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Trends and innovation needs in the European Food and Drink Industry

SOUTH EAST EUROPE
Transnational Cooperation Programme

European Union
European Regional Development Fund

European Food and Drink Industry- Key Data

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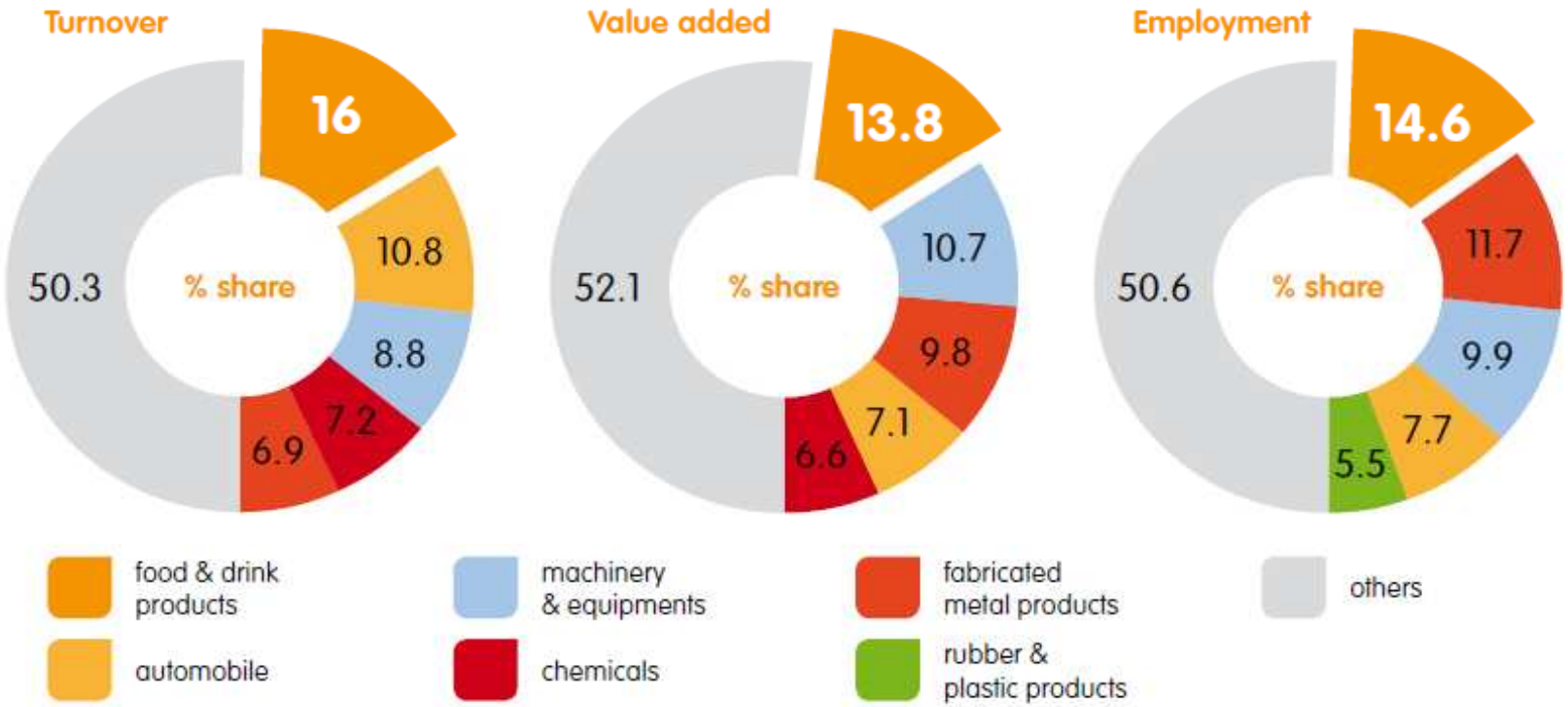
The number one manufacturing industry in the EU

