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Framing your EIT Food proposal



All proposal need to align with EIT Food's overall vision, mission, and set of **KEY IMPACT INDICATORS**. They must contribute to the strategic objectives of EIT Food and clearly define the targets for the added value and the business or societal impact that will be created in support of those objectives:

- Overcome low consumer trust, empowering consumers to make healthier and more sustainable food choices.
- Build a connected, sustainable and consumer-centric food system.
- Reduce food waste.
- Innovate to create new healthy products, ingredients and food supply processes.
- Educate and engage the public, students and professionals.
- Promote entrepreneurship and provide support to start-ups and SMEs in the food sector.



KEY IMPACT INDICATORS

Public Health

- Consumption levels of fruits/vegetables, whole grain, protein, sugar, saturated fat and salt
- Number of healthier products on the market tailored towards consumer preferences, acceptance and needs (PAN)
- Number of European consumers purchasing customized foods designed to meet their personalized food profiles
- Reduced healthcare costs related to unbalanced nutrition

Sustainability and Climate Resilience

- Decrease in food waste on the supply side (primary production, processing, wholesale / retail and food service)
- Decrease in food waste in consumption (measurements will be made in connection with the EU Platform on Food Losses and Food Waste)
- Understanding of consumers how they can minimize the environmental impact of their eating habits and act upon concrete improvement (survey among KIC consumer groups)
- Change of share of global protein consumption towards alternative sources such as e.g. algae.
- Environmental footprint of the products and services developed in the KIC (measurements envisaged using harmonized calculation methodologies of the European Commission)

Connectivity and Transparency

- Number of product recalls and notifications
- Reach out to SME and farmers with KIC initiatives, e.g. improving the control of the supply chain
- Increased reliability in in the food system on a global scale
- Increased annual yield in agriculture due to precision farming

Talent

- · Increase in training/education programs successfully completed by employed workforce (life long learning)
- Number of students equipped with required skillset as needed by the industry
- Increase in number of applications to undergraduate, graduate and post-graduate courses and continuous learning programmes in the food discipline (increased attractiveness of the career path)

Venturing and Growth

- Increase number of high quality jobs
- Degree of innovation in the food system and investment in R&D in the food sector
- Increase number of successful start-ups in food system relevant fields
- Personalised food market size

• Increase the R&D investment by manufacturers of food products and beverages in the EU from the current average of 0.27% of sales revenues (FoodDrink Europe and Eurostat)



Expected budgets, timelines and consortia in a proposal

- Education proposals may be around 100K
- Innovation proposals may range between 0.5 to 1m
- Proposals run by natural years. Usually innovation projects last

1 year but these may extend for 1 or 2 years more.

- Average of 4-5 partners per project
- At least (but ideally more) 2 locations and 1 industrial partner
- Technology readiness level: 4-6

TRL 3.	experimental proof of concept
TRL 4.	technology validated in lab
TRL 5.	technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
TRL 6.	technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
TRL 7.	system prototype demonstration in operational environment

Examples of education proposals in 2018

- Summer schools/ rotating workshops
 - Entrepreneurship and venture creation training
 - Digital food supply chains
 - Algae biotechnology
 - Product development
 - Technology adoption in farms
 - Development of functional foods.
- SPOCS small private online courses (6-8 funded per year)
 - Technical training
 - IP management
 - Support innovation in SMEs
- Online courses (50K each 7 funded per year owned by the KIC)
 - Healthy diets
 - Factual information in quality and safety of foods
 - Neuroscience and psychology in nutrition
 - How the food supply chain works

Examples of innovation/research proposals in 2018



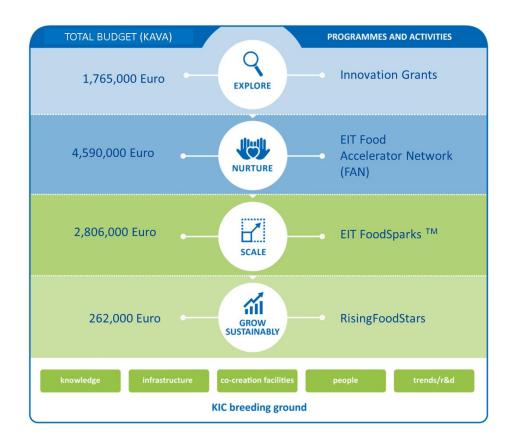
Empowering consumers

- Tool to calculate the environmental footprint, linked with nutritional values.
- Plant based meat products created by consumer-driven and culinary approaches
- New healthier products and ingredients:
 - Plant-breeding to improve Stevia extract taste
 - Starchy food products with sustained energy release using new enzymes and processing steps
 - Scale-up isolation of plant-based Ice Structuring Proteins for application in frozen foods
 - Dairy products with reduced saturated fatty acids
- Connected, optimised and safer food supply chains:
 - Digital food passport to record every life cycle step as a way to optimise food value chain.
 - Separating MycOtoxin-contaminated wheat grains using precision farming technologies.
 - Advanced technologies for beef & lamb sorting
- Reducing waste, sustainable solutions
 - Enhanced insect protein (fed from waste) for aquaculture
 - Enabling sustainable intensification of wheat as the climate changes



