

# **Frameworks for Action**

**Selection Process** 



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## **List of Abbreviations**

BCSDH - Business Council for Sustainable Development in Hungary

CSCP – The Collaborating Centre on Sustainable Consumption and Production

FA - Framework for Action

H2020 - Horizon 2020

HaFSA - Hospitality and Food Service Agreement

HFA - Hungarian Food Bank Association

MS - Member States

NGO - Non-governmental organization

POS - Point-of-sale

PP - Pilot projects

PWP - Pilot Working Platform

REFRESH – Resource Efficient Food and Drink for the Entire Supply Chain

SDG - Sustainable Development Goals

TCEF - Taskforce Circular Economy in Food

UNICEO - United Networks of International Corporate Event Organisers

## **Executive Summary**

This report is part of the EU-funded H2020 project REFRESH (Resource Efficient Food and dRink for the Entire Supply cHain). The objective is to record the progress of four European countries (Hungary, Germany, the Netherlands, and Spain) in the establishment of Frameworks for Action to tackle food waste along the whole supply chain.

The four pilot countries were selected based on:

- 1) Their existing levels of commitment;
- 2) The status of their existing food waste reduction strategies; and
- 3) Their aim to address a range of socioeconomic issues (covering grocery and foodservice supply chains).

In addition there was a geographical requirement for the pilot countries to span Northern, Central, Eastern and Southern Europe

The report focuses on the first twenty months of the project (July 2015 to February 2017). It begins with a summary of the purpose of this work, and goes on to explain what is meant by a Framework Agreement (FA) within the context of REFRESH. The report continues with four Country Reports, providing a standalone account of each country's progress through key stages identified in an earlier REFRESH report D2.1 Inventory and Evaluation of Effectiveness of Existing Approaches to Voluntary Alliances, as outlined below:

- a) Initiating and setting up the alliance;
- b) Governance and Funding;
- c) Recruiting signatories;
- d) Establishing actions; and
- e) Monitoring and evaluation.

Different levels of progress were reported by each country, depending on the maturity of their existing food waste strategies, and this is reflected in the four Country Reports. However, external influences such as the current political situation of a country can also affect the pace at which the FA has been developed and the subsequent take-up by industry.

The strategies for engaging Pilot Working Platform (PWP) members adopted by the pilot countries have also been documented. In some cases expressions of support from prospective members had been received at the bid stage of REFRESH, however for the most part, the pilot countries had to approach companies and organisations, demonstrating the business case for action.

Once the priorities and focus of the FA had been agreed, the next steps were to explore opportunities for pilot projects to support the agreed aims. At the time of writing, the four countries had each reached a different level of progress, depending on the aims of the FA, the readiness of PWP members to become involved, and their ability to provide the required food waste data to ensure the pilot project could be monitored and evaluated.

## Introduction

## **Sustainable Development Goals**

The project REFRESH is driven by the desire to prevent food waste on a global scale and the announcement of the United Nations Sustainable Development Goals (SDGs) in December 2014 have been instrumental in providing the impetus and justification for supporting the prevention of food waste.

Sustainable Development Goal 12.3 has a global target to reduce food waste at the retail and consumer end by 50% by 2030 and to reduce food losses along production and supply chains, including post-harvest losses.

#### Aims of the work

The overarching aim of Work Package 2 (WP2) is to establish and validate a range of framework models, through pilots in four European Countries; the Netherlands, Germany, Spain and Hungary.

The aim of the framework models is to bring together actors from along the whole food and drink value chain including major retailers, brands, government and non-governmental organisations to agree a co-ordinated and collaborative approach to tackling food waste.

The outputs and evidence generated through these pilots will provide the stimulus for other EU and third countries, including China, to take action so are of particular interest to businesses and policymakers across the EU; those in the driving seat for establishing collaborative approaches to the prevention of food waste.

The case for action is not just environmental but also social (as explored in the EU-FUSIONS project 2011-2015) and economic. Food waste costs the EU  $\leq$ 140billion per year.

A recent report<sup>1</sup> (co-written by WRI & WRAP on behalf of Champions 12.3<sup>2</sup>) has found that for every \$1 companies invested to reduce food loss and waste, they saved \$14 in operating costs, and the report finds that household savings could be much greater.

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<sup>&</sup>lt;sup>1</sup>http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/environment-food-and-rural-affairs-committee/food-waste/written/38003.pdf

<sup>&</sup>lt;sup>2</sup> 'Written evidence submitted by WRAP (FOW0045)'; [Submitted to the UK Parliament Environment, Food and Rural Affairs Committee Food Waste in England Inquiry]; WRAP, 2016

# Setting the basis for a Framework for Action

#### What is a Framework for Action?

Frameworks for Action can alternatively be referred to as "Voluntary Agreements", "Framework Agreements" or "Collaborative Agreements". The common element of all these approaches is that they're based on voluntary action by the actors involved without the need for legislation.

Voluntary approaches are schemes whereby firms make commitments to improve their environmental performance. They cover arrangements such as public voluntary programmes, negotiated agreements or unilateral commitments.

These types of approaches were "invented" by those who devise and implement them: policy-makers, business associations, individual firms, non-governmental associations, etc.

Within the REFRESH project a Framework for Action (FA) is referred to as

"A collaboratively agreed, self-determined 'pact' to take action on food waste and packaging materials generated at relevant stages of the food system."

The use of voluntary approaches in environmental policy (e.g. negotiated agreements between Government and industry) is spreading and attracting growing interest in OECD countries (*Voluntary Approaches for Environmental Policy, An Assessment, OECD, 11 Jan 2000, ISBN 9789264180260*). As an alternative mechanism to legislation for achieving desired behaviour changes by businesses, they have the potential advantages of:

- o working with the grain of the market;
- being faster to implement and to adapt to new circumstances;
- can be better designed than legislation, since they are normally produced by those with an in-depth knowledge of the business sector in question;
- encouraging constant improvement and innovation (whereas legislation generally sets a target, but does not encourage further improvement); and
- allowing parties to the agreement greater choice over how to achieve the overall objective than legislation, which tends to be more prescriptive

## **Role of Pilot Working Platforms (PWPs)**

The PWP has three key functions, reflecting the stages of REFRESH WP2.

In the early stages of REFRESH each PWP will act as a Steering Committee<sup>3</sup> to guide and advise the lead partner in each pilot country on the development of the Framework for Action (FA). It will bring national experience and expertise to help shape the Framework for Action to be appropriate to the country in which it is developed. This will include advising on existing alliances and initiatives which could be included within the remit of the FA, advising on national policy which would influence the FA, and suggesting levels of ambition and targets. It will also help ensure that measurement and evaluation is considered from the start of the pilot activity.

In the middle stages of REFRESH when the pilot projects are running the PWP will provide support and guidance to the lead partner and to project participants to help ensure that projects have adequate resources, contacts etc. to be effective, that participants remain motivated and focussed, and that measurement is carried out and recorded in order to provide the evidence base required at the end of REFRESH.

In the later stages of REFRESH, the PWP will act as a route to disseminate information about the activity in that country, to provide routes in to policy makers, trade associations, key businesses, NGOs, consumer groups etc. which promote the aims of REFRESH and gain support for the wider adoption of the FA in that country.

### **Drawing on existing knowledge**

WRAP, who are leading on this Work Package, have extensive experience in running successful voluntary agreements. These include the Courtauld Commitments 1, 2, 3 and 2025<sup>4</sup>; the Hospitality and Food Service Agreement (HaFSA), and the Sustainable Clothing Action Plan<sup>5</sup> (SCAP).

In Task 2.1 WRAP explored the success factors of a range of existing agreements<sup>6</sup> which had an agreed ambition or set of collaborative actions.

<sup>&</sup>lt;sup>3</sup> Steering committees are formed to make strategic decisions for any project, especially for its long term aspects such as considering its future realisation of a specific plan.

<sup>&</sup>lt;sup>4</sup> <a href="http://www.wrap.org.uk/category/initiatives/courtauld-commitment">http://www.wrap.org.uk/category/initiatives/courtauld-commitment</a>

<sup>&</sup>lt;sup>5</sup> http://www.wrap.org.uk/sustainable-textiles/scap

<sup>&</sup>lt;sup>6</sup> "Agreement" is here defined as a number of actors across different sectors who come together to formally sign up to achieve a shared ambition or target. This could be industry or Government-led. Throughout this report, the terms "alliance", "initiative" and "agreement" are used interchangeably.

The subsequent deliverable report <u>D2.1 Inventory and Evaluation of Effectiveness of Existing Approaches to Voluntary Alliances</u> was structured and analysed based on the following identified stages:

- a) Initiating and setting up the alliance;
- b) Governance and Funding;
- c) Recruiting signatories;
- d) Establishing actions; and
- e) Monitoring and evaluation.

Within the report, the Leaders of these alliances were interviewed by REFRESH researchers to gain more insight into the successes, and also the challenges of setting up a voluntary agreement. The main conclusions from the resulting analysis highlighted that:

- a) There is a need for a lead organisation to coordinate & manage information and potential conflicting interests and the freedom for signatories to choose their own actions from a predefined selection. In addition there is a requirement for the lead partner to be trustworthy;
- b) Governmental support to the aim of the alliance and full signatory engagement is essential;
- c) Agreements must have the correct level of supply chain involvement, select group of engaged signatories, key players into the issue involved and a strong business case with outlined advantages to join;
- d) There is need for available and dedicated funds to provide both the co-ordination and analysis function of the lead organisation and support actions and innovations by partners to make progress against the ambitions and targets of the agreement;
- e) A monitoring framework is essential to check whether the alliance is on track to achieving its object. Other factors to take into consideration are contextual factors (e.g. conducive policy environment) and a real threat of future regulation if a voluntary approach did not work as a key driver behind some alliances.

In addition, WRAP's own analysis of the role of voluntary agreements 'Written evidence submitted by WRAP (FOW0045)'; [Submitted to the UK Parliament Environment, Food and Rural Affairs Committee Food Waste in England Inquiry]; WRAP, 2016 concluded that:

To be successful, voluntary agreements:

- o require leadership from key organisations in the sector;
- o need to be well-designed and implemented:
  - setting clear strategic direction underpinned by specific targets;
  - embedding those targets in corporate policy and processes;
  - setting corresponding requirements in project procurement, and engaging with the supply chain;
  - measuring performance relative to a corporate baseline; and

 reporting annually and consistently on overall corporate performance.

The findings from D2.1, together with WRAP's expertise in this area, were applied to the formation and development of the four pilot FAs. For the purpose of continuity the structure of this report has been designed to mirror the key factors identified in D2.1.

#### Initiating and setting up the alliance

The starting point for a successful agreement is a well-functioning steering group. In REFRESH, the group responsible for providing this function is referred to as a Pilot Working Platform (PWP).

The analysis undertaken in D2.1 and WRAP's experience in the UK determined that this steering group, or platform, should be made up from a wide range of actors from across the food value chain as well as government and non-governmental organisations.

Experience also suggested that in order to represent the various sectors and actors, whilst retaining efficient and effective decision making without the risk of dominance of one major business or organisation, an initial steering group of 10-15 organisations is ideal. Where larger steering groups exist a 'Steering Group / Working Group' model can be effective. This involves a formal steering group which takes major decisions in a democratic way and smaller working groups who meet regularly to discuss and make recommendations on specific topics.

This Steering Group / Working Group structure also promotes good representation across sectors, ensuring all views can be considered and everybody has a voice. As reported in D2.1 it means that no one organisation is dominant in the group.

Taking learning from the analysis of successful agreements, guidance was given to co-ordinating partners in all four pilot countries about the ideal composition and size of the PWPs.

The co-ordinating partners then actively sought representatives from a range of organisations which reflected this balance.

#### **Governance and funding**

Most of the successful alliances investigated in D2.1 received funding, either from government or participants/ members. The WRAP Courtauld Commitments 1-3 were funded by government, which has now progressed with Courtauld 2025 to a mix of government and business funding. The presence of even a small amount of government funding is helpful to show that there is governmental support for industry taking a particular course of voluntary action.

The D2.1 report concluded that the source of funding is less relevant than the availability of funding. A shortage of any funding can be a barrier to the success of the alliance and a limit to what it can achieve.

Co-ordinating partners in the four pilot countries received a small amount of funding to get the right mix of people around the table, and to cover the launch and administration.

In order for the pilot FAs to be expanded, further funding will be required from either public or private sources.

#### **Recruiting Signatories**

One of the key learnings from D2.1 was that it was more effective to have fewer actively engaged signatories than many unengaged signatories. The advice given to each pilot country was that the initial membership should reflect the range of actors needed to successfully shape and implement the FA. This will most likely include representatives of key retailers, manufacturers, government agencies or ministries, NGOs or consumer groups.

In the early stages the suggestion was to have a manageable number in the PWP to act in a steering committee capacity. 10-12 should give a broad range of representation whilst remaining small enough to manage. In the later stages however, the PWP membership can be grown to increase the opportunities for support, dissemination and national uptake.

#### **Establishing actions - targets and ambition**

A first priority was to work with the four pilot countries to explore and agree a core set of targets and principles. Key lessons from the D2.1 research highlighted that to allow signatories to choose their own actions from a predefined selection seems to have encouraged action. The most successful alliances interviewed in the research seemed to involve signatories early in the process and allowed them to influence objectives and targets. It was deemed important to ensure that all relevant stakeholders were involved and that they all had a chance to contribute.

#### Monitoring and evaluation

A fundamental element of a voluntary agreement is to agree to collect and analyse data, which is essential to check whether the FA is on track to achieving its objective. In addition, an effective evaluation framework offers wider opportunities to understand the ways in which the FA is contributing to change. A process evaluation, for example, can identify early issues with implementation whereas an economic evaluation can identify costs and benefits and therefore value for money.

One particularly important type of evaluation is a counterfactual-based impact evaluation as this can identify not only the impact achieved but also the extent to which the actions of the agreement rather than other external factors have influenced the outcome.

## Whole chain approach

REFRESH seeks to take a "problem solving approach to reduce waste and improve resource efficiency across the entire product value chain – from farm to fork".

Therefore the FAs were developed with a whole chain approach, seeking actions and solutions from primary production, through manufacturing, retail and the consumer, and including valorisation of surplus and byproducts where they are unavoidable.

By setting priority actions at the key stages of the value chain as appropriate to the situation in each country, the FAs can direct attention and action towards where it can have most impact.

One way to identify the areas for action is to undertake whole chain projects. Whole-chain resource efficiency projects use a problem-solving approach to reduce food waste and improve resource efficiency across the entire product value chain.

By tracking a product from farmer to consumer, applying Hotspot analysis, it is possible to identify where waste arises and where it has the greatest environmental and economic impact.

Once done, this enables the design of targeted interventions to reduce food waste in the most effective way.

## The pilot countries

The four pilot countries had been selected prior to the start of the project, to ensure that they would be in a position to hit the ground running with the formation and establishment of Pilot Working Platforms

The criteria for their selection was based on their existing levels of commitment, the status of their existing food waste reduction strategies, their aim to cover a range of social and economic contexts (covering Northern, Central, Eastern and Southern Europe; grocery and foodservice supply chains). In particular their selection was based upon;

- Topic on policy agenda
- Sense of urgency
- Whether stakeholders already work together through the chain
- Is there is a basis for a Public Private model?

## **Background**

#### **Spain**

Food waste prevention is more and more in the public agenda in Spain. In recent years there have been a wide range of initiatives aimed at food waste reduction. They are diverse, ranging from quantifications to small and lucid activities or business oriented ones, and they have been led by different stakeholders: governmental, food agri-food business, civil society, NGO's, academia, consumer associations, etc. This previous work creates a great momentum to develop the FA. It will be the first opportunity to put together all kind of strategies and backgrounds to share a common aim. All the work done previously, although not being coordinated behind the same umbrella, give a valuable information to stakeholders to set up common goals and to test innovative actions to reduce food waste along the food supply chain.

#### The Netherlands

The Sustainable Food Alliance and the Ministry of Economic Affairs together developed the Sustainable Food Agenda 2013–2016 (SFA, 2013). Reducing food losses and waste and optimizing waste streams is a priority area, with the ambition to also contribute to the objective to reduce food waste by 20 percent in 2015. Though progress has been made in awareness and increased levels of actions, this is not reflected yet in a reduction of food

waste figures (Soethoudt, 2013). In a collaborative research and innovation approach across the whole supply chain, strategies for reduction of waste and improved valorisation will be developed and tested with a focus on retail, catering, and hospitality sectors.

#### Germany

A whole value chain collaborative approach will be taken, with producers and retailers, and their up-stream and down-stream partners. As product categories focus, those with most waste (food, packaging) generation are selected, at production / household, hospitality level and high sales to achieve large-scale impact. The FA will be the first of its kind in Germany and consolidate and extend the various ongoing, but scattered activities in the waste prevention (food, packaging) area. It will enable innovation solutions across the whole value chain and bridge policy directions with practical business actions.

#### Hungary

The Hungarian Food Bank Association (HFA) is supporting the Ministry of Agriculture in Hungary to create a Forum of relevant stakeholders related to the domain of food waste, and this Forum is the basis of establishing a FA in Hungary. The main goal is to determine the key intervention points where the highest possible return on investment in terms of food waste reduction can be obtained, thereby considerably reducing the amount of food waste in Hungary. The aim is to build a structured knowledge base, establish communication channels and platforms among stakeholders via the creation of working groups, and to launch, execute and evaluate innovation projects.

### **Role of the Work Package leader**

WRAP has extensive hands-on experience establishing and managing a number of voluntary approaches<sup>7</sup> in this arena, and are well placed to lead this work stream. WRAP were able to draw upon this expertise to provide guidance as well as a range of materials to the co-ordinating partners in each country.

The key areas of focus are to

- provide general support to lead organisations;
- provide reporting templates to lead organisations for regular reporting and review data;
- provide reporting templates in English for the collection of quantitative data;
- provide conversation guide in English for qualitative data gathering; and
- audit results and analysis and run workshops with lead organisations to ensure consistency of reporting.

WRAP has provided template documents for the structure and governance of a Pilot Working Platform including the structure and elements of a Framework Agreement, Logic Mapping tools, examples of wholechain

<sup>&</sup>lt;sup>7</sup> Courtauld Commitments 1-3, Courtauld 2025, Hospitality and Food Service Agreement

projects and a suite of case studies highlighting actions to tackle food waste along the value chain.

