DYNAMIX

Decoupling growth from resource use and its environmental impacts

Exploring consumption-focused policy mixes for absolute decoupling of well-being from resource use and environmental impacts

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Katharina Umpfenbach, Martin Hirschnitz-Garbers – Ecologic Institute

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OVERVIEW

- DYNAMIX research questions and objectives
- Decoupling concepts
- Drivers of resource consumption

- Defining three policy mixes
- The overarching policy mix aiming at addressing structural drivers of overconsumption

RESEARCH QUESTIONS

Policy options for a resource efficient economy

*“**policy mix** [leading] to an **absolute decoupling** of economic growth from unsustainable use of natural resources and environmental degradation.”*

*“**new concepts and paradigms** to ensure that the resource efficiency dimension throughout the **life cycle** of products/services is embedded in policy formulation“*

*“an adequate policy mix that optimises **synergies** and addresses **trade-offs** between different areas and policies”*

PROJECT OBJECTIVES

identify

promising policy mixes supporting absolute decoupling

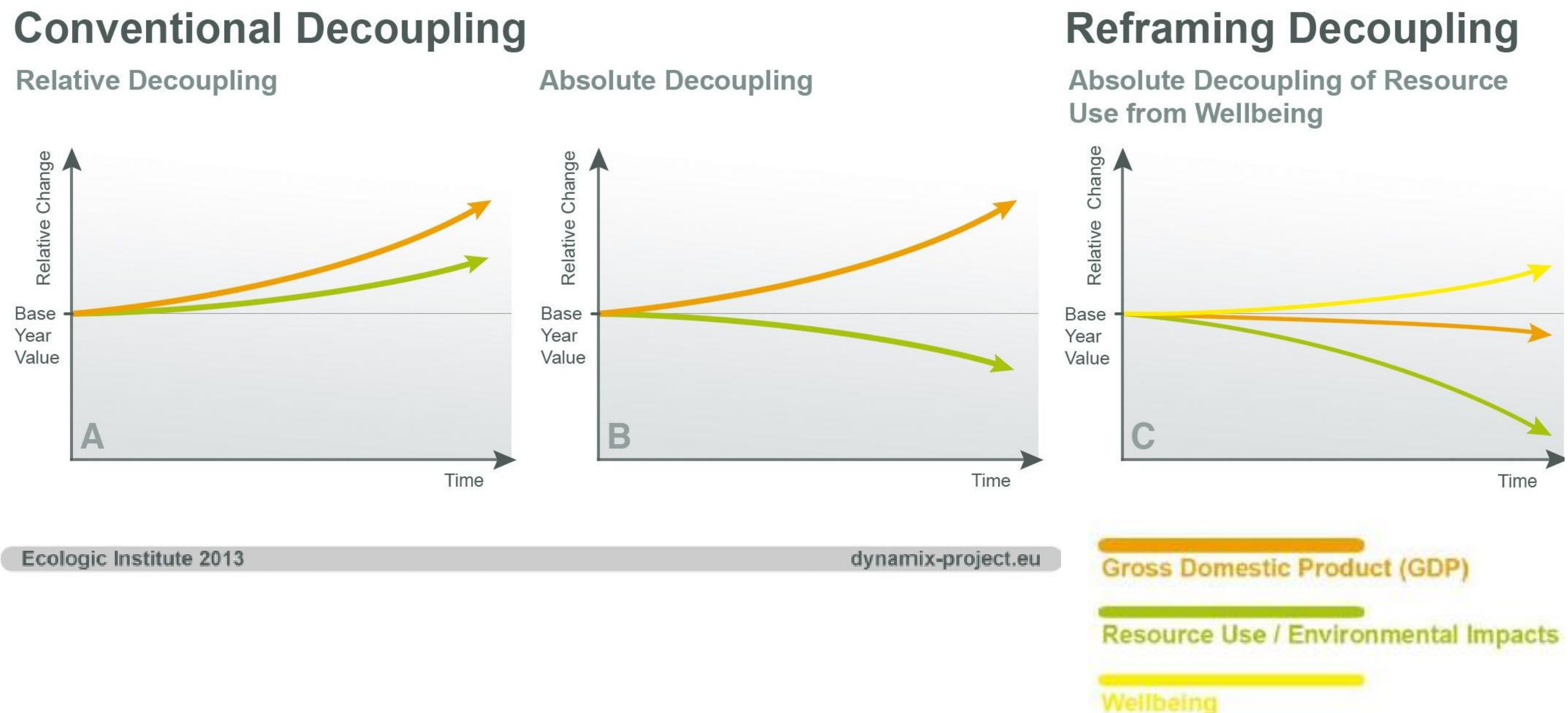
assess

potential impacts in the medium-term (2030) and long-term (2050)

