

REFRESH

Resource Efficient Food and dRink for the Entire Supply cHain

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Quick overview REFRESH

Resource Efficient Food and dRink for the Entire Supply cHain

- Develop **strategic agreements** to reduce food waste with governments, business and local stakeholders in four pilot countries (Spain, Germany, Hungary, and the Netherlands).
- Design and develop **technological innovations** to improve valorization of food waste and **ICT-based platforms and tools** to support new and existing solutions to reduce food waste
- Formulate EU **policy recommendations** and **support national implementation** of food waste policy frameworks
 - 26 Partners from 12 European countries and China
 - Duration: July 2015 – June 2019
 - Funding: ~ EUR 9 million

REFRESH Consortium – 26 partners / 13 countries



Research & Innovation into 5 areas

Consumer Behaviour

- Theoretical Framework
- In-house measurement
- On-pack guidance
- Consumer acceptance
- ICT Apps

Frameworks of action

- Framework agreements
- PWP platforms for Voluntary Agreements (NL, GE, HU, ES, CH)
- FA pilots & evaluation
- Decision Tooling
- Community of Experts
- Blueprint for VAs

Valorisation of unavoidable side flows

- Top waste streams
- Ingredients // texture processing & fibers
- Animal Feed
- Chemicals // bacterial conversion
- Economic modelling
- FoodWasteExplorer

Behavioural economics

- Consumer & Retail modelling
- FW reduction scenarios
- Roadmap policy interventions

Environmental impact

- Simplified LCA/LCC approach of valorisation
- FORKLIFT
- Case studies

Frameworks of Action

Establishing evidence through the desing & validation of national pilots

- To stimulate action in other EU and non-EU countries
- Designing & testing tools to facilitate effective decision-making, leading to actions that will prevent/valorize waste
- Encourage and enable action in key parts of the food supply chain



Success factors include:

- Strong **lead organisation** and right mix of key players
- **Government involvement** at early stage
- Engage **signatories** in the early stages
- Effective **measuring** and reporting framework
- Availability of **funding** aides effectiveness



And: visibility! Important aspect to dissemination



„Food is Value“- Forum Against
Food Loss and Waste
Framework for Action
Hungary

www.eu-refresh.org

Evaluation of the FA pilots

Considering the indicators of success – mixed method evaluation approach adopted.

Food waste baselines

- Attempted to establish food waste baselines for each FA
- Difficulties gathering food waste measurements meant evaluation became more qualitative in nature

