



**FOOD 2.0**

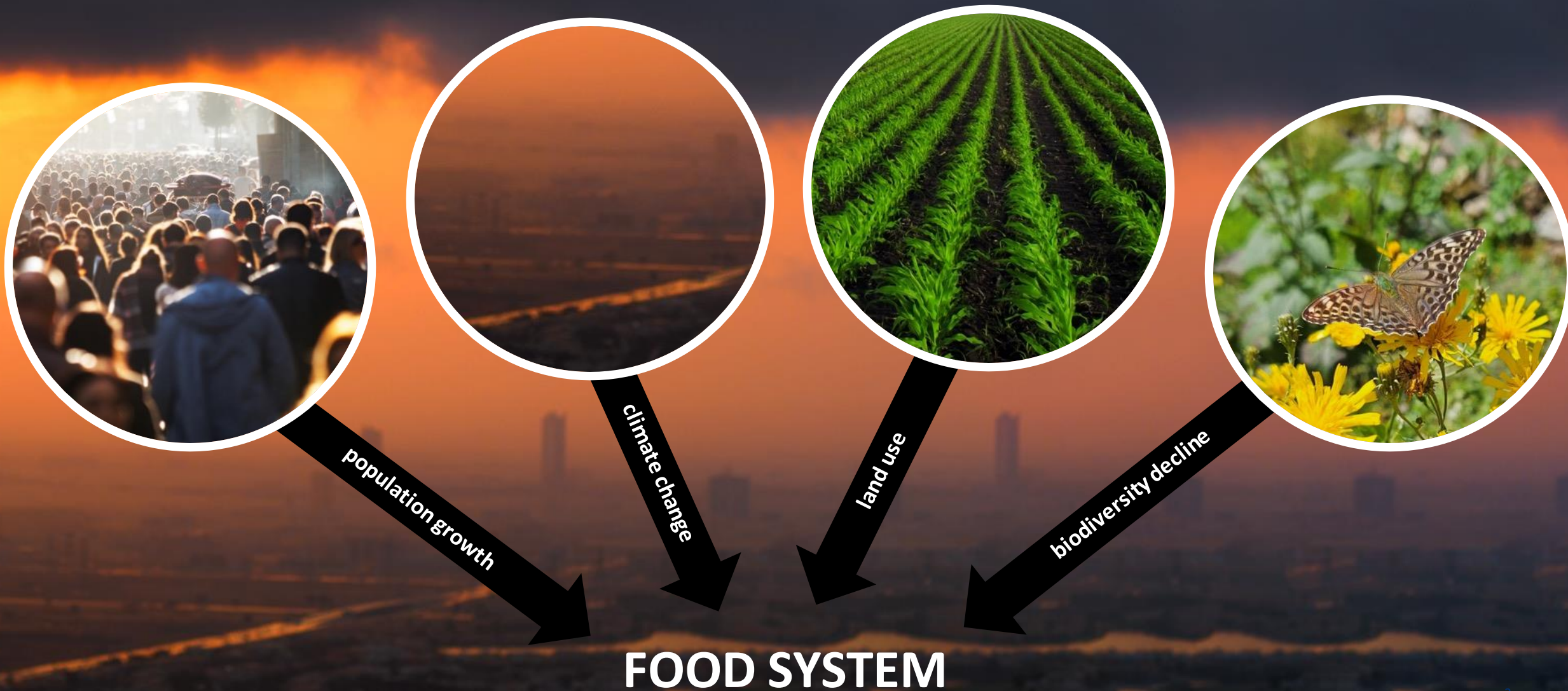
**BY VALIO**

**JOIN THE JOURNEY WITH US!**





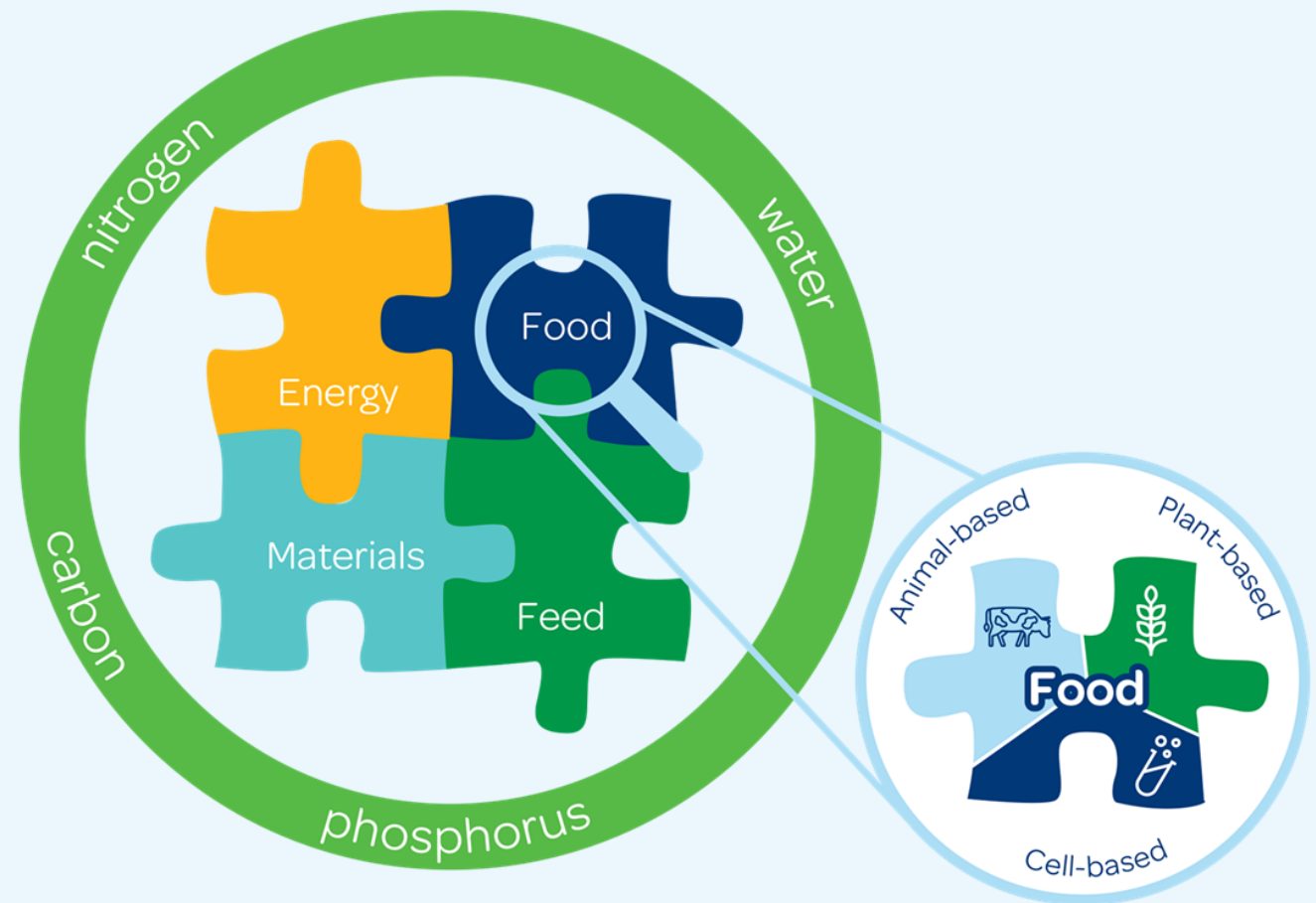
# GRAND CHALLENGE



# FOOD 2.0 – NATURE-SMART FOOD SYSTEM

## THE NEW FOOD 2.0 SYSTEM:

- **builds added value on sustainably produced food**
  - ✓ circulates nutrients efficiently in integrated value chains
  - ✓ promotes biodiversity
  - ✓ recognises the complementary roles of plant-based, animal-based and cell-based foods
  - ✓ builds on resource- and data-efficient technologies
- **encourages all players to strive for a common goal**



# ROADMAP

## Nature-smart food system

### 2024-2025

- Hybrid and all-in products
- Minimal energy processes
- Science-based targets for biodiversity
- Systemic view on improved nitrogen efficiency
- National roadmap for green NH<sub>3</sub>
- New business models

### 2026-2028

- Offering for diverse nutritional needs
- Solutions for data-integration in food system
- Increase in the share of regenerative production
- Zero-waste value chains
- Increase of exports due to nature-smart products

# FOOD 2.0

## THEME 1: FUTURE PRODUCTS

Animal- and plant-based nature-smart products and ingredients, Exploratory products from integrated value chains



## THEME 2: TECHNOLOGY TRANSFORMATION

Emerging process and measuring technologies, Cellular agriculture, Biomonitoring, Gene technologies, Artificial Intelligence, Digitalisation, CCS&CCU



## THEME 3: REGENERATIVE PRODUCTION

Biodiversity, Land use efficiency, Restoration, Water management  
Crop rotation, Animal welfare