develop & conceptualise

analytical framework for selection and design of dynamic policy mixes

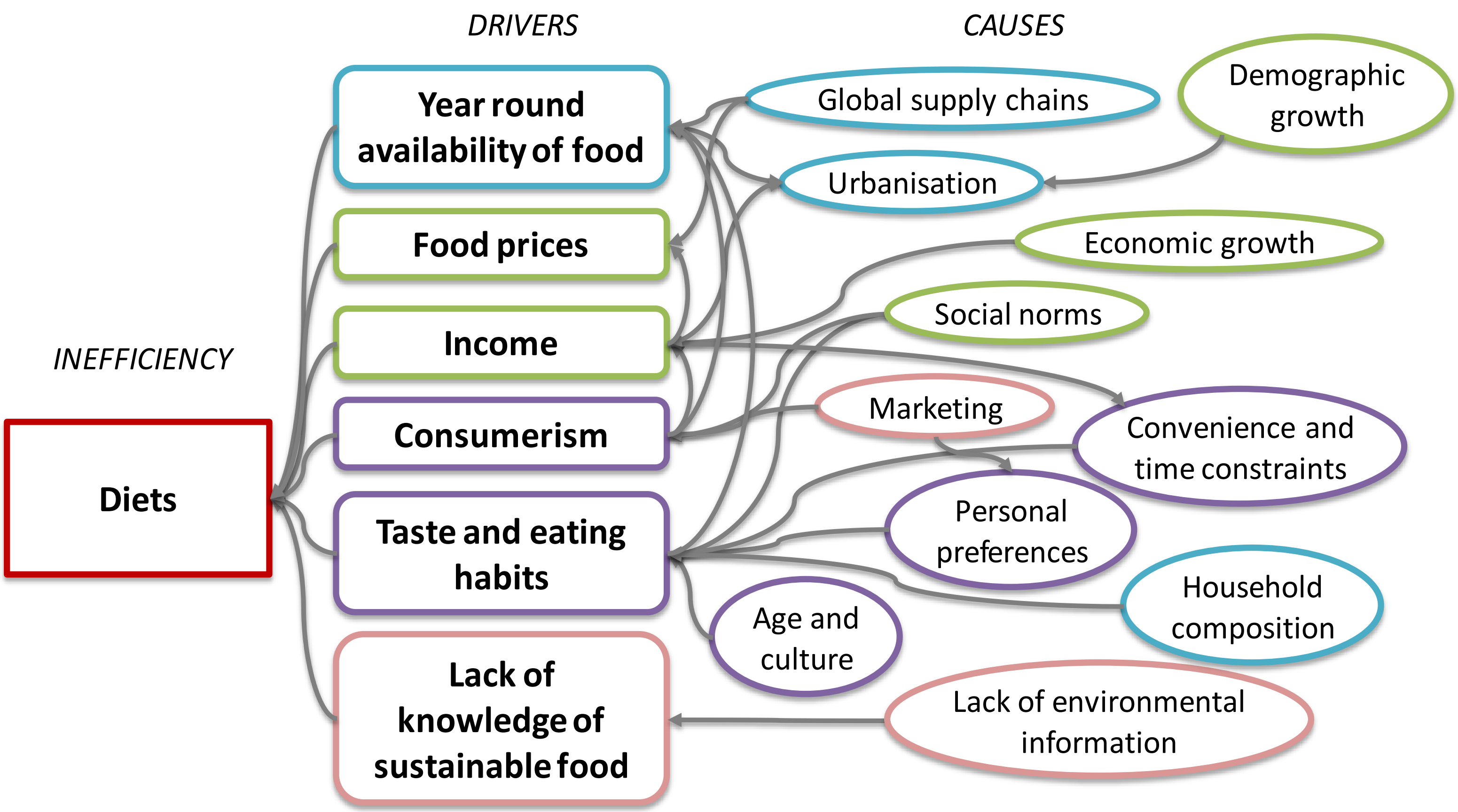
CONCEPTS – ABSOLUTE DECOUPLING



Can Absolute Decoupling Be Achieved?

- Easily … were it not for a complex web of drivers affecting inefficient resource use, such as