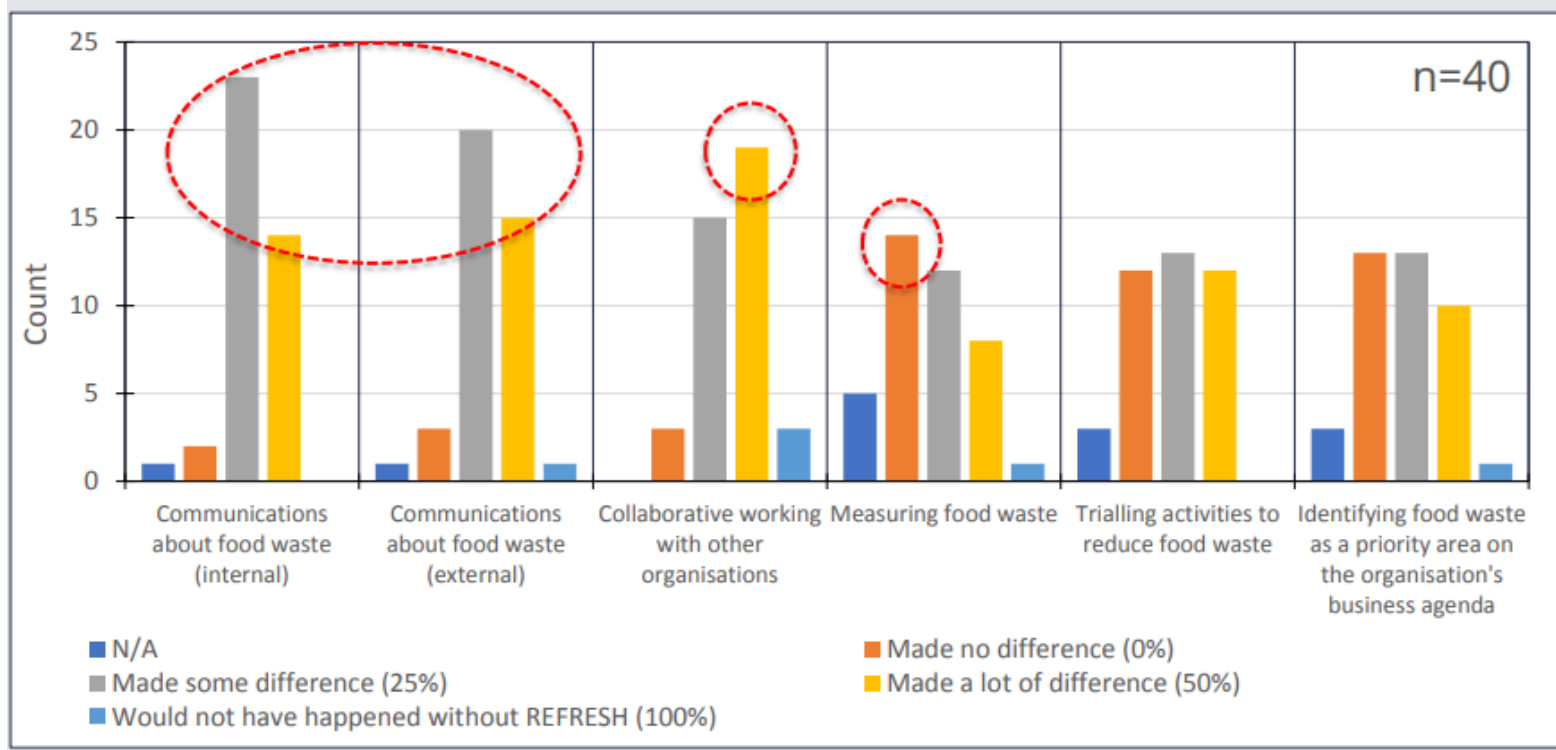
Process evaluations

- Process evaluations undertaken to test whether programme logic was holding up.
- Useful to gather insights from participating organisations and perceived FA success

