

# Global drivers in shaping the future bio-economy

## Driving sustainable food system transformation through research and innovation

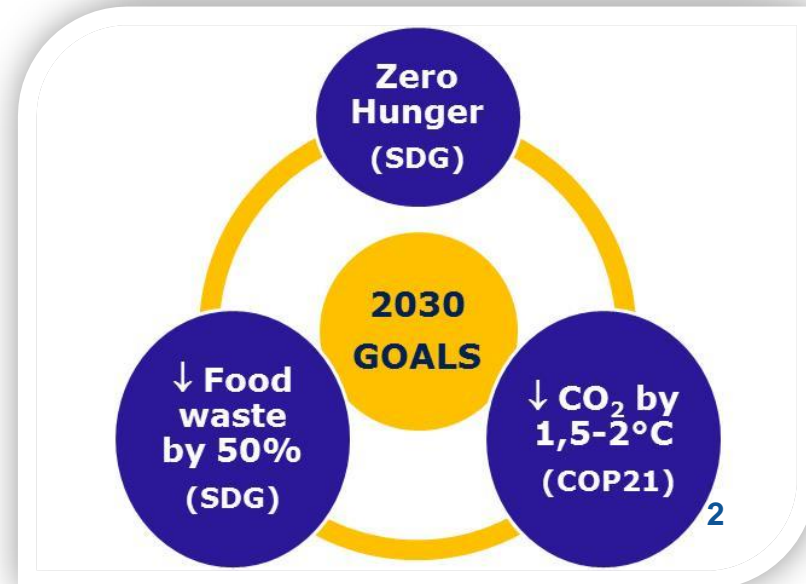
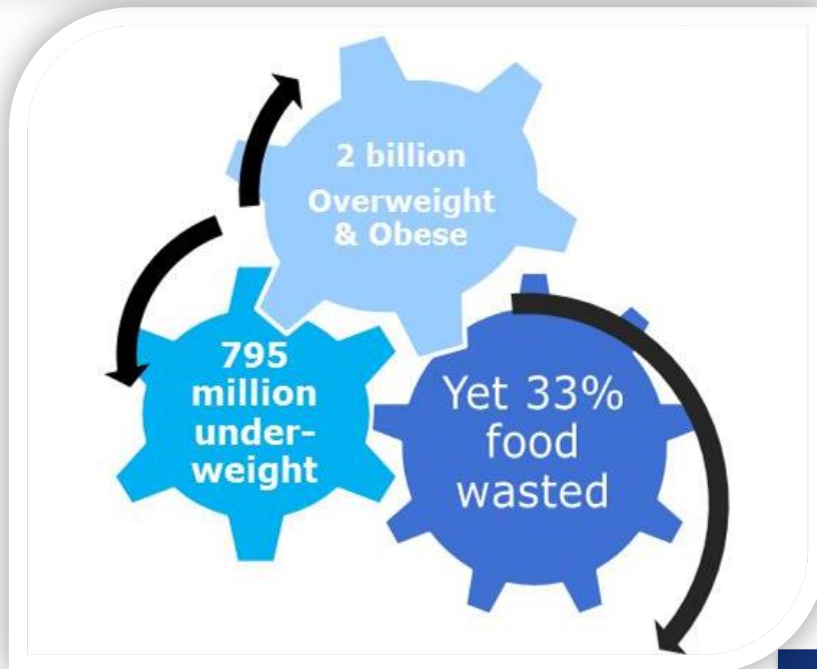
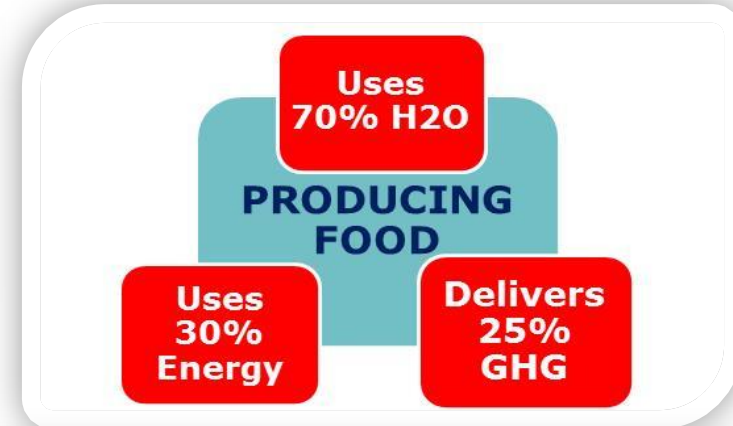
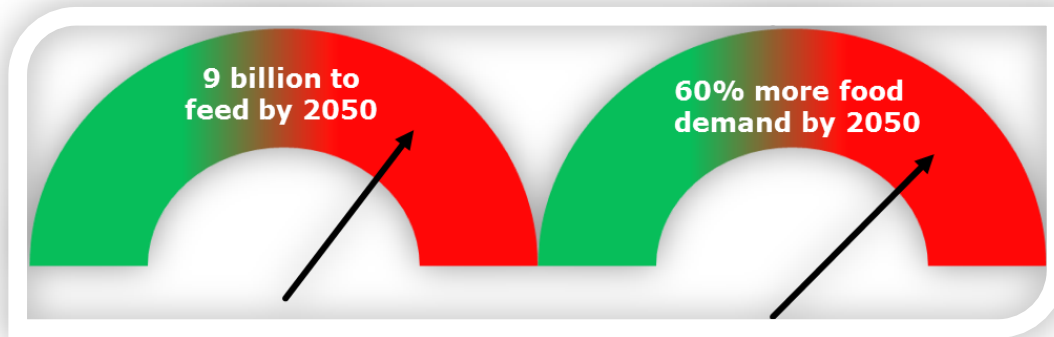
John Bell  
Director  
DG Research & Innovation  
European Commission