The food and drink industry is the number one manufacturing industry in the EU in terms of:



Source: Data & Trends of the European Food and Drink Industry 2011 - *http://www.fooddrinkeurope.eu/publication/data-trends-of-the-european-food-and-drink-industry-2011/*

European Food and Drink Industry- Key Data

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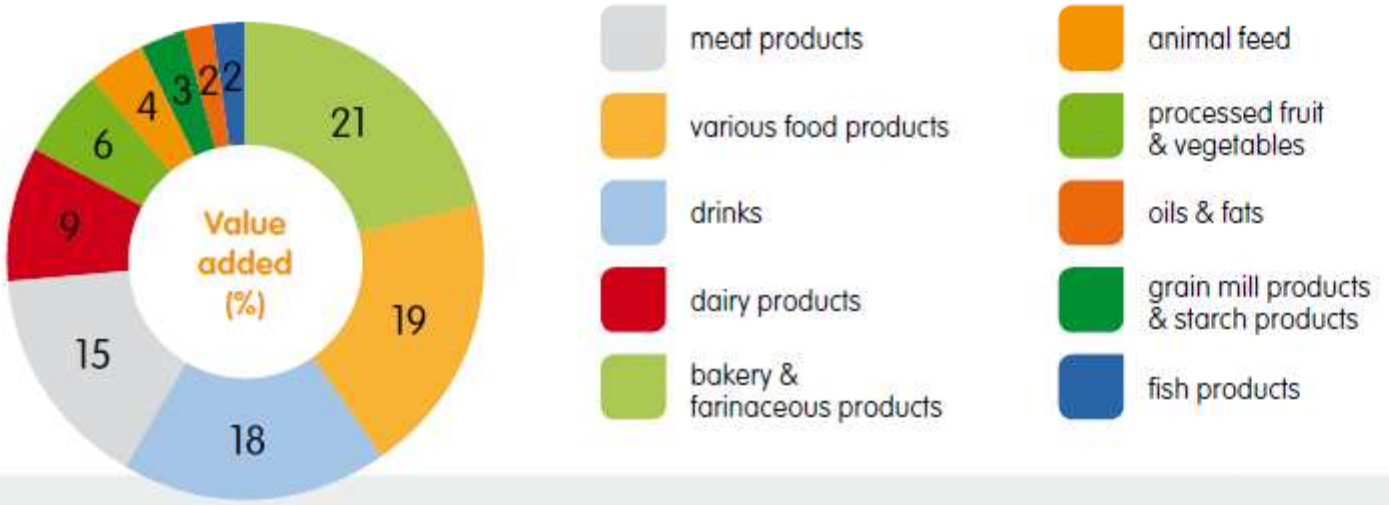
A highly diversified industry

274,000 European food and drink companies produce a vast range of foods, satisfying the wide range of evolving needs of Europe's 500 million consumers every day.



Source: Data & Trends of the European Food and Drink Industry 2011 - *http://www.fooddrinkeurope.eu/publication/data-trends-of-the-european-food-and-drink-industry-2011/*

