

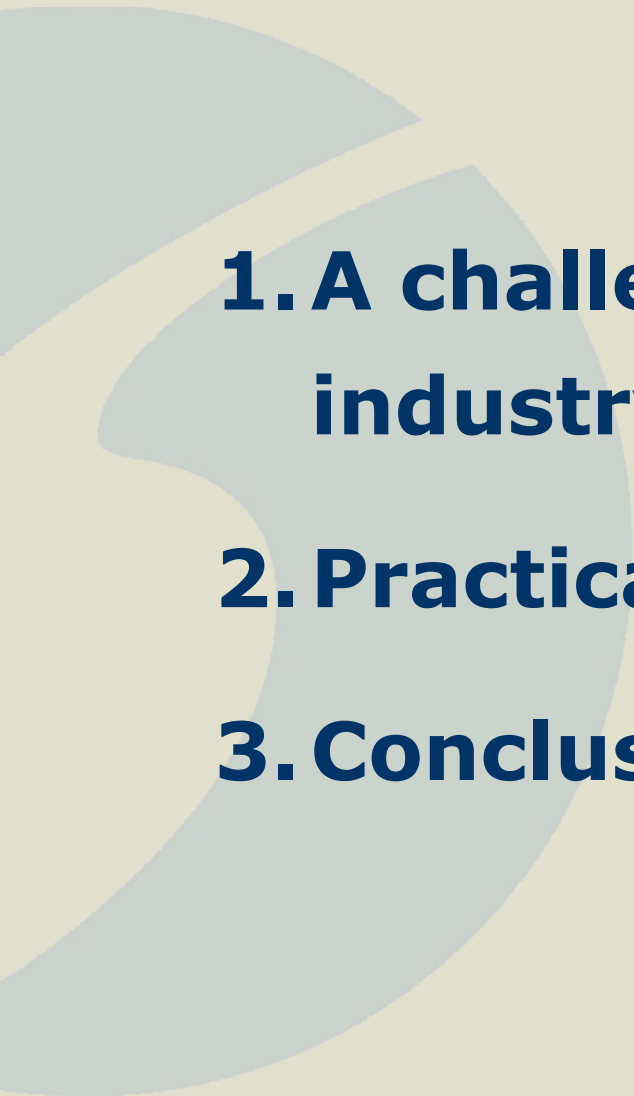
A stylized graphic of a globe, composed of several overlapping, semi-transparent light blue and grey curved shapes, positioned on the left side of the slide.

EFFAT

CLIMATE CHANGE CONFERENCE

**What is going on
in the Food and Drink industry**


Brussels – 23/24 September 2009



1. A challenge for the Food & Drink industry and workers

2. Practical consequences

3. Conclusions



1. A challenge for the Food & Drink industry and workers

Climate change: a challenge

Topical concern for all types of economic activities

Over 20 years, the world population will increase by 40%

- more food
- more pressure on the environment for the production
- more pollution / more waste
- more GHG emissions

Climate change: a challenge

Contradictory objectives...

1. Respond to the demand
2. Limit the impact of production on the environment

...in a difficult context:

1. Impact on agriculture
2. Consumers' demand for green products
3. Pressure from large multiple retailers

Climate change: a challenge

Some data

In the EU, the F&D sector represents:

23% of global resource use

18% of GHG emissions

31% of acidifying emissions

Source: European Commission

In the UK, the F&D sector represents:

18,5% of total GHG emissions

Source: Defra

Climate change: a challenge

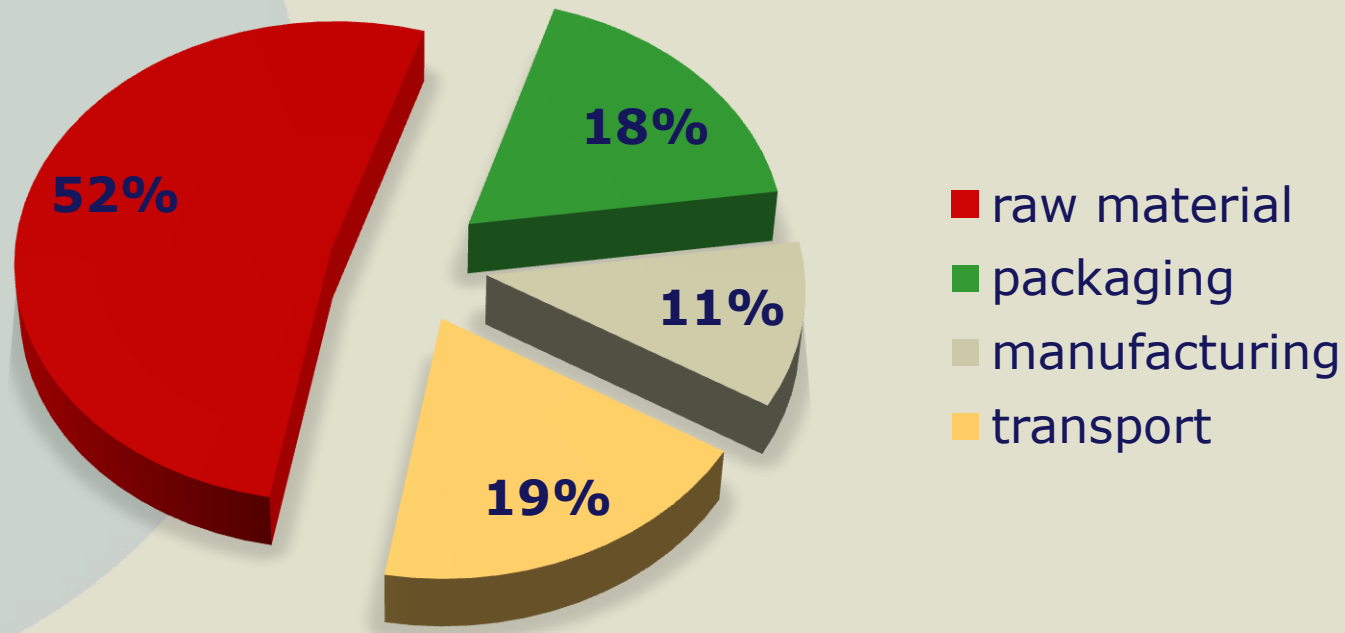
key environmental issues for some food and drink sectors