WRAP are overseeing the selection of innovation pilot projects to ensure coverage of the whole value chain, and to identify any cross-country synergies. In addition, WRAP is also coordinating knowledge sharing between the four pilot countries to ensure best practices are sustained, and where necessary refined. These will feed into the 'blueprint' which will be developed under Task 2.6 as learnings are identified.

## Role of the co-ordinating partners

The core responsibility of the co-ordinating partners in each pilot country is to:

- select an appropriate mix of actors to form the PWP;
- provide a secretariat function and to lead discussions around national priorities;
- progress the development of the FA; and
- coordinate innovation projects to support the aims of the FA.

This aligns with the findings from D2.1 which advocates that the coordinating partner (referred to as the Lead Organisation) should;

"have a positive reputation and be seen by the (potential) signatories as a trustworthy party, have access to the right actors/people to engage with and be able to commit them to the development of the alliance".

The co-ordinating partners in each pilot country are outlined below;

#### **CSCP** (Germany)

The <u>Collaborating Centre on Sustainable Consumption and Production</u> (CSCP) is an international non-profit Think and Do tank that works with businesses, policy makers, partner organisations and civil society towards a sustainable planet

#### **Wageningen University (Netherlands)**

<u>Wageningen University and Research</u> (WR) is collaboration between Wageningen University and Wageningen Research Foundation. The strength of WR lies in its ability to join the forces of specialised research institutes and the university which leads to scientific breakthroughs that can quickly be put into practice and be incorporated into education.

#### CREDA (Spain)

The <u>Centre for Research in Economics and Agribusiness Development</u> (CREDA-UPC-IRTA) is a private foundation created by UPC (Polytechnic University of Catalonia) and IRTA (Institute for Food and Agricultural Research) in 2005.

#### **HFA** (Hungary)

The <u>Hungarian Food Bank Association</u> is a non-profit organisation that works to make a link between surplus food and people in need in Hungary, in order to help reduce poverty, hunger and malnutrition.

## **Germany**

#### **Formation of the PWP**

#### **Initiation and set-up**

In recent years, both political debates and scientific research on the topic of food waste have not only increased on the global and European level, but also within Germany (WWF, 2015: 15). Some of the most important studies on food waste in Germany are Kranert et. al. 2012, commissioned by the Federal ministry and carried out by the University of Stuttgart), University of Applied Sciences Münster (2012, supported by Land NRW) and Peter et al. (2013).

The most recent study about the level of food waste in Germany was published in 2015 by the WWF Germany (WWF, 2015). Based on a meta-analysis of all current research and data about the topic, this study concludes that in Germany 18.38 million tons of food are wasted per year, of which 9.9 million tons is "avoidable waste". According to latest research, the largest share of this waste is caused at the end consumer level (39 %). Food loss during processing and distribution each sum up to 14 %; the large-scale consumption sector has a share of 19 % (WWF, 2015: 9). The WWF-study presents a broader picture of the current knowledge about the different dimensions of food waste in Germany. It acknowledges, however, both the sometimes insecure or missing data, as well as the differences in measurement methods (WWF, 2015: 12 and 40).

One of the reasons for the increasing public awareness of the topic of food waste in Germany might be the documentary "Taste the Waste" (2011) which illustrates causes of food waste at different stages of the value chain from production (farmer) level to the end consumer. The documentary was followed by an increased coverage of the topic of food waste in radio, TV and newspaper, was accompanied by various public discussions and events and arguably contributed to reaching a very broad audience in Germany (Kranert, 2012: 1). Even the Federal Association of German food retailers (BVLH) ascribes the movie an important role in putting the topic of food waste on the public agenda (Federal Association of German food retailers 2012).

Since then, several civil society initiatives and networks have been established and are constantly growing. The online platform "foodsharing" for instance, was initiated immediately after the release of "Taste the Waste". It enables households to share food leftovers and helps to organise the pick-up of unsold food products from supermarkets. Around 2,700 businesses are currently cooperating on the platform and the initiative counts almost 18,000 individual members (<a href="www.foodsharing.de">www.foodsharing.de</a>). While foodsharing is a relatively young initiative, the food bank association "Bundesverband deutscher Tafeln" has organised the collection of food leftovers (e.g. from supermarkets, restaurants etc.) since 1993. In more than

<sup>8</sup> Avoidable food waste is defined as food waste which is not generated due to necessary food processing stages, e.g. cooking, cleaning, cutting (WWF 2015: 7).

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2,100 local "stores" across Germany, this association prepares and hands out free of charge meals for approximately 1.5 million people per day (Bundesverband deutscher Tafeln e.V., 2016).

Also the German government is making an effort to reduce the level of food waste. In 2012, the federal ministry of food and agriculture implemented the campaign "Too good for the bin" ("Zu gut für die Tonne"). The campaign aims at connecting different organisations working on the topic of food waste, providing information on an internet platform and giving practical support to consumers, e.g. a smartphone application that provides leftover recipes<sup>9</sup>.

In Germany, the level of food prices is quite low. While in 2012 the level of food prices in Germany was, with 100.3 still around the average of the  ${\rm EU15^{10}}$  countries (100=average EU15), the index has been decreasing constantly and has fallen to  $96.7^{11}$ . The food retail market is very concentrated in Germany: the four biggest food retail companies are currently holding over 75% of total sales 12. German households spend on average 10.13% of their income on food products 13. Comparing this to the rest of Europe, only Switzerland and the United Kingdom have a lower share.

At the same time, awareness of sustainable food and nutrition is growing in Germany. The demand for regional and organic products is constantly increasing; in a recent survey by the Federal Ministry of Food and Agriculture, approximately one quarter of the respondents indicated that they frequently or exclusively consume organic products<sup>14</sup>. In 2015, the first food policy council was founded in Cologne, Germany with the aim of developing a sustainable and ecological food system for the region. While awareness for sustainable food and nutrition in general appears to be growing among German consumers, and there are several studies confirming this trend, so far - apart from the above-mentioned meta study done by WWF - there is no study analysing consumer awareness with regard to food waste.

There were (and still are) some initiatives in place but none similar to the REFRESH approach:

<sup>10</sup> EU15 countries are called the member countries of the European Union before the 2004 enlargement. It includes Belgium, Denmark, Germany, Finland, France, Greece, Great Britain, Italy, Ireland, Luxemburg, Netherlands, Austria, Portugal, Sweden und Spain.

14

http://www.bmel.de/SharedDocs/Downloads/Ernaehrung/Oekobarometer2016.pdf? blob=publicationFile

<sup>&</sup>lt;sup>9</sup> https://www.zugutfuerdietonne.de/

Eurostatis, 15.6.2016. Kaufkraftparitäten (KKP) und vergleichende Preisniveauindizes für die Aggregate des ESVG 2010

<sup>&</sup>lt;sup>12</sup> Bundeskartellamt. Sektoruntersuchung Lebensmitteleinzelhandel. September 2014, S.78

<sup>&</sup>lt;sup>13</sup>https://www.destatis.de/DE/ZahlenFakten/LaenderRegionen/Internationales/Thema/Tabellen/Basistabelle KonsumN.html

- "Zu gut für die Tonne" ("too good for the bin"): Initiative of the German government with some research projects, materials for companies, schools etc. and a contest for best practices.
- United against waste: Member based Out-of-home alliance which deals with best practices in this sector and which offers support for participating companies.
- "Genießt uns" ("enjoy us"): similar to "Zu gut für die Tonne" but private project that ended 2015.
- "Essens-wert": loose network of scientific institutions doing research concerning food waste
- There are many other projects on the political level and many scientific research projects

Against this background, German activities to build a pilot working platform (PWP) started by researching the most interested players and contacting companies where the CSCP had existing contacts. The CSCP realised that it was important for the participating organisations to be part of the process of defining the Framework for Action, and that the latter would be a voluntary agreement. Apparently, some companies were afraid to be forced to do something that would be too costly for them – as they had similar experiences with initiatives in other domains (e.g. animal welfare). It was and is still really important for them that they can decide by themselves what they plan to do to decrease food waste.

#### **Governance and funding**

In the German Pilot Working Platform (PWP)<sup>15</sup>, the CSCP brings together all the organisations and people that want to actively decrease food waste. These include ministries on the regional and federal level, companies (retail, food producer, Out-of-home), civil society organisations (including consumer organisations) and scientific bodies. Contact persons are mostly people on the middle-management level who would also be responsible for the implementation of projects. This composition guarantees that the German PWP is informed of relevant trends and most importantly has the opportunity to initiate activities with the involvement of all relevant actors.

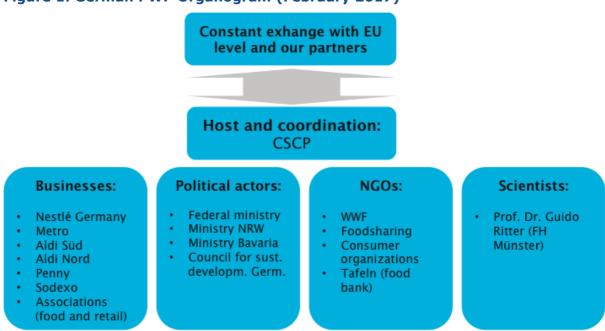
#### The German PWP is responsible for:

- Consulting and conducting the design and development of the complete extent of the Framework for Action in Germany;
- 2. Counseling of high-ranking goals for the Framework for Action;
- Providing advice and support for the implementation of pilot projects, which test the Framework for Action (i.e. through first-hand best practices from the organizational context) and if relevant and requested, participating in the pilot projects;
- 4. Searching for ways of maximizing the impact and securing the support and participation of different actors. That is, to spread the goals and

<sup>&</sup>lt;sup>15</sup> In CSCP communication with the PWP partners and external communication the PWP is referred to as a "Steering Committee" as this is a term that is better understood by the wider public.

- values of REFRESH and the Framework for Action inside the organizational network
- 5. The participation in the PWP is open to all relevant organizations, as long as a "critical mass" is not exceeded. If the number of participating organization surpasses 20, pragmatic decisions of participation as well as governance mechanisms will be discussed and aligned. The plan is to have two meetings per year. In the first year, three meetings were held. In 2017 meetings are scheduled in April and in October.
- 6. The CSCP acts as a kind of secretariat and as a lead to define activities together with the partners. The CSCP (and if necessary, in agreement with other elected participants of the PWP) is responsible for review of progress under the adherence of confidentiality. All participating organizations must report on progress at least on a yearly basis (based on data obtained from established activities). For showing / evaluating progress, all already available information of the organization should be included.

Figure 1: German PWP Organogram (February 2017)



#### **Recruiting members**

Some of the companies and political actors had indicated their support at the bid stage of REFRESH, proceeding to become members of the German Steering Group as the project was officially launched.

The chosen strategy to approach new members was to meet them directly and discuss the process with them. It was also good practice to invite them to the first meetings.

To kick-start the communication with all of the partners at least 1-2 emails were exchanged, plus one phone call and a short meeting on their premises. To reinforce the relationship, CSCP maintained contact via phone calls and emails in between meetings and this level of communication was highly appreciated by the partners in the German PWP.

#### **Establishing Actions**

The overall goal of the German PWP is to support the aims of SDG12.3, through innovative pilot projects in the context of REFRESH or as individual activities.

While some studies in Germany suggest the main focus for action should be at the retail and the consumption level, data is still far from perfect. This is why CSCP decided to define priorities for actions within REFRESH, as well as individual targets, in consultation with the PWP members. The results of this exercise are presented below; highlighting those topics that were considered of highest priority for the different sectors in Germany by the PWP members in their  $3^{rd}$  meeting on 6.10.2016 (scale 1 – 10; 10 meaning highest priority).

Figure 2: Supply chain priorities

Supply Chain topic	Average from answers	score 15
Collection of data / impact measurement		7,6
Revision of tolerances / sale of "ugly" fruits & vegetables		7,2
Interface production & other stakeholders		7,2
Creating incentives for reduced food losses / change of purchasing criteria		6,7
Training employees		6,2
Facilitation of regional consumption		5,3
Utilisation of waste		4,4
Gleaning		3,3

Figure 3: Out of home priorities

Out of Home topic	Average score 15 answers	from
Collection of data / impact measurement		8,3
Training employees		7,9
Offering various dish sizes		7,5
Offering taking home leftovers and legal security		7,3
Optimisation of processes together with clients		7,1
Cooperation with foodsharing/ food banks /		6,7
Campaigns / dialogues		5,8
Utilization of waste		5,1

**Figure 4: Consumer priorities** 

Consumer topic Average so 14 answers	
Collection of data / impact measurement	8,2
Campaign POS / canteen	6,9
New on-pack information	5,9
Apps regarding behaviour (e.g. shopping list)	5,4
Expansion former campaigns	5,1
New public campaign	4,8
Website / App with information	4,8

**Figure 5: Supermarket priorities** 

Supermarket topic	Average score from 14 answers
Collection of data / impact measurement	8,4
Training employees	7,1
Change of packaging	6,7
More hand over of edible products to organizations	6,7
Discounts at POS / discount offers close to best-before date	5,6
Model calculations regarding changes (DSS)	5,5
Utilization of waste	5,4

Another priority at the German level was to set up a federal strategy. This has still not happened but there is the hope that the PWP will set the scene with their activities to influence a future strategy.

The members agreed to participate in innovative pilot projects (PP) with the above-mentioned priorities, and undertake actions of their own.

#### Monitoring and evaluation

In the 3<sup>rd</sup> meeting the CSCP presented a questionnaire designed to capture the baseline of food waste data to the PWP members for initial feedback. All participating companies agreed that they would measure food waste. The CSCP will compile and aggregate data if possible – the aggregation and comparability depends on how many companies of a branch share data. Food waste figures will not be published.

While the PWP members had no resistance to completing the questionnaire, there were some concerns regarding the sharing and comparison of data. In February 2017, the CSCP is still in exchange with the companies and therefore cannot state anything about data quality and data aggregation yet.

Partners were willing to share with CSCP their approaches to data collection and how this could be further refined to get better data. It was appreciated by the German PWP partners that the CSCP took some time to go through the questionnaire and discuss the main challenges. One partner company also stated their interest in setting up an external project to get more detailed food waste data, with discussions due to continue past February 2017. This demonstrates how collaborative working through participation in the FA can lead to members thinking in a more sustainable manner.

#### The Framework for Action

#### **Signatories**

Many organisations are actively participating in the overall process and attending the meetings of the PWP:

Figure 6: Current members of the German PWP (at Feb.2017)

- I igure of current members of	the German PWP (at Feb.20)
Organisation	Type (e.g. NGO)
Penny / REWE	Retailer
Metro Group	Retailer
Aldi Süd	Retailer
Aldi Nord	Retailer
Nestlé Germany	Producing company
Sodexo	Out-of-home
Foodsharing.de	NGO
United Against Waste	NGO
WWF	NGO
Verbraucherzentrale NRW	Public body / NGO
Deutscher Nachhaltigkeitsrat	Public Body
Bundesverband deutscher Tafeln	Food Bank
Environment ministry North- Rhine Westphalia ( ministr regional level)	ry Government
Bavarian State Ministry on Food, Agriculture and Forestry (ministry regional level)	у
Federal ministry (ministry federal level)	Government
BVE (association food industry	y) Association
BVLH (association retailers)	
Prof. Dr. Guido Ritter, Uni Münster	Scientific partner

Of those, only 6 had officially signed the FA at the time of this report (Federal Ministry, IsUN Münster, Rat für Nachhaltige Entwicklung, Sodexo, Aldi Süd, Aldi Nord). From the exchanges, the CSCP understands the need for high level – and therefore time intensive – discussions, as the main reason for the slow process of signing.

In this view, the CSCP decided not to exclude any organisation from the PWP by making the FA signature a hard criterion for meeting attendance, in order not to lose momentum in the overall progress and to continue the involvement and exchange with the organisations.

#### **Framework Agreement**

In the development phase of the FA, the CSCP considered it important not to set too high goals but to rather stress the individual process for each participant. Thereby, the CSCP could create motivation to be part of the process and ensure not to scare organisations away by requesting promises that would eventually be too expensive. Furthermore, the German PWP gave all participants the opportunity to discuss the FA internally, together with the CSCP as well as with the whole group.

#### **Overview of German PWP meetings**

**1**<sup>st</sup> **meeting (2.2.2016):** In the first meeting the PWP started its discussions about the main challenges and possible solutions. To prepare this the CSCP sent around some questions to get a first idea what the priorities should be in Germany. Further topics addressed were the governance structure and first ideas concerning the Framework for Action (FA). As a virtual guest, David Rogers from WRAP gave a summary of the related REFRESH activities and the experiences and best practices of WRAP in the UK. After the meeting the first version of the FA was circulated and CSCP received many comments from the partners.

**2<sup>nd</sup> meeting (3.5.2016):** In the second PWP meeting the main objective was to discuss the second version of the FA. Presentations were delivered by Toine Timmermans (coordinator of REFRESH) who was in attendance, and presented on his experiences in the Netherlands, by Patrik Eisenhauer of the CSCP concerning some of the results of work package 1 and by Guido Ritter (professor of FH Münster) sharing insights into one scientific project related to food waste. After the meeting the FA was finalised and distributed to all the members of the PWP. The full FA document can be found at



Figure 7: Members of the German PWP

**3rd meeting (6.10.2016):** In the third meeting the PWP discussed the priority areas for Germany. The CSCP presented a prepared logic map, which helped to prioritize and align potential action areas. Together the PWP members rated different possible actions on a scale from 1-10 (for the results see section 1.1.4). Furthermore, the baseline questionnaire was presented and discussed. Following the meeting, the CSCP created documents for each company with suggestions for possible pilot projects and distributed the baseline questionnaire; results are expected for the first quarter of 2017.





#### **SUMMARY / KEY LEARNINGS**

To gain buy-in of the Framework for Action by organisations and particularly companies requires high level decisions on the basis of clear insights of benefits and costs. Such decisions can take time and this should be factored in to the early planning stages.

Active involvement and engagement does not necessarily depend on the signature of a Framework of Action but can also happen before (or even without) an official joining. Companies are willing to join interesting and promising initiatives, under the condition that they stay independent and can decide by themselves on their priorities and activities.

Partners appreciated bilateral exchanges on the questionnaire and to discuss the main challenges.

Maintained communication between meetings strengthened the relationship and was valued by the partners

## **Pilot Innovation projects**

#### **Call for pilots**

The expectation was that the German PWP defines the most promising activities that fit both the members, REFRESH's and public interests. To achieve this CSCP developed up-front a logic map with needed outcomes on different levels (consumer, retailers, out-of-home and supply chain /

production – see <u>Annex D</u>), which were presented in the 3rd Steering Group meeting). On this basis, outputs and potential pilot projects were then proposed and discussed by the German PWP. It was concluded that pilot projects should focus on the following areas: impact assessment, point-of-sale activities, employee engagement, canteen management and potentially packaging.