Drivers and causes to unsustainable diets and resource inefficient food choices

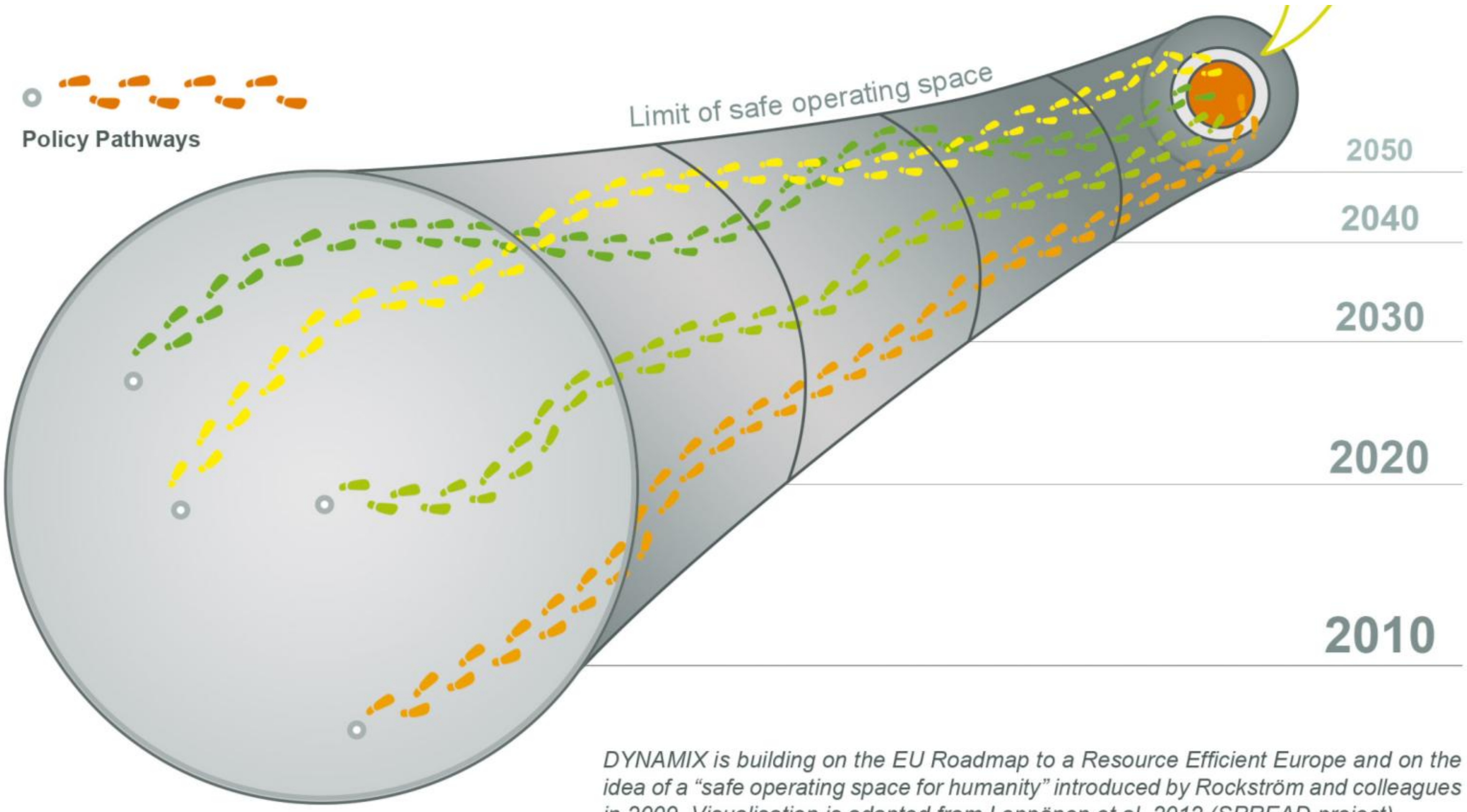


Source: Tan et al. (2013)

Lessons Learnt from Driver analysis

- We need to
  - change consumption and production patterns
  - challenge underlying paradigms and world views
  - overcome infrastructure and institutional lock-in
- How best to support such transitions?

Need for Dynamic Pathways



DYNAMIX is building on the EU Roadmap to a Resource Efficient Europe and on the idea of a "safe operating space for