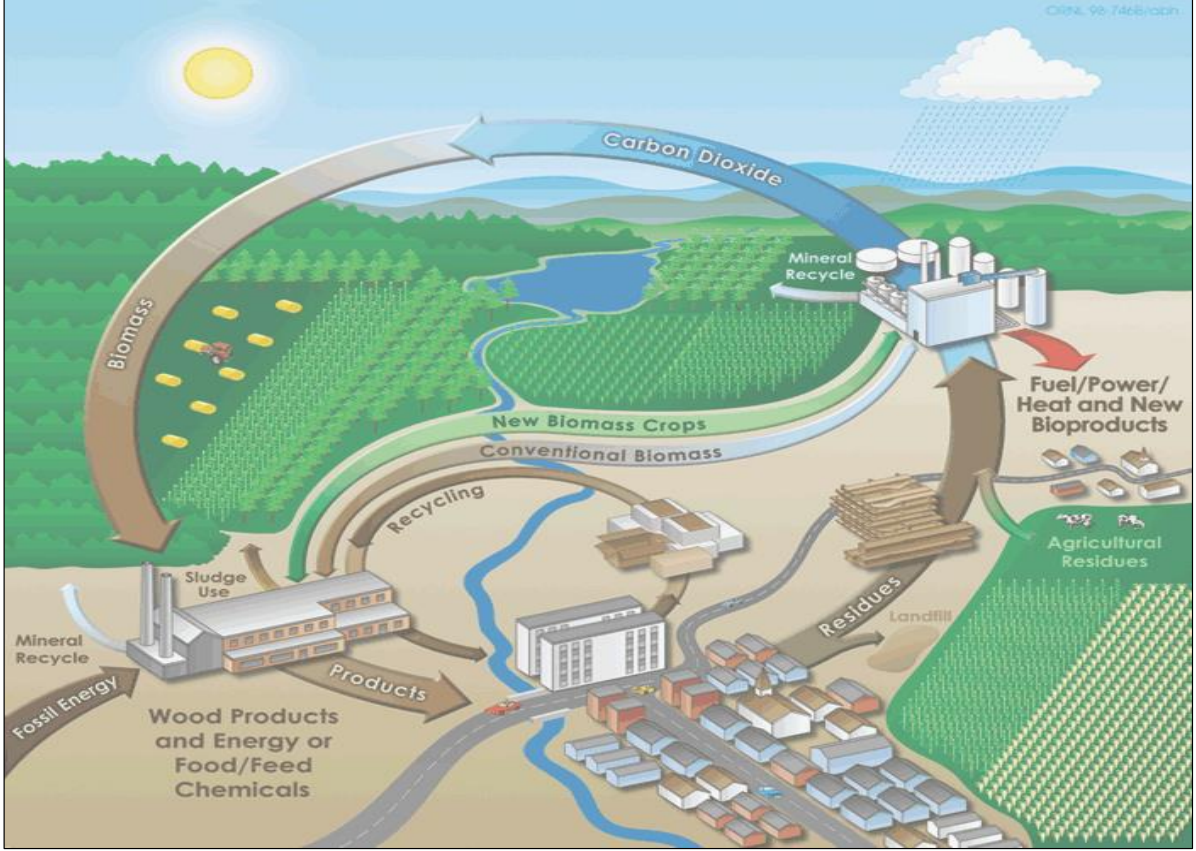
DS6. Sociedades inclusivas

DS7. Sociedades seguras



O conceito da Bioeconomia

<http://ec.europa.eu/research/bioeconomy/>



COM(2012)60, 13/02/2012

Utilização da I&I na produção de matérias-primas renováveis e sustentáveis em agricultura, silvicultura, pesca e aquicultura

... para **criar produtos de valor acrescentado** nas indústrias alimentares, nas indústrias de base biológica e no sector energético