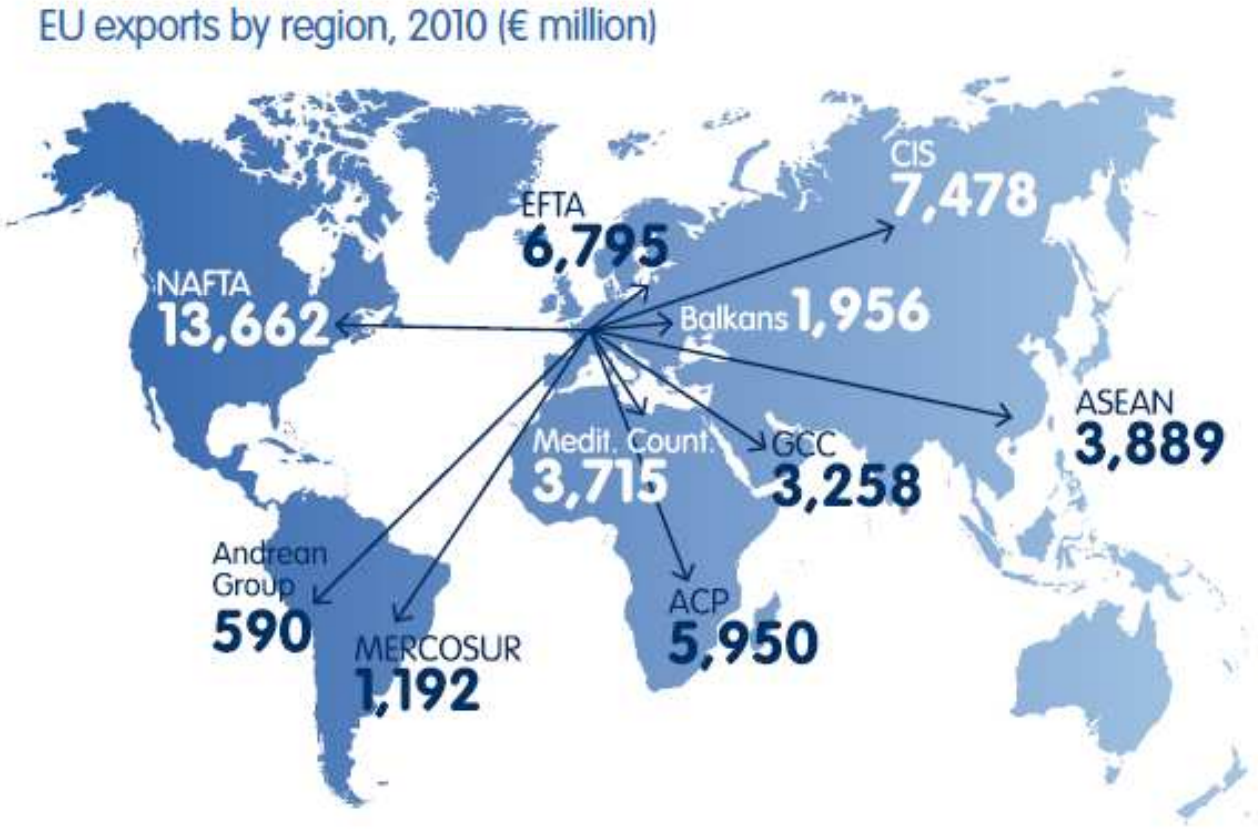
European Food and Drink Industry- Key Data

Exports
€65 billion

Imports
€56 billion

Trade balance
€10 billion

EU market share of global exports
17.8%



Food and drink industry is less innovative compared to other manufacturing sectors…

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Patent applications to the EPO[1] by sector in the EU, 2008 (% in manufacturing)

10% - 8%	7% - 4%	3% - 2%
Automobile	Basic chemicals	Medical equipment
Office machinery	Transport equipment	Fabricated metal products
Pharmaceuticals		Rubber and plastic products
Television and radio		**Food and drink products**

(1) European Patent Office

Source: Eurostat (Science, technology and innovation database)

…but EU food and drink companies innovate more than anywhere else in the world

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World and EU patent applications by sector for top 9 sectors, 1999-2008

	World (1000)	EU (1000)	EU share[1] (%)
Logistics	10.6	5.8	55
Agriculture and food	**24.3**	**10.2**	**42**
Water	23.8	9.5	40
Horticulture	8.7	3.5	40
Chemicals	551.2	212.1	38
Energy	23.7	8.3	35
Life sciences	298.0	99.2	33
Creative ind.	40.0	8.8	22
High technological ind.	1,331.1	208.9	16

(1) Share of EU patent applications for a particular category in the global number of patent applications of that category

