Foresight for policy-making

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Joint Research Centre

Foresight and Behavioural Insights Unit

Serving society
Stimulating innovation
Supporting legislation

Outline

➢ Brief introduction to the JRC

➢ What is foresight?

➢ Example JRC Foresight study on Food & Health

JRC - The European Commission's in-house science service

Mission:

To provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle.
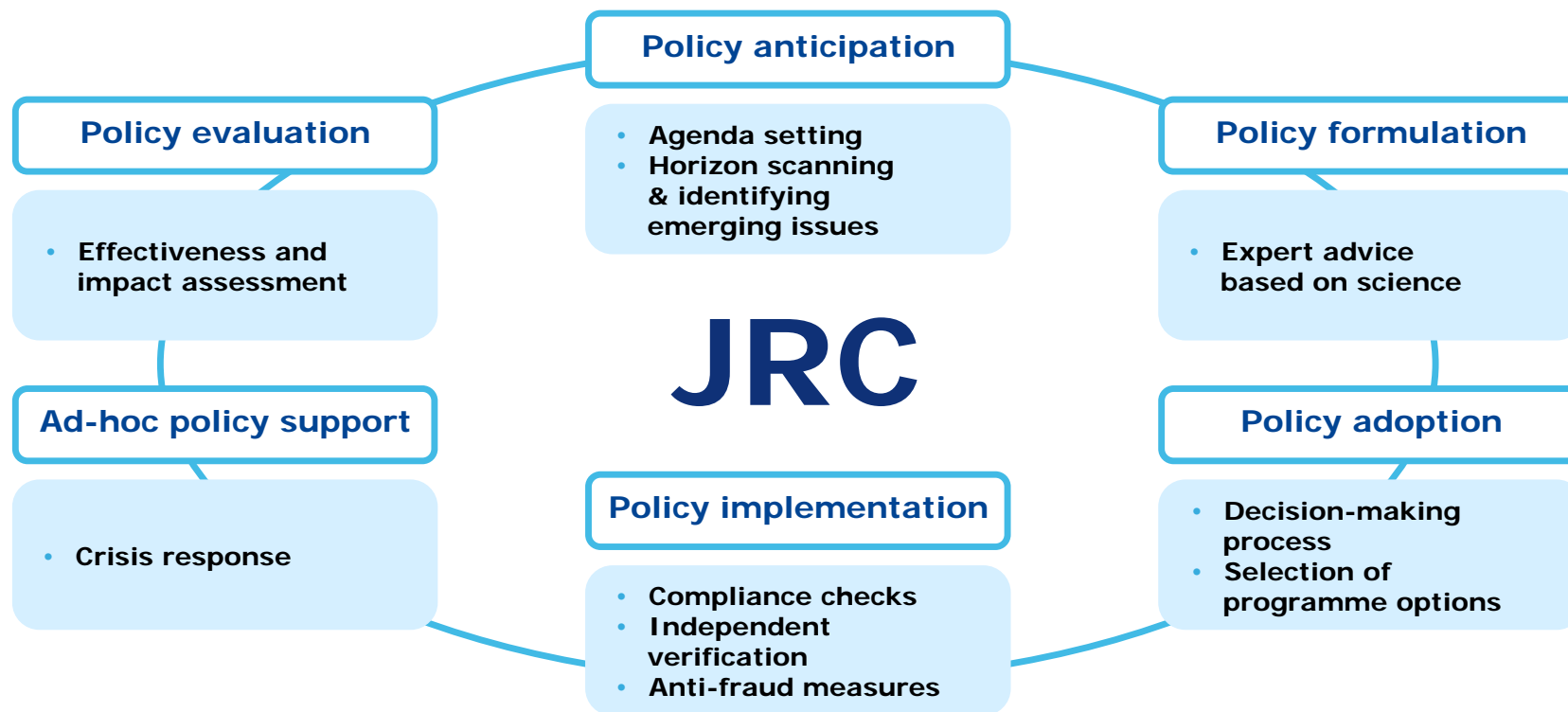
Quick Facts:

