



# Horizon2020: opportunities for animal health research and innovation and the EU-China Food, Agriculture and Bioeconomy flagship



Razvan Anistoroaei, PhD.

F3: Agri-Food Chain  
DG Research and Innovation

LinkTADs session: Coordinating veterinary research  
between EU and China

Madrid, 29 September 2016

HORIZON 2020



# AGENDA

- HORIZON2020
- DRAFT Work Programme 2016-2017
- BIOECONOMY for Europe & IBF
- FOOD2030

# Important notice

- This presentation is based on a **working document which is not yet endorsed by the Commission** and its content 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.
- The Commission expressly disclaims liability for any future changes of the content of this presentation.

Quick:

# Basis about Horizon 2020



# Three pillars



# Societal challenges

<b>SC1</b>	<b>Health, demographic change and wellbeing</b>	<b>7 472</b>
<b>SC2</b>	<b>Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy</b>	<b>3 851</b>
<b>SC3</b>	<b>Secure, clean and efficient energy *</b>	<b>5 931</b>
<b>SC4</b>	<b>Smart, green and integrated transport</b>	<b>6 339</b>
<b>SC5</b>	<b>Climate action, environment, resource efficiency and raw materials</b>	<b>3 081</b>
<b>SC6</b>	<b>Inclusive, innovative and reflective societies</b>	<b>1 310</b>
<b>SC7</b>	<b>Secure societies</b>	<b>1 695</b>
	<i>Science with and for society</i>	462
	<i>Spreading excellence and widening participation</i>	816

# The 2016-2017 Work Programme addressing solutions to Societal Challenge 2?

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# Horizon 2020 work programme 2016-2017: Proposing solutions to global challenges

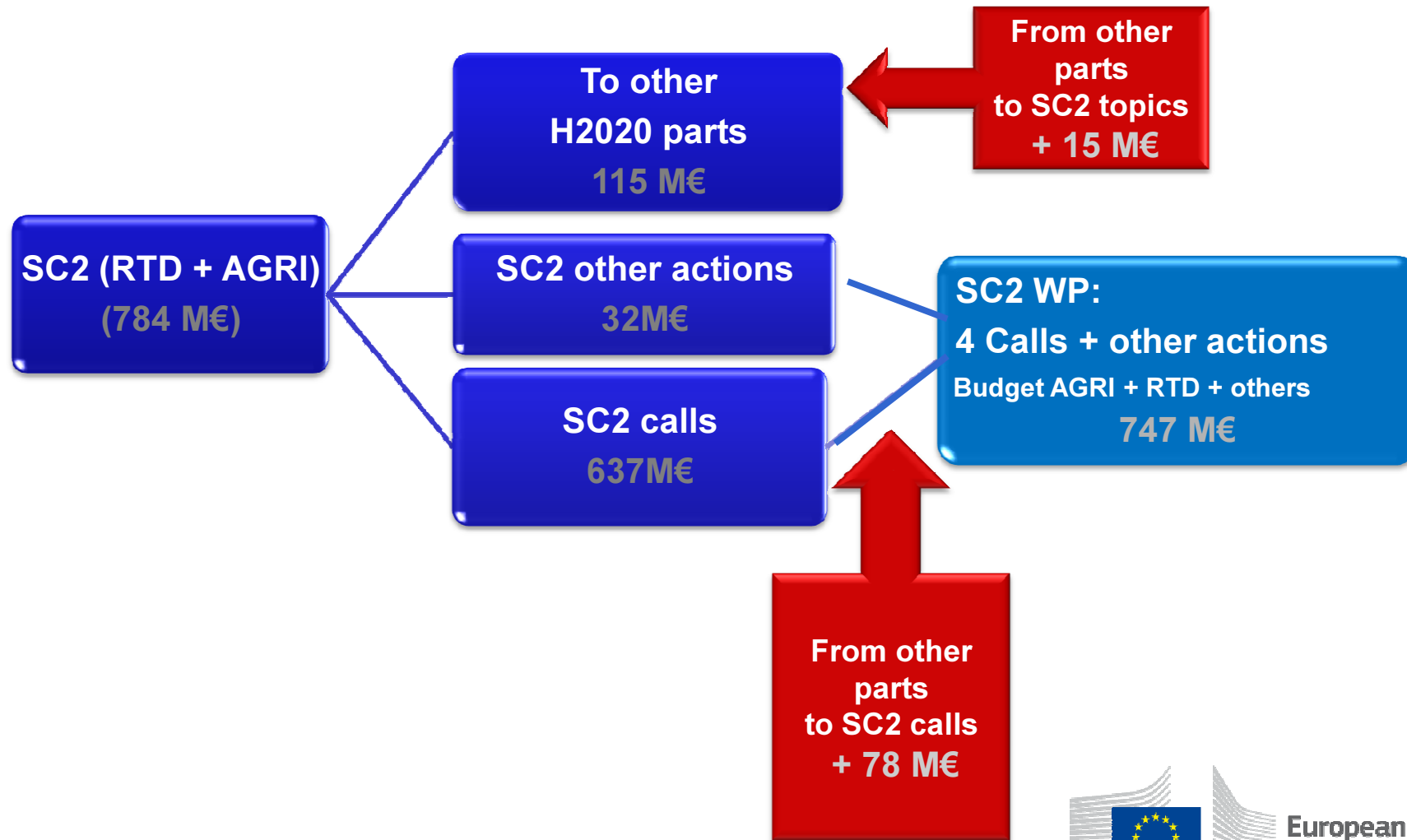
- **Feed 9 billion people by 2050** by improving farming and food systems' capacity to sustainably supply sufficient and healthy food
- **Unlock the potential of seas and oceans** which cover 70% of the Earth's surface and host 50% of known species
- **Raise the sustainable growth potential of rural areas** and their ability to cope with demographic, climatic and economic change
- **Boost bio-based markets** to create over 36% growth/ year in the sector and 90.000 new jobs