Sources: Octrooitoppers, Topgebieden vanuit octrooiperspectief, Ministerie van Economische Zaken, Landbouw en Innovatie, July 2011

Innovation objectives of the food industry

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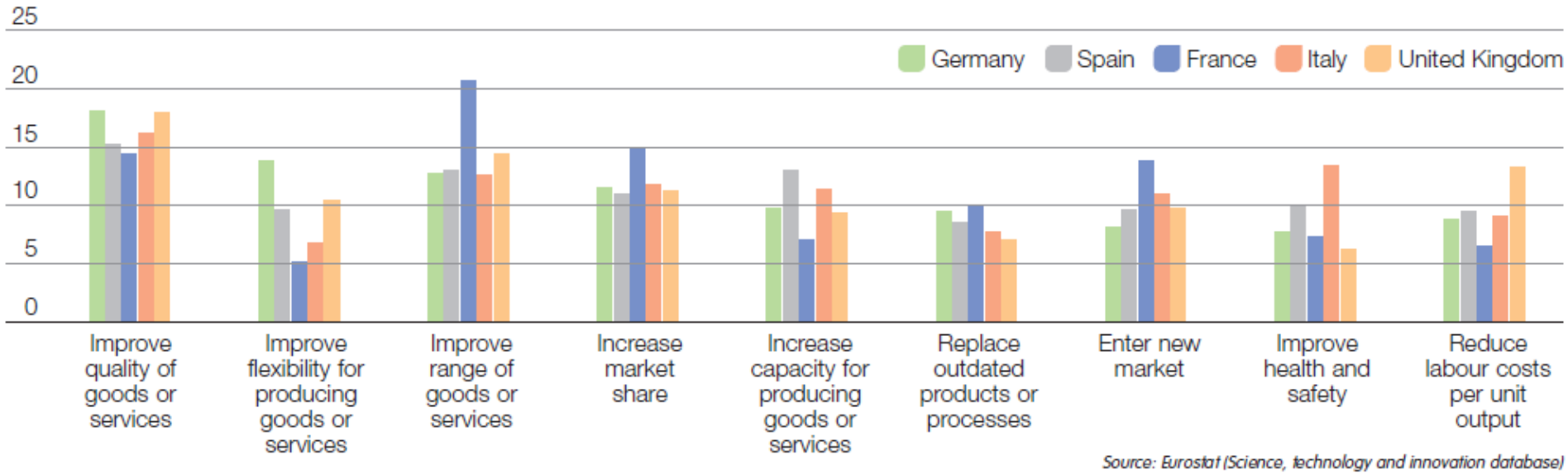
Highly important innovation objectives in the food industry, 2008 (% of companies with innovation activity)