• Established in 1957

• 7 institutes in 5 countries

• 3 023 scientific, technical and administrative personnel

• 2013 Budget: €386 million

JRC Sites

IRMM
Institute
for Reference Materials
and Measurements

IET
Institute
for Energy
and Transport

ITU
Institute
for Transuranium
Elements

Headquarters

IPTS
Institute
for Prospective
Technological
Studies

IHCP
Institute
for Health
and Consumer
Protection

PETTEN
GEEL
BRUSSELS
KARLSRUHE
ISPRA
SEVILLE

IPSC
Institute
for the Protection
and Security
of the Citizen

ISM
Ispra
Site
Management

IES
Institute
for Environment
and Sustainability

Implementing the JRC Mission in the EU Policy Cycle

Policy anticipation

- Agenda setting
- Horizon scanning & identifying emerging issues

Policy evaluation

- Effectiveness and impact assessment

Policy formulation

- Expert advice based on science

JRC

Ad-hoc policy support

- Crisis response

Policy adoption

- Decision-making process
- Selection of programme options

Policy implementation

- Compliance checks
- Independent verification
- Anti-fraud measures

What is foresight?

Why is thinking about the long-term powerful?

➢ helps to get out from present day concerns

➢ helps to go beyond the current mainstream thinking

➢ helps to look for opportunities

➢ better anticipate the challenges that shape the future

➢ supports creativity for today's strategies and actions

➢ helps break gridlock

Foresight …

➢ does not predict the future

➢ complements desk research analyses with structured dialogue

➢ enhances future thinking by gathering anticipatory intelligence from a wide range of knowledge sources in a systematic way

➢ structures the analyses to ensure the emergence of collective intelligence derived beyond established pathways and links it to today's decision making
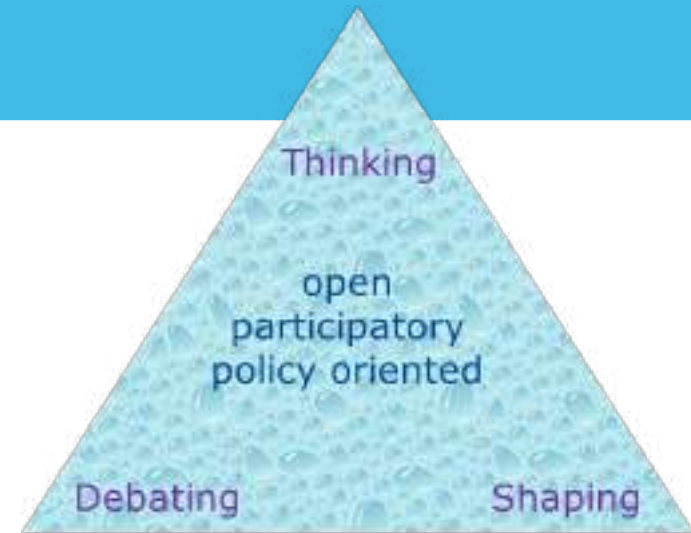
Foresight, Forecasting, Planning

Foresight
- can <u>use</u> forecasts, can <u>contribute</u> to planning
- assumes that there are numerous possible futures that can be created through the actions we choose to take today

Forecasting
- often assumes that there is one probable future

Planning
- has shorter time horizons. Typical foresight time horizons vary between 5-30 years but may be longer

When should foresight support policy?

➢ **When critical functions change or are pushed to change:** decline of key industrial sectors, after natural catastrophes, climate change ...

➢ **When stakeholders need to stand behind decisions:** research priorities, regional development ...

➢ **When decisions entail deep or long-term engagement and investments:** infrastructures, healthcare ...