Gabinete de Promoção dos Programa Quadro ID&I



Objetivos do Desafio Societal 2

“Segurança alimentar, agricultura e silvicultura sustentáveis, investigação marinha, marítima e de águas interiores e a bioeconomia”

- ✓ Garantir o abastecimento adequado de alimentos seguros e de qualidade e outros produtos de base biológica
- ✓ Desenvolver sistemas de produção primária produtivos e eficientes na utilização de recursos
- ✓ Potenciar cadeias de abastecimento competitivas e hipocarbónicas

Orçamento (2014-2020): 3851 M€
(~5% orçamento H2020)

Explorar de modo sustentável e eficiente os nossos recursos biológicos
acelerando a transição para uma bioeconomia europeia sustentável

EU Bioeconomy Strategy



5 grandes atividades no Programa Específico do DS2



**Agricultura
e silvicultura**

**Sector Agro-
alimentar**

**Aquicultura e
pescas**

**Bioindústrias
e
bioeconomia**

**Investigação
marinha e
marítima**



<http://ec.europa.eu/programmes/horizon2020/en/h2020-section/food-security-sustainable-agriculture-and-forestry-marine-maritime-and-inland-water>



Gabinete de Promoção dos Programa Quadro ID&I



H2020 – Programa Específico (base legal)



Programa Específico do H2020 (2014-2020)

**COUNCIL DECISION
of 3 December 2013**

establishing the specific programme implementing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) and repealing Decisions 2006/971/EC, 2006/972/EC, 2006/973/EC, 2006/974/EC and 2006/975/EC

(Text with EEA relevance)
(2013/743/EU)

2. FOOD SECURITY, SUSTAINABLE AGRICULTURE AND FORESTRY, MARINE, MARITIME AND INLAND WATER RESEARCH, AND THE BIOECONOMY

2.1. Sustainable agriculture and forestry

Appropriate knowledge, tools, services and innovations are necessary to support more productive, environmentally friendly resource-efficient and resilient agriculture and forestry systems that supply sufficient food, feed, biomass and other raw materials and deliver ecosystems services while at the same time protecting biodiversity and supporting the development of thriving rural livelihoods. Research and innovation will provide options for integrating agronomic and environmental goals into sustainable production, thus: increasing productivity and resource efficiency, including water use efficiency, of agriculture; increasing the safety of animal and plant production; reducing agricultural greenhouse gas emissions; reducing the production of wastes; reducing leaching of nutrients and other chemical inputs from cultivated lands into terrestrial and aquatic environments; decreasing dependence from international plant derived protein imports to Europe; increasing the level of diversity in primary production systems; and fostering the recovery of biological diversity.

2.1.1. Increasing production efficiency and coping with climate change, while ensuring sustainability and resilience

Activities will enhance productivity as well as the adaptive capacity of plants, animals and production systems to cope with rapidly changing environmental/climatic conditions and increasingly scarce natural resources. The resulting innovations will help to move towards a low energy, low emission and low waste economy and to reduce natural resources demand along the entire food and feed supply chain. In addition to contributing to food security, new opportunities will be created for the use of biomass and by-products from agriculture for a wide range of non-food applications.