#### **Selection process**

The criteria for the selection of pilot projects was defined using a logic mapping process and by referring back to the priorities highlighted within the Framework Agreement. Once the priority areas had been defined, face to face meetings or bilateral calls were scheduled with the PWP partners to scope the exact process of the projects. The CSCP developed a document for each company that listed all possible pilot projects and discussed with them their potential engagement.

#### **Agreed projects**

In early 2017, the CSCP was discussing three concrete ideas with three partners.

- 1) **Employee & trainee engagement**: Integrate food waste into trainee programmes. By making the trainees / employees aware of the challenges concerning food waste the German retailer Penny could on the one hand change processes at their own supermarkets and their own behaviour and on the other hand give advice to their customers what they could improve at their homes. As the retailer level and the consumer level are two very important areas for improvement in Germany it can be assured that those activities contribute to the overarching goal of reaching SDG goal 12.3.
- 2) **Consumer campaign at the point-of-sale**: This project would help the German retailer Aldi South to get in contact with their customers to give some advice what they could do in their homes to change their food waste level. Details of this project idea still have to be defined, it is planned to be implemented in autumn 2017.
- 3) Roundtable on legal frameworks for leftovers from canteens / out of home (still in discussion): Many out-of-home companies state that the legal framework makes it hard for them to give leftovers to customers or third party organisations. This is why the idea is discussed to organise a roundtable to bring together the relevant organisations to discuss possible solutions.

#### **SUMMARY / KEY LEARNINGS**

Set achievable goals: It was important that the German PWP focused on the individual potential for each participant and did not set unrealistic goals.

## The Netherlands

#### **Formation of the PWP**

#### **Initiation and set-up**

In the Netherlands a coalition of The Sustainable Food Alliance and the Ministry of Economic Affairs developed the Sustainable Food Agenda 2013–2016. Reducing food losses and waste and optimising waste streams is a priority area, with the ambition to also contribute to the objective from the Dutch Government to reduce food waste by 20 percent in 2015. Though progress has been made in awareness and increased levels of actions, this is not reflected yet in a reduction of food waste figures, despite the topic of food waste reduction being of high priority within businesses for several years. The Dutch PWP is set up in collaboration with the Ministry of Economic Affairs and the Sustainable Food Alliance. A multitude and series of public private initiatives and projects has been set up, and is currently being executed as shown in Annex 6.

The Sustainable Food Alliance (Alliantie Verduurzaming Voedsel) is a collaboration of the Dutch Federation of Agriculture and Horticulture (LTO Nederland), the Federation of Dutch Grocery and Food Industry (FNLI), the Central Office of Food and Grocery Trade - CBL), the association of Dutch catering organisations - Veneca, and the Royal Dutch Association for the Restaurant, Hotel and Catering Industry – KHN, with the aim of making the food industry more sustainable (www.DuurzamerEten.nl). The partners are working together towards concrete goals and actions, such as the elimination of legal obstacles to the maximum valorisation of by-products from waste and the development of innovative financing models for the circular economy.

Businesses and other key stakeholders in The Netherlands are ready for and committed to taking the next step, with the aim of converting the gathered insights on challenges, barriers and solutions to deliver greater levels of impact through coordinated actions. Key players and frontrunners across the whole food supply chain, including supporting organisations (e.g. from packaging & ICT business) have been involved in several of the recent activities, and are in regular contact with the coordinator of the Dutch REFRESH PWP (WUR).

The ambition was for a strategic group of frontrunners from business sectors, representing the total supply chain, and having a leading role in the PWP (with 70-80% of the PWP consisting of businesses). Additional members have been approached actively, and have been invited to join, based on their reputation, leadership and commitment to the topic of sustainability and food waste reduction. Additionally a selected set of public and civil society organisations have been invited to join (and all of them have accepted the invitation).

A unique element of the Dutch PWP is the endorsement by a group of Ambassadors. Pre-eminent leaders in the field of sustainability, Dick Boer (Ahold Delhaize), Feike Sijbesma (Royal DSM), Hans Hoogeveen (FAO), Tjerk Wagenaar (Nature & Environment), Conny Braams (Unilever), Hans de Boer (VNO-NCW) and Louise Fresco (WUR) are ambassadors for the PWP. They have a specific role in linking to global networks and initiatives (like Champions 12.3 coalition, Consumer Goods Forum, World Economic

Forum) and giving insights and recommendations on strategic issues that are relevant for contributing to SDG12.3 targets (like European Common Agricultural Policy, Sustainability reporting, Shareholder value including social and ecologic values).

#### **Governance and funding**

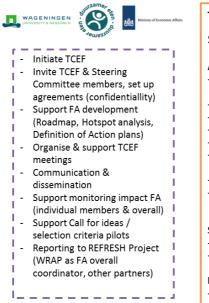
The Taskforce Circular Economy in Food (TCEF) Framework for Action is targeted at the National level for the Netherlands. Representation of participants and signatories reflect a balanced set of stakeholders, across the different supply chain stages, including solution providers, knowledge centres, government and civil society organisations. The overall objective is to contribute to the development of the Circular Economy of Food, resulting in a food system where all food resources have value, waste in principle doesn't exist and optimisation of utilisation of food resources is the leading paradigm.

Important elements of the Circular Economy of Food include making a transformation from: linear supply chains to circular networks, from wastemanagement to in-control on food resources, and from known & best practices to innovation and new business models. An important mechanism for the Framework for Action is to build a community on National level, with strong links to international initiatives and regional communities focused on developing solutions.

The Steering Committee will be convened to be representative of the different stakeholders, and the initial members are the current Taskforce members who signed up at the launch in January 2017. The Steering Committee will consist of a high-level team to determine strategies and direction, and to also lead communication with all participants. In addition it will discuss the progress made in the main project as well as the agenda for roundtable meetings. Steering Committee meetings will take place twice a year, one of which is combined with the annual Roundtable meeting with all member organisations.

All member organisations (signatories and supporters) are to take part in the Roundtable meetings once every year in order to discuss progress made, current events, as well as potential collaborations. Working groups will be formed for detailed topics accordingly, aiming for 2-3 meetings annually. Diagram 2 shows the proposed governance structure. The initial starting budget for the Taskforce comes from WP2 REFRESH budgets, and matching in-kind contributions from the co-founders and members.

Figure 9: TCEF Governance structure



# TCEF Members & signatories

#### **Acting Organisation**

- Set individual ambtions and (voluntary) targets
- Identification of hotspots & challenges
- Develop Action plan
- Initiate ideas for Pilots
- Implementation of Action plan
- Reporting on progress (impact assessment)
- Supports FA development
- Active communication strategy & actions (ambassadors)

#### Supporters

- Develop Action plan (optional)
- Implementation of Action plan

#### **Execute Pilots**

- Develop pilot-ideas & submission
- Implement and monitor Pilots

#### TCEF – Steering Committee

#### TASKS:

- FA strategic directions, objectives & action plan
- Define Roadmap & Hotspots identification
- Setting Scope & Focus for Pilots
- Monitoring progress FA (Dashboard)
- Communication FA & Agenda Roundtable meetings
- Linking to other platforms, including EU and global leve I (Champions 12.3)
- Strategic advices

The Steering Committee is a coalition of companies in the food supply chain (across the full chain), national and local authorities, a civil society organisation and other invited members who have an interest to:

- Assist in providing direction for the development of the TCEF FA in the Netherlands, including the formulation of a national Strategy and visionary Roadmap through their expertise contributions;
- Provide support and offer advice in the implementation of pilot projects that are tested within the Framework for Action and participate in the pilot projects and / or resources to support other participating organisations;
- Spread the goals and values of REFRESH and the TCEF FA within their networks in the Netherlands and in the EU and, as an ambassador, encourage others within their sector to become a supporter or active contributor to TCEF ambitions.

WUR is responsible for the planning and coordination of the projects in the FA in the Netherlands, in close collaboration with the co-founders of the Sustainable Food Alliance and the Ministry of Economic Affairs.

More specific tasks of the Steering Committee are to:

- Define the priorities for change along the Netherlands food system to strengthen and accelerate the circular economy development, which require cooperation and which can cause adverse changes in the Hotspots (Roadmap);
- Set the priority goals for the Framework for Action, to which the signatories undertake
  to contribute, including deciding on the scope and focus for pilots to be encouraged
  and supported by REFRESH;
- Contribute to the success in the work of REFRESH in the Netherlands, search for ways to maximise its impact and ensuring there is support and participation from different areas:
- Contribute to the strengthening of international relations (REFRESH partnership, EU food waste Platform, Champions 12.3 coalition and others)

The conditions for participation were to be finalised and agreed at the first Taskforce meeting (9 March 2017) and will be discussed at least annually to ensure their compliance.

#### **Recruiting members**

The FA is open to all organisations wishing to participate. A distinction is made between Signatories (acting organisations) which have concrete targets and an action program, and supporters, that support the FA and in some cases (pilot) projects, but must not necessarily have concrete targets. Companies already actively working on food waste reduction and willing to contribute to the FA can choose between becoming an active or supporting organisation, or have themselves and their contributions represented in the FA by a sector organisation as an intermediary.

#### **Establishing Actions**

The Taskforce has the intention and ambition to start working along the following series of connected activities and engage in the necessary actions to achieve progress:

#### 1. **Define a Connected Strategy**

The Taskforce will develop an overarching and connected strategy for the transition towards a Circular Economy in Food. This includes the identification of hotspots, a long term roadmap, impact analysis and identification of opportunities and barriers (mid 2017). The Taskforce will publish this national strategy and roadmap to collectively achieve a circular economy in food: an economy in which waste does not exist, agri-food residual streams are re-used in the best possible way, and raw materials retain their value. In the roadmap, there are concrete goals and actions for both the short and long term.

#### 2. Transition Agenda Circular Economy Biomass & Food

The Strategy and roadmap will be a core body of inspiration and input for the National action driven Transition Agenda for the Theme Circular economy of Biomass & Food. In collaboration with relevant stakeholders within and outside the Taskforce, with the science/knowledge base from universities & research institutes as starting point (Resource Use Efficiency, Sustainable Platform, and National Science Agenda) a collaborative agenda will be prepared. The Taskforce CE in Food is signatory to the Interdepartmental Ambition to achieve Circular Economy 2050, among 100 other members. Biomass & Food is one of the six transition areas. The aim is to finalise the National agenda before the end 2017, budget to be found.

#### 3. **Acquisition of business members**

Reach out to potential Signatories and Supporters for the Taskforce and Framework for Action model. The target is 100 Signatories or Supporters at the end of 2018; Midterm (end 2017) ambition is to have a minimum of 40 (additional) companies committed to the ambitions of the Taskforce, bringing representation from different sectors across the food supply chain.

#### 4. Starting of Pilots to build further evidence

Identify impactful ideas and actions, sponsored by a minimum of one Signatory/Supporter. REFRESH will support the realisation of the selected

ideas (as innovative pilot projects). The first two pilots are expected to commence in March/April 2017. Another 2-4 pilots will start end 2017/early 2018.

#### 5. Transparent about progress and actions

Signatory members will take concrete actions against food waste and report their progress transparently. Supporters will endorse the ambitions of the Taskforce and receive support for addressing food waste in a variety of ways. The REFRESH Protocol for evaluating business food waste (<a href="http://eurefresh.org/protocol-evaluating-business-food-waste">http://eurefresh.org/protocol-evaluating-business-food-waste</a> ) will be the guidance for quantifying food waste and setting the baselines for measurement.

#### 6. **Ecosystem for solutions**

Set up an "ecosystem" for solutions and an accelerator program to connect business needs/opportunities with solution providers. Extend the networks, and further develop a "community of experts". Targeted solutions providers are active in food processing, packaging, supply chain management, logistics, food quality, creative sector, ICT, consumer insights, marketing, etc. A set of instruments and tools will be available to support businesses (Signatories and Supporters) with their innovation opportunities. Ideas and business cases with perspective can be supported as a REFRESH pilot or with other National instruments. A home-base of the Ecosystem for Solutions will be the location ThreeSixty in Veghel.

#### 7. **Portal with best practices**

To share best practices, business cases, solutions, experiences, tools, models, protocols, etc. is seen by many businesses as an effective way to get inspiration and acquire new ideas or knowledge. The Taskforce has the ambition to set up – together with other organizations – an interactive portal for best practices. This will be developed in synergy with the REFRESH Community of Experts (CoE) portal.

#### 8. Consumer awareness campaign

One of the ambitions (to be further developed, work in progress) is to develop a framework for a long term, harmonized and consumer driven campaign, connecting with several existing initiatives and organisations. This is to be discussed further among the Taskforce members, and a working group has been formed to create a proposal to achieve such a consumer driven approach.

Figure 10: Launch of the TCEF (January 26, 2017)



#### Monitoring and evaluation

Monitoring and evaluation will be done at different aggregation levels. Signatories will report annually about progress within the scope of their business and actions (on a confidential base). Where possible and feasible, the impact of specific actions will be collected. These actions can be focused on a specific process or supply chain or broader, e.g. the impacts of a sectoral approach or aimed at specific target groups (like households). In addition, total impacts at National level will be determined quantitatively where feasible and qualitatively if no reliable data can be collected.

The reference definition for food waste used in the Netherlands in the annual food waste monitor is:

"food waste occurs when food that is intended for human consumption is not used for this purpose (including animal feed, anaerobic digestion, composed, incineration, landfill or being discarded)"

In quantifying the waste in kilograms, account is taken with the extent of high-value utilisation according to Moerman's ladder (Food use hierarchy). Food which was not intended for human consumption does not fall within the definition and is therefore not included in the quantification of waste. In piloting the FUSIONS definition and manual for the Dutch situation, it was concluded it will be possible to recalculate the amount of food waste in line with the FUSIONS definition of food waste.

In the monitoring methodology in the Netherlands a distinction is made between unavoidable, potentially avoidable and avoidable food waste flows. Only the potentially avoidable and avoidable fractions are considered as food waste. To differentiate between edible and inedible parts of food waste is a voluntary option and recommendation in the FUSIONS food waste quantification manual<sup>16</sup>.

<sup>&</sup>lt;sup>16</sup> Fusions Waste Quantification Manual

	2009		2010		2011		2012		2013		2014	
	Min	Max										
Veevoer	412	412	438	438	413	413	414	414	434	434	438	438
Vergisten	104	136	72	118	87	348	118	281	123	297	185	243
Composteren	524	957	503	881	544	993	500	918	500	885	536	869
Verbranden	759	963	815	956	746	1106	782	1010	754	926	743	965
Storten/Lozen	16	98	6	75	7	99	11	86	15	109	12	119
Totale												
bandbreedte	1.814	2.566	1.834	2.467	1.797	2.959	1.825	2.709	1.826	2.651	1.914	2.643

Estimates minimum and maximum amounts of food secondary resources within the destinations that are counted within the Dutch definition of food waste (avoidable and potentially avoidable)<sup>17</sup>

WUR (and where necessary other selected organisations) is responsible for the review of progress and taking account of confidentiality. Signatories must report progress at least annually (milestones as well as data). All the available information of the organisation is to be included for the demonstration of/ calculation of progress. Supporters must only show that they have carried out at least one action in a year.

Data from the various players will be collected and evaluated against the overarching Taskforce ambitions and REFRESH objectives to determine achievement. This ensures that data is never personalised and that only aggregated anonymous data is presented. At the same time it should make it possible for the actors to compare themselves with similar organisations and companies. A clear result of the achievements made by all the organisations involved in the entire Netherlands market will be determined at the end of 2018 (post-evaluation).

Besides the amount of food waste and the specific destinations, other indicators will be derived from the data such as environmental impacts, nutritional losses and social economic impacts (like food availability). More indirect indicators, or spill over effects of the actions, will also be collected such as awareness factors, and the maturity levels of organisations related to food waste prevention.

#### The Framework for Action

#### **Signatories**

A Steering Committee will be in place to approve the strategy, vision and roadmap, and safeguard a transparent process for communication and monitoring progress. In the table below the Steering Committee members at the launch of the Taskforce are listed.

<sup>&</sup>lt;sup>17</sup> Vollebregt, 2016, Monitor Voedselverspilling, Update 2009-2014

Figure 11: Dutch Taskforce members and ambassadors (February 2017)

Name organisation	Type of organisation	Member of the Task		
EZ	government	Martijn Weijtens		
CBL	retail (branche)	Marc Jansen		
AholdDelhaize, Albert Heijn	retail	Tony Vendrig		
LWM	food industry	Jolanda Soons		
Unilever	food industry	Gerard van der Krogt		
Scelta/Kids University for Food	food industry	Jan Klerken		
Foodtech Brainport/Proverka	food industry/technology	Jan van Rijsingen		
McDonalds Netherlands	food service	Manu Steijaert		
Hutten Catering	food service	Bob Hutten		
RijkZwaan	plant breeding/seeds	Anneke van de Kamp		
NVRD/VANG	waste management	Olaf Prinsen		
Google	IT/software	Michiel Bakker		
Moonen Packaging	packaging	Gé Moonen		
KIDV	packaging knowledge institute	Hester Klein Lankhors		
Natuur&Milieu	ngo	Hilde Engels		
Rabobank	financial sector/Banking for Food	Ruud Huirne		
Youth Food Movement	youth organisation	Jorrit Kiewik		
Milgro	waste service sector	Laurens Groen		
REFRESH	knowledge institute	Toine Timmermans		
Champions 12.3 & ambassadors				
AholdDelhaize	retail	Dick Boer		
DSM	industry	Fijke Sijbesma		
Natuur&Milieu	ngo	Tjerk Wagenaar		
WUR	knowledge institute	Louise Fresco		
Unilever	industry	Conny Braams		
VNO-NCW	branche	Hans de Boer		
FAO	UN organisation	Hans Hoogeveen		

#### **Framework Agreement**

The TCEF Framework for Action is targeted at the National level for the Netherlands. Representation of participants and signatories should reflect a balanced set of stakeholders, across the different supply chain stages, including solution providers, knowledge centres, financial institutions, government and civil society organisations.