➢ **When innovation needs to be fostered:** adaptation to changed circumstances ...
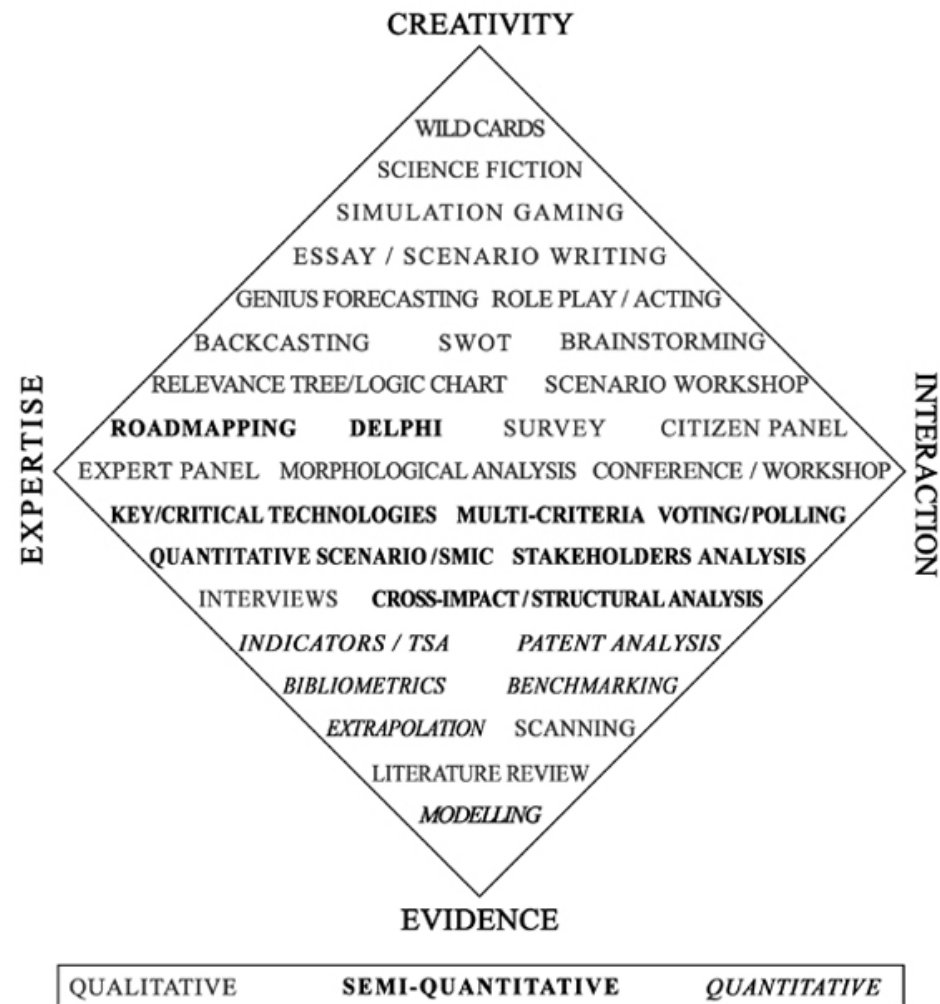
Foresight methods

Foresight diamond
Popper, R. (2008)

Often used, e.g. :
- Delphi
- Scenarios
- Extrapolation
- Brainstorming
- Interviews
- Literature review
- Expert panels
- Workshops

CREATIVITY

WILD CARDS
SCIENCE FICTION
SIMULATION GAMING
ESSAY / SCENARIO WRITING
GENIUS FORECASTING ROLE PLAY / ACTING
BACKCASTING SWOT BRAINSTORMING
RELEVANCE TREE/LOGIC CHART SCENARIO WORKSHOP
ROADMAPPING DELPHI SURVEY CITIZEN PANEL
EXPERT PANEL MORPHOLOGICAL ANALYSIS CONFERENCE / WORKSHOP
KEY/CRITICAL TECHNOLOGIES MULTI-CRITERIA VOTING/POLLING
QUANTITATIVE SCENARIO /SMIC STAKEHOLDERS ANALYSIS
INTERVIEWS CROSS-IMPACT / STRUCTURAL ANALYSIS
INDICATORS / TSA PATENT ANALYSIS
BIBLIOMETRICS BENCHMARKING
EXTRAPOLATION SCANNING
LITERATURE REVIEW
MODELLING

EXPERTISE

INTERACTION

EVIDENCE

QUALITATIVE SEMI-QUANTITATIVE QUANTITATIVE

JRC Foresight study

Tomorrow's healthy society –
research priorities for foods and diets

Foresight and Behavioural Insights Unit

Institute for Health and Consumer Protection IHCP

Institute for Reference Materials and Measurements IRMM

JRC Foresight study:

Tomorrow's healthy society – research priorities for food and diets

Objectives

• Identify research priorities that support the provision and consumption of foods and diets for health

• Support the implementation of Horizon 2020

The study was carried out on request of DG RTD.

Implementation

- Time horizon 2050

- Focus on the EU and EU consumers

- Scenario-based foresight approach

  - Scenarios are used to highlight possible futures, they do not predict the future or suggest a preferred future.

  - They are stories (creative combination of data, facts and hypotheses) which explore how the future could look like under the influence of a strengthening or weakening of a combination of driving forces.