Programa de trabalho 2014-2015 | DS2

HORIZON 2020 – WORK PROGRAMME 2014-2015

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

Table of contents

- Introduction* 4
- Call for Sustainable Food Security** 6
 - Sustainable food production systems* 7
 - SFS-1-2014/2015: Sustainable terrestrial livestock production 7
 - SFS-2-2014/2015: Sustainable crop production 9
 - SFS-3-2014: Practical solutions for native and alien pests affecting plants 11
 - SFS-4-2014: Soil quality and function 12
 - SFS-5-2015: Strategies for crop productivity, stability and quality 13
 - SFS-6-2014: Sustainable intensification pathways of agro-food systems in Africa 14
 - SFS-7-2014/2015: Genetic resources and agricultural diversity for food security, productivity and resilience 15
 - SFS-8-2014/2015: Resource-efficient eco-innovative food production and processing 17
 - SFS-9-2014: Towards a gradual elimination of discards in European fisheries 19
 - SFS-10-2014/2015: Tackling disease related challenges and threats faced by European farmed aquatic animals 20
 - SFS-11-2014/2015: Implementation of an Ecosystem-based approach for European aquaculture 21
 - Safe food and healthy diets and sustainable consumption* 23
 - SFS-12-2014: Assessing the health risks of combined human exposure to multiple food-related toxic substances 23
 - SFS-13-2015: Biological contamination of crops and the food chain 24
 - SFS-14-2014/2015: Authentication of food products 25
 - SFS-15-2014: Proteins of the future 26
 - SFS-16-2015: Tackling malnutrition in the elderly 27
 - SFS-17-2014: Innovative solutions for sustainable novel food processing 28
 - Global drivers of food security* 29
 - SFS-18-2015: Small farms but global markets: the role of small and family farms in food and nutrition security 29
 - SFS-19-2014: Sustainable food and nutrition security through evidence based EU agro-food policies 30
 - SFS-20-2015: Sustainable food chains through public policies: the cases of the EU quality policy and of public sector food procurement 32
- CONDITIONS FOR THIS CALL** 34



-> Estrutura do Programa de Trabalho 2015

SUSTAINABLE FOOD SECURITY (SFS)

-> 11 tópicos

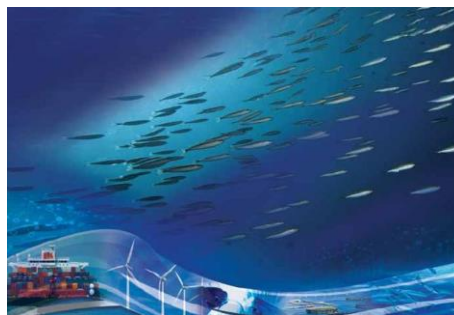
call H2020-SFS-2015 - 104,5 M€



BLUE GROWTH (BG)

-> 4 tópicos

call H2020-BG-2015– 43 M€



INNOVATIVE, SUSTAINABLE & INCLUSIVE BIOECONOMY (ISIB) ->8 tópicos

call H2020-ISIB-2015 – 86.5 M€



Deadline:

Two-stage -> 3/02/2015

(RIA & IA)

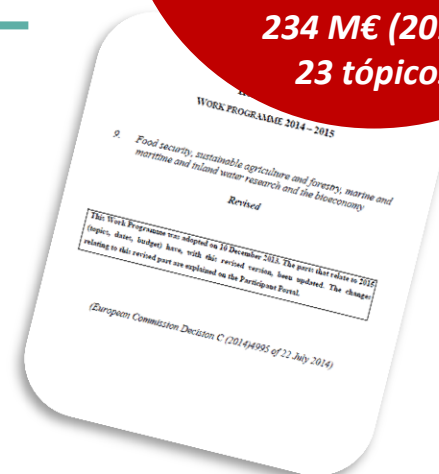
Single-stage -> 11/06/2015

(CSA)

Work Programme
2014-2015

“Food security,
agriculture and
forestry, marine
research &
bioeconomy”

234 M€ (2015)
23 tópicos



Parceria Europeia de Inovação para a Agricultura (EIP-AGRI)

<http://ec.europa.eu/eip/agriculture/>



Visa **fomentar a competitividade e a sustentabilidade da agricultura e da silvicultura**, de modo a que estas atividades consigam mais com menos recursos e se desenrolem em harmonia com o ambiente.