## THEME 4: CIRCULAR ECONOMY & RESOURCE EFFICIENCY

Green NH<sub>3</sub> and biogas, Nutrient efficiency & circulation (C, N, P), Water efficiency, Feedstock optimisation (C, N), Grass biorefinery, Side stream valorization, Systemic modelling

COMPETITIVE FUTURE

ENABLING CHANGE

PREREQUISITES FOR GROWTH



# NEED FOR FOOD 2.0 ECOSYSTEM RDI

Nutrients	Biodiversity and animal welfare	Climate impact	Resource efficiency	Human nutrition	Digitalisation	Disruptive & enabling technologies
Nitrogen and phosphorus circulation in food system	Measuring and modeling biodiversity	Carbon cycle and capture in integrated food system	Agri-food biorefineries	Nutritionally valuable compounds from side streams	Data ownership, quality and integration	Gene technologies for resilience and efficiency
Roadmap for green ammonia in Finland	Sustainable farming practices	Agricultural aerosols	Water- and energy-efficient processes	Nutritional quality of new foods	Computational modeling for assessing sustainability	Cellular agriculture
Systemic modeling of nitrogen circulation	Monitoring and verification of animal welfare	Sustainable farming practices	Side-stream valorisation and logistics	Health monitoring, sustainable and personalised diet	Artificial intelligence in food system	Power-to-X in food system
Technologies for recycled nutrients		Climate impact modeling	Renewable energy from agricultural biomasses		Robotics and automatization	Remote sensing in food system
			Biogas production value chain optimisation		Sensors and edge computing	Water management
			Agrofibers			
			Recycling of agricultural plastics			



# VALUE PROPOSITION – WHY TO JOIN?

## TRANSITION IS A POSSIBILITY

- Food system change is inevitable. Be among the forerunners that turn challenges into added value and added profits.