humanity" introduced by Rockström and colleagues in 2009. Visualisation is adapted from Leppänen et al. 2012 (SPREAD project).

Ecologic Institute 2013 **dynamix-project.eu**

POLICY MIXES FOR EX-ANTE ASSESSMENT

Steps in developing the policy mixes

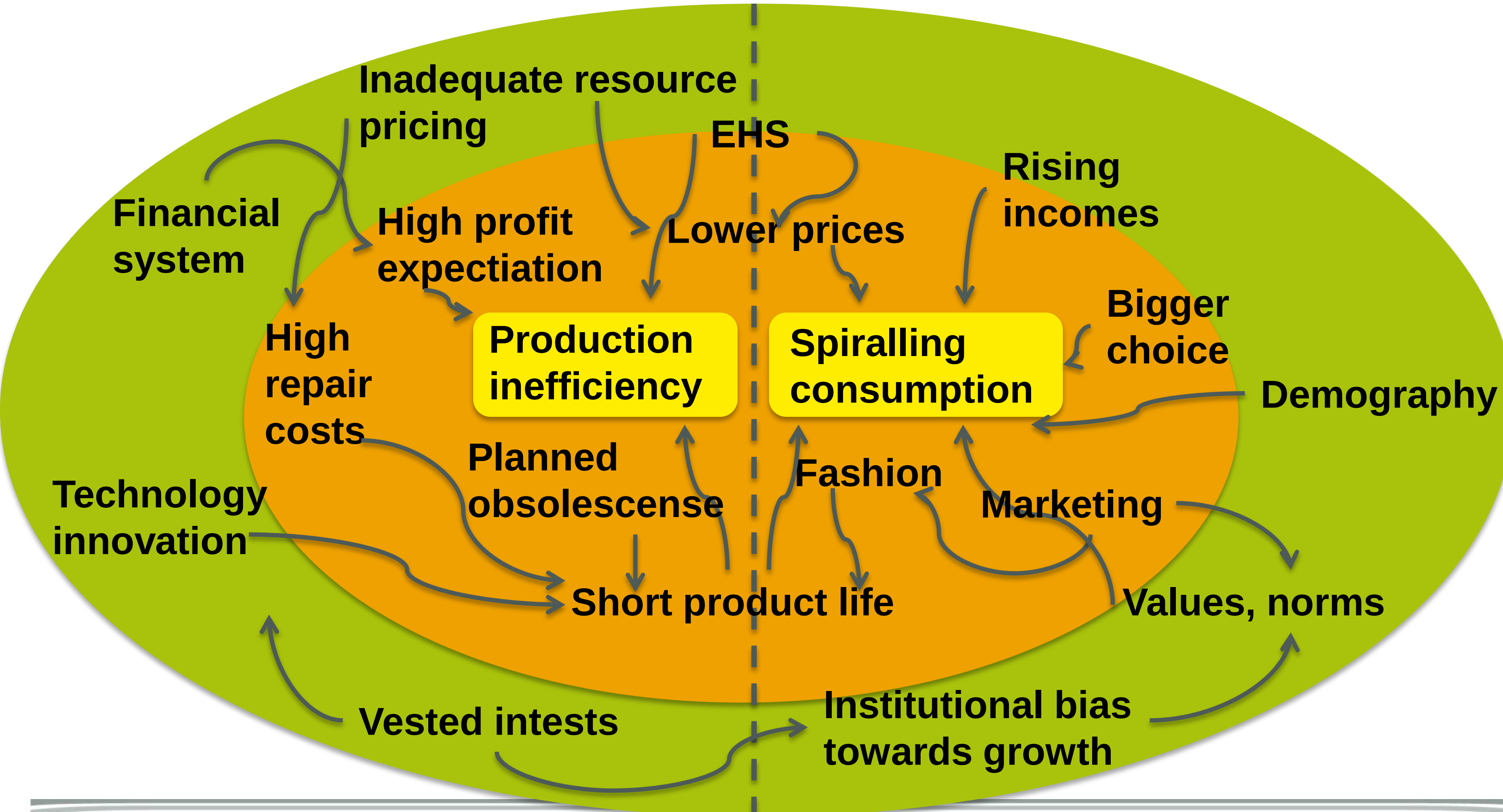
- Analysing theme-specific trends and drivers
- Setting 2050 and 2030 theme-specific aims
- Definining policy options addressing the drivers identified
- Choosing exemplary policy mixes for detailed assessment
- Seeking feedback from stakeholders