The overall objective is to contribute to the development of the Circular Economy in Food. To a food system where all food resources have value, waste in principle doesn't exist and optimisation of utilisation of food resources is the leading paradigm. Important elements of the Circular Economy of Food, is to make a transformation from: linear supply chains to circular networks, from waste-management to in-control on food resources, move from known & best practices to innovation and new business models. An important mechanism for the Framework for Action is to build a community at a National level, with strong links to international initiatives

and regional communities, with clear focus on actions and concepts to accelerate the adaptation of impactful solutions.

Figure 12: Launch of the Dutch Taskforce, January 2017



The main ambition of the FA is that participants will commit to actively reducing food loss and food waste by;

- Contributing to the development of better instruments and systems for monitoring progress and determine impacts and opportunities
- Contributing to the developing a roadmap for action in the Netherlands
- Highlighting the issue and influencing public opinion and attitude
- Enhancing knowledge management and flow of information within the sector and throughout the supply chain
- Identifying issues, barriers and potential solutions
- Seeking and promoting good practices in prevention of food loss and of food waste, and better utilisation of food resources, side- and byproducts
- Taking part in projects and pilots
- Contributing to monitoring and reporting of food system related flows of materials and products

### **Pilot Innovation projects**

#### **Call for pilots**

Pilot projects will be carried out as part of the FA, and can be supported by REFRESH partners (via capacity, knowledge, tools, infrastructure, network, etc.) and will be communicated to the other participants of the FA. They will take a collaborative research and innovation approach across the whole supply chain, where strategies for the reduction of food waste and improved

valorisation will be developed and tested. Collaboration between actors within the primary production sector, manufacturing, retail, catering and hospitality sectors will be promoted, including interventions at household level.

On several occasions, including the kick-off meeting of the Taskforce, an invitation process has been announced for (prospective) Taskforce members to suggest ideas for pilots. Suggestions for pilot ideas derived from REFRESH activities and results have been taken into consideration in this process, with a focus on WP1 [consumers], WP2 [Decision Support Tools (DST)], and WP6 [valorisation].

The ambition is to start two REFRESH pilots before summer 2017. Potential ideas are being identified via bilateral discussions with Taskforce members, enriched via the feedback process and further improved to meet the basic requirements and criteria (impact, novelty, across supply chain approach, link to REFRESH vision, etc.).

#### **Selection process**

The FA sets out the scope and focus for selecting REFRESH pilots to identify and test novel approaches. The key focus areas for the pilots was defined by the Steering Committee, and aims to demonstrate the business advantages of increased transparency, innovative concepts and more effective collaboration among supply chain partners.

Ideas that fit within the scope and (draft) criteria for selection have been elaborated through bilateral discussions, enriched via a feedback process and further improved to meet the basic requirements and criteria. The ambition is to launch the first 2 pilot studies at the second Taskforce meeting in June 2017. The process for the identification of additional ideas, and selection process for the 2<sup>nd</sup> round of pilot projects will be set at the second meeting.

In Addendum II of the FA, a draft scoping document describes the focus areas for the selection of projects, including a mapping of existing and running public private initiatives and projects on food waste reduction in the Netherlands (Annex XX).

#### Agreed projects

Currently a number of project ideas are in the pipeline to be selected in the first phase:

- Transparency in the supply chain for fresh perishable products, enabled via next generation ICT, labelling (e.g. GS1 databar) and sensor technologies. With ownership and commitment by retail members and upstream supply chain partners.
- Personalised food planning as enabler, how meal-kits with fresh products can contribute to better planning, better replenishment and less food waste across the supply chain, including consumers at home. What are innovations needed (e.g. ICT, packaging) to support effective delivery chains.
- **Design of a logistics network model** as enabler to create a platform for surplus-food entrepreneurs to collectively deliver a portfolio of surplus products to retail outlets.

• **Circular economy model "Oer-egg"**, producing high quality eggs, with the highest animal welfare and sustainability specifications in the market, feeding chickens with insects fed on vegetable waste streams.

Additional ideas are also being explored which could be ready for selection as a second phase of pilots:

- Smart packaging concepts for fresh perishable products, supported by latest generation packaging performance materials, quality management and validated within the pilots with whole supply chain approach.
- **Fish feed produced by insects**, fed on food surplus from plant based side flows
- **Municipality projects** with a focus on reducing food waste at a household level, looking at attitudes and behaviour change and working with regional/local partnerships of stakeholders (waste management, retail entrepreneurs, ICT-tools, civil society, etc.)

# Hungary

#### Formation of the PWP

#### **Initiation and set-up**

The Hungarian Pilot Working Platform (PWP) is referred to as **"Food is Value"- Forum against Food Loss and Waste** to reflect the significant amounts of valuable food being lost, while at the same time representing a huge opportunity for value creation both from a sustainability and a social aspect.

A Steering Committee was convened to be representative of the different stakeholder groups, and structured to consist of a core (smaller) group together with a broader group of potential stakeholders. The size of the Steering Committee was felt to be a key success factor, so the decision to keep it small was primarily to accelerate the decision-making process. The involvement of the wider platform members will be sought where relevant to specific projects, and to date there has been positive indication that members will be active in participation.

The Steering Committee comprises a selected team of Forum members representing the main segments of the food chain, together with relevant main national authorities and NGOs. However, all member organizations are invited to take part in Forum roundtable meetings once a year in order to discuss progress, current events, and potential collaborations. Working groups will be formed for more detailed topics accordingly.

Other than the project funding through REFRESH which is primarily designated to the Hungarian Food Bank Association (HFA) - as the Secretariat, HFA manages operations - there is no additional funding or budget for the Forum. To account for the lack of funding, the innovative

pilot projects are planned to involve partners that can offer some resource such as co-funding, or in-kind contributions.

#### **Governance and funding**

The Platform members were originally invited by the Ministry of Agriculture and the HFA; the primary selection criteria for invitation was the existing relation to the food supply chain with existing activities, or potential involvement/influence on food waste. Invitations were sent out in five different segments: government bodies and related public institutions, sectorial associations, research and academic institutions, non-profit organisations and some major private companies. E-mail invitations were followed by telephone, and in some cases personally meeting contacts, in order to convince potential target members to join the Platform.

A Steering Committee was convened with the role of determining policies and direction, and to lead communication with all participants. In addition it discusses the progress made in the main projects as well as the agenda for roundtable meetings. Steering Committee meetings are scheduled 3-4 times a year.

The main role of the Steering Committee is to:

- Assist in providing direction for the Forum through their expert contributions
- Set the main goals and priorities for the Forum activities, to which the signatories undertake to contribute
- Administer changes to the FA document if necessary
- Provide support and offer advice in the implementation of innovation projects
- Facilitate communication with all Forum members
- Spread the goals and values of the Forum within Hungary and across the FU
- Improve organisation structure in order to achieve the most efficient operation

#### **Recruiting members**

The existing platform in Hungary meant that HFA did not have to actively recruit for more members; instead they identified the key strategic partners who provided the optimum mix of organisations to promote and encourage further action.

Even at this stage of the process, HFA were initiating bilateral conversations with the wider Forum members to gage their interest in future innovation projects, in line with the aims of the FA.

The Steering Committee members were finally selected by two important factors;

1. the Steering Committee as a whole should represent all key segments of the food chain,

2. Steering Committee members should be committed to actively participate in pilot projects.

#### **Establishing Actions**

The local priorities for Hungary were discussed initially via bi-lateral discussions with the core members of the PWP, giving each partner the opportunity to share their thoughts and allowing for more productive conversations to be held.

The setting of priorities was further discussed in the first official PWP meeting on the 22nd March 2016. These discussions focused on the current situation in Hungary, but also accounted for wider political and legislative trends. The need to combat food waste has been given top most priority in the current sustainability debate as confirmed by the goal of the 193 UN Member States (MS) to halve food waste. The Member States have defined the latter in the context of the Sustainable Development Goals (SDGs). Through the Forum, the overarching aim is to contribute to the realisation of SDG12.3 by halving the per capita food waste by 2030, also supported by EU Member States as formulated in the Circular Economy package.

A proposed draft FA was circulated to the members ahead of the first meeting, and discussed in more depth during the meeting itself. During these meetings, edits to the draft FA were agreed and made, and the FA document was finalised shortly after.

It was agreed that the most productive route to tackling these priorities was through a series of defined actions as highlighted below;

- Set a definitive baseline for current levels of household and supply chain food waste in Hungary. Adaptation of the food waste hierarchy, especially the top 3 levels: reduction, redistribution and promoting measures which increase food valorisation
- Demonstrate that a voluntary approach can lead to supply chain waste reduction without the need for additional legislation, creating a healthy balance of regulation and self-regulation
- Raising awareness of food waste issues and forming of consumer attitude
- Identifying and addressing hotspots in retail supply chains to prevent waste
- Working with the hospitality and tourism industry to improve practices and consumer behaviour to prevent waste

#### **Monitoring and evaluation**

Due to the lack of significant food waste data in Hungary, an important part of this project was to enable and support the PWP members in the collection of this data. Consultations between the Ministry and Statistical Office have identified this as a focus previously, but budget constraints have meant this hasn't happened. The feeling is that it should be a general obligation for every supermarket, however it has proved hard to convince the Statistical Office to do this on a voluntary basis – it will most likely become a requirement. In response, the plan through REFRESH is to collect bottom up data from each of the intervention projects and use this to create a national

picture. The FUSIONS project proved this method can work and is similarly accurate to top down national statistics.

The first project-based activity will be to develop a general baseline. By signing up to the FA, the members agreed to measure and report their progress however not all members will be required to if they are not active 'project participants'. To differentiate, the FA recognises 2x diff types of organisation;

- Acting organisations
- Supporter organisations

There was some resistance (as expected) from members about sharing this type of data. Comparisons were made to other retailers who had not always received positive media attention when sharing published, previously unseen data.

#### **SUMMARY / KEY LEARNINGS**

Every member has a special focus, so bi-lateral conversations allow better understanding of their needs and priorities.

Plenty of opportunities to work in innovation projects – it is motivating for the participants when they see people are doing something within their sector.

A lot of correspondence happens in between meetings – steering committee meetings should not be the only decision making opportunity.

#### The Framework for Action

#### **Signatories**

A number of organisations are actively participating in the overall process and attending the meetings of the PWP. The below table highlights the organisations who had officially signed the agreement at the time of preparing this report.

Figure 13: Members of the Hungarian PWP (February 2017)

Ministry of Agriculture	Government
Ministry of Human Resources	Government
Agricultural Research Institute	Government
ÉFOSZ (Alliance of Hungarian Food Manufacturers)	association
TESCO	company
HORECA Marketing Club	association
Budapest Wholesale Market	public company

#### **Framework Agreement**

#### **Overview of PWP meetings**

The first meeting of the PWP Steering Committee was held in Budapest on March 22<sup>nd</sup> 2016, representing the different stakeholder groups across the food and drink industry in Hungary. The aim of the initial meeting was to identify goals, priorities and responsibilities, and to start thinking about potential intervention projects that could help achieve those goals. The Steering Committee assigned research, knowledge sharing and raising of awareness as the first steps, which will be started in each segment of the food sector.

The areas of focus that emerged from the round table discussions were: goal setting, priorities, responsibilities, communications platforms and the potential projects that could help achieving the goals. WRAP presented best practices from the UK to demonstrate the types of intervention projects and activities which could support the Framework going forward.



Figure 14: Meeting of the Hungarian PWP (March 2016)

The participants posed several questions about the legislative background and the international examples. The meeting demonstrated that collective thinking can help to find the solution to complex problems.

The next Steering Committee meeting is scheduled for February 2017, with a larger conference planned for September 2017. HFA have recognised that the ability to knowledge share is invaluable, so in addition to regular meetings, they share relevant or topical information via newsletter and also on their own bespoke online Knowledgebase.

One of the Steering Committee members, TESCO organised a food waste conference event in October 2016, which also served as an international meeting opportunity between experts from the REFRESH project and Hungarian Platform members. The REFRESH team actively participated in the professional preparation of the conference and also provided 4 experts for different panel discussions. The conference was successfully held on the

11 October 2016 with circa 100 participants. The event also included "food waste aware" catering provided by the Hungarian Food Bank Association.

Figure 15: Food Waste Conference, Hungary (October 2016)





### **Pilot Innovation projects**

#### **Call for pilots**

Bilateral conversations about potential pilot projects were started early on, during the Steering Committee creation phase. The initial idea was to launch at least one project in each of the main food chain segments. Steering committee members also act as a link towards other members of the specific segment.

#### **Selection process**

During the preparation phase, HFA discussed the potential ideas with the other REFRESH members in order to be in line both with the Hungarian PWP's and REFRESH's goals. The main selection criteria were the strategic fit, the commitment of the participating PWP partners and the potential impact and feasibility of the project idea.

It was further agreed that each project should be launched and managed in such a way that it suits the participating organisations and provides the greatest possible value to the fulfilment of the Forum's main goals. Based on the individual project plans the participating parties are involved in reducing food waste and food loss.

#### **Agreed projects**

As of early 2017, the HFA has agreed three innovation projects with members of the Forum.

1) "Just like at home": is a project between the HFA and the HORECA Marketing Club, with other interested stakeholders including UNICEO (United Networks of International Corporate Event Organizers) and BCSDH (Business Council for Sustainable Development in Hungary) who are representing the "corporate client" side in the catering process.

The aim of the project is to dissolve the paradox of "oversupply by virtual needs" and creating a common basis of understanding and awareness about the issue of food waste in the whole chain (from caterer to consumer) by

matching a realistic/real demand/supply in this special type of consumer scenario where the cost of food is not a primary selector.

Based on well selected criteria and test results a further aim is to gain a wider acceptance and thereby creation of a de facto "market standard" for food waste aware event catering both in Hungary and in other countries.

2) "Broadening the bridge" – modelling and increasing channel capacities in food surplus redistribution: The goal of this project is to model the total cost of redistribution within the "redistribution supply chain" including food banks and redistribution partner organisations, calculate the potential return on investment in case of additional funding and look at possible funding sources, especially concentrating the existing resources in the social care system such as using the existing (and maybe underused) capacities and potential funding sources such as the EU Fund for European Aid to the Most Deprived (FEAD) program. Redistribution organisations already face a significant lack of resources, delaying or scattering the redistribution activities. This problem will probably become more serious in the near future and will create a bottleneck for the whole second level of the food waste pyramid.

The main partner in the project is the Ministry of Human Resources of Hungary, who is in charge of all social affairs in Hungary, including the strategic management of the social care networks as well as the management of the Hungarian operational program of the FEAD Program.

3) "Ugly but tasty" - Creating value for imperfect fruit and vegetables: The main goal of this pilot project is to start working on a "farm to fork" approach to food waste related activities in the fruit and vegetable sector. This chain is one of the shortest chains as processing is not a part of it, thereby the focus is on the full chain from production through to consumer.

The main focus of the project is on the lower quality products, where the plan is to test possible channels for both on a marketed (sale) and a non-marketed (free redistribution) basis.

# **Spain**

#### Formation of the PWP

#### **Initiation and set-up**

Undoubtedly food waste is more and more in the public agenda in Spain. Although not having a unique and coordinated strategy to reduce food waste, in the recent years there has been a flourishing of numerous initiatives that aim to reduce food waste in diverse settings and in a

diversity of manners. These existing initiatives are varied and the majority of them are centred on food waste being generated at the consumer level.

A number of studies have attempted to quantify and analyse the food waste being generated in Spain or specific regions within it. Although the methods and definitions of food waste are diverse all of them contribute to create a picture of the situation at the consumer level in Spain. There are different levels of knowledge across Spain on the subject of food waste particularly in the autonomous regions, resulting in different approaches to the prevention of food waste and independent actions carried out.

A quantification at the primary production level was carried out in 2014 by the Ministry of Agriculture, Food and Environment of Spain (Magrama, 2014b). The study aims at analysing the situation and approximates the volume of food loss and waste in different stages of the primary production stage, namely: cultivation, harvesting, handling and conditioning. The study was conducted in two phases: a qualitative assessment, based on a round table, and a quantitative estimation by mean of 390 telephone interviews with producers on different subsectors: citrus, other fruits, vegetables, fats and oils, wine, cereals and legumes. The vegetable sector had the highest percentage of losses and waste, 29.2%; the citrus sector had the lowest percentage of losses and waste 22.5%. It should be noted that the study used different concepts such as food losses, potential food waste and avoided food waste. Therefore, it cannot be compared directly with other studies.

As for the industrial processing stage, the volumes are estimated based on a survey completed by a sample of 67 food companies located in the Ebro Valley, Navarra, La Rioja and Aragon. The results indicate that the bakery industry has the highest food waste rate (22%) (Magrama, 2014a). At the distribution stage, another study identified food waste as 1.3% of the food sold. Bakery products and fruits and vegetables were identified as the more relevant produces – comprising 60% of the total food waste (Magrama, 2014). In the same study, food waste at the collective and commercial catering stage was reported at 13.5%. The volumes were mainly identified during the preparation of food and consumers' leftovers.

Finally, at the household level, the Ministry of Agriculture, Food and Environment presented a quantification using data from a consumer's panel that collects information semi-annually from 1,000 households in Spain. The results showed that in 2015 households generated 1325.9 kg of food waste, which was 4.53% of the food purchased. Differences were identified concerning type of food. Fruits and vegetables and fresh bread were the most discarded food products (48% of total food waste). Consumers tend to waste less cooked or prepared than fresh food. The study highlighted the stationarity of food waste, with 9.4% more food waste being generated during spring to summer than in autumn and winter months (MAGRAMA, 2016). Previously to the latter report, the consumers organisation HISPACOOP (2012) quantified consumers' food waste in Spanish households through online questionnaires and a dietary cooking panel. The results showed that each household generates 76 kg per year. Households with less food waste amount are those with four or more members, higher social class, and living in the autonomous communities of Andalusia, Canary Islands and Galicia. Whereas the profile of households that generates more food waste are composed of two members, and in the autonomous communities of Catalonia and Madrid.

There is a lack of studies quantifying the whole supply chain using the same methodology. Nevertheless, there are examples of partial food chain quantifications. For example at the Catalan level, food waste was quantified at the final stages of the food supply chain (from retail to households) using direct measurements in the waste treatment plants in 2010 by the Catalan Waste Agency (ARC and UAB, 2011). Results showed that about 262,471 tonnes of food are wasted every year in Catalonia, 35 kg per person/year.

Interest in food waste reduction has been increasing in recent years. A variety of initiatives have been initiated and lead by different stakeholder profiles: institutional: "Mas alimento menos desperdicio" (MAGRAMA, 2013), "Som gent de profit" (ARC, 2016) food business association: "La alimentación no tiene desperdicio, aprovechala" (AECOC, 2016); consumer organisations and NGOs: "Yo no desperdicio" (Prosalus, 2016) or "No tires la comida" (OCU, 2016).