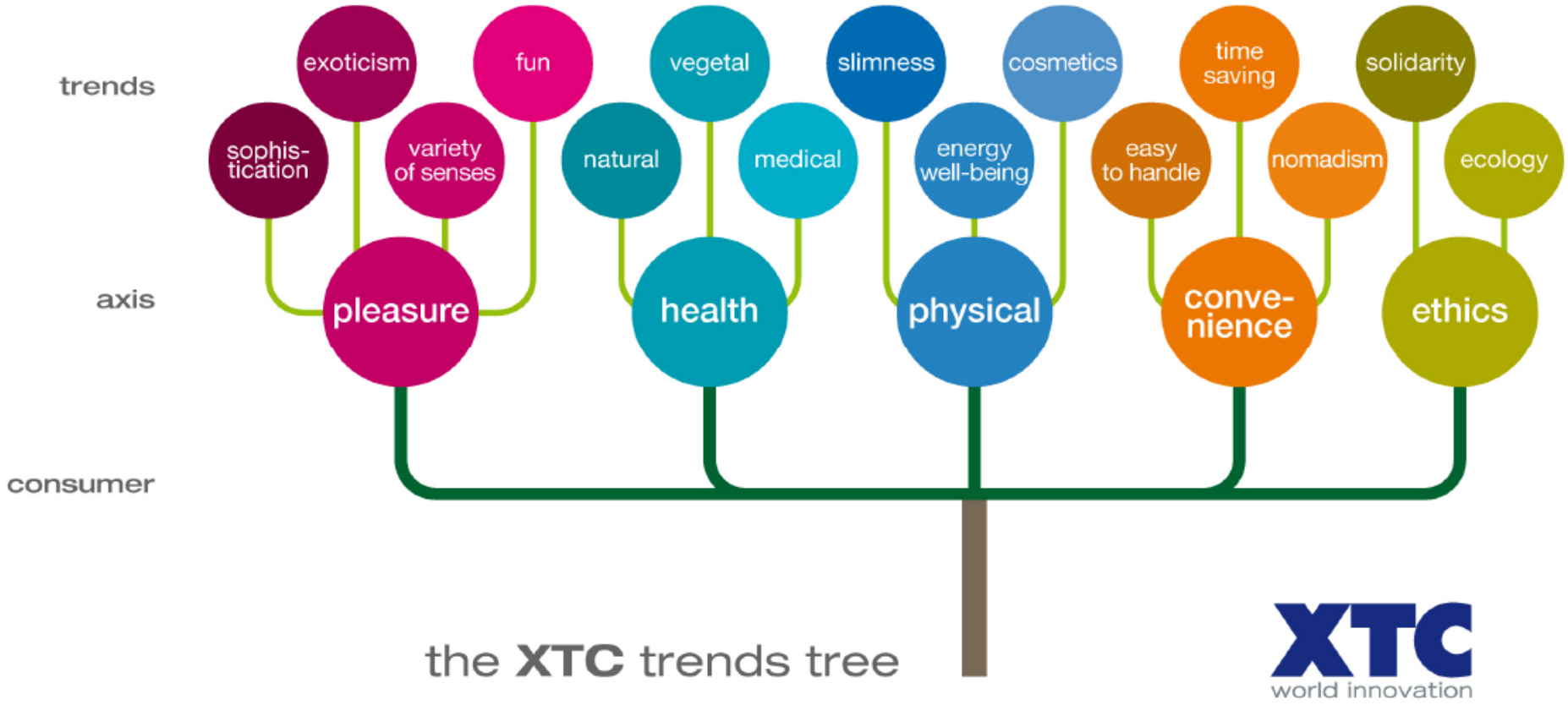


Source: Eurostat (Science, technology and innovation database)

European Food Industry: Key Challenges

- *Increased international competition*
- *Increased worldwide food demand*
- *Concerns for food safety and quality*
- *Interest in added- value food*
- *Changing attitudes and emerging consumer trends*

Consumer Trends in Food selection



The XTC Trends Tree™ is a hierarchical structure that summarizes overall consumer expectations and categorizes them under five axes, and then breaks them down into innovation trends and subsequently into the new drivers used by the world's manufacturers to meet these expectations, http://www.xtcworldinnovation.com

Axis	Trends	Group of claims	General claims
Health	"Medical"	Cardiovascular health	Promotes a healthy cardiovascular system
			Fights cholesterol
			Regulates triglyceridemia
			Promotes healthy blood circulation/pressure
			Fights anemia
		Bone health	Fights osteoporosis
			Reinforces bone mass
			Promotes bone growth
		Fights the signs of aging	Fights arthritis
			Fights the signs of aging cellulaire
		Mental health	Boosts mental alertness and concentration
			Improves memory
			Promotes development of the brain and nerve cells
			Regulates mood
		Hormonal health	Fights the effects of menopause
			Regulates blood sugar levels
			Helps control diabetes
		Immune health	Strengthens the immune system

Dominant claims

Growing claims

Emerging claims

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European Technology Platform ***Food for Life***