Examples of BUSINESS CREATION activities in 2018

- **Grants** to support students to implement ideas into business
- EIT Food Stars Accelerator Network: four innovation hubs to accelerate the business impact of food research and invention in the UK, Switzerland, Israel, Germany and Spain. 4 months programme
- First EIT venture capital fund: EIT
 FoodSparks[™]
- Rising Food Stars community



Examples of communication activities in 2018

- Food waste
 - Consumer panels: co-engineer solutions
 - Design awareness campaigns
 - Collaboration with Directorate General for Health and Food Safety European Commision
- Healthier and more sustainable choices
 - Gaming, scape rooms
- Debates:
 - Vertical farming
 - Blog
 - Broad public debate

Tools & Networks in the EIT Food

- My Food Portal: online consumer collaboration
- Trust barometer: surveying the consumer trust
- EIT Food students Network
- EIT Food Ambassadors network: celebrities

What is important for a winning proposal in education?



- Impact of your course:
 - Providing students with required skillset needed by the industry
 - Increase the number of highly trained professionals/executives
 - Effect on consumers –public health indicators
 - Help the public understand the food system and increase trust on the sector
 - Improve innovation culture in SMEs
 - Link to other innovation and communication activities: public debates, surveys, awareness campaigns, collaborations with policy makers and public ambassadors...
- Financial sustainability of your course:
 - Course fees

What is important for a winning proposal in innovation?

- Results and impact of your project:
 - Innovative products launched to market
 - Potential of underlying technology
 - Consumer involvement
 - Create a start-up as a result of your project
 - Environmental impact/sustainability
 - Attract private investment
 - Collaborations with consumers (eg. consumer panels to co-engineer solutions)
- Return on investment to the EIT:
 - Royalties, revenue share, % of benefits for x years

EIT Food partners

CLC West

Leuven

Belgium

- Colruyt Group
- EUFIC The European Food Information Council
- University of Leuven (KUL)
- Puratos

France

- Roquette Frères
- Sodexo

Switzerland

- Bühler
- EPFL (Ecole Polytechnique Federale de Lausanne)
- Eidgenössische Technische Hochschule Zürich
- Givaudan
- Nestec



| European Institute of | Innovation & Technology

CLC North-West

Agrimetrics Ltd

PepsiCo

Waitrose

CLC South

Ireland

Iceland

Israe

Quadram Institute Bioscience

Queen's University of Belfast

Matis Icelandic Food & Biotech R&D

University of Cambridge

University of Reading

ABP Food Group

UK

Reading

Germany

- Bosch, Packaging Technology
- Deutsches Institut f
 ür Lebensmitteltechnik
- Döhler

CLC Central

- Fraunhofe
- Herbstreith & Fox KG
- John Deere
- Sciex
- Siemens
- TUM Technische Universität München
- University of Hohenheim

The Netherlands

- DSM
- Koppert
- PlantLab

CLC North-East

Warsaw

Poland

- IARFR PAS Institute of Animal Reproduction
- Maspex
- Raben
- University of Warsaw

Finland

- University of Helsinki
- VTT Technical Research Centre of Finland
- Valio

Munich

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 Peptide-receptor modelling
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 fitto
 IoT enabled nutrition shaker
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Foller Platform for reducing food waste

SIDE STREAMS

CONSUMPTION

DISTRIBUTION

PRODUCTION

3D food printer
 Pod-based machine for baking
 FODPAIRING® Flavour Pairing Algorithms (Big Data)
 FOODMAESTRO Nutrition portal

👘 Potageren Local micro farm to consumer 🐇

- 離 🕂 PEF Systems to increase nutrition 正吟 Sustainable packaging
- Preprive Big Data Poultry Farm Management
 High pressure homogenization tech
 GAMAYA. Advanced crop analytics
 PHENOSPEX 3D Plant phenotyping
 GEOPUISE Satellite based farm management
 CEOPUISE Satellite based farm management
 BITE Solar panels
- Proteïn from insects SPROTIX Lupine as proteïn & dairy alternative Procent Liquid oat ingredients GLUCANOVA Food waste into sustainable, renewable resources using insects 🔅 entomic Recycling spent coffee grounds 🚯 bio-bean Online marketplace Rethink S Smart cooking device & app eskesso Hand-hold spectrometer Home Farming for Superfoods Home appliance for vertical farming activition Health, nutrition & fitness app 🛛 🙆 BeYou Figure 4: RisingFoodStars Al for smart shopping Pulsed Electric Field Systems 🌔 eleo Vegetable proteïn YASO* Tech for safety in plastic products 🌐 Morphotonix Beacon hard- & software 🦂 kontokt.io High-speed cereal diagnostics QualySense AgTech - soil and water sensors Cropx, Big Data for farming 6 GRAINSENSE Biosensors & Nanotoxicity 📣 nanoimmunotech Egg gender identification Smart weeding (ecorobotix

Personalized Nutrition based on gut microbiome