There is a map identifying where different types of activities to reduce food waste can be found: one from the Plataforma Aprofitem els Aliments (PAA) <a href="http://aprofitemelsaliments.org/mapa-diniciatives-per-laprofitament/">http://aprofitemelsaliments.org/mapa-diniciatives-per-laprofitament/</a> which identifies projects across Spain and the rest of the world.

Taking guidance from the work package leaders and maintaining consistency with the other pilot countries the partner in Spain, CREDA-UPC-IRTA, looked to assemble a Pilot Working Platform (PWP), which contained representation throughout the whole food supply chain from a mix of stakeholders, including food sector businesses, government and NGOs. In addition, CREDA-UPC-IRTA wanted to ensure the membership represented a diversity of experiences related to food waste generation and prevention, and contained a balance of Catalan and Spanish organisations. It was particularly important to ensure representation of the primary, retailer and hospitality sectors, which are of vital importance in the region. In order to facilitate understanding, the PWP was renamed REFRESH Platform in Spain.

In order to gain as wide coverage of various sectors as possible, CREDA-UPC-IRTA decided to focus on inviting associations representing key parts of the value chain, rather than individual businesses. This avoided the accusation that one or two small businesses held greater influence over the development of what could be an influential piece of policy in the future, should the Framework for Action (FA) be more widely adopted beyond REFRESH. The planned next steps will be to extend the invitation to individual retailers, producers and manufacturers.

Associations act as both a representative voice of their membership and a dissemination route, sharing information gained from PWP meetings and involvement in pilot projects with their members (businesses). This has the advantage of spreading information quickly and evenly across a sector and reaching more businesses.

One limitation to this approach is that there are no businesses directly involved in the PWP making it harder to discuss and agree the scope of and participants in pilot projects. Another is that, with no direct economic or corporate social responsibility drivers, associations may be less committed to the actions arising from any framework for action. This could mean that whilst the PWP membership is interested in the topic and happy to contribute to discussions about priorities, reflecting their members' interests and also receptive to hearing and transmitting outputs which are of use to their members, they may not be fully committed to taking action. They are

also not actively involved in tackling food waste within their own businesses, meaning that they are not measuring and reporting progress.

Since the feedback from initial meetings of the PWP has been disseminated, some of the members of the various associations have approached CREDA-UPC-IRTA to become members in their own right. It is the strategy across the four pilot countries to expand membership of the PWP once the Framework for Actions (FAs) are established in order to find project partners, disseminate results and best practice, secure additional measurement and reporting and to build consensus across the food sector for a framework agreement.

#### **Governance and funding**

CREDA-UPC-IRTA provides the secretariat function for the PWP and leads on the definition and management of pilot projects, which reflect the agreed national priorities and address food waste along the whole value chain.

The PWP was initially formed to reflect a good mix of actors in the food value chain, as well as government and non-governmental organisations with an interest in tackling food waste. CREDA-UPC-IRTA set out to recruit around 16 members reflecting this mix whilst retaining a small enough group to be effective at decision making.

Within the framework of the PWP, the participating organisations will meet once or twice per year, on collectively scheduled dates, in order to share progress on relevant topics, as well as to explore potential collaborations. If a need emerges to change the governance organization, the steering committee will decide how to change the structure on the basis of a majority of 75% of the participants and with a minimum quorum of 50% of the members.

The role of CREDA-UPC-IRTA is to:

- Coordinate the steering committee;
- Organise the annual or biannual meeting of the steering committee;
- Produce an annual report about the member's activities and advances of the steering committee, ensuring total confidentiality, and processing this data on an assessment of the overall objective of the UN SDG12.3 in Spain by the end of 2018;
- To support and monitor the pilot project;
- Aggregation of data: data submitted by the various participants will be used to assess the overall objective of the ODS in Spain at the end of 2018.

The role of the PWP in Spain is to contribute in:

- Acting as a steering committee to:
  - Assist in providing direction for the FA in Spain through their expertise contribution;
  - Provide support and offer advice in the implementation of pilot projects to support the objectives of the FA;

- Measure and report progress of agreed actions both within and without Refresh so that a picture of progress towards the objectives of the FA can be mapped.
- Acting as a voice for the FA and ambitions of the REFRESH Pilots
  - o Spread the goals and values of REFRESH and FA;
  - o Promote the successes and benefits of the FA;
  - Recruit additional signatories;
  - Encourage government to support the ambitions of the FA and PWP.

In order to fulfil the second of these roles, the PWP will work to become an extended platform of interested parties who will facilitate building consensus and momentum to build the FA into a nationally significant movement against food waste.

#### **Recruiting members**

The process of recruiting members for the PWP was a contradictory endeavour. The fact that food waste is a recently emerged notion implies that institutions and government have not yet been able to build supportive political schemes. Also the fact that it is a new policy issue also comes with certain disagreement and inconsistencies on the very definition of food waste, and consequently on the most appropriate action to be taken or promoted to tackle this issue. However, the increasing social awareness on the food waste domain is obvious at all levels, from small local NGOs to different governmental organizations and businesses. This is clearly shown by the myriad of small experiences tackling food waste that are spread over the territory as demonstrated during the process of recruiting members for the PWP. Almost all people and organizations that were contacted agreed to join the steering committee.

It was noticeable that a lack of offer of financial support, by REFRESH, and a lack of legislative threat, by the government, made it harder to recruit members for the PWP. Without a clear offer of financial support or government pressure it was not obvious that PWP members could easily be recruited. What helped to attract organisations was the scale and reputation of the REFRESH project and the involvement of so many highly regarded partners. The increasing social awareness and the imminent push to take action against food waste that is expected to come from the Circular Economy package from Brussels also played a role in generating a positive atmosphere.

The PWP is open to all people and organizations that are willing to participate and work to reduce or prevent food waste in their area of intervention. However, to build the PWP, the initial focus was on members that covered the different existing experiences in the region concerning food waste. Around 10% of the signatories of the FA were organisations that got in touch with CREDA-UPC-IRTA as the coordinator of the PWP to join the platform. In line with this, some of the companies and political actors had offered support at the bid stage of REFRESH, proceeding to become members of the PWP. The majority of the signatories are organizations that were suggested to us by other members of the PWP. The snowball

methodology was the one leading the recruitment process, as well as the concern on providing the PWP with the largest possible diversity of profiles on food that exists in the region.

The strategy for recruiting members was to hold a series of bi-lateral discussions to explain the REFRESH project and the ambition for the FA in Spain, which preceded the invitation of members to the first meeting. This was a similar pattern to that followed in Germany, where there was not already an existing association of organisations in place.

In the second meeting of the PWP the potential members were asked to sign an expression of interest to join the steering committee, which was followed by official signatures a few weeks later.

#### **Establishing Actions**

Having recruited the core membership of the PWP, CREDA-UPC-IRTA, organised the first meeting of the members. On March 2, 2016, the PWP met in Castelldefels (Barcelona) with the objective to develop a Framework for Action to reduce food waste in Spain took place. Stakeholders with a shared interest in tackling food waste at a national level discussed the extent of the problem and identified potential solutions, creating a strong foundation for future collaborative work.



Figure 16: First meeting of the Spanish PWP (March 2016)



A variety of organisations, ranging from primary production and consumer associations to public administrations participated in the meeting: FIAB, ASEDAS, FCAC, AECOC, HISPACOOP, Mercabarna, ARC, AMB, PAA, ADICAE, Espigoladors and Barcelona Food Bank. As shown in Table 3 the majority of these officially joined the platform. Presentations were given by CREDA-UPC-IRTA, WRAP and Feedback, followed by small interactive round table discussions to identify the priorities to tackle food waste in Spain.

The objective of the workshop held during the first meeting of the PWP was twofold: first, to identify those sectors and stages in the food chain where food waste is highest, and second to examine the most convenient ways to measure food waste and the success of the future pilot projects (see Figure 17 for the results of the workshop).

The workshop was organised in three different groups. In each group, three different questions were tackled in relation to food waste in Spain:

- i. What priorities do you identify for food waste reduction in Spain? Where are hotspots? Who are the most relevant actors in these hotspots?
- ii. How would you measure the success of the pilot projects? What objectives of reduction seem pertinent to you? What kind of indicators should be employed?
- iii. Solutions to reduce food waste in Spain.

CREDA-UPC-IRTA used the World Café approach to build consensus on these questions to then be able to identify the key priorities for Spain through debate between the partners. The World Café is a methodology employed to run a structured conversation process on a given issue. Initially these discussions are being run in small groups; later on a process of linking ideas within the larger group is conducted. All this process is being run with the help of several facilitators. The name of the process relates to the fact that this methodology aims at recreating informal cafe shop conversations, as a means to facilitate conversation and enhance creativity and good disposition to reach consensus.

In the end, the participants enjoyed socially responsible, anti-food-waste catering prepared by the chef Mayya Papaya (Foodisms) using rescued ingredients.

Figure 17: Results of the World Cafe workshop.

**CRITICAL POINTS SOLUTIONS INDICATORS** STAGES INCREASE SENSITIVITY Lack of data Children **OBJECTIVES OF REDUCTION** Consumer Good practices Primary production Balance between what is effective and feasible **Economic impact** Difficulty in establishing objectives of global reduction MOTIVATION CATEGORIES/SECTOR Be aware of the importance of communication Corporate image Avoidable food waste Good practices Perishable food LOGISTICS AND MANAGEMENT Seasonal produce PRIMARY SECONDARY ICT in retailing and wholesaling Catering Money saved Employment opportunities Kg food recovery Smart packaging Kg food waste Sales models Food rations dispensed - CO<sub>2</sub> emission reduction **EVENTS** Consumer cooperatives Kg made / kg traded / kg People involved Excess produce from fields Local food networks consumed - Profit from processed Product withdrawal due to price REGULATION % of reduction regulations product Aesthetics standards Price vs cost Fishing discards Climate Date of expiry and best before Commercial standards

On September 22, 2016, the second meeting of the steering committee of the Spanish PWP took place at the headquarters of CREDA-UPC-IRTA in UPC's Baix Llobregat Campus in Castelldefels (Barcelona). Representative stakeholders across the food chain met to agree on a Framework for Action to set up their collective engagement of working to prevent or reduce food waste.

The organisations in attendance were: AECOC, ACES, HISPACOOP, MERCABARNA, Agencia de Residuos de Cataluña, COAG-JARC, Plataforma Aprovechemos los Alimentos, Espigoladors, FIAB, ASEDAS, PROSALUS, PACKNET, FCAC, Àrea Metropolitana de Barcelona, GASTROFIRA and Banco

de Alimentos de Barcelona. The social enterprise Espigoladors prepared an anti-food-waste catering.

At this meeting CREDA-UPC-IRTA presented the first draft FA, which had been circulated for comment in advance. Through the collection of individual feedback and discussion in the second PWP meeting, the members mutually decided on a final version of the agreement. One of the key focal points was agreeing on a definition of food waste.

The FUSIONS definition "Food waste is any food, and inedible parts of food, removed from the food supply chain to be recovered or disposed (including composed, crops ploughed in/not harvested, anaerobic digestion, bioenergy production, co-generation, incineration, disposal to sewer, landfill or discarded to sea", was too controversial in Spain, with a number of members rejecting this definition completely. This was proving to be a barrier to progress with the collaborative approach of the FA and so it was removed for the purposes of the first signing of the agreement.



Table 2: Signatories of the Framework for Action in Spain.

As with the other pilot countries, the PWP in Spain concluded that the main goal of the FA should be to make progress towards the UN SDG 12.3 target, of reducing retail and consumer waste by 50% by 2030. In Spain, this would be achieved through:

- 1. understanding the current levels and causes of food waste from production to consumption,
- 2. raising awareness among the actors of the food chain and the general public on the undesired effects associated with food waste and the positive effects of reducing it, and
- 3. encouraging innovative initiatives to reduce and prevent food waste, particularly to address the most critical points of the food chain.

The FA became the tool which brought together existing activities and identified opportunities for new, targeted opportunities for collaboration across the food sector, government and NGOs.

In addition to this, the PWP members identified the main priority areas for Spain through the World Café workshop, considering both the volumes of food waste generated and the relevance in Spain of the related economic sector. The key areas of interest as shown in *Figure 17* were the hospitality sector, consumers, and primary production. These priority areas then formed part of the criteria in the identification of potential pilot projects.

The final Framework Agreement can be found at **Error! Reference source not found.**.

#### **Monitoring and evaluation**

Signing up to the FA included agreeing to collect and submit information. In particular, signatories are committed to promote measures that contribute to the overall objectives established in the FA. Two main kinds of measures are considered: activities and pilot projects. Activities can cover any actions supported by participants that are in line with the objective of the FA. In order to share information, enhance synergies, promote communication and foster action, on an annual basis, the signatories of the FA are encouraged to report to the steering committee. This includes the activities supported in the past year and the provision of activities programmed for the coming years in the form of an action plan, where it would be desirable that targets and progress measurement were made explicit. CREDA-UPC-IRTA will be in charge of preparing an annual report covering all these activities supported by the members of the steering committee.

In addition to the development of the framework agreement, 3-4 pilot projects will be conducted. The aim of the pilot projects (PP) is to examine the effectiveness of specific initiatives to reduce food waste, and explore potential for scaling-up. The PPs are selected considering the willingness of organisations to participate (not necessarily members of the PWP) and coverage of the identified hotspots in Spain. CREDA-UPC-IRTA will support and monitor all PP. Periodical reports of the development of the PP will be facilitated by CREDA-UPC-IRTA to the SC, in order to share information, enhance synergies and promote communication. It is expected that the PP will last at least two years; although their exact implementation will be subject to the particular specificities of each case.

Building trust is very important. Therefore the FA states that CREDA-UPC-IRTA will collect and handle the information of the individual organisations involved with utmost confidentiality. Only aggregated results will be discussed and shown within the group. If necessary, CREDA-UPC-IRTA will sign a confidentiality agreement. The data reported by the various participants will be employed to evaluate the attainment of the overarching SDG objective in Spain at the end of the 2018. Data will not be available in an individualized manner, but will only be accessible in an aggregated mode

#### The Framework for Action

#### **Signatories**

As mentioned above, at the end of the Second meeting of the PWP and after agreeing on the final content of the FA, the people and organizations attending the meeting signed a 'willingness to participate' document. In the weeks that followed, all of them sent to CREDA-UPC-IRTA, as coordinator of

the platform, the official signature (see below the updated list of member of the PWP in Spain).

**Table 3: Members of the Spanish PWP** 

SIGNATORIES	DOMAIN
ARC (Agencia de Residus de Catalunya)	Waste management Catalan Agency
AMB (Área metropolitana de Barcelona)	Metropolitan Region of Barcelona Government
Mercabarna	Barcelona Wholesale Market (fruit vegetables, fish and slaughterhouse)
Banc Aliments Barcelona	Food Bank
Federació de Cooperatives Agràries de Catalunya	Catalan Association of Cooperatives
Espigoladors	Gleaners – Social enterprise
Plataforma Aprofitem els Aliments	Platform for Resourceful food use Civil society association
HISPACOOP (Confederación Española de Cooperativas de Consumidores i Usuarios)	Spanish Confederation o Cooperatives of Consumers and Users
AECOC (Asociación de Fabricantes y Distribuidores)	Manufacturers & Distributors Association – GS1 partner
GASTROFIRA	Catering Service of Barcelona's Trade Fair Organization
ASEDAS (Asociación Española de Distribuidores, Autoservicios y Supermercados)	Spanish Association of Wholesales Self-services and Retailers
PROSALUS	Civil society association
Nutrició Sense Fronteres	Nutrition Without Borders - Civi society association
PACKNET (Plataforma Tecnológica Española de Envases y Embalaje)	Spanish Technological Platform Packaging
ACES (Asociación de Cadenas Españolas de Supermercados)	Association of Spanish Supermarkets
COAG-JARC (Coordinadora de Organizaciones de Agricultores y Ganaderos – Joves Agricultors i Ramaders de Catalunya)	Farmers' Union
Most will be active participants in pilot projects by	t come may be more

Most will be active participants in pilot projects but some may be more passive, presenting their own activities to the group, thirdly some attend and listen and can spread results and good practice out to members for wider dissemination.

#### **Framework Agreement**

The Spanish Framework Agreement is less prescriptive than some others, reflecting the early stage and disparity of activity in Spain. As with the other 3 FAs the Spanish document sets out the ambition to galvanise and coordinate efforts to help Spain progress towards UN SDG12.3 target to reduce retail and consumer waste by 50% by 2030, through taking action against food waste along the whole supply chain.

Based on the priorities established by the PWP, the FA sets out three key areas of activity around which signatories / partners can collaborate to progress towards the agreed target. These are:

- I. Understanding the current levels and causes of food waste from production to consumption. This reflects the current lack of baseline data on food waste levels and causes of food waste along the value chain in Spain, either in consumer or manufacture and retail sectors. Without a baseline or understanding of causes, it is not possible to decide on the most appropriate interventions, nor to measure and evaluate progress towards the UN SDG target. Therefore the primary goal of the FA should be to encourage the collection and analysis of suitable data in order to set a baseline, identify hotspots and trends and allow measurement of progress in future.
- Raising awareness among the actors of the food chain II. and the general public on the undesired effects associated with food waste and the positive effects of **reducing it.** Food waste is a relatively new policy issue. Consequently the need to raise awareness is obvious, as well as the acute lack of data. However, awareness is growing quick among the general public, businesses and government. But more work needs to be done to consolidate food waste within the policy and businesses' agendas. Whilst there is general sense that food waste is an issue, the specific causes of this and the solutions are not known in detail. More food for thought is required to activate action in the food sector businesses, consumers and government. Therefore general awareness-raising among consumers, government and the retail supply chain actors is important in order to encourage behaviour change and adoption of improved practices. This could take the form of consumer awareness campaigns but also of bi-lateral discussions with key retailers who exert influence over their supply chains, as well as key suppliers of branded and own brand products in Spain.
- III. Promoting innovative initiatives to reduce and prevent food waste, particularly to address the most critical points of the food chain. These are then reflected in the choice of pilot projects.

