Integrated Policies for Food Waste and Sustainable Food Systems in the Circular Economy

REFRESH final Policy Workshop

Brussels, 22 March 2019

Hilke Bos-Brouwers, Stephanie Wunder, Venice Graf
REFRESH: Resource Efficient Food and dRink for the Entire Supply cHain

REFRESH’s main objective is to contribute towards Sustainable Development Goal 12.3

To achieve this, the project’s main goals are to:

- 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

3/22/2019
Consumer Behaviour
- Theoretical Framework
- In-house measurement
- On-pack guidance
- Consumer acceptance
- ICT Apps

Valorisation of unavoidable side flows
- Top waste streams
- Ingredients // texture processing & fibers
- Animal Feed
- Chemicals // bacterial conversion
- Economic modelling
- FoodWasteExplorer

Frameworks of action
- Framework agreements
- PWP platforms for VA (NL, GE, HU, ES, CH)
- FA pilots & evaluation
- Decision Tooling
- Blueprint

Behavioural economics
- Consumer & Retail modelling (BN & ABM)
- FW reduction scenarios
- Roadmap policy interventions

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

Dissemination
- Food Waste Contest
- Events
- Community of Experts
- Communication & online campaign
Policy

- **Mapping food waste drivers across the food supply chain**
  - Identifies drivers of food waste and resulting waste streams across the supply chain in five food categories: bread, dairy, potatoes/tomatoes, prepared meals (sandwiches), and processed meat/poultry

- **EU policy review**
  - Identifies the impact of EU policy areas on food waste generation and/or prevention and discusses opportunities for improvement

- **Qualitative assessment of unfair trading practices and voluntary agreements with comparative case studies** across EU countries

- **6 Policy workshops**
  - Barriers to food waste prevention/valorisation and solutions
  - Windows of opportunity in EU policy
  - National approaches and voluntary agreements
  - Consumer behaviour
  - Animal feed
  - Integrated Policies for food waste

- Propose an **Action Plan** for policy change
Introduction FoodWIN & Greenbizz

By Gil Op De Beeck
FoodWin
Goodmorning!
Welcome at Greenbizz
Our approach

Monitor  Co-create  Action  Impact
Cities

- Food waste estimation tool
- Bring together city stakeholders
- Impact

Examples: Food Lab Bruges: stakeholder platform developing food strategy of Bruges
Resto Restjes
Canteens

- Food waste measuring
- Participatory innovation workshop
- Action

Example:
Healthcare institutions Bruges
- 40% reduction in FW
- Savings: 50,000 euro/yr
Innovation trajectories

- Look for innovation
- Traject:
  - Factsheet
  - Learning journeys
  - Food Waste Challenges
  - Action Labs
- Past: Apples and pears, Bread
- Currently: households
FOODWIN PRESENTS:

THE FOOD WASTE FEST

- SOLUTIONS WORTH SPREADING -

APRIL 2ND, 2019
Thanks for listening!

Contact me (for nearly everything):

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Ice-Breaker

Who are you

Why are you here?

What’s your favorite, personal anti-food waste tip @Home?
Agenda of today

- REFRESH Insights & Constellation exercise
- Food For thought
- Road mapping for integrated food waste policy
- From Options to Actions
- Wrap up and reflections
Interactive consultation 1

Presentation of REFRESH insights

by Stephanie Wunder
Ecologic Institute
Integrated policies for Food Waste and sustainable food systems in the Circular Economy

REFRESH insights
Policy Workshop, Brussels, March 22, 2019

Stephanie Wunder, Ecologic Institute
REFRESH scope: three focus areas

1. Understand consumer behaviour and study potential (policy) interventions
2. Develop voluntary agreements across the food supply chain
3. Study new uses/valorisation of surplus food/food production side streams
REFRESH policy work

Focus areas reflected in policy work

Four policy briefs:

1. Changing consumer behaviour (and implementation and monitoring of interventions)
2. Feeding surplus food to omnivorous non-ruminant livestock
3. Voluntary agreements
4. Unfair Trading Practices

Integrated supply chain policies

3 Policy briefs just published on the REFRESH website
Integrated perspective: Food waste reduction and link to other (EU) policies

- Screening of relevant EU policy areas related to food waste prevention
- Analysis of 10 related policy areas
- Many interlinkages
- Food Policy currently a "byproduct"
- Identified need for more coherence/integrated policies
Need of integrated policies to reduce food waste and promote sustainable food systems

What kind of integration?