- *An **industry-led**, public/private partnership encouraged by the EC to drive **innovation** and unite **stakeholder** communities (industry, academia, researchers, consumers, media, etc.) in reaching **strategic research objectives for the agro- food sector***
- *To increase **industry competitiveness** and safeguard the continued **well-being and welfare of consumers** across Europe*

http://etp.fooddrinkeurope.eu

European Technology Platform Food for Life

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Challenges

1. Ensuring that the **healthy choice** is the **easy choice** for consumers
2. Delivering a **healthy diet**
3. Developing value-added food products with superior **quality, convenience, availability and affordability**
4. Assuring **safe** foods that consumers can **trust**,
5. Achieving **sustainable** food production
6. Managing the **food chain**
7. **Communication**, training and technology transfer, competitiveness and **consumer** interaction

Challenge 1: Ensuring that the healthy choice is the easy choice for consumers

- Goal 1: Better and agreed upon measurement in food consumer Science
- Goal 2: Developing comprehensive models of consumer food choice processes
- Goal 3: Promoting effective interaction with consumer groups and consumers directly through communication and public participation
- Goal 4. Developing strategies to induce behavioural change in order to improve consumer health and social responsibility (through healthier food choices)

Challenge 2: Delivering a healthier diet

- Goal 1: Understanding brain function in relation to diet
- Goal 2: Understanding effects of diet-gut interactions on intestinal and immune functions
- Goal 3: Understanding the link between diet and metabolic function (obesity and associated metabolic disorders)
- Goal 4: Understanding consumer behaviour and effective communication in relation to health and nutrition

Challenge 3: Developing quality food products

- Goal 1: Relevance of the research to small, medium or large enterprises
- Goal 2: Define the needs to develop specific training and/or education programs
- Goal 3: The need for ERA-Nets in areas of research defined as high priority
- Goal 4: Investments in infrastructure

