

Innovation with purpose: improved outcomes for people and planet prosperity

Dr. Paola Giavedoni
Future of Food Forum, 3rd March 2022



Co-funded by
the European Union



A GUIDE TO EIT FOOD

As the world's largest food innovation ecosystem, we are working to make the food system more **sustainable, healthy and trusted**

OUR MISSION

Our mission is to create a sustainable and future-proof food system, where everybody can access and enjoy sustainable, safe and healthy food – with trust and fairness from farm to fork.

OUR ROLE

Our role is to bring all players together and guide and accelerate the innovation process that will transform the food system.

OUR STRENGTH

Our strength comes from partners, with Europe's leading 78 agrifood companies, 30 research institutes and 23 universities.

The network also includes the RisingFoodStars Association, bringing together Europe's 70 best agrifood startups and scaleups. Every year, EIT Food supports and scales more than 150 startups.

We are headquartered in Leuven and have regional offices in Warsaw, Freising, Reading, Leuven, Bilbao and Madrid.

We have 14 innovation hubs to support local food ecosystems.



EIT Food Central
Freising, Germany

EIT Food North-West
Reading, UK

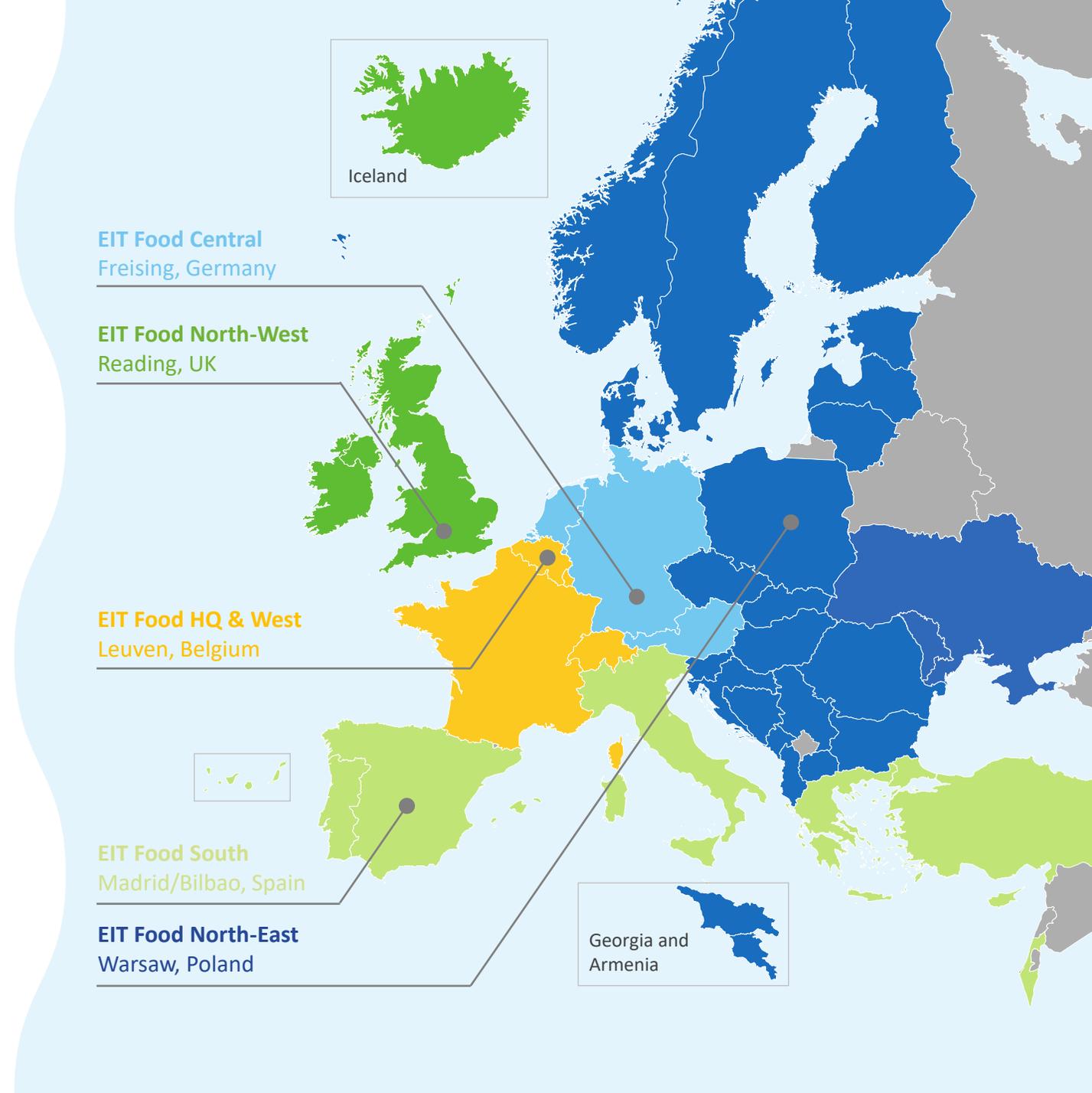
EIT Food HQ & West
Leuven, Belgium

EIT Food South