# Horizon 2020 work programme 2016-2017: Four core objectives

- **Foster resilient and resource efficient** primary production and industry as well as **sustainable and healthy consumption**
- **Demonstrate the innovative potential of the Oceans** by bringing technology to market
- **Foster innovation and business opportunities for rural and coastal areas** through new territorial approaches and business models
- **Re-industrialise Europe** through new bio-based value-chains, securing sustainable biomass

# Societal Challenge 2 2016-17 Budget



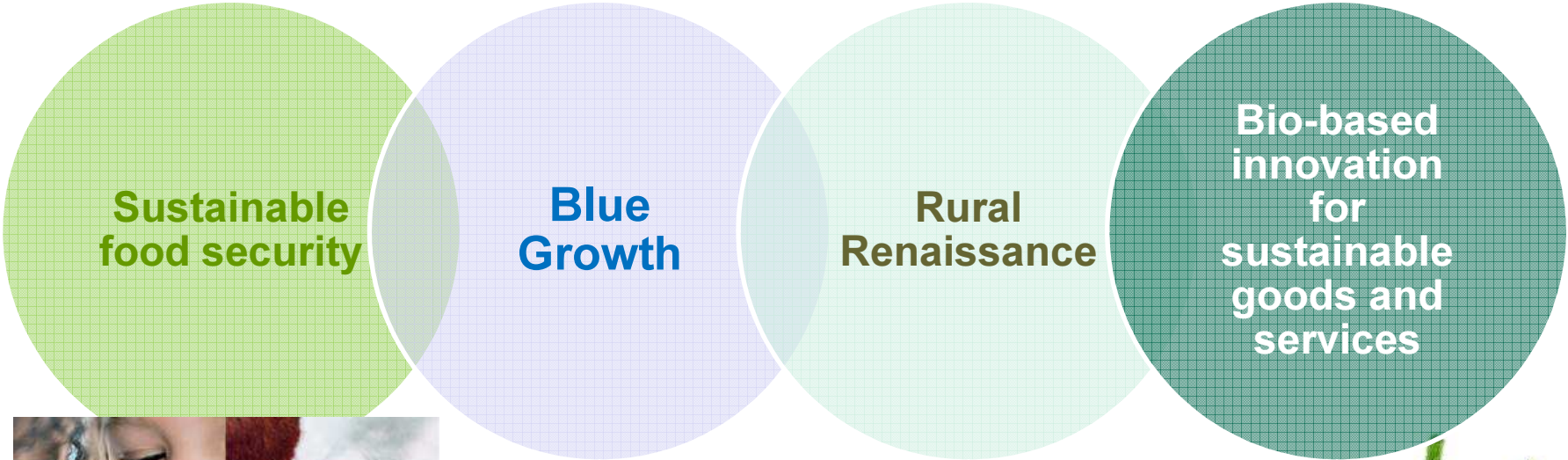
# Four calls in Societal Challenge 2



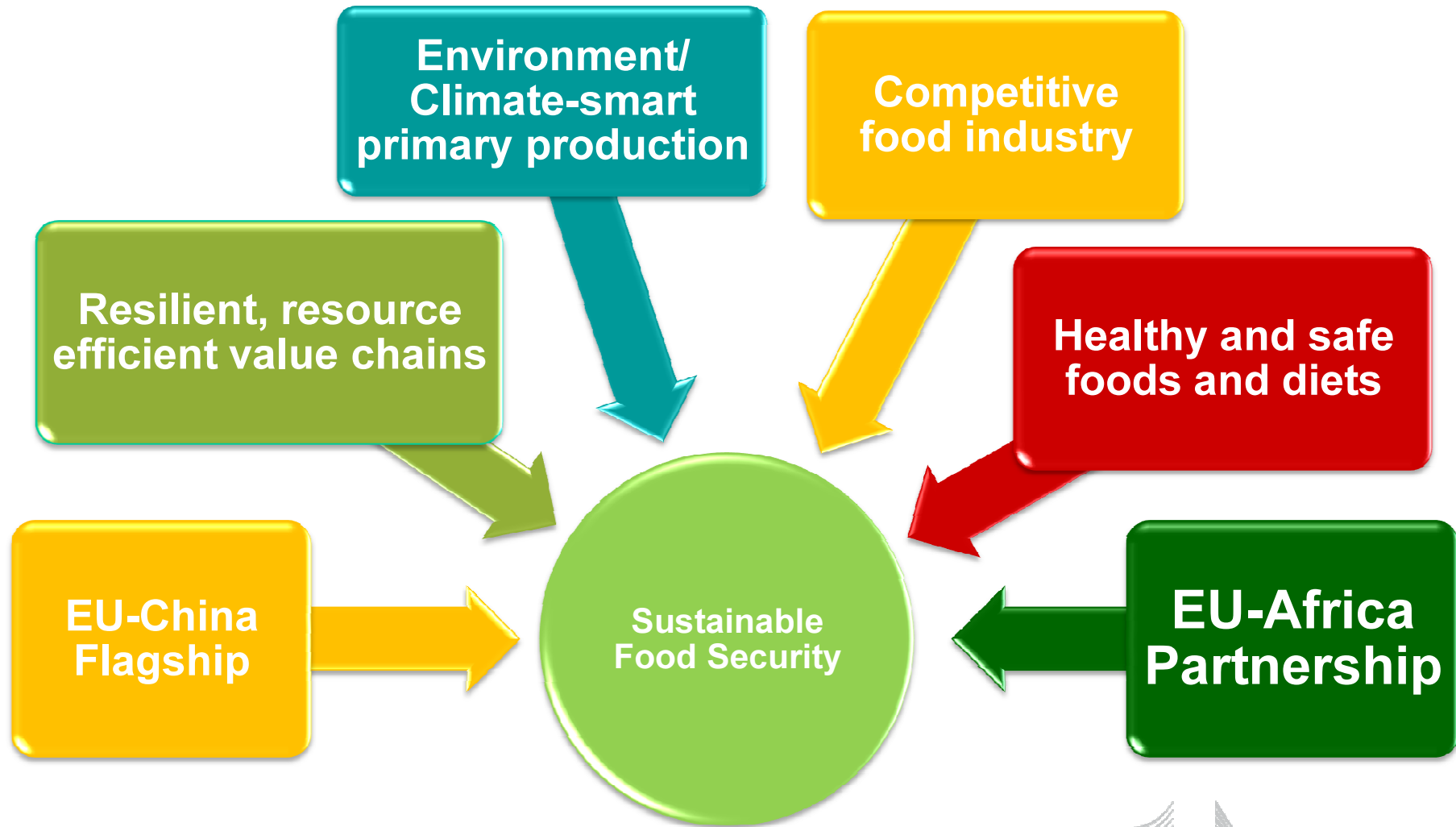
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# Four Calls in Societal Challenge 2