Co-criação e troca de conhecimento em projetos de I&I

- **Projetos multi-ator:** Os utilizadores finais da investigação e os multiplicadores têm de estar estreitamente envolvidos durante todo o projeto
- **Redes temáticas:** Enfoque boas práticas e nos resultados de investigação que necessitam ainda de ser testados e adaptados às necessidades práticas

Abordagem multi-ator no H2020

Tem em vista a orientação dos resultados da investigação para soluções inovadoras com aplicação prática

Um projeto multi-ator deve ter em consideração:

- Como os objetivos e o planeamento da proposta **são direcionados para as necessidades/problemas e oportunidades** dos utilizadores finais;
- A composição do consórcio deve ter um **envolvimento suficiente de atores-chave com tipos complementares de conhecimento** (científico e prático) para alcançar os objetivos do projeto e garantir que os seus resultados sejam amplamente implementados;
- As propostas devem demonstrar quantitativa e qualitativamente **atividades de intercâmbio de conhecimento**.

H2020 Work Programmes (WP)

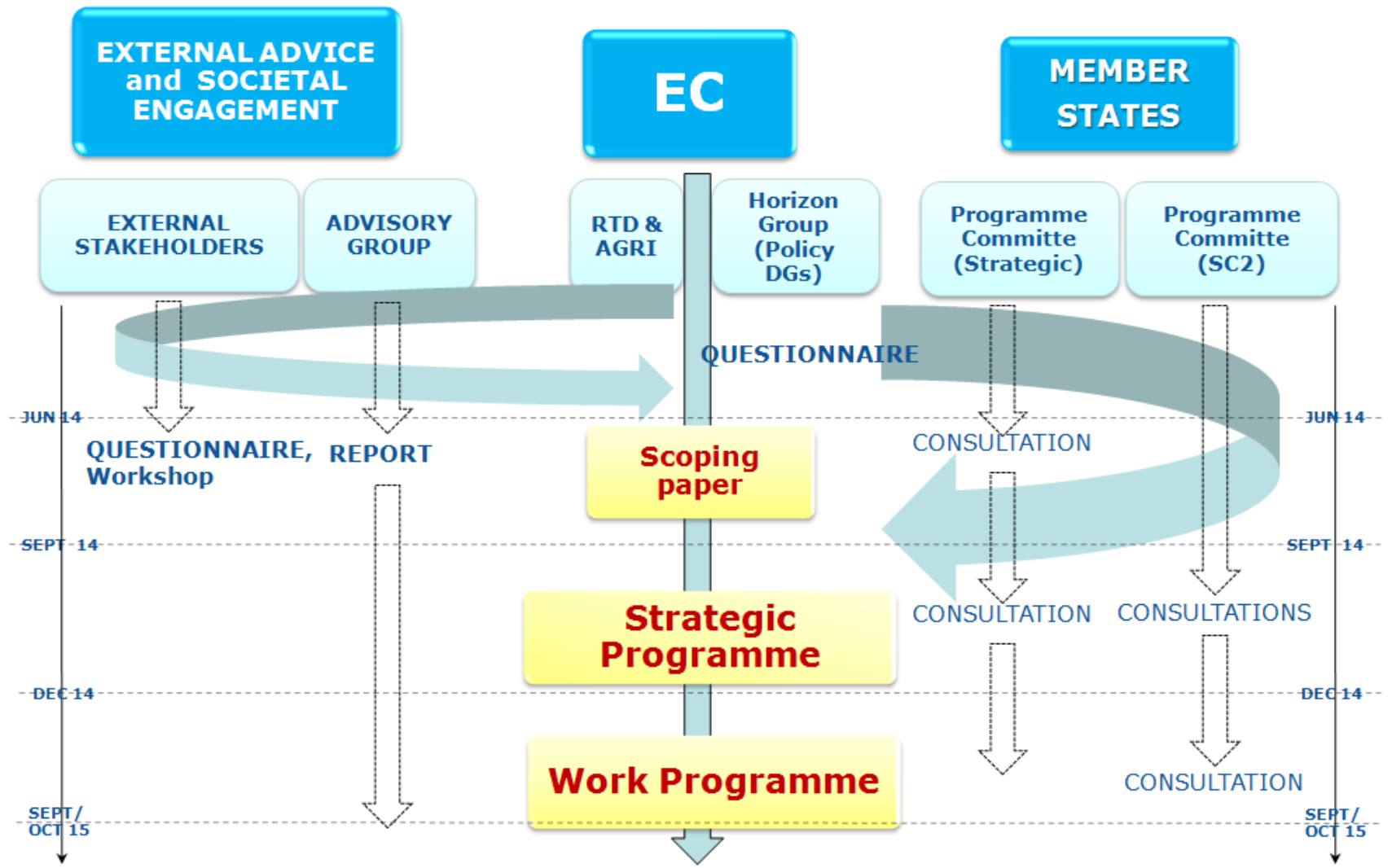
Horizon 2020 Strategic Programming Document