Madrid/Bilbao, Spain

EIT Food North-East
Warsaw, Poland

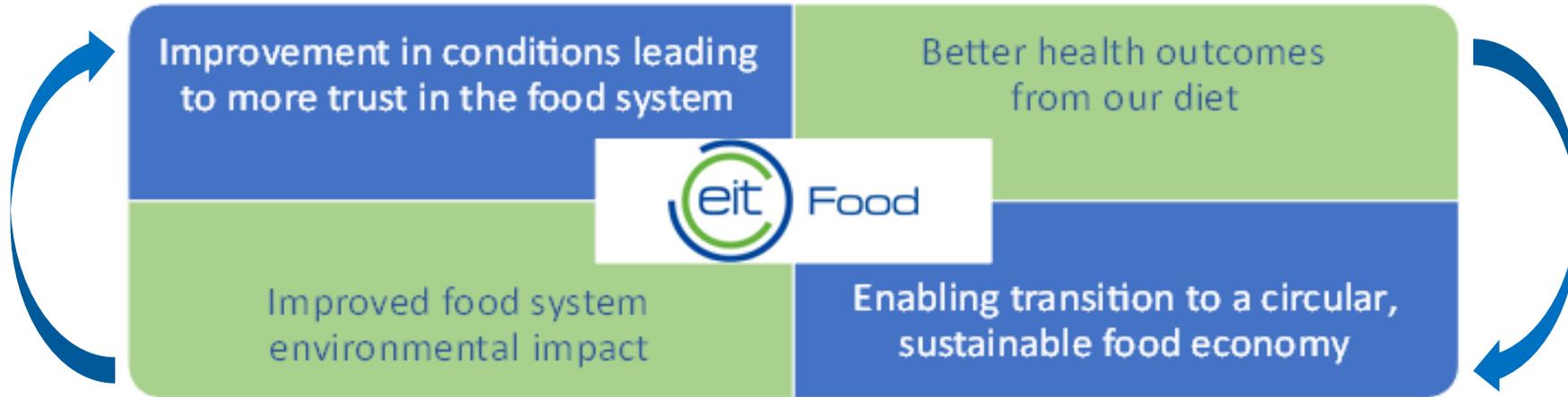
Iceland

Georgia and
Armenia



Our Approach to Impact

Collaborative innovation aligned with EU policies



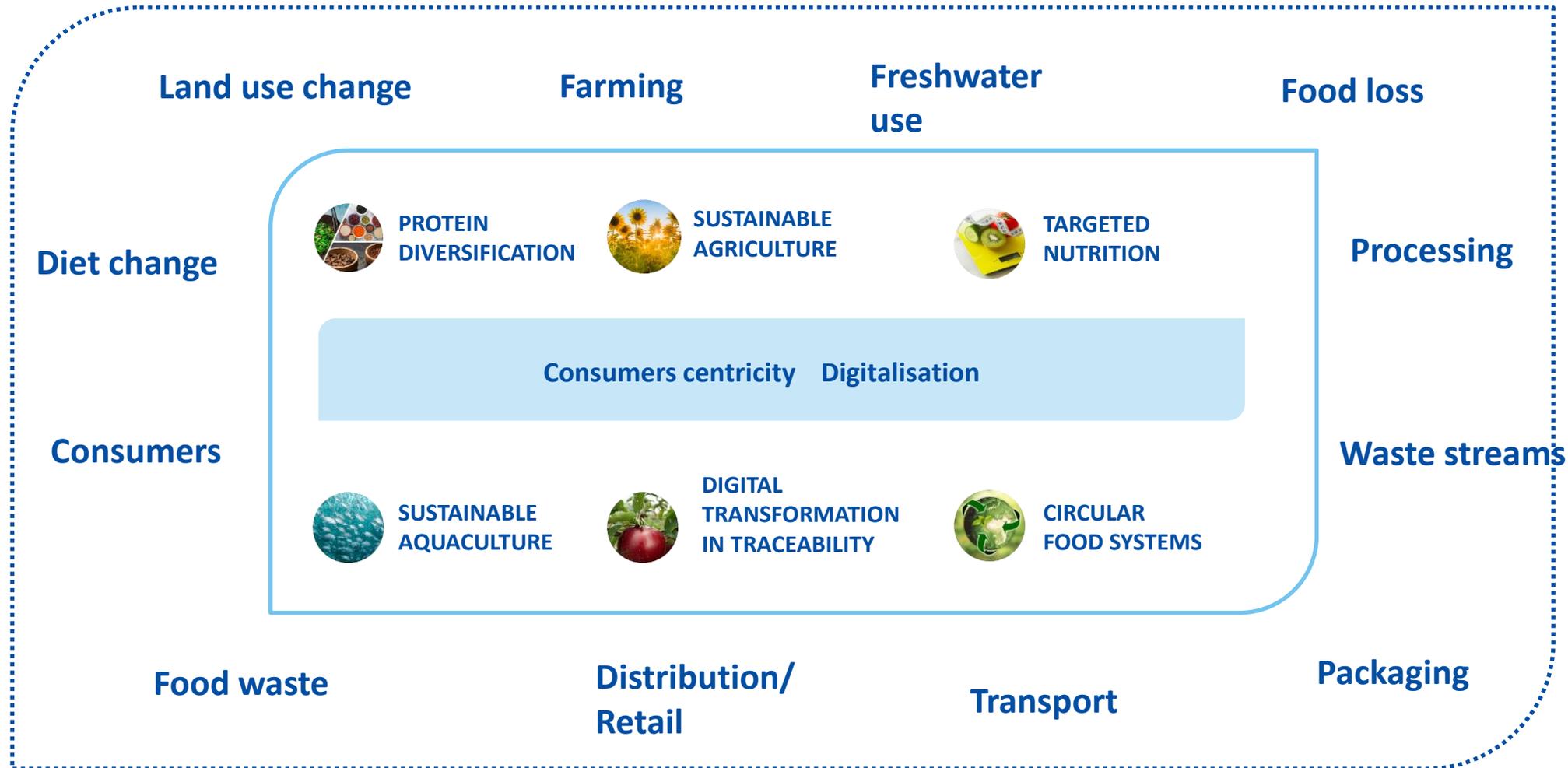
Calls & Activities geared towards impact



Between 2021-2027, EIT Food will deliver:

- 210,000+ consumers engaged to define healthier, sustainable behaviour.
- 700+ innovations supported during their design and test phases.
- 1300+ graduates from EIT labelled MSc / PhD programmes.
- 345,000+ online learners by 2027.
- 180 new entrepreneurs into the food system.
- 800+ companies securing over €350m investment funding.