  - Scenarios can be used to highlight challenges and opportunities to inform today's decisions.
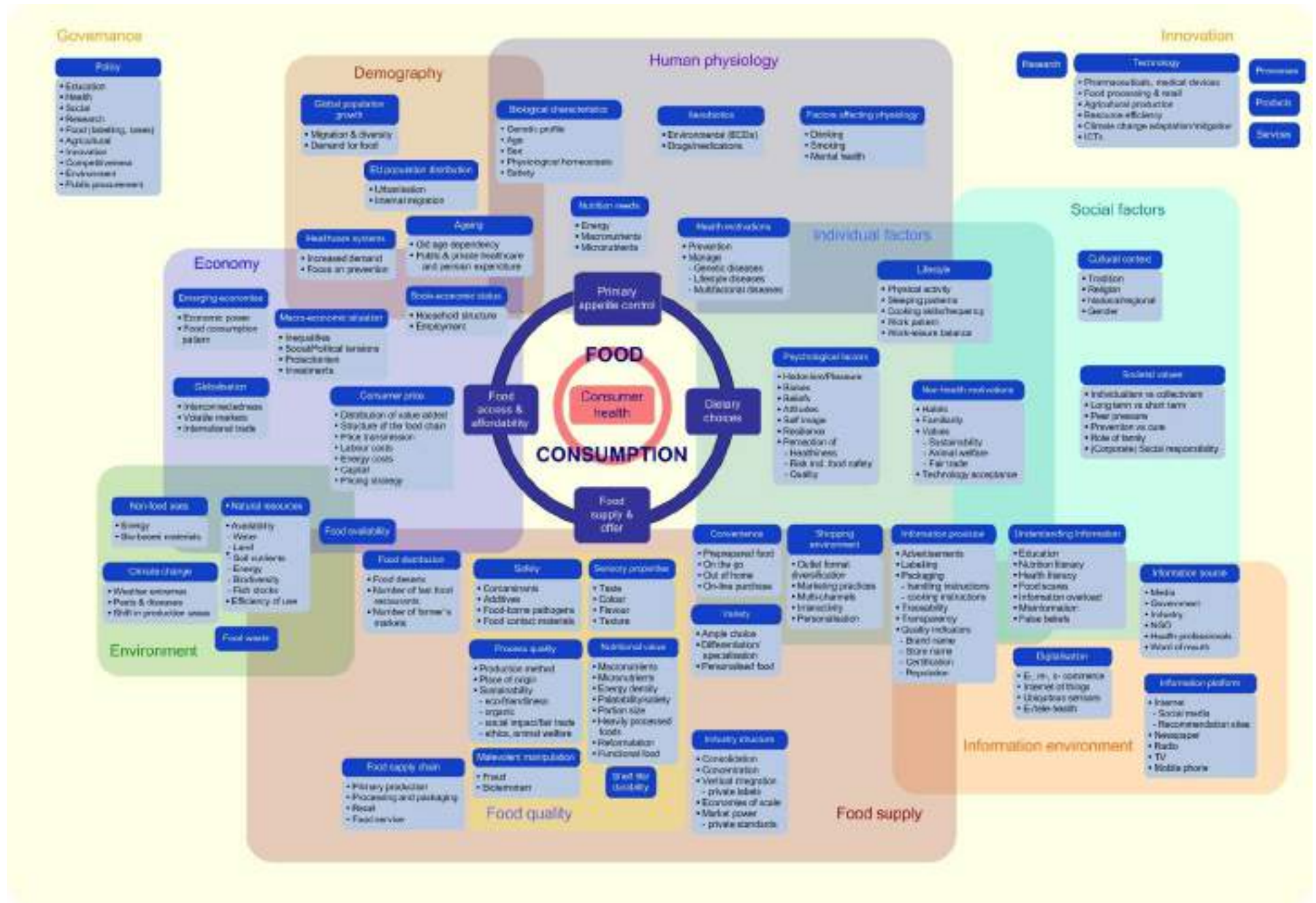
Scenario process for Food&Health study
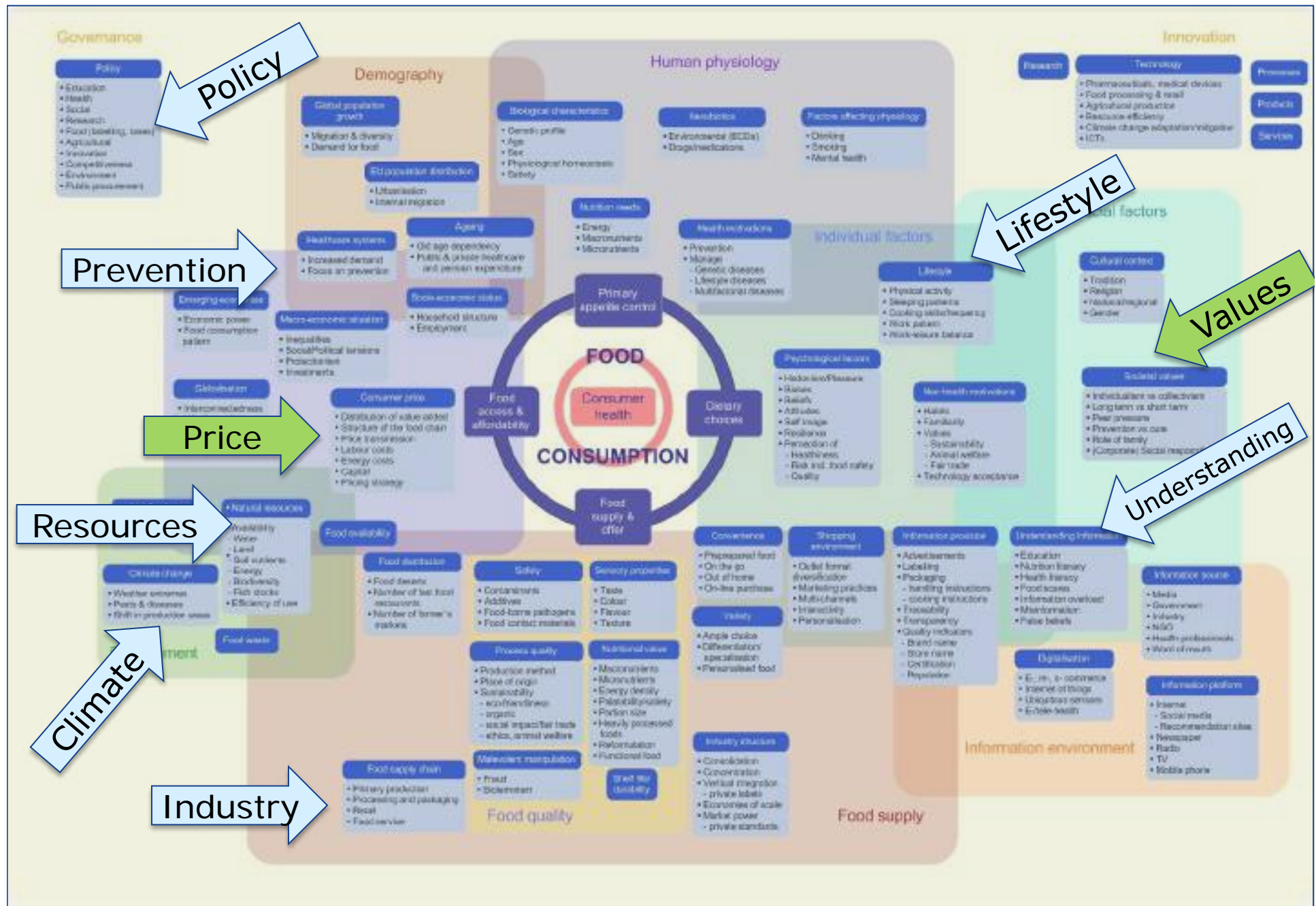
1st workshop