Guidance for the development of the Work Programme 2016-2017

2014	2015	2016	2017	2018	2019	2020
Strategic Programme 1						
WP 1		Strategic Programme 2				
		WP 2		Strategic Programme 3		
				WP 3		
						WP4

Os **programas de Trabalho (WP)**, contendo os tópicos individuais dos concursos e respetivos orçamentos, **cobrem 2 anos**, *i.e.*, o próximo WP vai abranger os concursos **2016 e 2017**

Processo de programação estratégica -> WP 2016/17



Cronograma das atividades-> WP 2016/17

2014	By the summer break	External consultation, including: - Advisory Groups; - other stakeholders and wider R&I community; - Strategic configuration of the PC (on process, criteria) - Commission services to analyse input on basis of selection criteria and prepare first drafts
	After the summer break	Discussion with PC configurations on the basis of drafted documents
	22 October 26 November	Programme Committee meetings
	December	Proposed 2nd Strategic Programme
2015	First half of the year	Preparation of the WP 2016/17, prepared on the basis of the finalised Strategic Programme
	In the course of Summer 2015 or later	Adoption of the Work Programme; Publication of the calls for 2016/17



Setembro 2015
(a confirmar)



Gabinete de Promoção dos Programa Quadro ID&I



2016-2017 Strategic Programming

Scoping Paper for

Horizon 2020 Societal Challenge 'Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research, and the Bioeconomy'

Important Notice: Working Document

This paper will be used as guidance for developing the content of this part of the Horizon 2020 Work Programme for 2016-2017 which is expected to be adopted by the Commission in the third quarter of 2015.