Reduction of C-Footprint: EIT Food areas of intervention across the food Value Chain



EIT FOOD SOLUTIONS – REGENERATIVE AGRICULTURE & CARBON+ FARMING

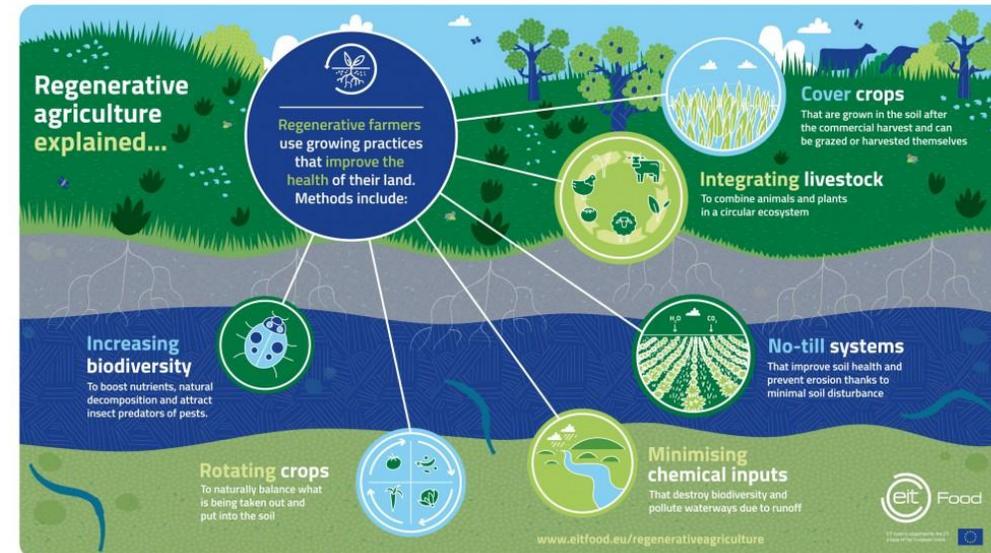
Objective

Accelerate Europe's transition to regenerative farming practices and **empower farmers with necessary skills and support**. Support the European Union and economic operators with innovative tools (including finance and de-risking) and solutions towards achieving **net-zero targets**.

Establish a lighthouse to inspire and scale regenerative practices across the globe (in collaboration with WEF).

Outputs

- EIT Food toolkits, training modules and mentoring for farmers
- Insights into farmer journey, needs, barriers and incentives needed for transition
- Blueprint for collective action for Carbon+ Farming and pilot projects and demonstrators (publication on 21st March 2022)



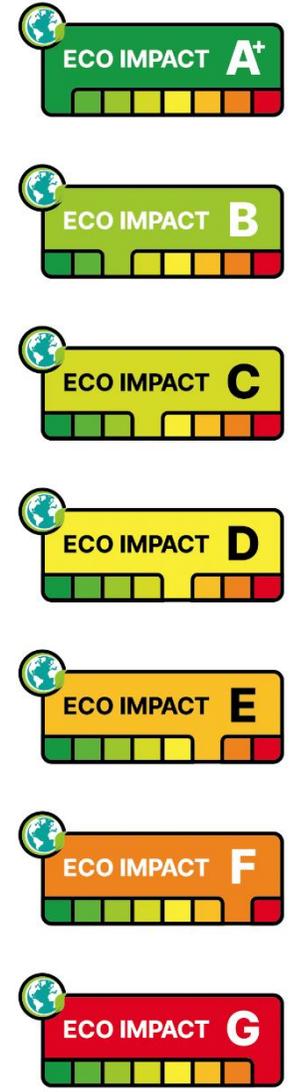
EIT FOOD SOLUTIONS – Front-of-Pack Environmental Labelling

Objective

Raise the consumer’s understanding of the **impact of food production and consumption on the environmental footprint** and link this with products and dietary patterns. Ultimately, help consumers shift to **new behaviour patterns** in their food consumption, while creating **incentives for supply chain operators to improve performance**.

