



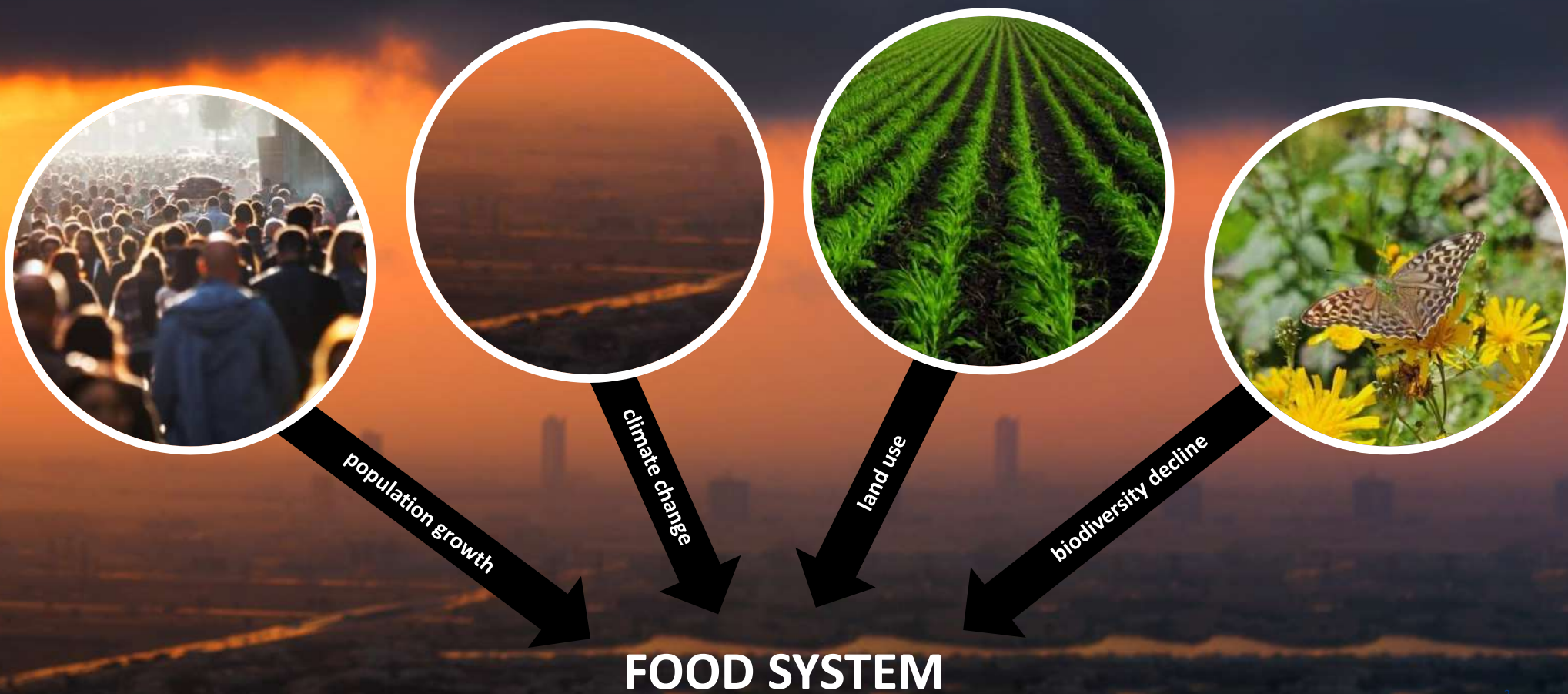
FOOD 2.0

BY VALIO

JOIN THE JOURNEY WITH US!



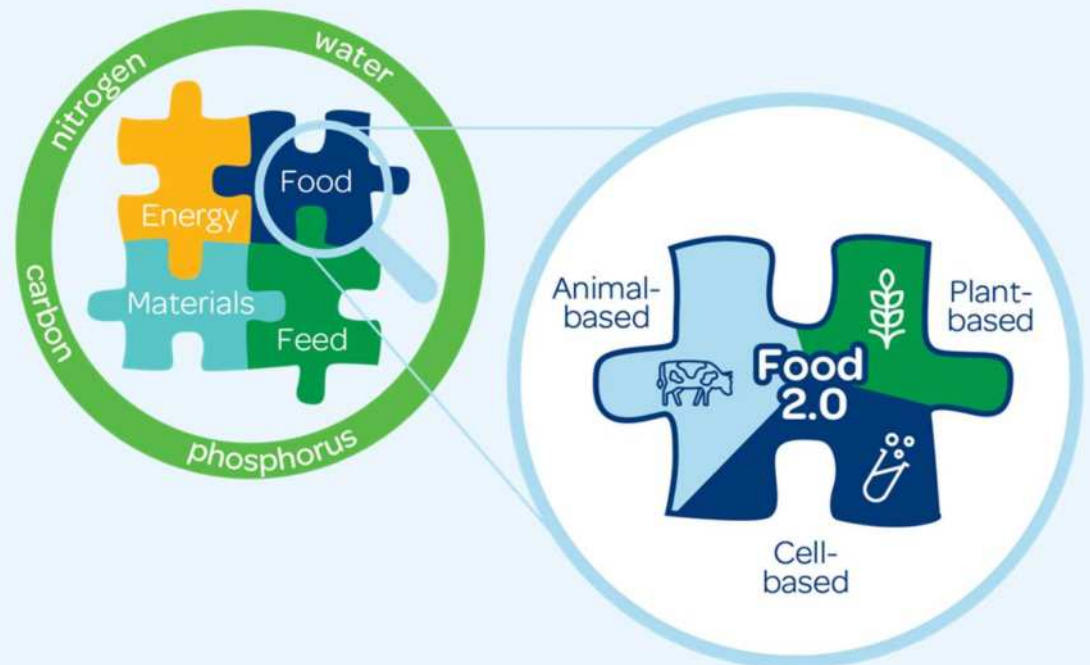
GRAND CHALLENGE



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 NH₃
- 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 NH₃ 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