Scoping
paper

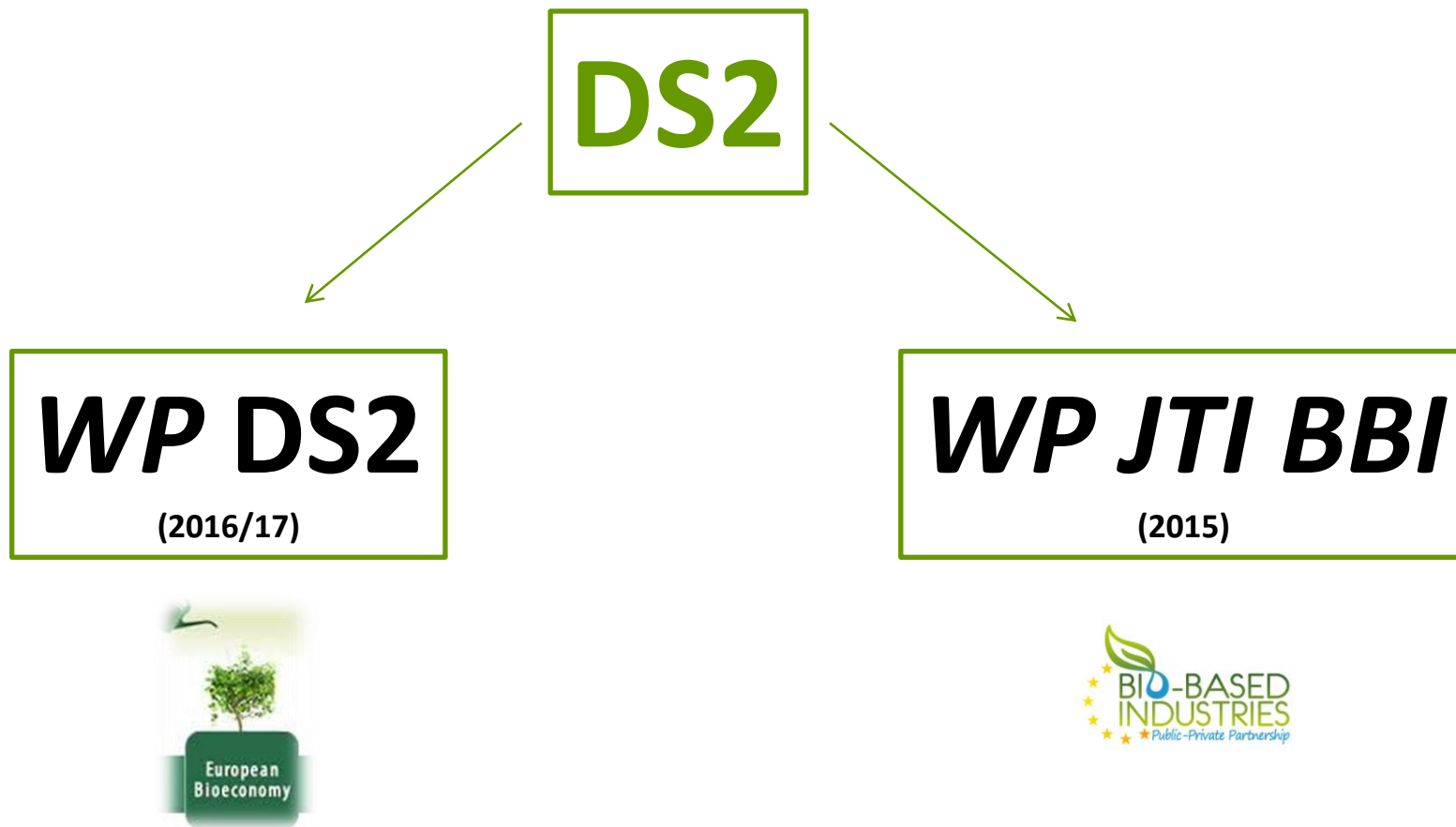
Strategic Programme

Work Programme

Orientações Estratégicas

1. *Resource efficiency as a driver for a resilient primary sector and related industries*
2. *Smart and inclusive territories*
3. *Unlocking the potential of seas and oceans*
4. *Mobilising stakeholders engagement for new bio-based markets*

H2020 – DS2 -> Implementação



Portal do Participante: <http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/index.html>

Iniciativa Tecnológica Conjunta sobre Bioindústrias (JTI BBI)

- Nova **Parceria Público-Privada (2014-2020)** estabelecida entre a UE e o Consórcio das Bioindústrias (*BIC*) tendo em vista **ultrapassar os desafios do setor**
- **Reune todas as partes interessadas para estabelecer na Europa bioindústrias inovadoras e competitivas**, envolvendo a produção primária, as grandes empresas, as PME, as associações industriais e comerciais, as universidades, as entidades do sistema científico e tecnológico e os utilizadores finais
- **Opera de acordo com as regras do H2020 e é orientada pela Agenda Estratégica de Inovação e Investigação (SIRA) desenvolvida pela indústria**, onde são apresentados os principais desafios que devem ser abordados para explorar o potencial das bioindústrias , tendo por base 5 cadeias de valor de base biológica (da produção primária aos mercados de consumo)
- **Enfoque na transformação de partes não comestíveis de plantas** (p.ex. madeira, resíduos agrícolas e florestais) e **resíduos biodegradáveis** em bioprodutos e biocombustíveis