- among sectors and policies
- Integrated supply chain policies

Coherence between different policy levels (EU→local)

“Food loss and waste is a symptom of a dysfunctional food system”
Example 1:
Need to be in line with Food Use Hierarchy
Feed surplus food vs. food safety vs. environment

- Use of discarded food (potential animal origin, incl. catering residues) from the food chain currently not allowed under EU regulation (food safety concerns)
- Feeding surplus food to omnivorous non-ruminant livestock has large potential to reduce carbon emissions, land use footprint and can reduce feed cost

→ REFRESH microbiologists studied different forms of heat treatment to inactivate dangerous pathogens: identified safe way of using food surplus
Renewable Energy/Bioenergy policies versus food use hierarchy

- EU Renewable Energy Policy (RED) in conflict with food use hierarchy:
  - Incentivises the use of edible food as energy source over use of food/feed
  - Double counting towards the RE quota
  - Biogas/AD plants with path dependency that is difficult to reverse

→ support of feedstocks that can be food or feed should be discouraged
Example 2: Need for collaboration in the supply chain

Food waste is a systemic problem, so solving it requires **collaboration** across the entire food supply chain.

This is hard to legislate for - **Voluntary agreements** provide a potential solution to this policy challenge.

→ REFRESH developed a blueprint with a key steps in setting up a voluntary agreement.
“Unfair Trading Practices” cause food waste and are barrier to collaborative approaches

- UTP=Practices that deviate from good commercial conduct between two trading parties, often a result of unequal balance of power

  Can occur independently of food waste, but have been found to be one cause of food waste connected to quality rejects, last minute order cancellation, poor demand forecasting etc.

- UTP’s make collaborative measures (such as Voluntary Agreements) difficult to implement

Source: Feedback global
Requires policy to look beyond legislation directly linked to food waste and to explore aspects of competition and commercial law.

Example of importance of quality of data: lack of robust EU food waste data at farm level may prevent understanding the scale of food waste in primary production (range of 11%-40% of all FW occur on farm level depending on methodology).
Example 3: Need to look into synergies with other policy objectives and into new policy instruments

- REFRESH research in consumer behaviour and food waste shows relevance of social norms
  - exploit tendency of individuals to conform to majority
  - emphasize positive behaviour of others

- Eating patterns are deeply rooted in culture → difficult area “to regulate” on consumer level → nudging approaches

- Need to find good balance of competing goals (health, taste, FW...)

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**POOR DIETS** pose a greater risk to health than **unsafe sex, alcohol, drugs, and tobacco use COMBINED.**
Need for integrated food policy/strategy

Next step today:
- Better understand impact of each policy area:
  Which are of particular relevance?
- Better understand relation between different policy areas
  ➔ Constellation excercise

- Think towards coherent approaches that serve food waste reduction AND more sustainable food systems overall
- Think of concrete next steps
  ➔ Input through presentations
  ➔ Interactive consultation in the afternoon
Scope: policy areas analysed

1. Waste and resource policy
2. Food safety and hygiene
3. Special case: use of former food for animal feed
4. Agriculture & rural development
5. Fisheries policy
6. Unfair trading practices
7. Bioenergy
8. Product info & date labelling
9. Changing consumer behaviour
10. Voluntary cooperation

Need for EU Food policy?

NOT analysed due to ongoing processes

- a. Donation and VAT issues
- b. Common Methodology, & Measuring approaches
- c. How to (better) include food waste measures in MS programs
Consultation exercise

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participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed
Aim of the session

**To discuss the different angles of policy areas and how they relate to the generation and prevention of food waste**

A constellation technique serves to create a physical set up, where people representing different policy areas position themselves in relation to each other, and to the signposted “Goal”.