European  
Commission

# Drivers of change - a "Perfect Storm"

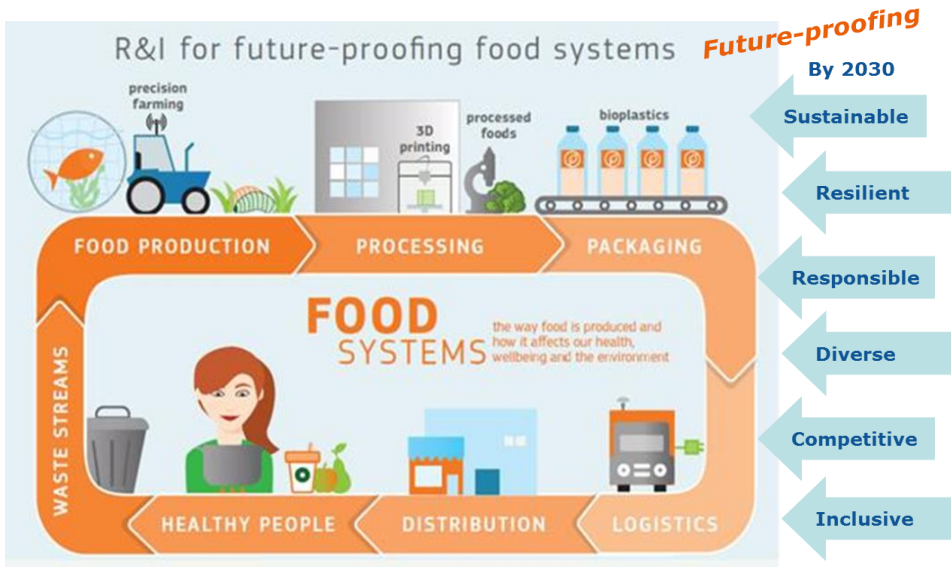




European Commission

# 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

### Drivers

- Research breakthroughs**
- Innovation and Investment**
- Open Science**
- International collaboration**

