

# FOOD 2030 A R&I Policy Framework to Future-Proof our Food Systems

#### **EU Platform on Food Losses and Food Waste (FLW)**

Brussels, 6 December 2018



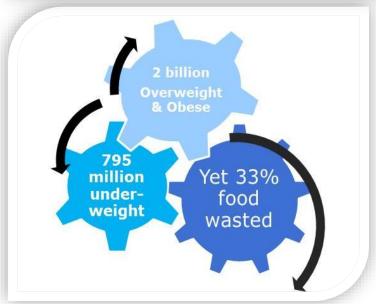
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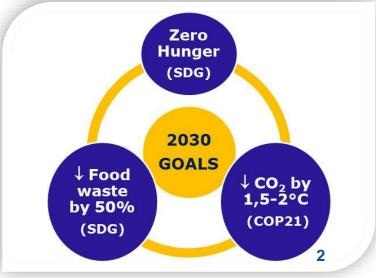


## A "Perfect Storm"





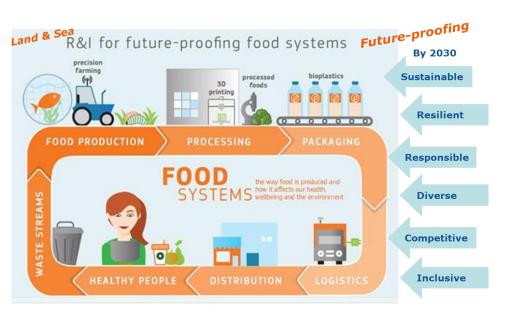






## **FOOD 2030**

**EU R&I Policy Framework to future-proof our** nutrition & food systems



- Need for a systemic approach to future-proofing food systems by structuring, connecting and scaling-up R&I
- To provide evidence for policies and solutions (knowledge, methods, technologies, services, business models, etc) addressing 4 priorities.



#### **Priorities**

**NUTRITION** for sustainable and healthy diets



**CLIMATE** smart and environmentally sustainable food systems



CIRCULARITY and resource efficiency of food systems



**INNOVATION** and empowerment of communities





**Research breakthroughs** 



**Innovation and Investment** 



**Open Science** 





International collaboration



## FOOD 2030 key achievements

**FOOD 2030: Research & Innovation for Tomorrow's Nutrition & Food Systems** 

High-Level Event, 12-13 October 2016, Brussels

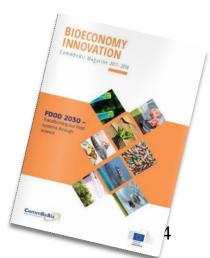






Harnessing Research and Innovation for FOOD 2030

Science Policy Dialogue, 16 October 2017, Brussels





## FOOD 2030 key achievements

Research & Innovation for Food and Nutrition Security

- Transforming our food systems

2<sup>nd</sup> High-Level Event, 14-15 June 2018, Plovdiv (BG)



FOOD 2030 European Parliament event with FAO on World Food Day 16 Oct 2018, Brussels

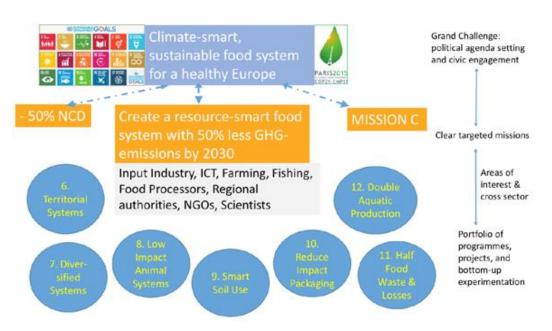
FOOD 2030 Workshop with DG SANTE at Austrian Presidency Conference