What policy area has the largest contribution in the generation of food waste?
Policy areas

1. Waste Management
2. Food Safety
3. Food Information
4. Animal Feed
5. Climate Change / Env.pol.
6. Agricultural policy
7. Fisheries policy
8. FEAD
9. Unfair Trading Practices
10. Bio-energy
11. Health
12. Resource efficiency / packaging
13. Taxation / VAT regulation
14. Education
15. International trade
16. Donation
17. Animal welfare
18. Public procurement
19. International trade
20. Integrated food policy
Start of the excercise

**Step 1**
- Go to your designated group space (3 [pre-]selected groups)
- Each group selects 1 Rapporteur
- Each group member selects a Policy Areas to represent
- Max 10 minutes
Create the constellation

**Step 2**

- The Group members self-organise into a constellation
- The Rapporteur observes & invites to discuss criteria & placement
- The closer to the signpost or each other, the stronger the relation and/or higher the impact.
- High Impact means a high contribution to generation of food waste.

**Max. 20 minutes**
Feedback & Group Comparison

Step 3
- At the signal, stop the discussion! Photo time
- Place your sign at the floor where you are standing
- Step away and gather around constellation No.1
- Summary by the Rapporteur No. 1 on process & positioning decisions (max. 3 minutes) + Questions (max. 5 minutes)
- All move towards constellation No.2, summary reported, questions + comparison with constellation No.1
- Move towards constellation No.3, summary reported, questions + comparison with constellation No. 1+2.
- Short reflection
- End of the exercise
Coffee break

🌿 Back at 11.20 hrs
Food for thought (1)

A vision towards a Common Food Policy

By Chantal Clément
International Panel of Experts on Sustainable Food Systems (IPES FOOD)
Towards a Common Food Policy for the EU

Chantal Clément, PhD
IPES-Food Coordinator
What is IPES-Food?

Since 2015, IPES-Food has been working to inform policy debates on food systems reform around the world, using:

• A holistic approach

• Political economy focus

IPES-Food’s Work programme combines 1) policy-oriented research (global) and 2) policy development processes (regional).
Sustainability challenges

Food and farming systems are in crisis

- **Health risks.** More than half of adults in the EU are overweight & more than 20% obese.
- **Environmental impacts.** Food systems account for up to 30% of global GHGs.
- **Socio-economic challenges.** 1 out of 4 farms disappeared from the European landscape between 2003-2013.

➤ The current model delivers cheap food, but is very costly in social and environmental terms, and cannot be sustained...
Why do we need an EU food policy? (i)

1. Integration across conflicting policy areas
Realigning policy tools across multiple sectors
Why do we need an EU food policy? (ii)

2. Integration across governance levels

- Social innovation and experimentation is emerging rapidly at the local level, however, EU and national policies are ill-equipped to encourage this type of experimentation.

- Where supportive EU policy frameworks do exist, the opportunities are under communicated, ineffectively implemented at national/ local level, or subordinated to competing priorities.
Why do we need an EU food policy? (iii)

3. Governance for transition

• The challenges identified by the UN SDGs must be urgently addressed.

• Current policies have proven slow to adapt to new challenges, and are locked into the paradigms of the past. A different type of policy – a governance framework for transition – is needed.

• There is a growing gap between the mandate policy-makers assume themselves to have and the space citizens are keen to reassert when given the chance...
Integrated food policy can overcome structural barriers to change ("lock ins")
A 3-year process of research & reflection: Bringing different voices to the table & asking the right questions
The 5 objectives of a Common Food Policy

Policy reforms grouped under five objectives, represent the five paradigm shifts that need to occur in parallel to build sustainable food systems in Europe.
Policies relevant to food waste within Common Food Policy framework:

- Target reduced production of waste via supply chain redesign (incl. short supply chains) under review of Circular Economy Package
- Develop comprehensive regulation to reduce EDC exposure in the food system, including revision of Food Contact Materials regulations
- Amend EU Plastics Directive to encourage adoption of plastic packaging taxes on food companies & promote local zero-packing markets
Integrated food policies already exist in the EU...