# Sustainable Food Security : 6 areas



# Livestock-related topics in DRAFT 2016-2017 WP

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# SFS-10-2017: Research and approaches for emerging diseases in plants and terrestrial livestock

*Some highlights:*

- Newly emerging diseases in terrestrial animals.
- Improve methods and strategies for risk assessment, prevention and containment.
- Partners from **non-EU** regions welcomed.
- Development of environmentally sound tools for the prevention, detection and diagnosis.

**Research and Innovation Action (RIA)**

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# SFS-13-2017: Validation of diagnostic tools for animal and plant health

*Some highlights:*

- Harmonise and validate (including through ring trials) existing and new protocols for the detection and quantification of pathogens and other factors of concern for the health of plants and terrestrial animals, and correlates of infection/immunity.
- Bringing to the market of end-products, such as swift, portable tools for field-testing by veterinarians, practitioners and business operators.

**Innovation Action (IA)**



# **SFS-36-2017: Co-fund on "One Health" (zoonoses – emerging threats)**

*Some highlights:*

- Coherence in research is needed to better understand processes triggering and propagating zoonoses, their routing in the animal–human-environment triangle and their impact on public health.
- Create a European joint programme to deal with zoonoses with an emphasis on zoonotic food-borne microbial infection and intoxication, including natural toxins and the risks associated with domesticated and wild animal reservoirs and their exposure routes towards human infection.

**Cofund (European Joint Programme)**

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# **SFS-46-2017: Alternative production systems to address anti-microbial drug usage, animal welfare and the impact on health**

*Some highlights:*

- Efforts to maximise production and ensure product safety often involve overuse of anti-microbial drugs in farm animals either in veterinary treatment.
- Address immunity and health, biosecurity measures and residue detection. Develop possible means, including tools, methods and schemes, by which more welfare-friendly production systems can help improve health and reduce the use of veterinary drugs.

## **Research and Innovation Action (RIA)**

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# Call deadlines

<b>2017</b>					
<b>CALLS</b>			<b>Deadlines</b>	<b>Information to applicants</b>	<b>Grant Agreements</b>
<b>SFS, BG, RUR, BB</b>	<b>two-stage submission (RIA, IA)</b>	<b>1st stage</b>	14 Feb 2017		
		<b>2nd stage</b>	13 Sept 2017		
	<b>single stage submission (CSA, ERA Net)</b>	<b>Single stage</b>	14 Feb 2017		
<b>BUDGET 2017 : EUR 375 million (SFS 251 M€ - BG 47 M€ .m – RUR 62 M€ BB 15 M€)</b>					

**Find out more:**

[www.ec.europa/research/horizon2020](http://www.ec.europa/research/horizon2020)