	Water use	Waste water	Air pollution	Solid output	Energy use Heating & Cooling	Refrige- ration
Meat & poultry	x	x	x	x	x	x
Fish & shellfish	x	x		x	x	x
Fruit & vegetables	x	x		x	x	x
Vegetable oils & fats	x	x	x	x	x	x
Dairy products	x	x	x	x	x	x
Dry pasta	x	x	x	x	x	
Starch	x	x	x	x	x	
Sugar	x	x		x	x	
Drinks	x	x		x	x	x
Breweries	x	x	x	x	x	x

Climate change: a challenge

A company example:

Danone carbon footprint





2. Practical consequences

Practical consequences

- 1. Manufacturing** (energy-water)
- 2. Packaging**
- 3. Transport**
- 4. Raw material**

Practical consequences

Energy: issues

Food processing and preservation

Safe and convenient packing and storage

Methods of food storage: energy intensive

$\frac{3}{4}$ of electricity goes to: machine drive, process cooling & refrigeration

In France, the F&D sector represents **10%** of energy used by the whole industry

Practical consequences

Energy: issues

...but many different usages:

Close link to kind of food processed and stage of processing

e.g. slaughterhouses

Processing includes a mixture of operations requiring all use of energy

Practical consequences

Energy: possible solutions

Companies undertake carbon footprint evaluation

Process optimisation

Adaptation of facilities

Switch from fossil fuel to fuel from waste & by products

Practical consequences

Water: issues

Key environmental issue for F&D sector

Present all stages

Mainly used for cleaning & washing

Usually once-through basis

Lack of awareness & "safety margins" for hygiene standards

In UK, the F&D sector represents **24%** of water used by the whole industry

Practical consequences

Water: possible solutions

Process optimisation

Adaptation of facilities

Recycling of wastewater

Practical consequences

Packaging: issues

Key environmental issue for F&D sector

Packaging is crucial for food safety

Packaging is crucial for labelling

EU study: major differences between types of packaging

On average, packaging represents **6%** of weight of food products.

Practical consequences

Packaging: possible solutions

Water bottles: PET instead of PVC

Reduction of weight

Packaging can't be isolated from efforts to cut the mountains of food waste

Product-by-product approach

Nanotechnologies: innovation and risks

Practical consequences

Transport: issues

The F&D sector: largest customer of the trucking industry

1/5 of the carbon emissions of the sector

Refrigerated transport systems & traditional diesel engine: crucial factors of global warming & destruction of ozone layer

External costs of GHG emissions are bad for the image of the sector

Practical consequences

Transport: possible solutions

- Local sourcing
- Greater capacity vehicles
- Modal shift
- Alternative fuels
- size and weight of packaging

In Germany, the project Marco Polo is supporting since 2007 initiatives shifting the transport from the road to the train.

Practical consequences

Raw material: issues

Access to raw material is crucial to the sustainability of the agro-food sector

Impact of climate change on agricultural production will have knock-off effects for the food and drink industry:

- supply dislocation
- variation of prices
- competition with energy companies
- biodiversity in jeopardy

Practical consequences

Raw material: possible solutions

Protection of geographical areas (Evian...)

Agreement with farmers to reduce carbon footprint of agricultural products

Use of biotechnologies in agriculture



3. Conclusions

Conclusions

- F&D workplaces are at stake
- Companies can act very differently
- Existing tools for workers:
social dialogue / collective bargaining /
European Works Councils
- International solidarity vs companies
- Development of new products: new risks



Thank you for your attention