## BUSINESS OPPORTUNITIES FROM CIRCULAR ECONOMY

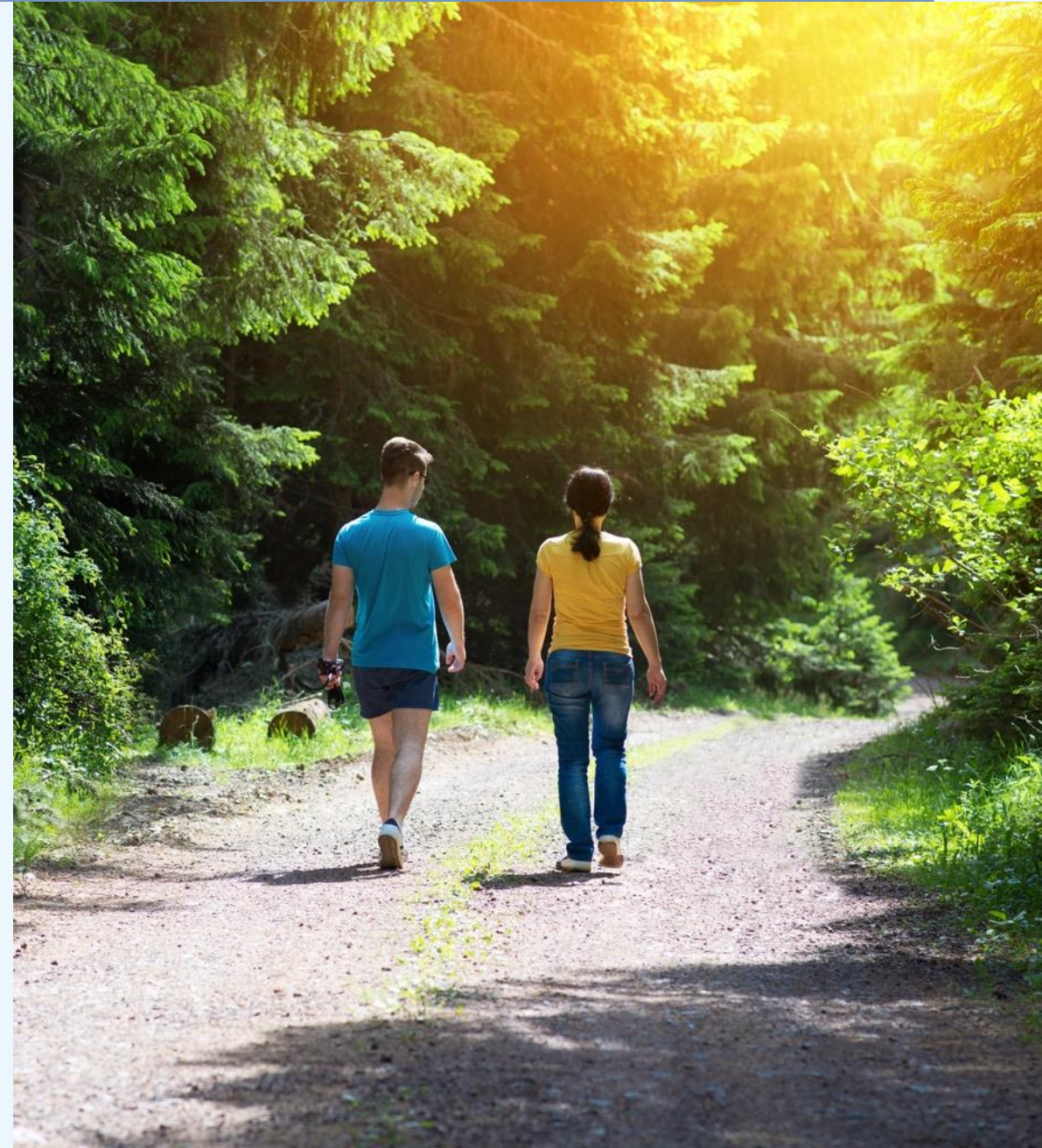
- Work together within and between value-chains to create new solutions and competences.

## FUNDING OPPORTUNITIES

- Explore and utilize the Business Finland Veturi ecosystem R&D funding scheme with us.

## NETWORKING AND COLLABORATING

- Membership gives access to member news and content as well as research and business ecosystem events.





# WORKING TOGETHER TO BUILD A NEW, SUSTAINABLE FOOD SYSTEM