Outputs

- A new methodology to calculate and communicate a single, footprint score in a consumer-friendly way.
- A userfriendly software to calculate and report the environmental footprint (B2B)
- A dynamic front-of-pack label combinable with other existing labels (e.g. Nutri-Score)



UK PILOT PROGRAMME

A model developed by Oxford University and Mondra, using full product life cycle analyses, bespoke evaluations and the world’s most comprehensive secondary databank on environmental impact of food



EU PILOT PROGRAMME

A model developed by an EIT Food consortium comprising KU Leuven University and AZTI, aligned to the European Commission’s PEF methodology



Towards implementing a Water-saving economy in Europe



40%

Savings of up to 40% in the agricultural and industrial sectors, by supporting and promoting smart solutions

50%

Savings of up to 50% in cities by monitoring and repairing leaks in public supply networks

19%

Reduction of about 19% of the public water consumption by extending the Eco-design Directive to domestic water-saving devices

> 50 external experts	46 startups / scaleup supported	6 technical workshops held	> 6 awareness actions
2 high level publications	> 4 demo sites	> 400 participants	> 1 M accounts reached
10 product in market			

-  Climate-KIC
-  Digital
-  Food
-  Manufacturing



Pro4Bake

Impact indicator: # new digital solutions in use to improve supply chain efficiency, integrity and/or transparency; Volume reduction in CO2 equivalent tonnes from Agri-Food system



THE PROBLEM

- In the EU, more than 154.000 bakeries with 99.7% SMEs waste resources due to energy over-consumption in inefficient baking schedule planning and a high share of food waste (unsold bread waste: 5-10%). Consequence: avoidable CO2 emissions, excessive costs for SME bakeries

THE INNOVATION

- Demand Forecasting Tool and Production Optimisation Planning Tool combined with a training and consultancy package.

THE IMPACT

- Estimation: make span reduction of 7-9% and idle times reduction of 23-27% resulting in a lower carbon footprint and production costs;
- Example: Germany has an annual electricity consumption of 1.3 m kWh with costs of about 350,000 €. Saving 10% of these costs by optimal production planning would free about 35,000 € per year. In addition, costs for raw material, transport and disposal of waste can be saved by a demand-driven planning.

METAMORPHOSIS

Impact indicator: Improved Circularity & Environment

THE PROBLEM

- Food supply will need to grow 70% by 2050, yet only 5% of arable land is left. Worse, a third of all food already produced every year is wasted.*



THE INNOVATION

- Turn food waste into nutritionally optimized and sustainably produced insect protein for inclusion in (aqua)feeds to guarantee food security and enhanced sustainability of food and feed production.

Developed insect farming module and scaled up insect processing line

- 2019: Metafeed Alpha -insect-based feed additive for salmon feed by Entomics Biosystem Ltd.
- 2020: Better Origin X1 insect farming module sold to 4 customers; more in pipeline
- 2021, Q2-Q3: scaled up processing line for 1to insect per hour
- Next steps: X1 s/live insect provision to poultry*

THE IMPACT

Predictions for X1 up-scaling unit:

- welfare of 16000 chickens improved
- food waste reduction by 180 tonnes
- crude protein production of 5800 kg
- emission of 400 tonnes CO2-eq saved*