22-23 Nov 2018, Vienna





## **FOOD 2030 EG**

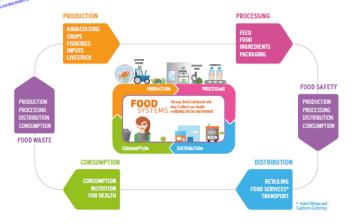


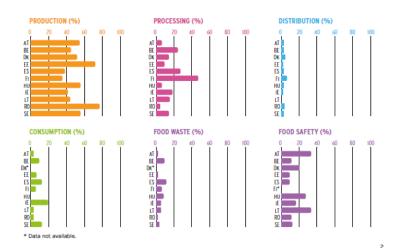


- A. Improve dietary patterns and lifestyles for a 50% reduction in the incidence of non-communicable diseases (NCD) in 2030, while reducing the environmental impact of food consumption
- B. Create a resource-smart food system with 50% lower greenhouse-gas emissions by 2030
- C. Realise trust and inclusive governance for a resilient and safe food system



## **SCAR FS WG**







Food Waste



## Fit4F00D2030 Engagement Platform

Fit4FOOD2030: Support the EC to further develop and implement the FOOD 2030 policy framework & actions (2018-2020)



- 1. **EU Think Tank** to link EC and Member States & Associated Countries, with a global outreach
- Policy briefs
- 2. **Policy Labs** to increase & align public/private R&I policies/programs on FNS, building on and expanding existing national/regional networks;
  - Netherland, Italy, Hungary, Norway, Romania, Flanders
- 3. **City Labs** to extract best practices, develop/pilot action-oriented trainings for students, consumers, researchers and professionals linking Science Centres/Science Shops to networks of the Milan Urban Food Policy Pact cities.
  - Amsterdam, Milan, Budapest, Barcelona, Athens, Sofia, Tartu in Estonia



## **Horizon 2020 & Horizon Europe**

The EU Framework Programmes as **implementation tools** for FOOD 2030

- Horizon 2020 WP calls
- Horizon Europe
   discussions ongoing in parallel to Multi-Annual Financial Framework



## **2018 Calls**



## "Integrated system innovation in valorising urban biowaste" € 20 million

## Scope:

- Urban biowaste recycling and valorisation
  - → high added-value products (including proteins for food and feed)
- Integration into existing local waste/wastewater management schemes
- **Life Cycle Assessment** of the entire value chain:
  - behaviour & stakeholders participation

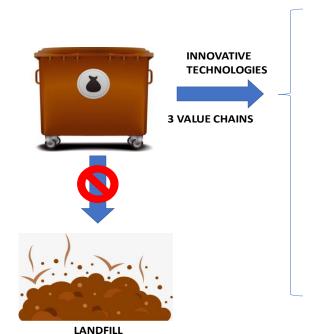
## **Expected impacts:**

- Improved perception of citizens on urban biowaste as a local resource and their enhanced active participation in waste separation;
- A more sustainable and resiliente protein supply chain;
- Safety assessment of bio-bases processes and products from urban biowaste;
- Reduced amount of urban biowaste;



## The VALUEWASTE approach













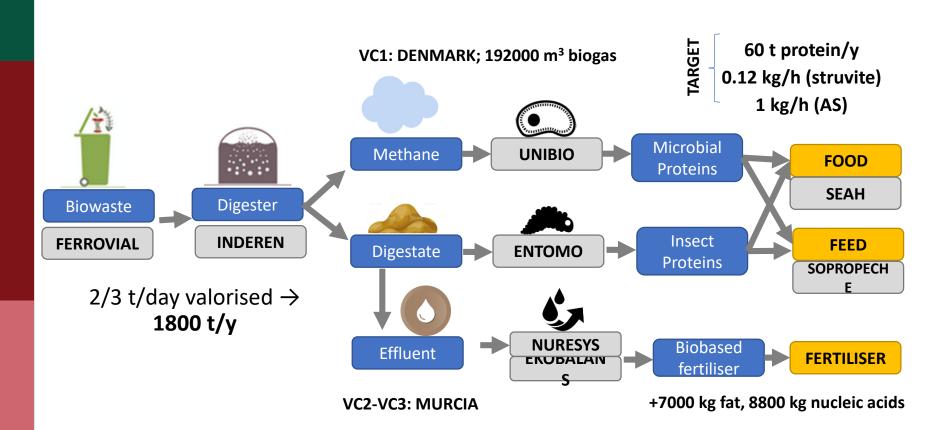
- ✓ Production of high-value biobased products
- ✓ Integrated approach in urban biowaste upcycling
- ✓ Easily implemented and replicated across Europe
- ✓ Comply with legislation

VALUEWASTE challenge: To find new sources of value-added products for the EU through the full valorisation of biowastes in a cascading approach that can be easily replicated across Europe



## Value chains in detail











#### SCALable Technologies for Bio-Urban waste Recovery

#### **CHALLENGES**

- 100 M tonnes/year of biowaste.
- >75% is landfilled or incinerated
- ECONOMIC IMPACT 143 billion euros cost its management
- ENVIRONMENTAL IMPACT: GHG emission, soil and groundwater contamination...