Signatories are committed to undertake measures that contribute to the overall objectives established in this FA. Two main kinds of measures are considered: activities and pilot projects. Activities are all interventions participants conduct that are in line with the objective of the FA of reducing food waste in Spain. Pilot projects are specific projects run to examine the

effectiveness of specific initiatives to reduce food waste, and explore potential for scaling-up of the given measures to reduce or prevent food waste generation in Spain, and specifically in the hotspots identified.

Each PWP member has a series of priorities or targets. Any collective agreement in this domain should be designed in such a way that it suits the organisations involved, and provide the greatest value to the organisation while reducing or preventing food waste.

## **Pilot Innovation projects**

#### **Call for pilots**

As with the other pilot countries, in Spain the approach to selecting pilot projects was one of collaborative development rather than a traditional call for projects. Through the World Café workshop, the key areas for action along the value chain were identified (as above –with a focus on retailers, primary production and hospitality). In view of this, CREDA-UPC-IRTA then worked with the members of the PWP to identify ideas for projects which would have impact in the key areas of the value chain.

The FA document sets out the approach to pilot projects as: 3-4 pilot projects will be conducted. The aim of the PP is to examine the effectiveness of specific initiatives to reduce food waste, in previously identified hotspots, and explore potential for scaling-up. The PP will be selected considering willingness to cooperate by specific organizations and effective coverage of the identified hotspots in Spain – mainly hospitality, primary production and retailers. CREDA-UPC-IRTA will support and monitor all PP. Periodical reports of the development of the PP will be facilitated by CREDA-UPC-IRTA to the PWP, in order to share information, enhance synergies and promote communication. It is finally expected that the PP will last several months during the next two years; although their exact implementation will be subject to the particular specificities of each case.

In the second meeting of the PWP, not only the results of the World Café workshop, setting the priorities collectively identified to tackle food waste in Spain, but also several potential pilot projects were introduced.

#### **Selection process**

In the process of identifying potential pilot projects, several criteria were employed: (i) willingness to collaborate of the given organization; (ii) belonging to the food waste hotspots identified for Spain; (iii) potential for scaling-up; and (iv) offering solutions of an innovative nature. Keeping these criteria in mind, as coordinator of the PWP, the CREDA-UPC-IRTA made an active search for tentative candidates and interventions. Multiples are the conversations and meetings celebrated and being celebrated for this endeavour.

**Table 4: Agreed projects** 

PILOT PROJECTS	DESCRIPTION	DOMAIN	STATE OF AFFAIRS
1/ GASTROFIRA	Offering anti-food waste catering	Hospitality	The pilot with Gastrofira was

options to Gastrofira's customers.

2 fairs will be examined each year. First year quantification and second year antifood-waste intervention.

initiated and the first exercise of quantification was conducted in a 2000customers, four-day big event.

In preparation the second quantification.

producers

2/ WHOLE CHAIN OF TOMATOES

100 tomatoes of the breed "tomàquet de penjar" will be followed from the field to the table, in collaboration with the Cooperative of "Cooperativa Conca de la Tordera".

Whole chain

Undertaking the preliminaries.

A Life Cycle Assessment will be conducted throughout the chain to identify the flows of materials, energy and food waste that occur at each stage of the chain.

The objective is to minimize the generation of food waste at the pre-farm gate stage of the food chain, specifically the prevention of food waste in the fishing domain.

consumed will now be employed to make

fish soup in a particular fishers' quild of Valencia: Cofradía de Pescadores de Villajoyosa.

3/ FISHING

Primary production Little fish and fish that are not usually

Undertaking the preliminaries.

OTHERS: Espigoladors, Mercabarna, **Nutrition Without**  Bilateral talks to organize further pilot projects are being run with other

Diverse

In process.

# Learning points and next steps

Given the exceedingly tight timescales on the project, the establishment of four individual PWPs and agreeing a FA for each has proven particularly challenging, particularly taking into account that this is being implemented across four countries with very different cultural and political make-up.

This report does not focus on drawing conclusions as the four pilots are still very much in the delivery phase. Instead it takes into consideration the challenges that have presented themselves during the process and how they were overcome, ensuring that key learnings are captured for future FA development in line with the overarching aim of REFRESH.

#### **Challenges:**

Forming a plan that was both appropriate for each country and that allowed them to engage the right mix of stakeholders to.

Creating an appropriate pitch to major retailers to persuade them to give their time, when they're being constantly approached by organisations to take part in numerous initiatives. Funding was only available for the core partners to convene and manage the PWP – there was no budget to encourage stakeholders to take part.

To persuade retailers and other key stakeholders to give their time to the PWP and potentially for pilot projects, with no funding available to support this, a compelling business case was essential. To inform this, the UK experience was drawn upon, together with the outputs from D2.1 and the strength of the REFRESH project consortium

None of the in-country partners had organised a voluntary agreement approach before, and some were not specifically engaged with the retail sector.

WRAP drew on their experience of running voluntary agreements to support the partners in shaping the business case, the approach to identifying who they should invite, convening a PWP and agreeing areas for action in the FA. Guidance was also provided by WRAP on the approach to choosing the most impactful projects to realise the aims of each FA.

The lack of a documented approach to follow when setting up a FA will be addressed further along the project, through the production of a blueprint (or roadmap) that other nations can follow.

All of the countries were at different stages of tackling the issue of food waste, ranging from no quantifiable data, to high level political will but with no coordinated delivery. Within the development of the blueprint, a key requirement will be to ensure that it is accessible and relevant for any country, regardless of their entry level.

Another variance between countries was the way in which the retail sectors operated for e.g. the dominance of larger retailers. This links in to the importance of having a strong in-country partner and Steering Committee

who understands the sector, is able to assess the key players required and help shape the FA accordingly.

In addition there were some specific challenges in each of the countries

- In Germany retailers were very supportive but they wanted full details about the PWP and the FA before committing to become a member.
- In Spain there was discord with delays due to the election in 2016
- Similarly elections in the Netherlands meant decisions were delayed for a year
- In Hungary where there are more issues around food poverty and lack of access to food, there is a natural tendency towards redistribution rather than taking a whole-chain approach

There were differences between the four countries in the approach to and understanding of measuring food waste. In some countries there was a lack of any data and no history of trying to quantify the level of food wasted while elsewhere there was no agreement on the definition of food waste. One area of similarity across all countries was that the retailers were not used to sharing their data.

Using the output from FUSIONS and the Food Loss & Waste Protocol, an approach was agreed which has been adopted differently in each country, either by the REFRESH partners or in-country statistical bodies.

#### **Learning Points:**

The voluntary FA approach CAN be adapted and applied to a range of different scenarios, by ensuring the right mix of actors.

- By drawing on past experiences of countries such as the UK (Courtauld Commitments) and agreed international targets on food waste reduction such as the UNSDG12.3, it is possible for a National Steering Group to consider national priorities and the importance of different sectors to the economy, in order to identify areas of focus and develop an agreement which suits the situation in that country.
- Even without large amounts of funding, it is possible to bring the right people around the table and to make decisions. The next steps are to elicit the level of support/resource required to implement these actions.
- The Pilot Working Platforms were able to agree priorities and a range of actions to support these. All 4 referenced the UNSDG goal 12.3 as an overarching aim of the FA
- With the right support (tools, resources) then it doesn't matter what the starting point on the food waste journey is.
- A strong national co-ordinating organisation is required to successfully establish a platform on which to build a Framework for Action.
- By applying learning from D2.1 and WRAP experience we are moving towards a 'standard' approach or blueprint

- National co-ordinating organisations benefit from guidance in setting an optimum structure for the size and make-up of the PWPs
- National co-ordinating organisations benefit from provision of a set of core documents and principles that the PWPs could adapt and shape to suit their national priorities and progress to date.

#### **Next steps**

- Call for innovation pilot projects targeting the most impactful stages of the whole value chain in each country.
- Need to evaluate the impacts of the individual innovation projects, and the four FA pilots.
- Test the European approach in China and any other country interested in adopting a similar approach.
- Develop a Blueprint for the development of voluntary action to tackle food waste based on a range of starting points.
- Shared via the Community of Experts platform for wider dissemination and replication

# Conclusion

Overall the process of piloting the formation of stakeholder platforms and agreeing frameworks for action has been successful.

The work done so far in REFRESH has shown that, with the right lead organisation, support from a range of stakeholders and drawing on the experience of previous agreements, it is possible to apply a voluntary framework for action to a range of national scenarios. Whether a country is far advanced with numerous but uncoordinated food waste prevention activities, or has not yet started to address the issue, this approach can work equally well.

Through the remainder of the REFRESH project this will continue to be developed with expanded stakeholder platforms, supporting actions and the development of a Blueprint for future development of frameworks for action.

The learning from this will be shared through REFRESH's knowledge sharing platform, the Community of Experts.

## **Annexes**

## **Annex 1: German PWP 1st meeting agenda**

#### **Steering Committee Business engagement Deutschland**

#### 1. Sitzung

#### 2. Februar 2016

CSCP, Hagenauerstr. 30, 42107 Wuppertal

#### 09.45 Uhr

• Eintreffen, Kaffee

#### 10.00 Uhr

- · Begrüßung und Präsentation der Agenda
- Vorstellung der Teilnehmer

#### 10.15 bis 12.15 Uhr

- Überblick Refresh (inkl. Aufgaben Steering Committee)
- **David Rogers, WRAP UK**: Purpose and use of the Framework for Action (incl. best practices of existing frameworks)
- Feedback-Runde mit David Rogers
- Diskussion Herausforderungen und Interessen: Was sind die gemeinsamen Herausforderungen und Interessen aller Beteiligten und welche Ziele müssen im Framework for Action notwendigerweise verankert sein - wie kann ihre Erreichung gemessen werden?

12.15bis 13.00 Uhr: Mittagspause

#### 13.00 bis 13.45 Uhr

- Diskussion Voraussetzungen: Wie schaffen wir die Voraussetzungen, um gemeinsam Lebensmittelverschwendung zu reduzieren?
- Diskussion Aufbau Framework for Action: Wie sollte das Framework for Action aufgebaut sein? Was ist machbar und gleichzeitig noch ambitioniert?

#### 13.45 bis 14.30 Uhr

• **Diskussion Governance:** Wie sollte die Governance Struktur über den gesamten Projektzeitraum aussehen? Wer sollte noch mit an Bord geholt werden?

#### 14.30 bis 15.00 Uhr

- Nächste Schritte: was ist die Erwartung an das weitere Vorgehen?
- Abschlussrunde: Welche Punkte sind noch unklar?

## **Annex 2: German PWP 2nd meeting agenda**

#### **Steering Committee Business engagement Deutschland**

2. Sitzung

#### 3. Mai 2016

CSCP, Hagenauerstr. 30, 42107 Wuppertal

#### 09.45 Uhr

Eintreffen, Kaffee

#### 10.00 Uhr

#### Einführung

- Begrüßung und Präsentation der Agenda
- Verbindung Refresh, SDGs, Consumer Goods forum, Champions 12.3, Food lost and waste protocol
- · Aktuelle Themen seit dem letzten Treffen

#### 10.30 bis 11.15 Uhr

 Toine Timmermans, Coordinator Refresh: Results of Fusions, Connections to the EU and recent developments, Update concerning developments in the Netherlands, engagement of Wageningen concerning Champions 12.3

#### 11.15 bis 12.00 Uhr:

- Diskussion Aufgaben des Steering Committees
- Diskussion Aufbau Framework for Action
- Diskussion Governance

#### 12.00 bis 12:15 Uhr:

 Impulsvortrag aus der Praxis: Umgang mit Lebensmittelabfällen und -verlusten als Koch (Volker Mehl, ayurvedischer Gourmetkoch)

#### 12.15 bis 13.15 Uhr: Mittagspause

#### 13.15 bis 14.00 Uhr

#### Vorträge

- Vorstellung der Resultate aus WP1 (Patrik Eisenhauer)
- Vorstellung Ergebnisse aus Forschungsprojekt "Verluste in der Lebensmittelbranche vermeiden: Forschungstransfer in die KMU-Praxis" – 500 praktische Instrumente für eine aktive Reduktion (…auch in Großunternehmen…) (Prof. Guido Ritter)

#### 14.00 bis 14.45 Uhr

#### Vorgehen Pilotprojekte:

- Wie ist das Vorgehen?
- Was könnten mögliche Projekte sein?
- Wie könnte eine Projektförderung möglich sein?

#### 14.45 bis 15.00 Uhr

- Nächste Schritte
- **Abschlussrunde:** Welche Punkte sind noch unklar?

## **Annex 3: German PWP 3rd meeting agenda**

#### **Steering Committee Business engagement Deutschland**

3. Sitzung

#### 6. Oktober 2016

CSCP, Hagenauerstr. 30, 42107 Wuppertal

#### 09.45 Uhr

· Eintreffen, Kaffee

#### 10.00 Uhr

#### Einführung

- Begrüßung und Präsentation der Agenda
- Aktuelle Themen seit dem letzten Treffen

#### 10.30 bis 10.50 Uhr

REFRESH-Updates aus dem letzten Projekttreffen Anfang Sept.

#### 10.50 bis 12.00 Uhr:

# Vorstellung von möglichen Pilotprojekten und Abstimmung zum weiteren Vorgehen (1)

- Rahmendaten, detaillierte Ausgestaltung von Ideen, Erklärung des Prozesses
- Vorstellung und Diskussion der relevanten Fokusfelder
- Diskussion und Abstimmung zu den wichtigsten Outcomes

#### 12.00 bis 13.00 Uhr: Mittagspause

#### 13.00 bis 13.30 Uhr

# Vorstellung von möglichen Pilotprojekten und Abstimmung zum weiteren Vorgehen (2)

- Abstimmung zu Pilotprojekten
- Wer könnte sich vorstellen, dort mitzumachen? Wer müsste dort noch jeweils mitmachen?
- Vorstellung und Absprache Follow-up

#### 13.30 bis 14.00 Uhr

**Vortrag Dr. Dieter Schneider vom BMEL**: Strategieentwicklung auf deutscher Ebene zum Thema Lebensmittelverluste und -abfälle

#### 14.00 bis 14.30 Uhr

#### Vorstellung des Fragebogens zur Baselinemessung

- Diskussion
- Absprache zu den nächsten Schritten

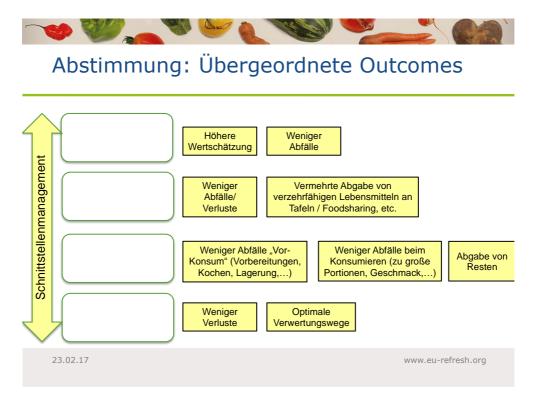
#### 14.30 bis 14.45 Uhr

# Vorstellung der Messmethoden des Food loss and waste Protocols sowie von Fusions

#### 14.45 bis 15.00 Uhr

- Nächste Schritte
- **Abschlussrunde:** Welche Punkte sind noch unklar?

# **Annex 4: German Logic Maps**





Höhere Wertschätzung Informiert über Qualitätskriterien & Produktionshintergründe

Informiert über MHD, Verbrauchsdatum & ggf. weitere Informationen (z.B. Lagerung)

Weniger Abfälle

Einschätzung des eigenen/fremden Bedarfs

Weniger Impulskäufe

**Produzenten:** Neue Verpackungen/Etiketten entwickeln und verwenden

Bessere Verwertung von Resten

Nutzung kleinerer Portionsgrößen (z.B. Singlepackungen)

Abgabe an Foodsharing/ Tafeln

23.02.17

www.eu-refresh.org



# Abstimmung - Supermärkte Wie können die Outcomes erreicht werden?

Weniger Abfälle/ Verluste Prozessoptimierung Bestellsystem

Rabatte auf Produkte näher am MHD/ Verbrauchsdatum / Angebot von Waren nah am MHD

Verpackte/unverpackte Ware anbieten (Was ist besser?)

VermehrteAbgabe von verzehrfähigen Lebensmitteln an Tafeln/ Foodsharing, etc. Mitarbeitereinbindung

Abstimmung der relevanten Prozesse

23.02.17 www.eu-refresh.org

# Abstimmung - Lieferketten / Produktion Wie können die Outcomes erreicht werden?

Weniger Verluste

Gleaning (Nachernteauflese)

Vermarktung von ,hässlichem' Obst &

Anreizsystem für weniger Verluste

Änderung der Einkaufskriterien

Optimale Verwertungswege Regionale Produktion

Neue Verwertungswege erschließen

Zusammenarbeit mit Foodsharing / Tafeln / weiteren Akteuren

23.02.17 www.eu-refresh.org



# Abstimmung - Out-of-home Wie können die Outcomes erreicht werden?

Weniger Abfälle "Vor-Konsum" (Vorbere itungen, Kochen, Lagerung,...) Optimale Bedarfsplanung

Schulungen/Messungen durchgeführt

Weniger Abfälle beim Konsumieren (zu große Portionen, Geschmack,...) Verschiedene Tellergrößen

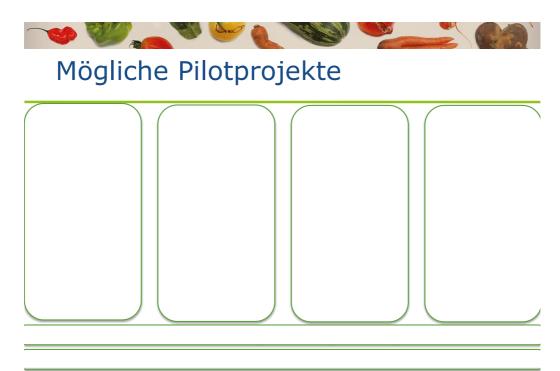
Optimierte Prozesse

Informiert über Wert von Essen

Abgabe von Resten Mitnahmemöglichkeit der Reste

Zusammenarbeit mit Foodsharing / Tafeln / weiteren Akteuren

23.02.17 www.eu-refresh.org



23.02.17 www.eu-refresh.org

# **Annex 5: German Framework Agreement**



# Framework for Action Business Engagement Germany – Final Version (translation)

25.7.2016





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#### 1 Introduction

The reduction of food waste and loss is a high priority in current sustainability discussions. This is also made clear through the established goal of halving food waste, which was validated by 193 UN member states in the framework of the Sustainable Development Goals (SDGs). The United Nations emphasizes that measures at all stages of the production and supply chain are important, starting from producers, and including the suppliers and consumers. REFRESH has the objective to bring together different stakeholders from all stages of the production and supply chain and to lead them closer towards the goal of reducing food waste and loss. This will be implemented through effective measures, especially those that do not stem from legal necessities.