DEFINE SYSTEM → IDENTIFY DRIVERS → SCENARIO LOGIC

LESSONS ← NARRATIVES ← SCENARIOS
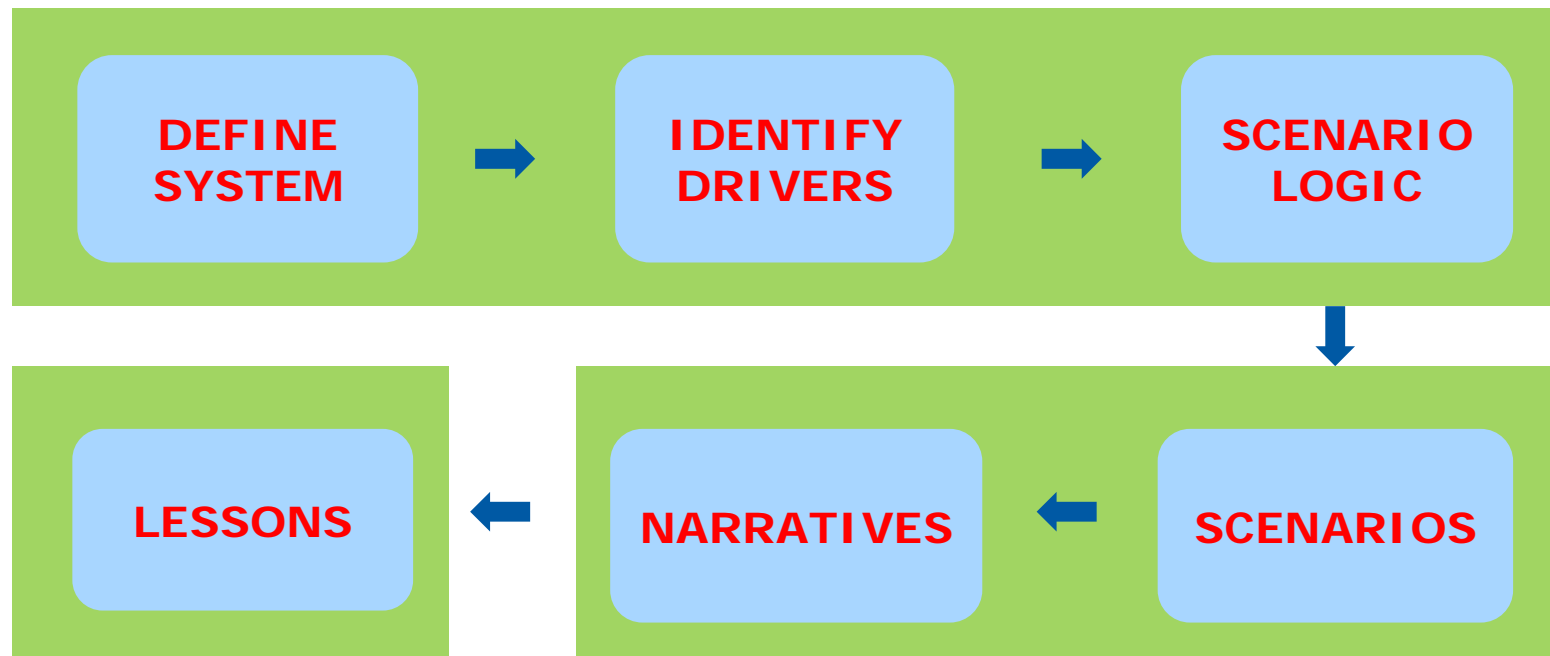
3rd workshop