- Urban food policies
- City-region food policies
- National food policies

Support for integrated food policy at EU level is growing:

- **EESC** opinion on "More sustainable food systems (May 2016)
- **CoR** opinion "Towards a sustainable EU food policy" (March 2017)
- European Commission’s in-house scientific advisers (the **JRC**, the **European Environmental Agency, SCAR**)
THANK YOU
An integrated perspective on food and food waste in the private sector & among social innovators

By Barbaros Corekoglu
European Institute of Innovation & Technology (EIT)
EIT Food

Let’s create the future of food together

Barbaros Corekoglu, Public Affairs Manager
EIT – European Institute of Innovation & Technology

◊ **EU Body** based in Budapest (2008)
◊ Operates through thematic “Knowledge & Innovation Communities (KICs)”

- InnoEnergy
- Health
- RawMaterials
- Digital
- Climate-KIC
- Food (2017)
- Manufacturing Urban Mobility (2019)
EIT’s vision is to become the leading European initiative that empowers innovators and entrepreneurs to develop world-class solutions to societal challenges, and create growth and skilled jobs.

• First EU initiative bringing together the three sides of the ‘knowledge triangle’: business (companies and SMEs), education institutions and research centres.

• Aim to increase the cooperation and integration between higher education, business and research to facilitate the transition from:

  - student to entrepreneur
  - idea to product
  - lab to citizens
The Knowledge Triangle of EIT

- Higher Education
- Business
- Entrepreneurship
- Research & Technology
Squaring the Knowledge Triangle
4 Action Areas of EIT Food

- Innovation
- Communication
- Consumer Centricity
- Business Creation
- Education
‘EU Food Systems’ Today

THE FOOD SECTOR IN SUMMARY
- EUR 1,244 billion turnover – largest manufacturing sector in EU;
- Provides 44 million jobs in the EU;
- 99.1% of companies are SMEs with 63.3% of sector employment and 49.6% of turnover;
- 0.27% R&D investment as a share of output by private sector.

ENTREPRENEURSHIP AND NEW BUSINESSES
- Only 50% of European start-ups survive the first 5 years;
- 9 out of 10 start-ups fail due to lack of a market need for their products;
- Only 2.6% of all EU start-ups are in the food sector;

SECTOR’S GLOBAL ENVIRONMENTAL IMPACT
- Responsible for 25% of global CO₂ emissions;
- 32% of all food goes to waste;
- Sector consumes 70% of global freshwater extractions.

CONSUMPTION HABITS
- Over 50% of European citizens are overweight;
- 14% of EU household budgets spent on food and drink;
- 25% of EU citizens order grocery products online and 55% are willing to do so in future;
- 62% of European consumers are willing to pay more for sustainable brands.

Strategic Objectives

Transparency in the Supply Chain
1) Address low consumer trust in their food

Distorted Nutritional Habits
2) Create consumer-valued food for healthier nutrition

Fragmented supply chain
3) Build a consumer-centric connected food system

Sustainability
4) Enhance sustainability through resource stewardship

Skill gaps
5) Educate to engage, innovate and advance and attract new talent into the food sector

Limited entrepreneurial culture
6) Catalyse food sector entrepreneurship and innovation
EIT Food – Transforming the Food System

**We are on a MISSION**

**EIT Food** is an ecosystem for solving complex societal challenges by deploying innovative solutions.

EIT Food is the biggest consumer-centric open science innovation ecosystem.
Being innovative requires going beyond value chains...we are building an ecosystem
EIT Food Partners
Transforming the Food System together
Europe’s most promising start-ups - RisingFoodStars
EIT Food - Knowledge & Innovation Community For Food

5 Co-Location Centers (CLCs)
- Leuven (BE-FR-CH)
- Reading (UK-IE-IS)
- Madrid (ES-IT-IT)
- Munich (DE-NL)
- Warsaw (PL-FI-DK-HU)

Core partners (55)
- Economic Actors
  - (19 LE; 7 SMEs; 4 associations)
- Higher education (12)
- Research & Technology Org. (8)

RisingFoodStars
- Start-ups (50)

Network partners
- Civil society
- Regional and public authorities
How to go bananas?

Circular Food Generator Track

- Multi-disciplinary students from different universities
- **Societal Challenge:** Valorising food loss and food waste from manufacturing and retail
- 10 months so come up with a solution
- Coaching from industry, retail and universities
Responsible Research and Innovation (RRI) implies that societal actors (researchers, citizens, policy makers, business, third sector organisations, etc.) work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of society.