Germany was chosen for this collaborative concept together with Spain, Hungary and Netherlands. The concept will be implemented throughout the next 4 years.

By agreeing to the Framework for Action, the participants agree to an unbinding self-commitment to implement measures throughout the most relevant stages of the production and supply chain in order to minimize food waste and food loss. Sanction mechanisms do not exist.

By validating the Framework for Action, the signatories / participants from economic, civil, scientific and political spheres will contribute to achieving the UN Sustainable Development Goal 12.3.1, within their respective areas of accountability, of halving the amount of food waste and loss per capita along production and supply chains by 2030.

#### 2 The definition of food waste

To ensure a mutual understanding of the topic, a definition contemplated by Goebel et al. 2013 will be presented. "The term 'food loss' is known in agriculture, processing and supply industries, and its meaning will be taken over from literature and experts. Food loss can, where possible, be minimized through system optimization, provided there are systems from which appropriate optimization potential can be derived from.

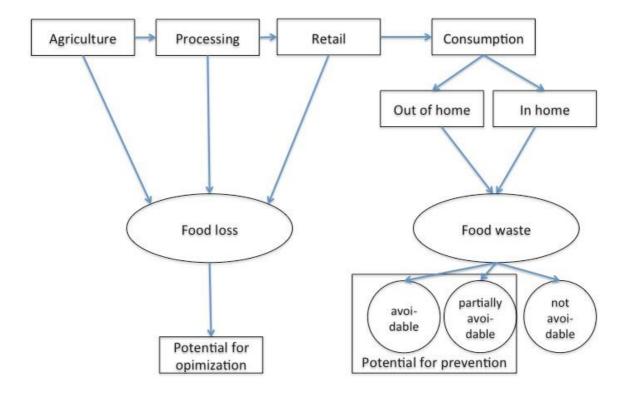
Text: "By 2030 halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains including post-harvest losses". Siehe: <a href="https://sustainabledevelopment.un.org/sdgsproposal.html">https://sustainabledevelopment.un.org/sdgsproposal.html</a>.

'Food waste' originates at the consumer level (from household provisions and end-consumers in the household). It can be partially or completely avoided if there is an avoidance potential."2

In the FA we will use the definition of food loss and waste presented by FUSIONS: "Food loss and food waste is any food, and inedible parts of food, removed from the food supply chain to be recovered or disposed of (i.e. through compost, crops ploughed in/ not harvested, anaerobic digestion, bio-energy production, co- generation, incineration, disposal to sewer or landfill, or discarded in the sea)."3

This definition is a working definition, which in this case, with more experience, may be altered or changed. In external communication (especially when communicating with consumers), a simplified version can also be used.

**Diagram 1:** The defining distinction between food loss and food waste (according to Göbel et al. 2013)



Christine Göbel, Silke Friedrich, Prof. Dr. Guido Ritter, Prof. Dr. Petra Teitscheid and Prof. Dr. Christof Wetter, Gerold Hafner, Jakob Barabosz, Dominik Leverenz, Claudia Maurer, Prof. Dr. Martin Kr (2013): Analyse, Bewertung und Optimierung von Systemen zur Lebensmittelbewirtschaftung. - In: Müll und Abfall, Book 11 2013, S. 601-610.

S. <a href="http://www.eu-fusions.org/index.php/about-food-waste/280-food-waste-definition">http://www.eu-fusions.org/index.php/about-food-waste/280-food-waste-definition</a>.

## 3 Components of the Framework for Action (FA)

#### 3.1 General principles of the Framework for Action (FA)

- **Main goal:** The participant of the FA will actively contribute to reducing food waste and food loss in accordance with the SDG Goal 12.3.
- **Participation is voluntary.** When an organization is engaged in the FA, it voluntarily commits itself to fulfilling the determined obligations at least until the end of 2017. A participation commitment until the end of 2018 would be desirable.
- **Openness of participation:** The FA is open to all organizations willing to participate. No distinction will be made between corporations, public authorities, NGOs, etc. All organizations commit themselves to the framework in such a way that they are able to provide a contribution. This contribution may be of a qualitative or quantitative nature.
- **External communication:** The FA will be externally communicated and advertised. The participating organizations will be listed. However, the specific goals of the organizations will not be communicated. All use of specific external media communication will be, before publishing, sent for approval to the participating organizations.
- **Governance:** All participating organizations will additionally meet twice per year, in the framework of a Steering Committee on mutually predetermined dates, in order to share progress on active topics (for example: project results, political decisions, events, etc.), as well as to discuss potential cooperation. If there is a need to change the Governance structure (e.g. because the group got too big) the Steering Committee will decide how to change the structure.
- **Confidentiality:** The information from participating organizations will be collected and handled confidentially by the CSCP. Within the group, only collective results will be shown and discussed. If required, a confidentiality agreement can be signed from the side of the CSCP, the content of which will be aligned with the respective organization.

#### 3.2 Arrangement of goals and measurement of progress

- **Basic idea of the activities:** All activities will be designed in such a way that they exactly fit to the organization. Existing activities will be considered. The "best solutions" will be assessed from the side of the Organization / Company, and consultation will be provided by the CSCP. The individual arrangement between the CSCP and the participating organization will result in a complete account of achievements reached for reducing food waste and food loss.
- **Material analysis:** In the beginning, the priority products as well as priority measures that will contribute to a reduction of food waste and food loss will be examined through a material analysis. Ultimately, each organization will decide on which topic it wishes to work on; however, a reason for this decision must be provided. The material analysis serves to identify relevant possible activities. Additionally, the Quantification Manual<sup>4</sup> from the FUSION-process, as well as the circular economy statute ("Kreislaufwirtschaftsgesetz") may serve as orientation tools.

- **Action plan:** Based on the information obtained through the material analysis, each signatory will develop an action plan. Each action plan must contain a clear short- or middle-term (i.e. 2 to 5 years) goal or a set of thematic priorities, as well as provide a description of its baseline and a timeframe.
- **Goals:** The goals can be quantitative (in the form of a clear reduction goal) and/or qualitative (for example, defining measures / projects). If there is no actual data, data collection until a certain time period should be defined as one of the goals. A quantitative goal with qualitative indicators is possible, as well as a qualitative goal with quantitative achievement rates.
- Activities: In the framework of the action plan, the signatories will carry out activities in a self-defined scale and timeframe, which will contribute towards the attainment of the main goal (fulfilling the SDG 12.3), as well as achieving individually established goals. The CSCP will communicate with each participant, upon request, which activities in their range of action have the highest effects and which participants can / should support the implementation of these activities. The participant must then prepare the arrangement. The action plan will not be published and will only be available to the respective organization(s) and the CSCP. The action plan will be submitted to the CSCP, at least one time per year, for the purpose of analysing goal attainability. Important: the action plan and its activities is a self-commitment without sanctions. The exchange of best practices, which will arise from the implementation of the action plans, would be desirable,, in which each organization can decide if its best practice will be shared with the other organizations.
- Criteria for the implementation of the activities: The goals and the implementation of related activities should always target and address hotspots (the most relevant fields) along the whole supply and production chain (including the consumer side). In doing so, it is necessary to initially determine individual hotspots. The activities should therefore lead to improvements in priority stages. These include harvest (and the after processes), production (especially with regards to packaging, i.e. size, contribution to shelf life), supply stages, in the supermarkets, and by the end consumers. This means that outside of the core business activities, it would be preferable that organizations also define activities. Therefore, all partners along the production and supply chain should work together closely to establish suitable measures, especially with manufacturers and suppliers.
- **Impact measurement:** Impact measurements can be of a qualitative or quantitative nature. The measurement methods will be discussed in the group and minimum standards for the measurement will be defined. The possible measurement methods should be oriented towards the "Food waste quantification manual to monitor food waste amounts and progression" (footnote on the previous page) of the FUSIONS project, which was a predecessor project to REFRESH.

3 <u>http://www.eu-fusions.org/phocadownload/Publications/FUSIONS%20Food%20Waste%2</u> 0Quantification%20Manual.pdf.

### 3.3 Implementation of the action plan

• **Individual ambition levels:** There will be different ambition levels, which the participants could / should be able to fulfil. After each self-assessment and/or mutual agreement between the CSCP and the respective organization, the ambition level will be defined, which should be improved in a stepwise manner through projects or permanent measures. All active measures of the organization will be included in the definition of the ambition level.

The ambition levels will, after assessing the possibilities, be divided into qualitative and quantitative categories, so that the individual organization may adopt them based on their individual needs, possibilities and capabilities.

#### An example of qualitative steps (demonstrating project success):

- 1. Step: Identification of problems and/ or opportunities
- 2. Step: Improvements planned in the coming two years
- 3. Step: Implementation of improvements in parts of the organization
- 4. Step: Implementation of improvements in the whole organization
- 5. Step: After all previous steps are applied, implementation of additional improvements along the supply and production chain, i.e. with subcontractors.

#### An example of quantitative steps:

- 1. Step: Setting of expectations and objectives
- 2. Step: Monitoring with regards to existing food waste and loss amounts
- 3. Step: Establishing concrete measurable improvements in the respective organization
- 4. Step: Spreading and measuring successful measures along

the production and supply chain

- **Minimal requirements:** Each participant must conduct at least one individual activity / project, to actively achieve reduction of food waste and loss. These activities (especially those, resulting in gained experience) should be collected and shared as best practice with other participants (if possible).
- **Pilot project (voluntary):** In the framework of the FA, pilot projects will be conducted, which will be openly available to other participants and supported and intensively monitored by CSCP to insure results. The criteria for the pilot projects will be elaborated later, but they may vary from organization to organization.

#### 3.4 Measuring and review

- **Coordination:** The CSCP will take over the coordination of the Steering Committee and will be responsible for progress review.
- **Review of progress:** The CSCP (and if necessary, in agreement with other elected participants of the Steering Committee) is responsible for review of progress under the adherence of confidentiality. All participating organizations must report on progress at least on a yearly basis (based on data obtained from established activities). For showing / evaluating progress, all already available information of the organization should be included.
- Aggregation of data: The data from different participants will be collectively evaluated to determine the achievement of the SDG Goal 12.3. Data will not be available in a personalized manner but will only be accessible in an aggregated fashion. At the same time, it should be possible for the participants to compare themselves to other organizations and companies, as long as data from other comparable organizations is available. At the end of 2018, there should be a clear result on the goal achievement of all involved organizations on the collective German market.

## 4 Tasks of the Steering Committee

The **Steering Committee** is a coalition of companies from the food industry, big and small retailers, national and local administrative bodies, NGOs and other interested members, who have an interest in proactive, collaborative, and solution-oriented work for achieving a significant reduction of food waste and loss along the complete production and supply chain.

In the beginning, the Steering Committee will be formed from a small group of member organizations. As the project progresses, this group may include other participants. The CSCP will take over the planning and coordination of REFRESH in Germany. The final decisions regarding the selection of pilot projects (not including the measurements which are internally implemented by the organization and will not be openly communicated), the **framework of action**, the goals, etc. will be done by the REFRESH **executive board** at the European level. **The German Steering Committee is responsible for:** 

1. Consulting and conducting the design and development

of the complete extent of the Framework for Action in Germany;

- 2. Counselling of high-ranking goals for the **Framework for Action**;
- Providing advice and support for the implementation of pilot projects, which test the **Framework for Action** (i.e. through first-hand best practices from the organizational context) and if relevant and requested, participating in the pilot projects;
- 4. Searching for ways of maximizing the impact and securing the support and participation of different actors. That is, to spread the goals and values of REFRESH and the **Framework for Action** inside the organizational network.

The **participation in the Steering Committee** is open to all relevant organizations, as long as a "critical mass" is not exceeded. If the number of participating organization surpasses 20, pragmatic decisions of participation as well as governance mechanisms will be discussed and aligned.

## **Annex 6: Netherlands overview of existing initiatives**

Overview of projects and initiatives Food waste reduction & valorisation of bio-waste, Circular Economy & packaging (public-private) in the Netherlands

October 2016				
Public private projects	Contact person(s)	Partners	Type of Public financing	Duration
FUSIONS	WUR, Toine Timmermans	21 partners, 13 countries, 200 platform members	EC Framework 7	2012 - july 2016
TiFN, Resource Efficiency	FNLI, Philip den Ouden; CBL, Marc Jansen; TIFN, Toine Tim	CBL, FNLI, supply chain partners (retail, manufacturing)	FES-program, TKI-matching f	2011-2016
Food Waste Monitor	Min. Economic Affairs, Erwin Maathuis; WUR, Martijntje V	Sustainable Food Alliance (+ companies)	min. Economic Affairs (budge	2011-2016
Eindeloos (Infinity)	TOP, Wouter de Heij; WUR, Martijntje Vollebregt	diversity of companies (primary production/manufacture	Topsector Agri&Food (PPS)	2013-2016
CARVE (Across supply Chain Action program	Sustainable Food Alliance, Floor Uitterhoeve; WUR, Joost	Supply chain partners/businesses	Topsector Agri&Food (PPS)	2015-2019
REFRESH	WUR, Toine Timmermans	26 partners, 12 EU countries + China	EC Horizon 2020	2015-2019
NoAW (Innovative approaches to turn agric	INRA (FR), WUR, Jan Broeze	23 partners	EC Horizon 2020	2015-2020
Houdbaarheid Begrepen (Understanding She	CBL, Marc Jansen; WUR, Toine Timmermans	Sustainable Food Alliance + companies/municipalities/r	Topsector Agri&Food (PPS)	2016-2019
SBIR - Sustainable Food	Topsector, Koos van Wissen	AVV, UDV, RVO, several businesses (Provalor, Dishman,	EZ SBIR Regeling	2015-2016
TIFN, Sustainable Packaging	KIDV, Hester Klein Lankhorst; TiFN, Hans van Trijp	KIDV, TIFN, WUR, UT, TNO, TUD, RUG	Topsector Agri&Food (TKI)	2015-2019
GreenDeal THT/Experation Dates	Min. Economic Affairs, CBL, FNLI.	Min. Economic Affairs, Min. I&M, CBL, FNLI, WUR, other	in kind by partners	2016
Other relevant projects/initiatives				
Food360 - verspillingsfabriek (food waste fa	Bob Hutten	Hutten, Plus, WUR, HAS, provincie Brabant	SBIR (1st + 2nd phase)	2011-2015
Food waste reduction recreation parcs	Q-point, Carel Jasperse	Burgers Zoo	SBIR (1st + 2nd phase)	2011-2015
Food 360 - The Source Shakers	WUR, HAS, Hutten, Rabobank, BOM, P2-managers, Veghel	WUR, HAS, Hutten, Rabobank, BOM, P2-managers, Vegl	in preparation	2016
Food Battle	min. I&M, Bernard Cino, WUR, Bart van Gogh	regional/local, municipalities, public/private	I&M (webtool)	2011-2016
Waste in Health Care	WUR, Joost Snels; Guido Meijer, Economic Affairs	health care, hospitality sector, institutional catering	Economic Affairs, GreenDeal	2013
BIT project waste reduction hospitality sector	EZ, Royal Restaurants Association (KHN)	catering & restaurants	Econmic Affairs	2015-2016
Insights in date labeling	WUR, Stefanie Kremer	Ministry Economic Affairs	EZ (policy funds)	2016
More value from side streams	TU Delft, Jan Henk Welink	Province		2013-2016
WRI - global FoodLoss&Waste protocol	WRI, Craig Hanson, Kai Robertson	WRI, WRAP, FUSIONS, CGF, WBCSD, FAO, UNEP		2014-2016
Champions 12.3	•	Tesco, WBCSD, WRI, UNEP, WUR, etc.	SDG 12.3 ambition	2015
Smaaklessen (taste education)	WUR steunpunt Smaaklessen	several businesses (Rabobank is lead sponsor)	Topsector Agri&Food (PPS)	2008

## **Annex 7: Netherlands Pilot Project focus areas**

Scope and focus areas for the call for pilot projects in the Netherlands, and mapped existing/running public private initiatives and projects on food waste reduction.

Scope and focus areas for REFRESH pilots	Focus supply chain stage (+1)				Focus supply chain stage (+1)	
	Primary sector (pre-farm gate)	Processing or manufacturing	Wholesale or Retail	Hospitality or Food Service	Households/ Consumer	Waste management (post-consumer)
Product- and packaging design &development						
Planning and forecasting Sourcing & buying –						

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(quality) criteria	-			<u> </u>		
Sourcing & buying –						
quantities & ordering						
process						
production and						
product properties						
(incl storage)						
Logistics &						
distribution						
Marketing,						
communication &						
sales						
Labeling & interaction						
Supply chain						
transparancy &						
collaboration						
Supply chain business						
models (simulation)						
Food surplus						
redistribution						
Valorisation						
secondary flows						
(food)						
Valorisation						
secondary flows						
(feed) Valorisation &						
recycling secondary						
materials(biobased)						
Packaging (circular						
economy)						
Behaviour employees						
Behaviour consumers						
(incl. awareness						
raising)						
Measuring, mapping						
& opportunities						
	Outside scope (-1	) : excluded for pilo	t projects			
		us (+1): Relevant ar		rojects		
	Within scope & Focus (+2): Hotspot pilot projects					

Mapping running initiatives & projects (public/private)	Focus supply chain stage (+1)				Focus supply chain stage (+1)	
	Primary sector (pre-farm gate)	Processing or manufacturing	Wholesale or Retail	Hospitality or Food Service	Households/ Consumer	Waste management (post-consumer)
Product- and packaging design &development						
Planning and forecasting		Dairy	Dairy	Healthcare		
Sourcing & buying – (quality) criteria						
Sourcing & buying – quantities & ordering process			Dairy	Healthcare		

production and product properties		Iglo			Vacuvita	
(incl storage) Logistics & distribution						
Marketing, communication & sales						
Labeling & interaction			NoFoodW asted		Circulus Vacuvita	
Supply chain transparancy & collaboration		Dairy RE-TIFN	Dairy RE-TIFN			
Food surplus redistribution						
Valorisation secondary flows (food)		Sonneveld Hutten	Sonneveld			
Valorisation secondary flows (feed)						Circulus
Valorisation & recycling secondary materials (biobased)						
Packaging (circular economy)						KIDV
Behaviour employees			Vakcentru m	Healthcare		
Behaviour consumers (incl. awareness raising)		Iglo		Healthcare BIT-project	Circulus	Circulus
Measuring, mapping & identifying opportunities	TSS	A-Ware TSS	TSS		Vacuvita	
Other, specify						
		) : excluded for pile				
	-	us (+1): Relevant a		orojects		
	Within scope & Focus (+2): Hotspot pilot projects					

# Annex 8: Netherlands list of existing projects/initiatives

**Sonneveld**: re-use of unsold bread as ingredient for food (CARVE, 2015)

**Iglo**: understanding consumer behavior at home (CARVE, 2015)

**A-Ware**: Measuring & identifying opportunities cheese (CARVE, 2015)

**Dairy**: collaborative ordering & quantities (CARVE, 2015)

**RE-TIFN**: Resource Efficiency TI Food & Nutrition (2016)

**KIDV**: Sustainable packaging (KIDV, TIFN, 2016)

TSS: The Source Shakers, mapping & identifying opportunities, 2016

**Healthcare**: reduction food waste in health care sector

**BIT-project**: consumer understanding & behavior in hospitality sector (KHN, 2016)

**Hutten**: food waste factory (SBIR, 2012 – 2015), private investment

**Food battle**: consumer behavior change (2012 – current)

**Circulus**: Circulus Berkel food waste reduction & consumers (Understanding shelf life, 2016)

**Vacuvita**: storage & longer shelf life consumer @ home (Understanding shelf life, 2016)

**NoFoodWasted**: apps promote sales before expiration date (Understanding shelf life, 2016)

**Vakcentrum**: training, ambassadors retail franchise (Understanding shelf life, 2016)

## **Annex 9: Hungary Framework Agreement**

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

#### Introduction

According to estimates by the UN Food and Agriculture Organisation (FAO), one third of food intended for human consumption gets lost. When seen against a series of problems, including the scarcity of natural resources, poverty, famine and a protracted financial and economic crisis, it becomes clear that this matter requires union and solutions on a global, European and national scale.