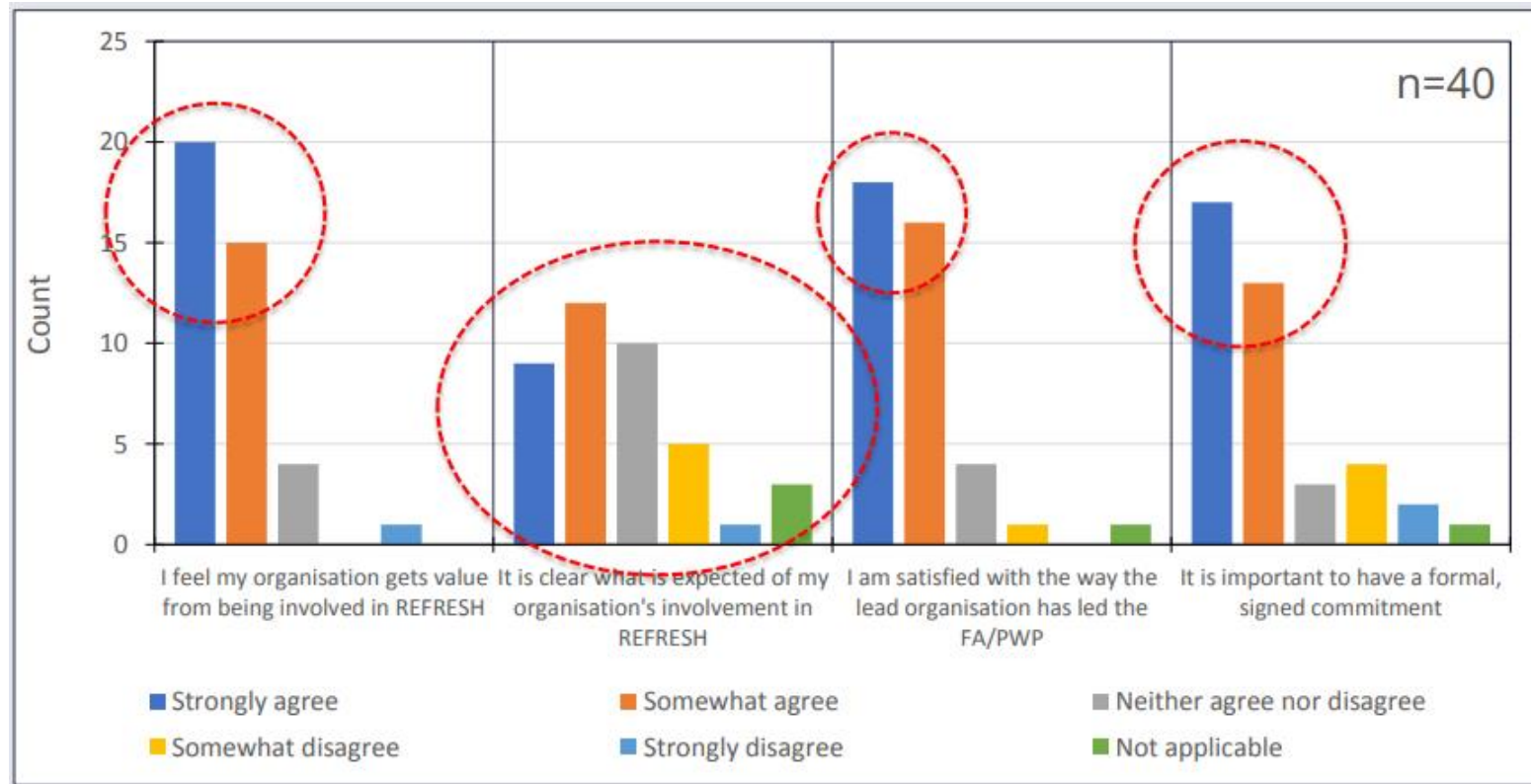
Case studies

- Brought together all information to assess how successful the FAs have been
- Also used to highlight the work that was undertaken for each pilot project – highlighting useful lessons for other organisations

Changes to organisations' food waste behaviours



Value & satisfaction



Evaluation suggested a pan-European agreement would likely be very difficult to implement – however the fundamentals of FAs are the same. Experiences from pilots were used to develop the REFRESH Blueprint.

The evaluation of the REFRESH pilots suggest FAs:

1. Facilitate collaboration between different stakeholders

2. Bring stakeholders together to work towards a common goal

3. Offer a flexible approach to tackling food waste

4. Highlight shared lessons learned to help organisations choose the right actions necessary to deliver change

FA Innovation Projects



Retail

- Consumer information campaign on milk date marking
- Imperfect fruit & vegetables
- Packaging solutions
- Employee engagement



Retail

- Influence of (dynamic) BOGOF promotions & @home waste behaviour
- ## Restaurants
- Default doggy bags



School canteens

- Use of surplus & valorised food products
- ## Event catering
- FW interventions at trade fairs
- ## Monitoring
- Cross-chain losses & waste from peaches & nectarines



Households

- Consumer activation programme

Catering

- Event catering FW reduction guidelines

Donation

- Improving cost model & capacity building of food banks

Retail

- Imperfect fruit & vegetables



Schools

- FW solution contest
- International youth summer camp

Catering

- Urban catering action plan


Household

- FW measurement

Lessons learned

- For the PWP: focus countries & 'landscape' predefined, but the VA itself not
- For the FA Pilots: none of them were predefined at the proposal stage, all developed in collaborative process of the PWPs
- It is time consuming to align, but it leads to well-thought out and monitored actions
- All pilot activities worked!
- But, some are more effective/efficient than others. Barriers are: delays, high costs/kg saved, less savings than expected, indirect effect (difficult to measure), one-off actions, dependency on 1 or few persons, not in the core of business
- Different levels of policy barriers: regulation (animal feed! date marking!), market-based instruments (unfair trading practices, taxation), and information & education (social norms)

Thank you for
your attention!



To explore
the potential
of nature to
improve the
quality of life