**#FOOD2030EU**

# **FOOD 2030 - New level of ambition, impact & focus**

- Food system approach
- New partnerships with Member States, business, society and other stakeholders – all levels (local-int'l)
- Map & close R&I investment gap
- Connect R&I from 'farm-to-fork-to-gut-and back', land & sea (including seafood catches & aquaculture products)
- Game changing technologies, approaches, business models
- Support policies, align with & deliver on Int'l commitments (SDGs, etc)

# Horizon 2020 & Horizon Europe

- The EU Framework Programmes as implementation tools for FOOD 2030
- Horizon 2020 – making use of WP calls for proposals
- Horizon Europe (2021+) discussions ongoing – Food and Natural Resources Cluster
- How do we convene in the area of Food Safety?



# Examples of R&I

## Nutrition

Alternative Proteins



Personalised Nutrition



Improved nutrition for improved health



## Circularity

Fighting Food Waste



Sustainable Use of Land



## Climate

Bio-fertilisers for Plants

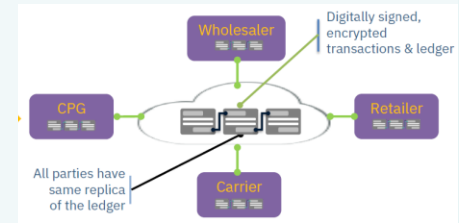


Farmers as Natural Resource Managers

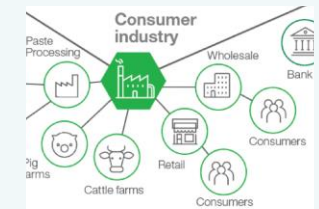


## Innovation

Block chain technology



Social innovation and consumer engagement



Cities - Urban Farming



# Food Safety 2030

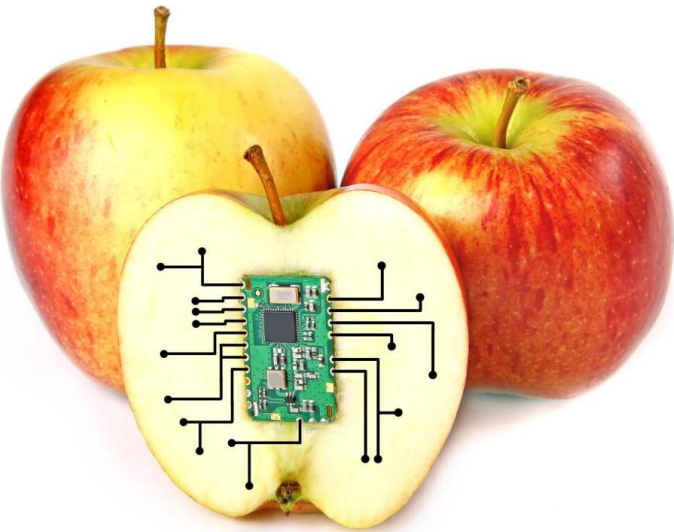
## Needs:

- Nutrition and health claim tools
- Assessment tools for novel foods
- Assessment tools for cocktail mixtures in foods and reduce the toxicological impact
- Networks of excellence
- Assessments/real time assessments

## How:

- (Meta)Genomics, microbiome
- Blockchain for Authenticity & Safety
- Reduce, Replace, Reorganize (3xR)

**New toolkits**



**New technologies**



- Food safety is at the heart of the European democracy and at the heart of the food systems
- Opportunities for R & I to invest on a food safety platform engaging all relevant actors and addressing governance and public trust
- The platform should be based on a common approach and shall harness the R & I results and develop the kit tools for food safety



# Thank you!



**Website bioeconomy directorate:**  
<http://ec.europa.eu/research/bioeconomy>

**Twitter: #FOOD2030EU**