The need to combat food waste has been given top most priority in the current sustainability debate as confirmed by the goal of the 193 UN member states to halve food waste. The Member States have defined the latter in the context of the Sustainable Development Goals (SDGs).

The United Nations (UN) has stressed the need to take action at all levels of the value creation chain ranging from producers to suppliers and consumers.

Hungarian Minister for Agriculture Sándor Fazekas proposed an EU level debate on food loss and wastage at the Council Meeting of Ministers of Agriculture in July 2013. Hungary requested the European Commission to develop plans jointly with the competent international organisations and other stakeholders so that we can get a clear picture of the global situation and take appropriate action in our best interests.

The Ministry of Rural Development and the Hungarian Food Bank Association have jointly launched a forum in Hungary to reduce food wastage and loss.

By signing the Declaration andjoining the Forum, the signatories commit to a non-binding agreement to reduce food waste and food losses to a significant extent in the areas most relevant to them in the food chain. Through the Forum, we aim to make a contribution to the realisation of SDG 12.3 by halving the per capita food waste by 2030, also supported by EU member states as formulated in the Circular Economy package.

The Forum welcomes companies, non-profit organisations, administrative bodies, production chain operators and their industrial/professional organisations as well as organisations from the sectors of research & development and education to participate.

#### Main goals and priorities of the Forum

Main goals: Participants of the Forum commit to actively reducing food loss and food waste;

- Highlight the importance of this current issue and form public opinion and attitude;
- Enhance knowledge management and flow of information among all concerned;
- Identify issues and possible solutions along the whole supply chain from primary production to consumers and valorisation of unavoidable waste;
- Identify and develop, good practices Hungary and abroad. Promote and adapt these for wider uptake in Hungary.

Main priorities for actions are:

- Set a definitive baseline for current levels of household and supply chain food waste in Hungary
- Adaptation of the food waste hierarchy, especially the TOP 3 levels: reduction, redistribution and promoting measures which move food valorisation
- Demonstrate that a voluntary approach can lead to supply chain waste reduction without the need for additional legislation, creating a healthy balance of regulation and self-regulation
- Raising awareness of food waste issues and forming of consumer attitude
- Identifying and addressing hotspots in retail supply chains to prevent waste
- Working with the hospitality and tourism industry to improve practices and consumer behaviour to prevent waste

• Engaging the entire food supply chain including the recruitment of further Forum members

#### **General principles**

• Open participation: The FA will be open to all organizations wishing to participate. Members may have different ambition levels that they can/want to achieve. Members can participate in the Forum's activities as "acting organizations", which (can) take active roles with concrete tasks and targets in one or more projects launched under the umbrella of the Forum, or "supporters", that support the Forum's work occasionally (e.g. in projects or dissemination activities) but must not necessarily have concrete tasks and targets.

Definition of Food Waste: To ensure a common understanding of the subject matter we use the definition defined by the EU FUSIONS project (www.eufusions.org): "Food waste is any food, and inedible parts of food, removed from the food supply chain to be recovered or disposed (including composed, crops ploughed in/not harvested, anaerobic digestion, bioenergy production, co-generation, incineration, disposal to sewer, landfill or discarded to sea)".

Drink and liquid waste, fish discarded to sea and waste of any materials that are ready for harvest, but which are not harvested, are included in FUSIONS's definition of food waste, making its perimeter wider and broader than many other existing definitions. FUSIONS also consider inedible parts of food (e.g. skin, bones...) as food waste in order to support the development of resource efficient and sustainable food systems in the EU.

• Governance: All member organizations are invited to take part in Forum roundtable meetings once a year in order to discuss progress made, current events, as well as potential collaborations. Working groups will be formed for detailed topics accordingly.

A Steering Committee is convened that is representative of the different stakeholder groups. The Steering Committee determines policies and direction, and to also lead communication with all participants. In addition it discusses the progress made in the main projects as well as the agenda for roundtable meetings. Steering Committee meetings take place 3-4 times a year.

• External communication: The Forum is to be externally promoted and published. The participating organizations are to be listed on the Forums web site and other communication material. All Forum members are invited

to support external communication activities using their own communication channels.

- Legality: The Forum is not a legal person. Legally every member of the Forum acts of its behalf.
- Funding: The Forum's activities can be funded by different sources, including EU funded projects, such as the REFRESH project, national development and innovation funds and members own resources (on a voluntary basis).
- Confidentiality: The Forum collects and handles the information of the individual organizations involved with utmost confidentiality. Unless agreed differently with specific members only aggregated results will be discussed and shown within the group and published outside.

#### **Project targets and Progress Measurement**

The fulfilment of the Forum's main goals is primarily reached by the launch and execution of various projects. Projects management and participation is based on a voluntary basis among Forum members.

Main project targets are:

- Setting a definitive baseline for current levels of food waste
- Adapting methodologies / good practices
- Research and innovation projects in supply chains
- Redistribution development especially by involving new segments and broadening redistribution channel capacity
- Public awareness raising
- Valorisation projects
- Other new ideas supporting the priorities
- Project scoping: Any projects should be launched and managed in such a way that it suits the participating organizations and provides the greatest possible value to the fulfilment of the Forum's main goals. Based on the individual project plans the participating parties are involved in reducing food waste and food loss.

- Objectives: The identified project priority aspects should be assigned quantitative and / or qualitative targets, including time frame and a clearly defined baseline. It is also possible to have a quantitative target with qualitative indicators.
- Activities: Project participants undertake changes that contribute to the overall objectives. Participant can have different tasks or targets. The project manager discusses with each participant the activities with the greatest impact in their own field of action and the actors that could/should assist them with the implementation of the activities. Participants are to prepare a common project plan.
- Implementation criteria: The objectives and the related activities to achieve them should address the main priorities. The activities should therefore lead to improvements in at least one of the priority items. This means that a member organization should start activities where it has the most significant potential for improvement, even if it is outside its core business activities.
- Impact assessment: Impact assessment can either be carried out qualitatively or quantitatively. Measurement methods are discussed within the project group and the minimum measurement standards defined. The possible measurement methods may be based on the Food Loss & Waste Protocol of the World Resources Institute.
- Project plan: A project plan, based on the target definition and impact assessment is designed and presented to the Steering Committee. Execution should be analysed at least once every year to gauge its achievement. Important: This is a voluntary agreement without sanctions.

#### **Tasks of the Steering Committee**

The Steering Committee is a selected team of Forum members representing the main segments of the food chain, and relevant main national authorities and NGOs. The Steering Committee

- Assists in providing direction for the Forum through their expertise contributions
- Sets the main goals and priorities for the Forum activities, to which the signatories undertake to contribute;
- Changes the Framework of Agreement document if necessary
- Provides support and offers advice in the implementation of projects
- Facilitates communication with all Forum members

- Spreads the goals and values of the Forum within Hungary and in the EU
- Improves organization structure in order to achive the most efficient operation

Tasks of the Secretariat

The Secretariat tasks of the Forum are handled by the Hungarian Food Bank Association (HFA)

Providing the secretariat support includes:

- Managing the registration process
- Facilitating and monitoring projects
- Managing internal and external communication
- Management of webpage and knowledge base
- Organising meetings and events
- Managing international relations, especially works together with the EU REFRESH project (www.eu-refresh.org) where four countries (Germany, Hungary, Netherlands, Spain) were chosen to implement similar collaborative approaches.

HFA is responsible for the review of progress and taking account of confidentiality.

**Annex 10: Spain Framework Agreement** 

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Introduction

The need to combat food waste has been given top most priority in the

current sustainability debate. This is firmly established through the goal of

halving food waste settled by the 193 UN member states in the framework

of the Sustainable Development Goals (SDGs).

The United Nations (UN) has stressed the need to take action at all levels of

the value creation chain ranging from producers to suppliers and

consumers. REFRESH aims to bring the different stakeholders from all

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stages of the food chain together to advance the common goal of reducing food waste. This will be implemented through the promotion of effective measures that do not stem from legal regulations.

Spain, jointly with three more countries (Germany, Hungary and Netherlands), was chosen to implement this collaborative approach during the coming three years.

With the signing of the Framework for Action, the signatories commit to a non-binding agreement to contribute to reduce food waste in the areas most relevant to them in the food chain. Through the Framework for Action it is aimed to make a contribution to achieving the SDG's target 12.3 by halving the per capita food waste by 2030<sup>18</sup>.

#### **Definitions**

- Framework for Action: the Framework for Action (FA) is a non-binding agreement to contribute to reduce food waste in Spain in the context of the REFRESH project.
- Steering Committee: the Steering Committee (SC) is a coalition of companies from the food industry, big and small retailers, national and local administrative bodies, NGOs and other interested members, who have a shared interest working and collaborating to reduce food waste along the food chain. In the beginning, the Steering Committee will be formed by a small group of member organizations. As the project progresses, this group may include other participants. To become member of the Steering Committee it is required the signature of the FA.

#### Framework for Action

**Objective of the Framework for Action** 

The signatories of the Framework for Action show their interest in contributing to progress towards the UN SDG 12.3 target, of reducing retail and consumer waste by 50% by 2030, through the promotion of anti-food-

<sup>&</sup>lt;sup>18</sup> "By 2030 halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains including post-harvest losses" (see <a href="https://sustainabledevelopment.un.org/sdqsproposal.html">https://sustainabledevelopment.un.org/sdqsproposal.html</a>).

waste measures along the food chain in Spain. The measures may make contributions in the following lines:

Understanding the current levels and causes of food waste from production to consumption;

Raising awareness among the actors of the food chain and the general public on the undesired effects associated with food waste and the positive effects of reducing it;

Encouraging innovative initiatives to reduce and prevent food waste, particularly to address the most critical points of the food chain.

### **Implementation of the Framework for Action**

- Measures to reduce or prevent food waste: signatories are committed
  to promote measures that contribute to the overall objectives established in
  this FA. Two main kinds of measures are considered: activities and pilot
  projects.
  - Activities: activities are all measures participants support that are in line with the objective of the FA of reducing food waste in Spain. In order to share information, enhance synergies, promote communication and foster action, on an annual basis, the signatories of the FA are encouraged to report to the SC, firstly, the activities supported in the past year and, secondly, the provision of activities programmed for the coming years in the form of an action plan, where it would be desirable that targets and progress measurement were made explicit. CREDA-UPC-IRTA will be in charge of preparing an annual report covering all these activities supported by the members of the SC.
    - Targets: each participant will have a series of priorities or targets. Any collective agreement in this domain should be designed in such a way that it suits the organisations involved, and provide the greatest value to the organisation while reducing or preventing food waste.
    - Progress Measurement: preferably a hotspot analysis to examine priority products and actions should precede the establishment of quantitative or qualitative targets and priorities, including time frame and clearly defined baseline and indicators.

o **Pilot Projects:** in the framework of the FA, 3-4 pilot projects will be conducted. The aim of the pilot projects (PP) is to examine the effectiveness of specific initiatives to reduce food waste, and explore potential for scaling-up. The PP will be selected considering the willingness to cooperate by responsible organizations (who will not be necessary members of the SC) and coverage of the identified hotspots in Spain. CREDA-UPC-IRTA will support and monitor all PP. Periodical reports of the development of the PP will be facilitated by CREDA-UPC-IRTA to the SC, in order to share information, enhance synergies and promote communication. It is expected that the PP will last at least two years; although their exact implementation will be subject to the particular specificities of each case.

#### Role of the Steering Committee:

- Assist in providing direction for the FA in Spain through their expertise contribution;
- o Provide support and offer advice in the implementation of PP;
- Spread the goals and values of REFRESH and FA.

#### • Role of CREDA-UPC-IRTA:

- Coordinate the SC;
- Organize the annual or biannual meeting of the SC;
- Elaborate an annual report about the member's activities and advances of the SC, ensuring total confidentiality, and processing this data on an assessment of the overall objective of the ODS in Spain by the end of 2018;
- To support and monitor the PP;
- Aggregation of data: Data submitted by the various participants will be used to assess the overall objective of the ODS in Spain at the end of 2018.

#### **General Principles of the Framework for Action**

**Open participation**: The FA is open to all organisations wishing to participate, and committed to support the reduction or prevention of food waste. The conditions for participation will be finalised and discussed annually to ensure their compliance.

**Time schedule**: Any organisation taking part in the FA commits to implement the provisions of the FA at least until the end of 2017 or 2018.

**External communication:** The FA will be externally promoted and publicised. The participating organisations in the FA will be listed. However, the specific targets of each organisation will not be communicated. All use of specific external media communication will be sent for approval beforehand to the participating organizations.

**Governance:** The participating organisations will meet once or twice per year, on collectively scheduled dates, in the framework of a SC, in order to share progress on relevant topics, as well as to explore potential collaborations. If a need emerges to change the governance organization, the SC will decide how to change the structure on the basis of a majority of 75% of the participants and with a minimum quorum of 50% of the members.

**Confidentiality:** CREDA-UPC-IRTA will collect and handle the information of the individual organisations involved with utmost confidentiality. Only aggregated results will be discussed and shown within the group. If necessary CREDA-UPC-IRTA will sign a confidentiality agreement.

## **Annex 11: REFRESH business food waste** questionnaire

#### Refresh business food waste measurement questionnai



required data entry Optional (recommended) data entry

All data refers to the total for the calendar year January-December 2016

Name of the business	
Name of person completing this document	
Contact (phone number, email)	
Date of submission	

#### Part I:Quantitive data

Contextual information	Units	Data 2016
Turnover of the business for the calendar year	€	
Total retail sales volume in tonnes of product	Tonnes	
Total waste of all materials (food waste, packaging waste and other wastes combined)	Tonnes	
Disposal cost of handling all materials waste	€	
Disposal cost of handling food waste	€	

#### **Food Surplus data**

Food surplus is any food, and inedible parts of food that are not sold as primarily intended, but are nonetheless used to feed

······································		
Food surplus/reject donated to charity for redistribution or sold on secondary marke	ts Tonnes	
Food surplus/reject sent to animal feed	Tonnes	
Food surplus/reject sent for input to food or non-food industrial processes	Tonnes	

#### Food Waste data

Food waste is any food, and inedible parts of food, removed from the food supply chain to be send for disposal (including anaerobic digestion, composting, bio-energy production, co-generation, incineration, crops ploughed in/not harvested, disposal to sewer, landfill or

Please specify the quantity of food waste converted to tonnes

## Food Waste breakdown (optional)

By destination

In reference to FLW Protocol, please outline the split of food waste by different

destinations / treatment options.		
Anaerobic digestion	Tonnes	
Composting	Tonnes	
Land spreading	Tonnes	
Rendering	Tonnes	
Thermal treatment with energy recovery	Tonnes	
Thermal treatment without energy recovery	Tonnes	
Landfill	Tonnes	
Other waste management technology	Tonnes	
TOTAL	Tonnes	0

0 <check that this equals cell D21

In reference to FLW Protocol, please outline the split of food waste between foo and associated inedible parts such as peels and bones:	<b>.</b>	
The part that would have been edible	Tonnes	
Associated inedible parts	Tonnes	
TOTAL	Tonnes	<b>0</b> <check cell="" d21<="" equals="" th="" that="" this=""></check>
By food category		
Please fill according to any break-out you have, and copy lines if more needed		
e.g. bakery	Tonnes	
e.g. dairy	Tonnes	
^Add more lines if necessary.	Tonnes	
TOTAL	Tonnes	o <check cell="" d21<="" equals="" td="" that="" this=""></check>
Check to confirm the following: Packaging and any other non-Food waste material have been EXCLUDED from		
		FA C
inventory results.  Inventory results reflect the state in which the FLW was generated (i.e., before		FALSE
water is added or before intrinsic water weight of FLW is removed).		EA
water is added of before intilisic water weight of FLW is removed).	_	TALSE
Pre-harvest losses have been EXCLUDED from inventory results.		FA .
The market restriction have been exceeded from inventory results.		17(2)2
Part II: Important contextual information		
rait II. Important contextual information		
A		
Approach to measuring food waste Please, describe how you have measured/estimated your food waste for this sub	mission, E.g. have you	r done some
measurements? have you estimated it from waste collection cost? etc. Specially i		
any problems or made any assumptions and how you are planning to address this	•	
addressing those problems).	next year (or ii you ii	eca neip
addressing those problems).		
Approach to reducing food waste		
Are you currently running any initiatives to reduce food waste from your own ope	erations, supply chains	s or your customers?

Are you currently running any initiatives to reduce food waste from your own operations, supply chains or your customers? Were you running any initiatives to reduce food waste from your own operations, supply chains or your customers between Jan-Dec 2016?					