2nd workshop

Food consumption map

Food consumption map

Strong community spirit

Importance to common goods, rights & social justice

Healthy new world

Heal the world

Low agricultural commodity price

Adaptation to climate change, new generation of biofuels

High agricultural commodity price

Scarce natural resources, Climate change, Biofuel competition, at global level

Me, myself and I

Eat to live

Individualistic society

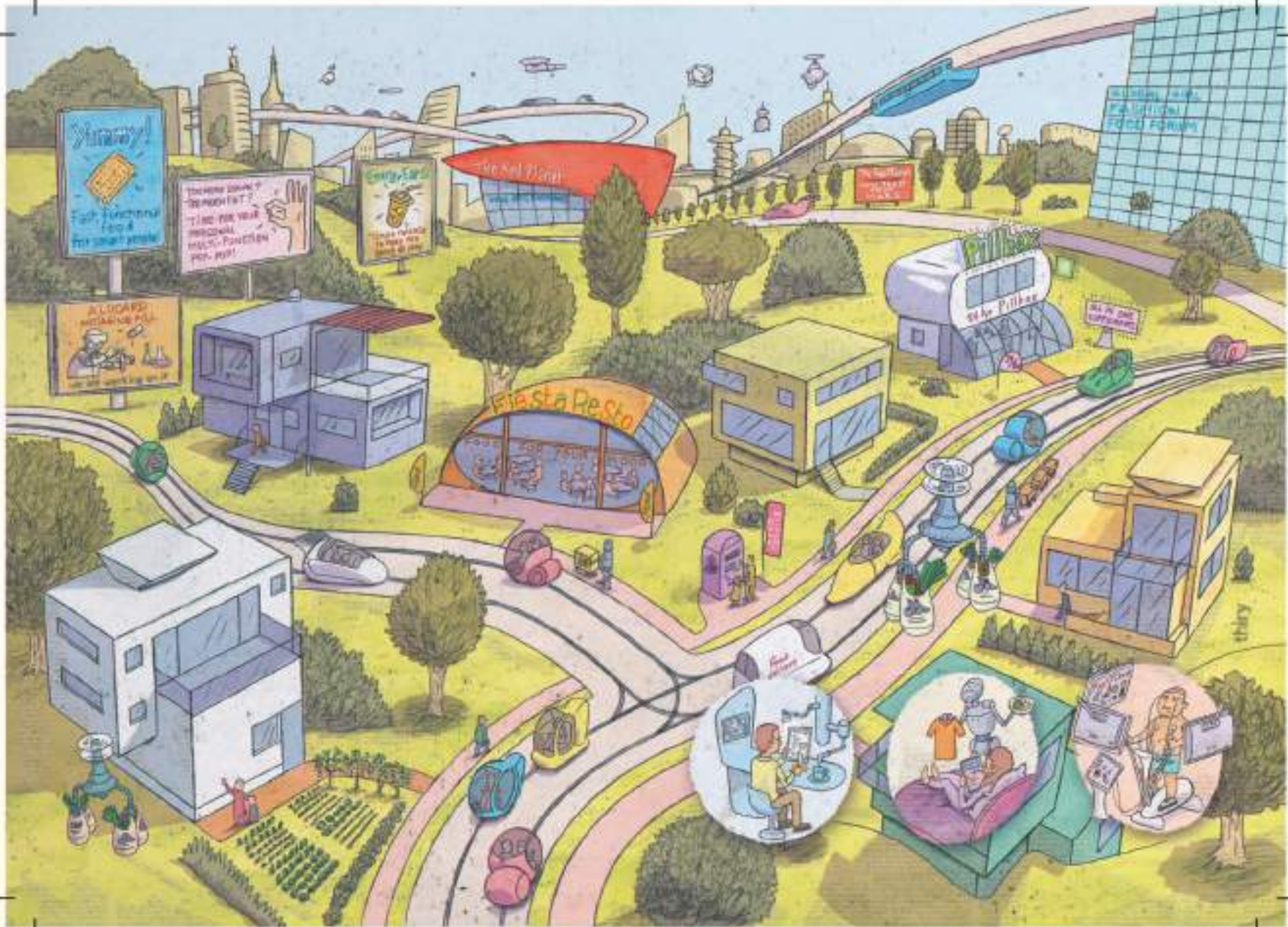*Individual rights and initiatives valued, self-interest goes before common good*

Healthy new world

Heal the world

Eat to live

Me, myself & I

Opportunities & challenges, e.g.

Strong community spirit

Importance to common goods, rights & social justice

Low agricultural commodity price

Adaptation to climate change, new generation of biofuels

High agricultural commodity price

Consensus on healthy diets

Criminalisation of unhealthy behaviour

Long-term adherence to healthy diets

Effective regulation of food chain

Healthy diets for low-income groups

Food & health literacy

Policy integration

Actors working in networks

Management of personal data

Food as disease treatment

Loss of social value of food

Easy food choice for elderly

Alternative protein sources

Better nutrition profiles of basic food

Effective fortified foods

Global supply chain integrity

Individualistic society

Individual rights and initiatives valued, self-interest goes before common good

Tomorrow's healthy society: Research priorities

Towards healthier eating: integrated policy making	Food, nutrients and health: cross-interactions and emerging risks	Making individualised diets a reality	Shaping and coping with the 2050 food system
• Improve the evidence base for adoption of healthier dietary behaviours • Developing a scientific framework for a systems approach to food and nutrition policies • Provide a framework to design, monitor and evaluate policies	• Deepening the understanding of human nutrition: facing the complexity • Anticipation of emerging risks	• Data needs: creation and management of necessary data for enabling individualised diets • Analysing feasibility and impacts of individualised, healthy diets	• Understanding the social role of food • Towards a sustainable food system producing safe, affordable and healthy dietary components • Supporting technologies to meet societal needs

Multi-disciplinary Systems Approach

More on Food&Health foresight:

Report available soon on JRC website

https://ec.europa.eu/jrc/en/publications-list

More on foresight:

Engage today to shape tomorrow -

5th International Conference on Future-Oriented Technology Analysis (FTA)

Brussels, 27 & 28 November 2014

Joint Research Centre (JRC)

www.jrc.ec.europa.eu

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THANK YOU!

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