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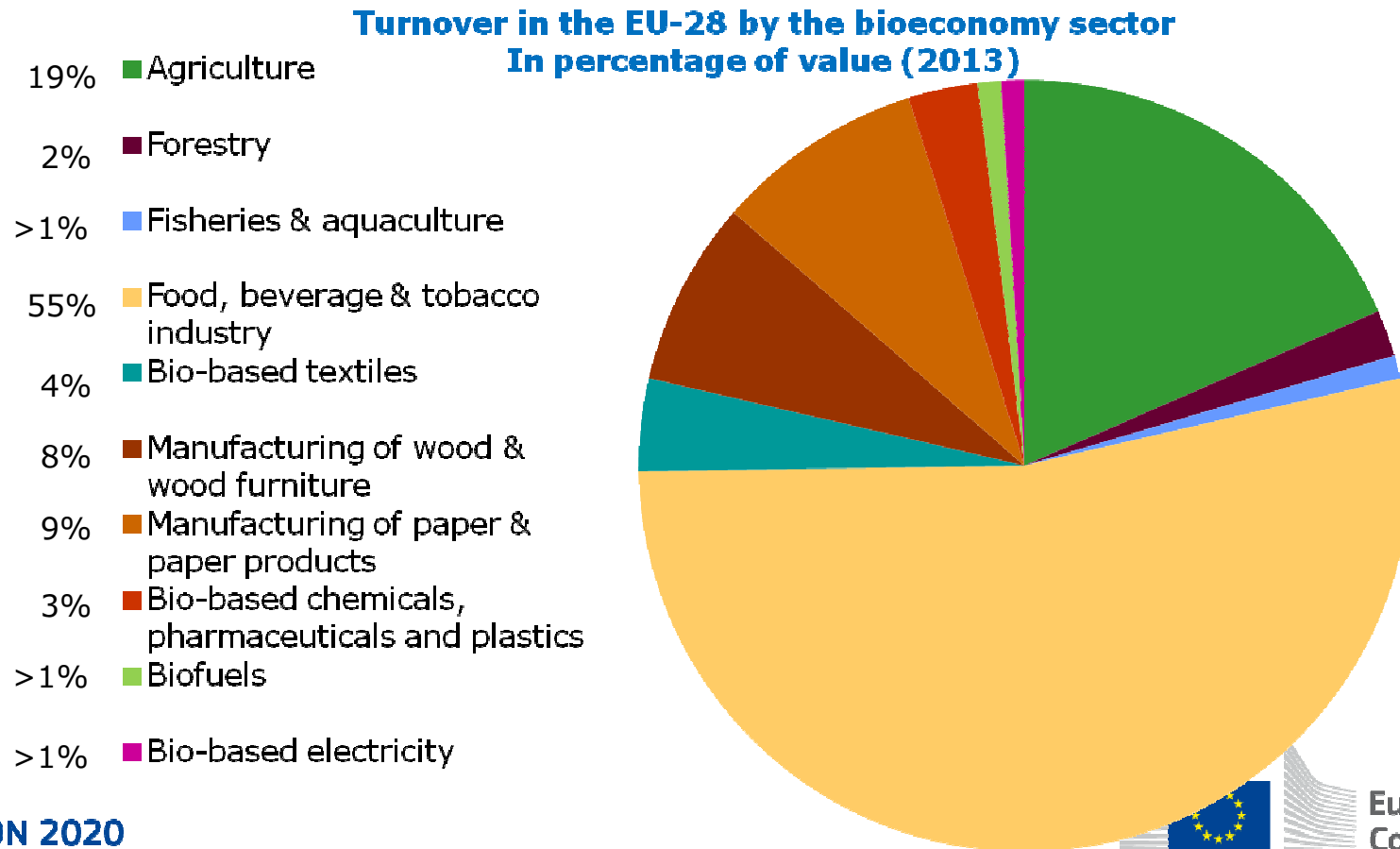


# A Bioeconomy for Europe

Using resources from land and sea  
for a post-petroleum economy

**Directorate Bioeconomy – DG RTD  
European Commission**

# Bioeconomy is an important industrial sector for Europe



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# International Bioeconomy Policy

## Bioeconomy has become a national priority in many countries

- dedicated bioeconomy strategy
- partial bioeconomy strategy (e.g. bioenergy, bioindustry, regional strategies)
- bioeconomy strategy under development



As of June 2015

## Internationalisation of the Bioeconomy:

- Global challenges = global approaches
- Strategic cooperation & knowledge sharing → set global Bioeconomy agenda
- Policy-related discussions & launch common R&I actions
- Participation in individual projects → programme level cooperation



