LIFE FOODPRINT Project

«The challenges and the opportunities for the Food Sector»

Dr Fotini Salta
SEVT

Athens, 23/6/2017
Hellenic Food & Drink Industry

Figures

- **Turnover**: €14.2 billion
- **Value Added**: 3% of Hellenic Gross Added value
- **Exports**: €4.5 billion
- **Employment**: 360,000 (direct & indirect)
- **Number of Companies**: 1,225
- **CONSUMPTION**: 14% of household expenditure on food and drink products

December 23, 2017
5th International Conference on Sustainable Solid Waste Management
EU FOOD AND DRINK INDUSTRY FIGURES

TURNOVER
€1,089 billion
Largest manufacturing sector in the EU

VALUE ADDED
1.8%
of EU gross value added (GVA)\(^1\)

CONSUMPTION
14%
of household expenditure on food and drink products

EMPLOYMENT
4.25 million people
Leading employer in the EU

NUMBER OF COMPANIES
289,000

SMEs
49.5%
of food and drink turnover

EXTTERNAL TRADE
€98.1 billion
Exports
€72.9 billion
Imports

EU share of global exports
17.8%

R&D EXPENDITURE
€25.2 billion
trade balance
€2.5 billion

Sources: Eurostat; UN COMTRADE; JRC

\(^1\) For definition, see page 22

Athens, 23/6/2017
5th International Conference on Sustainable Solid Waste Management
A few words for the Federation of Hellenic Food Industries SEVT

**Represents** the Greek Food & Drink Industry at national, European and international level.

**Membership** is made up of food and drink companies and sector associations.

The **mission** is to facilitate the development of an environment in which all food and drink companies, whatever their size, can meet the needs of consumers and society, while at the same time competing effectively for sustainable growth.
SEVT Priorities

- Competitiveness – Growth – Extroversion
- Research – Innovation
- Safety & Quality
- Nutrition & Health
- Sustainable Development
- European Co-operation

Sustainability plays a key role in food and drink companies long-term competitiveness. SEVT is committed to support sustainable practices, to protect and promote natural resources, to work in partnership to develop uniform, science based methodologies to assess a food product environmental impact and to find the best ways to be communicated to the consumer.
The world challenges

Providing **Food and Nutrition Security** in a changing world is an urgent objective due to the increasingly interconnected challenges of **natural resource scarcity, climate change and population growth**, which affect European and food systems globally.
Billion

World population expected to reach 9 billion by 2050

Projected to require:

- **60%** Some 60% increase in food supplies globally
- **45%** 45% increase in global demand for energy
- **30%** 30% increase in global demand for water for agriculture

- As well as to exacerbate competition for arable land
- Increased changes in unpredictable weather patterns will put further pressure on these natural resources
- Meanwhile it is estimated that 30% of all food grown worldwide is wasted before or after it reaches the consumer, representing a missed opportunity to feed the growing world population and a superfluous source of GHG emissions

Athens, 23/6/2017

5th International Conference on Sustainable Solid Waste Management
EC FOOD 2030: Research and Innovation for Tomorrow's Nutrition and Food Systems
The Food sector priorities

**NUTRITION** for sustainable and healthy diets: Ensuring that nutritious food and water is available, accessible and affordable for all.

**CLIMATE** smart and environmentally sustainable food systems: Building climate smart food systems adaptive to climate change, conserving natural resources and contributing to climate change mitigation.

**CIRCULARITY** and resource efficiency of food systems: Implementing resource-efficient circular economy principles across the whole food system while reducing its environmental footprint.

**INNOVATION** and empowerment of communities: Boosting innovation and investment, while empowering communities.
The Food sector priorities

NUTRITION: The Challenges

- Malnutrition and hunger
- Obesity and the rise of noncommunicable diseases
- Food safety issues and crises
- Rising protein demand
- Unhealthy and unsustainable diets
The Food sector priorities

CLIMATE & SUSTAINABILITY: The Challenges

Food systems not resilient to changing climate.
Ensure food quantity and quality in a changing climate.
Ensure food systems also contribute to mitigating GhG emissions.
Food scarcity and poverty induced migration
Protect biodiversity.
Unhealthy and unsustainable diets.
The Food sector priorities

CIRCULARITY: The Challenges

Resource efficiency in food systems.
Environmentally sustainable food systems.
Healthy ecosystems to provide sustainable ecosystems services for food production.
Polluted ecosystems suffering from intensive production practices.
Limit or reuse food waste for multiple uses.
The Food sector priorities