<http://bbi-europe.eu>



Gabinete de Promoção dos Programa Quadro ID&I





Strategic Innovation & Research Agenda (SIRA)

- **Value Chain 1: From lignocellulosic feedstock to advanced biofuels, bio-based chemicals & biomaterials**
realising the feedstock and technology base for the next generation of fuels, chemicals and materials
- **Value Chain 2: Next generation forest-based value chains**
utilisation of the full potential of forestry biomass by improved mobilisation and realisation of new added value products and markets
- **Value Chain 3: Next generation agro-based value chains**
realising the highest sustainability and added value by improved agricultural production, and new added value products and markets
- **Value Chain 4: New value chains from (organic) waste**
from waste problems to economic opportunities by realising sustainable technologies to convert waste into valuable products
- **Value Chain 5: Integrated energy, pulp and chemicals biorefineries**
realising sustainable bio-energy production, by backwards integration with biorefinery operations isolating higher added value components



http://ec.europa.eu/research/participants/data/ref/h2020/other/legal/jtis/bbi-sira_en.pdf



Gabinete de Promoção dos Programa Quadro ID&I



Como se pode envolver na *JTI BBI*

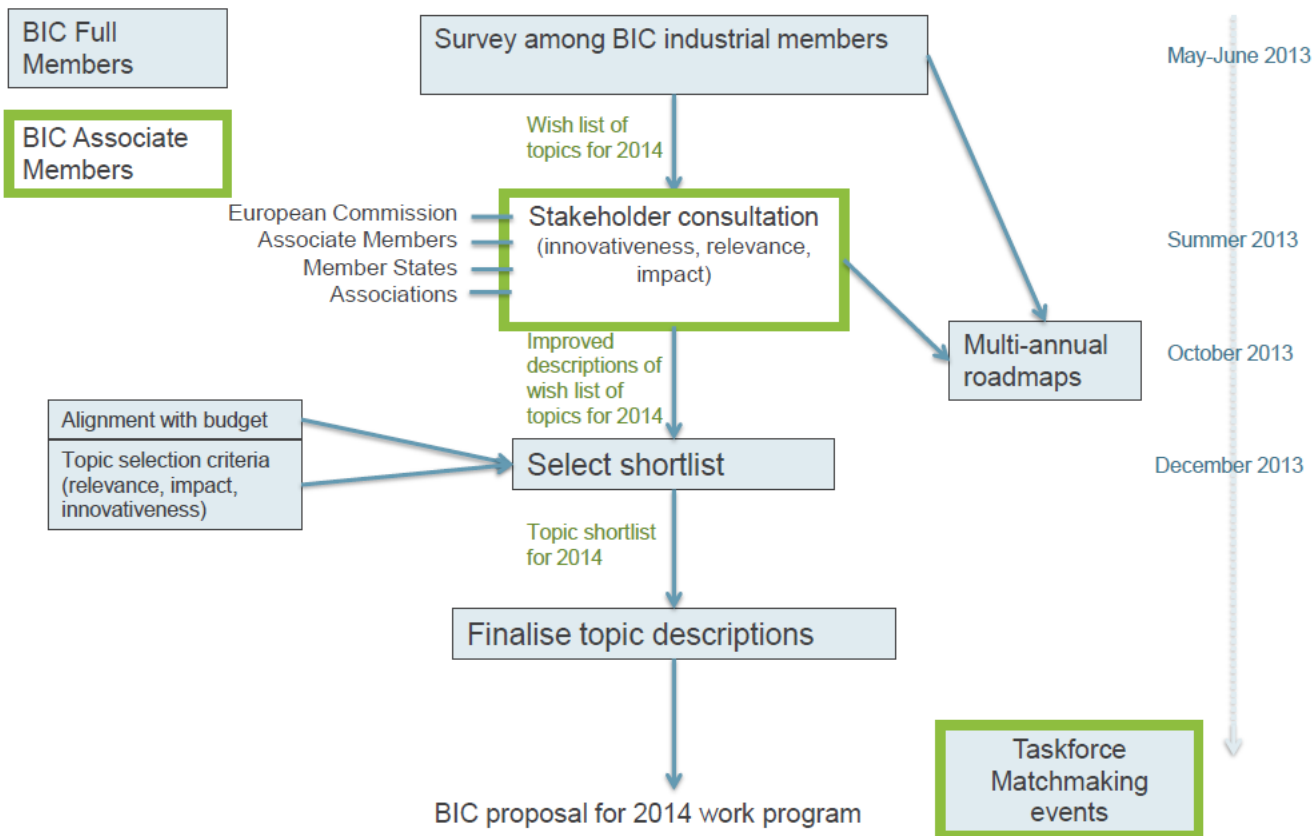
- Participando nas propostas dos concursos anuais desta PPP
- Apoiando o desenvolvimento do Programa de Trabalho anual tornando-se membro do consórcio *BIC* (<http://biconsortium.eu/join-us>)