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## Future actions in EU international cooperation

- **Review of Bioeconomy Strategy & Action Plan** ← **international element**
- Continuous dialogue with partner countries in existing format
- Better alignment of research agendas in Europe
  - systematic cooperation with JPIs and ERANETs
- Better use of multilateral cooperation
- ... through the launch of an informal



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**International Bioeconomy Forum (IBF)**



## What would the International Bioeconomy Forum (IBF) be:

- Informal multilateral network for the actively engaged in the Bioeconomy
- Framework for reinforced, strategic programme level R&I cooperation
- Room for policy related discussions
- Platform working on concrete actions



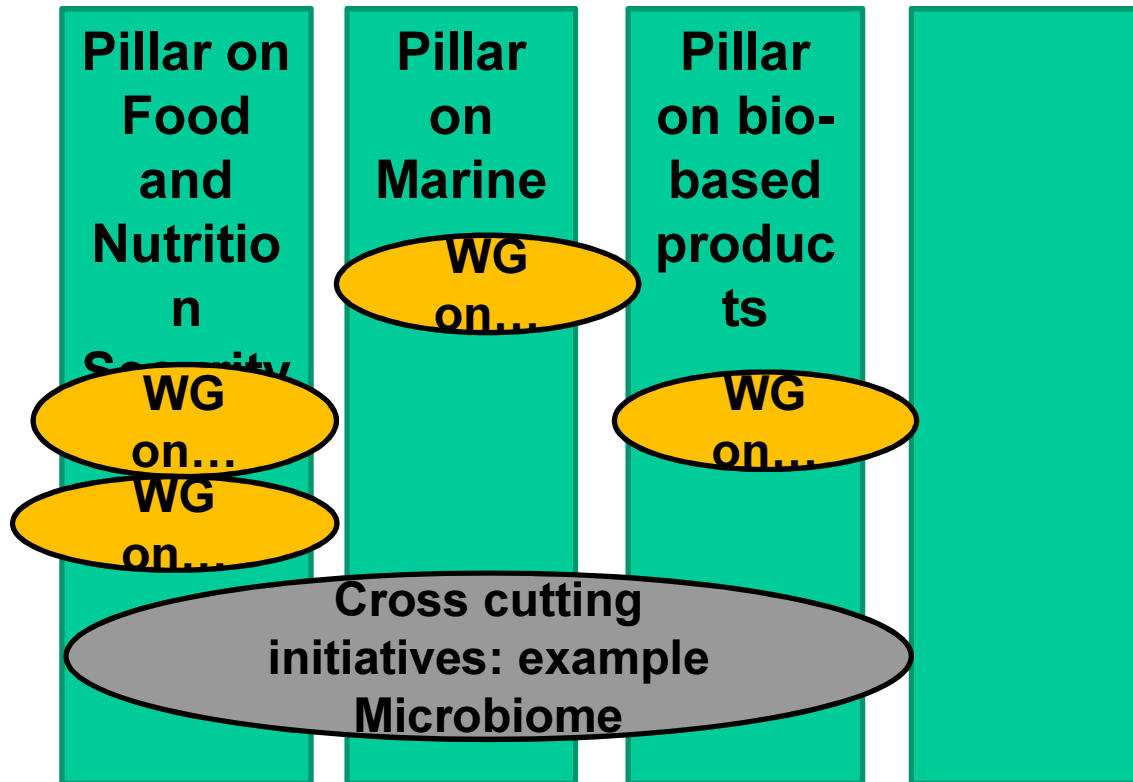
# International Bioeconomy Forum - IBF

## Horizontal aspects



Who?  
Ministries +  
Funding  
Agencies +  
Int. Org.s

## Thematic activity examples



Who?

Ministries

Funding Bodies (public and private)

Research Institutes

Int. Org.s

Countries (variable geometry):

US, Canada, Australia, New Zealand, China, India → observer status possible, after transition period more countries

International organisations (Int. Org.):

OECD, **HORIZON 2020**

Member States: EU position to be developed with MS (regular involvement of JPIs, ERA-NETs etc.)