INNOVATION: The Challenges

Make food systems sustainable, resilient, responsible, diverse, competitive and inclusive.
Empower and engage communities, civil society & consumers in food systems.
Strengthen rural, urban and coastal communities around food & nutrition security.
Increase the level of food & nutrition literacy of consumers.
Unsustainable and unhealthy consumer behavior.
Boost new skills, jobs & business models for better functioning food systems.
The data for the Food & Drink industry in European level

- **22%**
  Total GHG emissions in the food and drink processing industry in the EU-15 decreased by 22% between 1990 and 2012\(^\text{11}\)  
- **65%**
  The food and drink processing industry’s fuel consumption decreased by 65% between 1990 and 2012 in the EU-15, resulting in 4,168 Gg of avoided CO\(_2\) emissions\(^\text{12}\)  
- **Over 490**
  Over 490 food and drink manufacturing sites apply robust standards for green building design and operation in Europe\(^\text{16}\).

- **0.9%**
  The food and drink processing industry accounted for 0.9% of total EU-15 GHG emissions in 2012\(^\text{12}\).

- **4th highest**
  The European food and drink industry is proud to be the sector with the fourth highest number of EU Eco-Management and Audit Scheme (EMAS) registered organisations with 119 registrants\(^\text{14}\).

Source: “A Time to Act - Climate Action & The Food Drink Europe”, FOODDRINKEUROPE

Athens, 23/6/2017

5th International Conference on Sustainable Solid Waste Management
Climate Change

Critical resources, upon which food production relies, will come under increased pressure in the future.

Therefore, there is an urgent need all stakeholders to step up their efforts in order to deal with the challenge of the climate change.

Climate Change mitigation means implementing policies to reduce GHG emissions to lessen the probability of exacerbating Climate Change.

Source: “A Time to Act-Climate Action & The Food Drink Europe’, FOODDRINKEUROPE

Athens, 23/6/2017

5th International Conference on Sustainable Solid Waste Management
Actions taken by Food Industry

Technology change

Optimization

Behaviour change

Sector-wide voluntary actions and agreements

Source: “A Time to Act-Climate Action & The Food Drink Europe”, FOODDRINKEUROPE

Athens, 23/6/2017

5th International Conference on Sustainable Solid Waste Management
FOODPRINT: The main goal

To identify, quantify and implement measures to reduce, the carbon footprint (CF) of the pastry and flour food industry sector along the supply chain while increasing competitiveness through the development of an innovative software tool.
The Identity

- **Implementation countries:** Greece / Italy
- **Budget:** 1,874,864 Euros, 50% European funding
- **Duration:** 01/09/2014 - 31/10/2017
- **Website:** [www.foodprint.gr](http://www.foodprint.gr)
- **Coordinator:** JOTIS SA
- **Partners:** NTUA, SEVT, AUA, AKTINA SA, BIOCHEM ARVANITIS SA, KONTZOGLOU BROS SA, FEDERALIMENTARE Servici
Project aims

-To evaluate the CF of food industry along the supply chain.
-To develop a robust software tool that will enable the reliable determination & evaluation of the CF food products considering direct and indirect activities.

- To perform a large scale demonstration of the developed CF tool in 6 food industries in Greece and Italy.

-To implement in 1 major food industry in Greece and 1 in Italy, the developed CF offsetting program that has been derived from the analysis & evaluation of the demonstration data.
Project aims

To develop a **national strategy** in regard to the reduction of GHG emissions from pastry and flour food industries in Greece and Italy and increasing these industries competiveness in the future.

To **disseminate project** results and findings and to engage the stakeholders & the key actors through appropriate communication methods.

Sector-wide voluntary actions and agreements

Behaviour change
The benefits for the Food Sector

• A free, easy to use, Carbon Footprint software tool was developed. Data for this tool will continue to be collected after the end of the project in order to expand the data base of the tool.

• 6 companies without belonging to the partnership gave to data for the demonstration of the tool.
  – ATTICA ALEXANDROS PITTAS MELISSOKOMIKI
  – G. KALLIMANIS S.A.
  – EI PAPADOPOULOS SA Biscuit and Food Industry
  – ELAIS-UNILEVER HELLAS S.A.
  – Nicoli Molina SPA
  – AB MAURI SPA
The benefits for the Food Sector

• The Hellenic Strategy for the reduction of the GHG emissions is under development and it will be the guide of the sector for the reduction of GHG.

• The participating companies affected deeply from the project and they have re-oriented their environmental approach.

• Raised the awareness of the food Industry concerning the environmental issues and it will contribute to become more efficient.

• Expand of food industry - academic network with scientists of this research field as well.

• Proposal for specific research priorities for the reduction of GHG.
Thank you for your attention