JTI BBI -> Preparação do WP 2015



Programming procedure



WP 2015 – Calendarização:

- ✓ Out 2015: *scoping paper* c/ grandes prioridades para 2015
- ✓ Início 2015: 1º *draft WP* 2015
- ✓ Abr/Mai 2015: publicação *call* 2015
- ✓ Set 2015: fecho *call* 2015

Informações sobre a Bioeconomia na UE

> [FP7](#)
 > [FP6](#)
 > [FP5](#)
 > [FP4](#)

e-Library

More information on Research and Innovation DG publications can also be found at the :

> [Research and Innovation DG publication library](#)

More publications on :

> [EUBOOKSHOP](#)

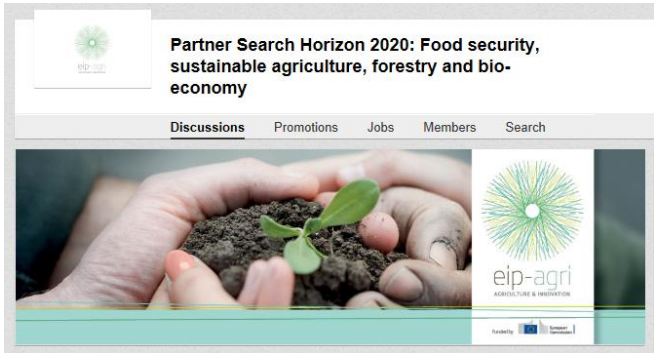
<http://ec.europa.eu/research/bioeconomy>

Mecanismos de apoio ao *networking* e ao envolvimento em projetos



LinkedIn group:

<http://www.linkedin.com/groups/Partner-Search-Horizon-2020-Food-7416906>



Find a HORIZON 2020 Partner



Horizon 2020 Biotechnology and Bioeconomy

COST Actions - F&A Domain

http://www.cost.eu/domains_actions/fa



CORDIS Partner Service:

<https://cordis.europa.eu/partners/web/guest/home>



Projetos financiados anteriormente:

<http://ec.europa.eu/research/bioeconomy>

H2020 Agro-Food catalogue:

<http://www.ceseand.net/LinkClick.aspx?fileticket=VG0JEdPeI2M%3d&tabid=113&mid=522&language=es-ES>



Gabinete de Promoção dos Programa Quadro ID&I





GPPQ – Gabinete de Promoção do Programa-Quadro

Av. D. Carlos I, nº126
1249-074 Lisboa - Portugal

www.gppq.fct.pt

Bio Economia
BBI



Maria João Fernandes

🏠 GPPQ

Av. D. Carlos I, nº126, 4º andar
1249-074 LISBOA

✉ mariajoao.fernandes@fct.pt



Gabinete de Promoção dos Programa Quadro ID&I

FCT
Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