# FOOD 2030



**Research and Innovation for  
Future-proofing our Nutrition and Food Systems**

# FOOD 2030

## Need for EU R&I Policy Framework

An innovation facing a Food Systems approach integrating land and sea - from inputs to nutrition (and back)

Will provide:

1. A policy framework to better structure, connect and scale-up EU R&I, in a global context
2. A global platform to convene stakeholders in Nutrition & Food Systems to tackle global societal challenges
3. Investment driver : A mean to step-up EU investment ambition and division of labour – PPP, P2P, financial instruments, EFSI
4. A magnet for Market Creating Innovation

# The Political Opportunity

## Juncker Priorities

10 priorities

01		A new boost for jobs, growth and investment.	06		A reasonable and balanced free trade agreement with the United States.
02		A connected digital single market.	07		An area of Justice and Fundamental Rights based on mutual trust.
03		A resilient Energy Union with a forward-looking climate change policy.	08		Towards a new policy on migration.
04		A deeper and fairer internal market with a strengthened industrial base.	09		Europe as a stronger global actor.
05		A deeper and fairer Economic and Monetary Union (EMU).	10		A Union of democratic change.

Sources: European Parliament, European Commission

## SDGs Post-2015

## COP21

**TOUS ENSEMBLE  
POUR LE CLIMAT**  
cop21.gouv.fr #COP21

## World Food Day 2016

**Climate is changing.**

**Food and agriculture are too.**

**IPCC**

IPCC | 14 April 2016 | 14:52

The IPCC's priorities for the next six years: 1.5C, oceans, cities and food security

Quantity

Quality

Sustainability

Business Models

## FOOD 2030 Priorities



=> **Nutrition:** ↓ hunger & malnutrition, ↑ food safety & ↓ diet-related illnesses, and helping citizens adopt sustainable diets and healthy lives – e.g. EJP One Health



⇒ **Climate:** Building a climate and global change-resilient food system – e.g. PRIMA, EU/Africa



=> **Sustainability:** Implementing sustainability & circular economy principles across the whole food system – e.g. food waste, sustainable and resource-efficient food production



=> **Innovation:** ↑ market-creating innovation & investment, while empowering communities – e.g. FOOD PPP, FOOD KIC, regions and Agri-food Smart Specialisation, food in cities, synergies between funds (H2020, EFSI, RDF, etc.)

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# THANK YOU

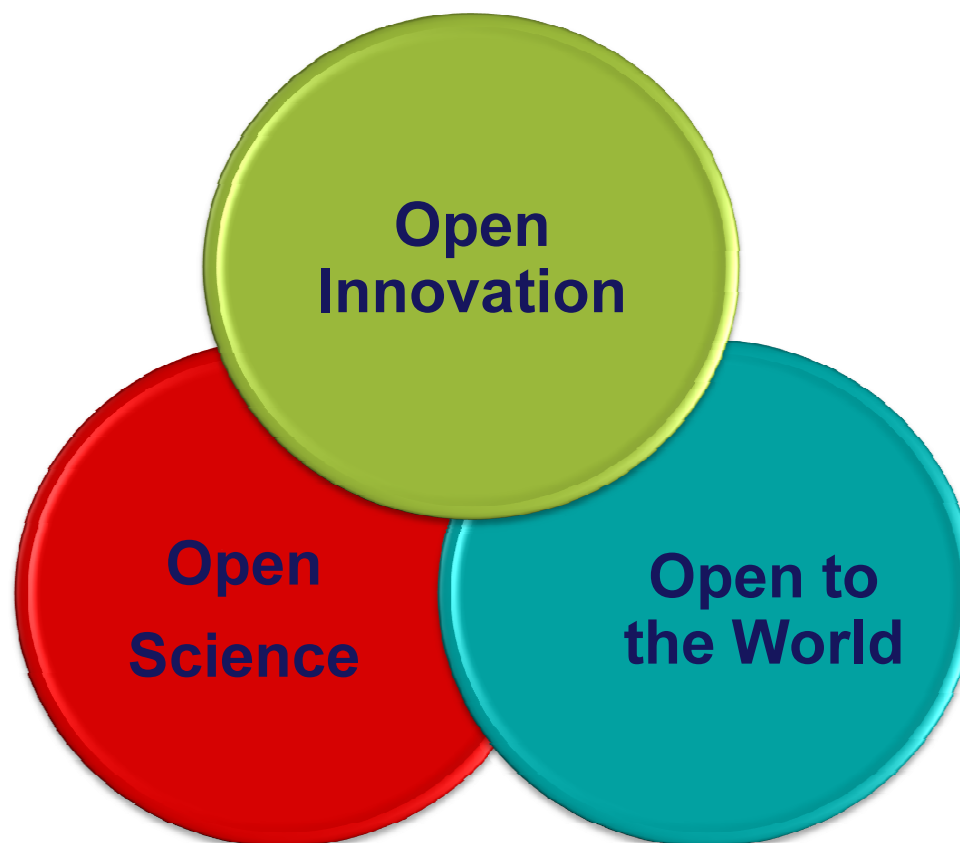
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# How does the Work Programme fit the Commissioner Moedas' priorities "the three Os"?