**Circular Food Generator Track**

- Education (talent)
- Food Technology (integration)
- Reduced Waste
- Entrepreneurship (business)
- New Product (economy)
- Healthy Alternatives
Future of Food – Future of Europe

Reconnect to Food
New Communication Culture

Food Systems Approach
Transdisciplinary
Involve all actors

Strengthen collaborative R&I
R&I as an enabler to address challenges

Ecosystems

Let’s Put your money, energy, where your mouth is!
10 innovative prototypes
3 innovative product formats
+14000 learners
10 RIS fellows
26 specialists
22 partner internships
+3m learners
TrustTracker™
5 countries
3 new start-ups
+3m learners
+40k citizens engaged
+40k citizens engaged
5 nutritional behavior models
100 influencers
100 influencers
138 entrepreneurs
21 investors
555 matchmaking
€300k Innovation Grants
22 SME knowledge transfer workshops
22 SME knowledge transfer workshops
22 SME knowledge transfer workshops
22 SME knowledge transfer workshops
90 startups supported
50 partners startups projects
46 tailored dialogues
19 business ideas
19 business ideas
25 partner guidelines templates
25 partner guidelines templates
25 partner guidelines templates
25 partner guidelines templates
25 partner guidelines templates
THANK YOU!

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eitfood.eu
Lunch

Introduction

by Steven Desair
Eatmosphere.be
Interactive consultation 2

Road mapping for integrated food waste policy

By Stephanie Wunder
Consultation excercise

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Consultation exercise – Part 1: Road mapping for integrated food waste policy and discussion on future policy options

13.20-14.30
1. Find “your” group (see name tag)
2. Group appoints moderator (responsible that the group stays in time and respects rules) and rapporteur (reports back, structures content) (2 persons)

3. Think (5 min total): What interventions are needed for more sustainable food systems (that among other things works according to circular economy principles and reduces food waste)?
   • 3 quiet min. everyone: Think of interventions (policy, business...) you think are needed for more sustainable food systems (1 idea per card, readable)
   • 1 more minutes everyone: select your favourite 2 ideas you want to present
Consultation exercise – Part 1: Road mapping for integrated food waste policy and discussion on future policy options

4. Present ideas to the group (12 min each round = 25 min total)
First person starts to share first idea with the group, place the card in the coordinate axes system (y: Impact to reduce FW and x: impact to achieve sustainable food system) and explain why – no discussion yet only questions if understanding is unclear.

5. Sticky dots and focus on two top interventions (15 min): everyone places 3 stickers on favourite suggestion, the 2 ideas with the most dots are further discussed in the group (write on long sticky paper): name of the intervention, why it is important, who would need to take which action, when

6. 14.15: Rapporteurs present results (2 min)
Coffee Break

Back at 14.55 hrs
Interactive consultation 3

From options to actions – next steps

By Stephanie Wunder
Consultation exercise part 2 – From Options to Actions/action points for Commissioner

14.55-15.45
Find a new group **group** (choose yourself, max 8 pax)
1. **Appoint** new **moderator** (responsible that the group stays in time and respects rules) and **rapporteur** (reports back, structures content) (2 persons)
2. **Think** (5 min in total):
   - What should the next Commissioner do? (DG Sante or other) – collect ideas (1 idea per card, readable)
   - select your favourite 2 ideas you want to present
3. **Present** (25 min): first person starts with one idea, 2 rounds, place idea on coordinate system (impact FW and time)
4. **Prioritize**: 3 dots per person for 2 favourite suggestions
5. **Specify**: Agree on wording for required action, specify
6. 15.25: **Report back** (Rapporteurs on 2 ideas, 2min)
Wrap up & reflections

By Hilke Bos-Brouwers
Finalising – June 2019

REFRESH Event
Webinar: Measuring and managing retail food waste
02 May 2019

Webinar: Tackling consumer food waste
29 Apr 2019

Webinar: Voluntary Agreements to address food waste
10 Apr 2019

Webinar: Adding value to food waste and by-products
09 Apr 2019

REFRESH Final Conference 2019: Fresh ideas to reduce food waste and valorise surplus food
09 May 2019 to 10 May 2019
Spain, Barcelona
Thank you for your participation!!