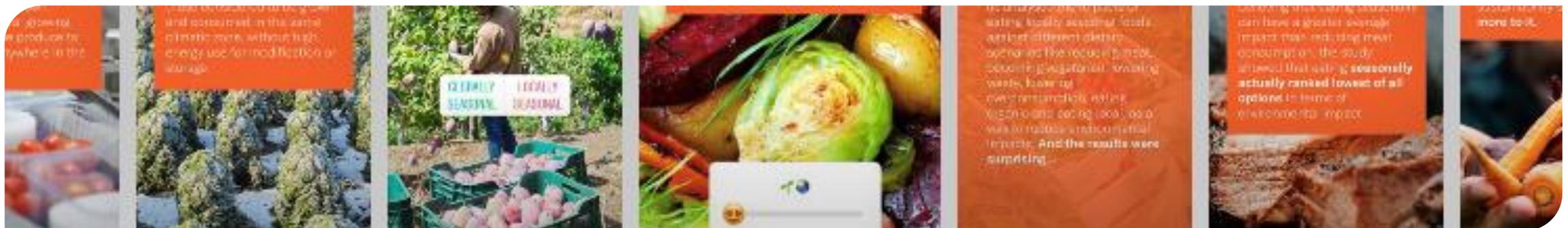
The Better Origin X1 is a fully autonomous, modular insect farm powered by AI, which makes it low maintenance.*

*betterorigin.co.uk

This is what FoodUnfolded's followers have said on.....

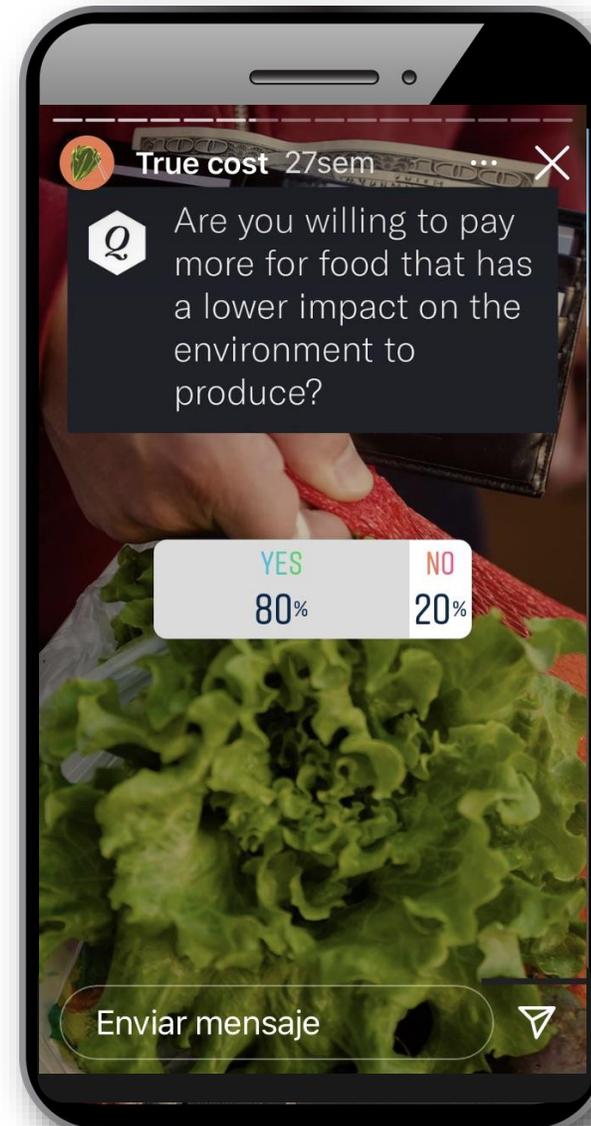
Sustainability

- 85 % think about sustainability or the environment when buying food or drinks (1048 respondent vs 186 respondents)
- 79% think it is hard to buy sustainable products (961 vs 258)
- 90% think the word sustainability is used or misused (1346 vs 158)
- 83% believe that sustainable changing our food system is still possible (1460 vs 291)



Are you willing to pay more for food that has a lower impact on the environment to produce?

80% of respondents are willing to pay more for food that has a lower impact on the environment





www.eitfood.eu

www.foodunfolded.com



Co-funded by
the European Union

For more information, please contact:

Paola Giavedoni – paola.giavedoni@eitfood.eu

Innovation Director