# 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 to SMEs, demonstration and financial instruments**

**Widening regional uptake**



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# Open Science

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



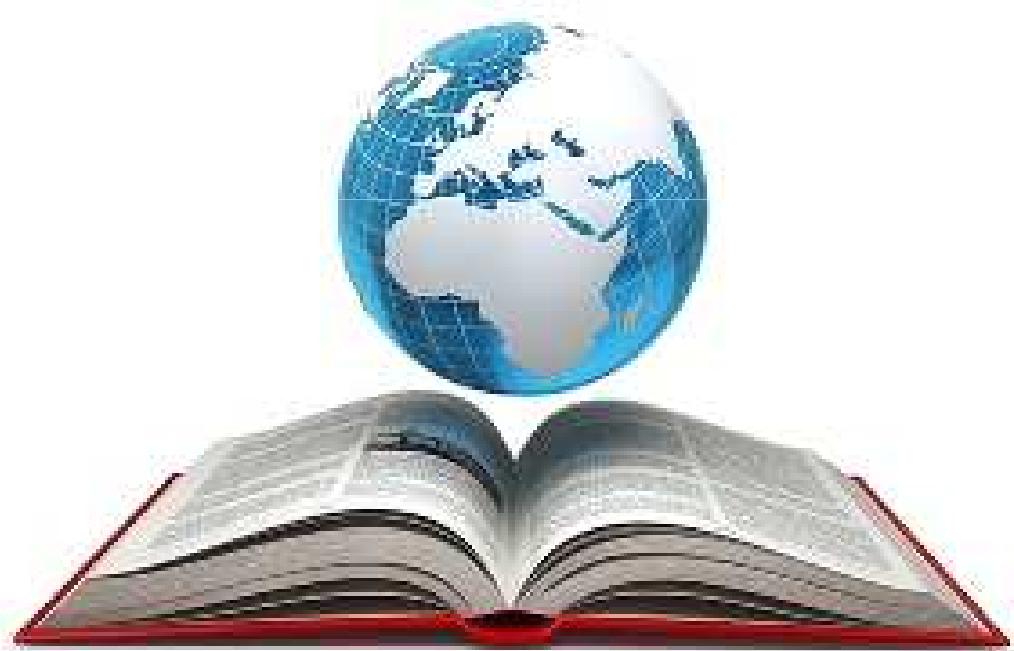
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# Open to the world

## Tackling key challenges with global partners:

- **China,**
- **Africa,**
- **South-East Asia,**
- **the Arctic**





## Focus Area Call

# Sustainable Food Security - Resilient and resource efficient value chains (SFS)

*431 M€ to ensure sufficient, safe and  
nutritious food for all while safeguarding  
natural resources*