#### MAIN OBJECTIVE

Innovative systems and technologies to obtain high-value biobased products from municipal solid waste (MSW), urban sewage sludge (USS) and retail organic waste (ROW)



### ZO SOCIAL ERCEPTI

#### - Improvement of social perception of urban biowaste - Enhance social participation

- Improving consumer
- acceptance of bioproducts

#### OF LANDFILLING REDUCTION - Reduction of amounts of urban bio-waste. - Reduction of environmental

- impact

**RESULTS** 

- New business models on cities by upgrading urban biowaste
- Alignment with circular economy concept

## **HIGH ADDED-VALUE** BIOPRODUCTS

Biobased plastics (polyester and PHA), biopesticides, safety assessment of proteins, lipid, chitin/chitosan.

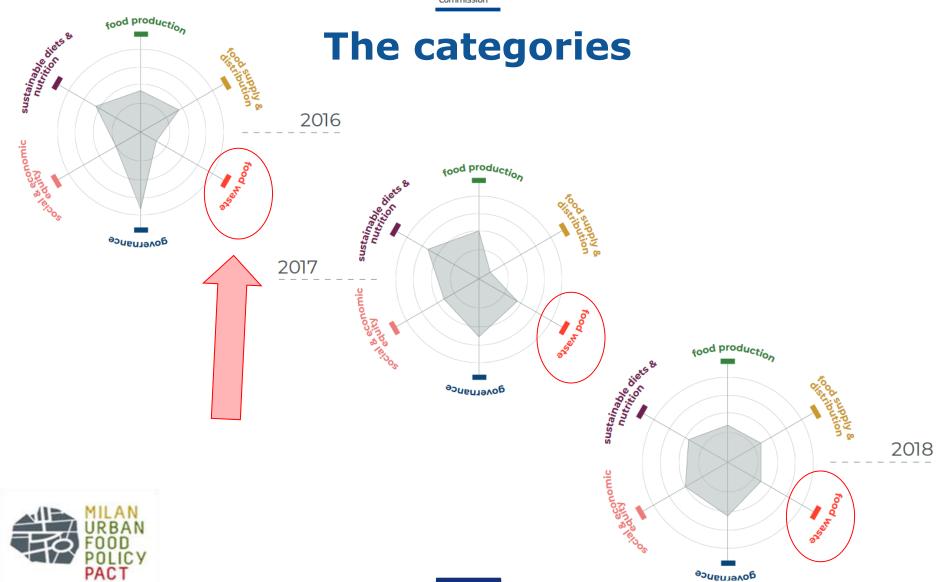
## 2019-2020 Calls



• "Innovative and citizen-driven food system approaches in cities" (15M x 2) 2019 • 40M for a potential topic on cities 2020