Challenge 4: Assuring safe foods that consumers can trust

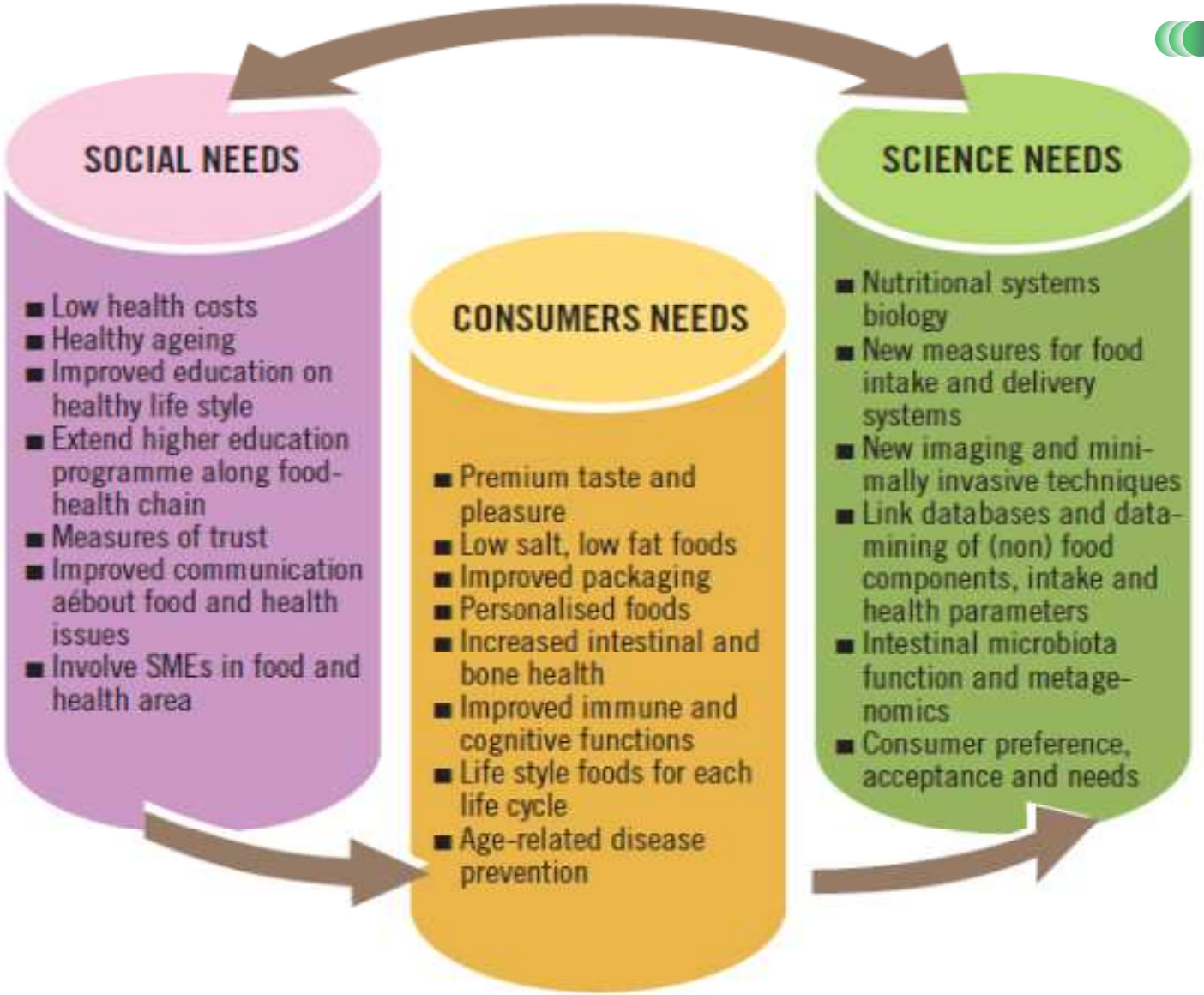
- Goal 1. Predicting and monitoring the behaviour and fate of relevant known and emerging biological hazards
- Goal 2. Predicting and monitoring the behaviour and fate of relevant known and emerging chemical hazards including toxins of biological origin
- Goal 3. Improving risk assessment and risk-benefit evaluation
- Goal 4. Developing tools to ensure security of the food chain
- Goal 5. Understanding and addressing consumer concerns with food safety issues

Challenge 5: Achieving sustainable food production

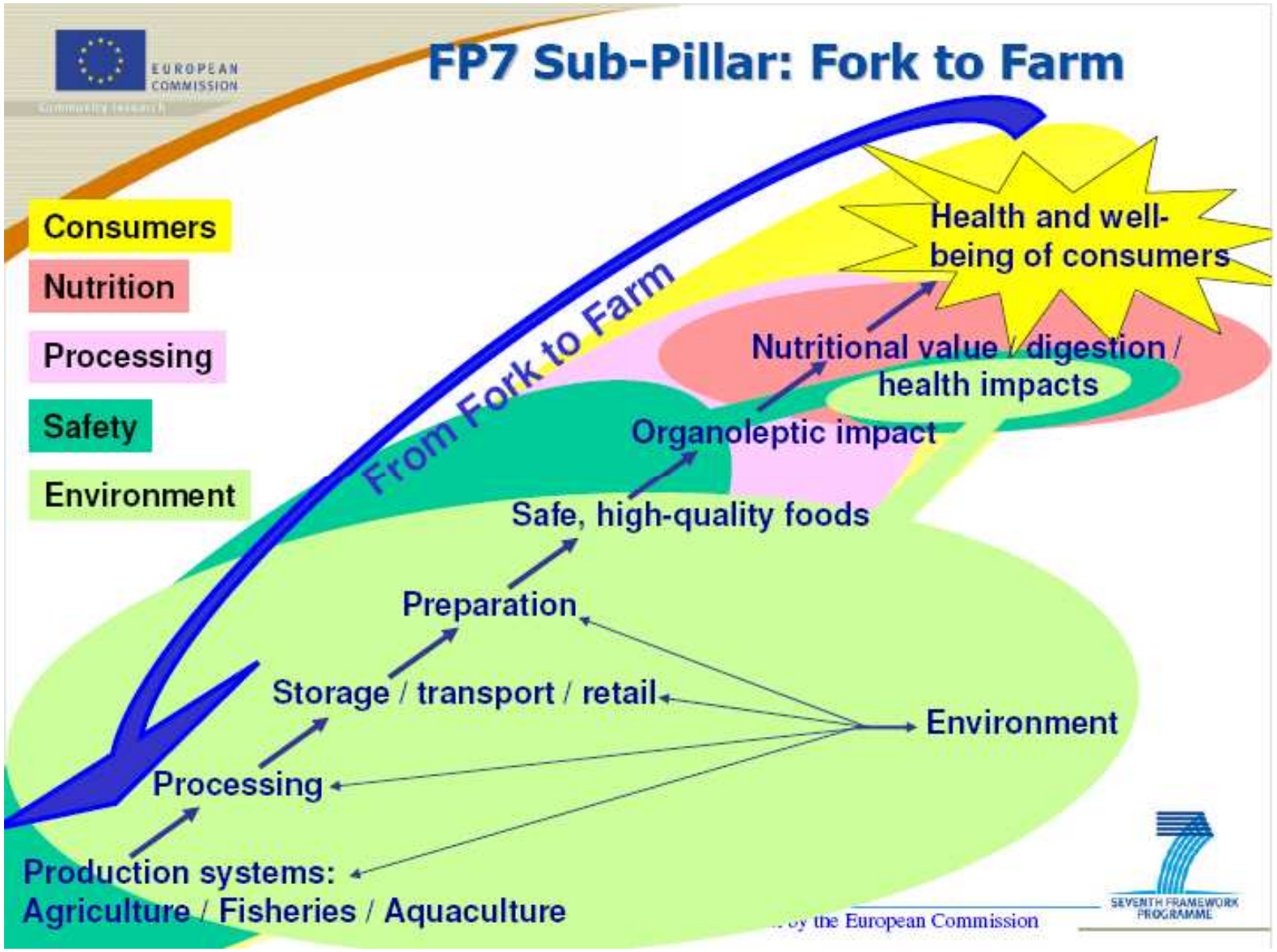
- Goal 1. Progressing the sustainability of food production and supply in Europe
- Goal 2. Developing scenarios of future European food production and supply
- Goal 3: Developing sustainable processing, preservation, packaging and logistics systems
- Goal 4. Ensuring sustainable primary food production in Europe
- Goal 5. Understanding consumers and their behaviour regarding sustainable food production

Challenge 6: Managing the food chain

- Goal 1: Serving consumer needs for affordable food of quality and diversity
- Goal 2: Serving transparency needs for advancements in chain governance, efficiency, innovation dynamics, and trust
- Goal 3: Serving SME needs for better integration into value chain relationships
- Goal 4: Serving sector needs for better understanding the dynamics in critical success factors for competitive performance and sustainability in times of globalisation and change



The integrated picture- social, consumer and science needs
(Source: European Technology Platform "Food for Life", Strategic Research Agenda 2007-2020, http://etp.ciaa.be/documents/CIAA-ETP%20broch_LR.pdf).


EUROPEAN COMMISSION
FP7 Sub-Pillar: Fork to Farm
Consumers
Nutrition
Processing
Safety
Environment
From Fork to Farm
Health and well-being of consumers
Nutritional value / digestion / health impacts
Organoleptic impact
Safe, high-quality foods
Preparation
Storage / transport / retail
Processing
Production systems:
Agriculture / Fisheries / Aquaculture
Environment
SEVENTH FRAMEWORK PROGRAMME

Thank you!

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