## **The MUFPP**

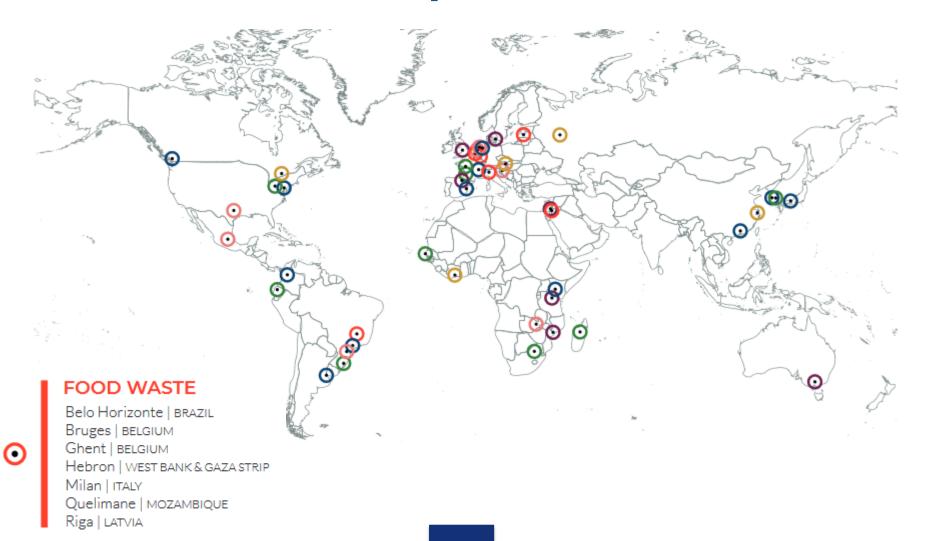




## The MUFPP



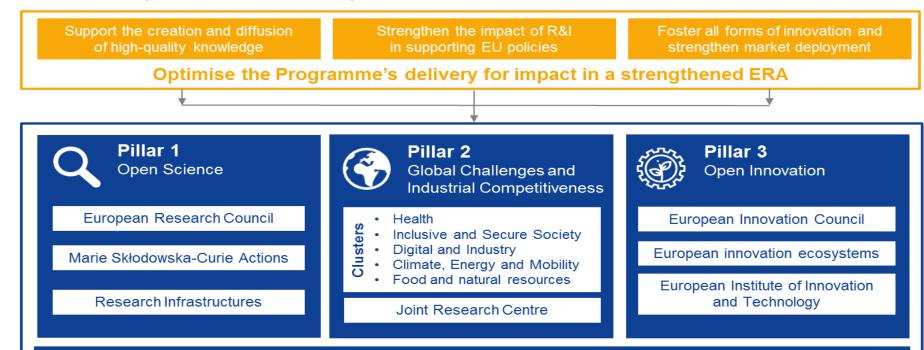
## **Best practices**





## Horizon Europe: evolution not revolution

#### Specific objectives of the Programme



#### **Strengthening the European Research Area**

Sharing excellence

Reforming and Enhancing the European R&I system



## PILLAR 2

#### **GLOBAL CHALLENGES & INDUSTRIAL COMPETITIVENESS:**

boosting key technologies and solutions underpinning EU policies & Sustainable Development Goals

Clusters implemented through usual calls, missions & partnerships	Budget (€ billion)
Health	€ 7.7
Inclusive and Secure Societies	€ 2.8
Digital and Industry	€ 15
Climate, Energy and Mobility	€ 15
Food and Natural Resources	€ 10
Joint Research Centre supports European policies with independent scientific evidence & technical support throughout the policy cycle	€ 2.2

## **CLUSTER 5**



## FOOD AND NATURAL RESOURCES WHY A SINGLE CLUSTER?

- To address the interlinked challenges
   of eco-systems, health of our planet, sustainable agricultural, forest
   and marine production, and sustainable consumption
- Strong linkages with key EU programmes and SDGs
- Bringing together the concepts of:
   circular economy, bioeconomy and blue economy,
   with a coherent contribution of R&I to EU policies in these areas
- Mainstreaming a participatory approach to R&I, working on the overall system, and exploitation of big data

## **CLUSTER 5**



## FOOD AND NATURAL RESOURCES INTERVENTION AREAS IN KEY WORDS

### Food systems (SP Annex I, 5.2.5)

- Food systems transformation
   environmentally sustainable, circular and resource efficient
   food systems from land and sea;
- Healthy diets and personalised nutrition;
- Food safety and authenticity;
- Consumer behaviour, lifestyle and motivations for better health and environmental sustainability along the food value chain



## **CIRCULAR BIOECONOMY CITIES**

### 2018 EU BIOECONOMY STRATEGY





HOWEVER, circular bioeconomy **policies** directly implemented by European cities are still **limited** 

→ Action on pilot circular bioeconomy cities
to support the draft and implementation of urban circular bioeconomy





## **Thank You**



**Website FOOD 2030:** 

http://ec.europa.eu/research/food2030/

Twitter: #FOOD2030EU

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