3 Policy mix Areas

- Land:
  - reduce agricultural land footprint/impacts
  - Production (improve water and biodiversity conservation service) and consumption (reducing meat/dairy consumption) focus

- Metals:
  - Reduce metal-consumption related mining
  - Increasing recycling and material efficiency
  - Mass and precious metals (e.g. iron, copper, gold)
- Overarching

ANALYSING STRUCTURAL DRIVERS



THE GRETCHEN QUESTION(S)

	Macro narratives					
Macroeconomic means	GG	GE	GT	PWG	SSE	DG
Price-based instruments:						
Ecological tax reform						
Carbon tax						
Cap and trade						
Border tax adjustments						
Picking the winner:						
Technology policies						
Stopping perverse subsidies						
Green subsidies						
Governing demand:						
Green stimulus						
Education and re-education						
Mainstreaming						
Increasing the demand for resource-extensive services						
Redirecting financial flows (green investments):						
Pension fund investments in green infrastructure						
Eco-tax revenues invested in green transition						
Financial transactions tax financing green transition						
Advertisement tax revenue invested ingreen transition						

	Macro narratives					
Macroeconomic means	GG	GE	GT	PWG	SSE	DG
Means for localisation:						
Local currencies						
Strengthening the informal economy						
Enhancing local production and services						
New redistribution and labour marketpolicies:						
Maximum and minimum income						
Citizen's income						
Worksharing						
Employer of last resort						
Harnessing the financial sector:						
Division between investment and retail banking						
Forced demergers of financial actors too big to fail						
Tax on financial transactions						
Ban of obscure instruments						
Capital control						
Limit on bonuses						
Fight tax havens						
State-monopoly on money creation						
Regulation of and creation of new businesses:						
Limit to size (and right-size profits)						
Cooperative ownership						
New business models						
Regulation of international trade						
New measures for economic progress						

Source: Urhammer and Ropke 2013

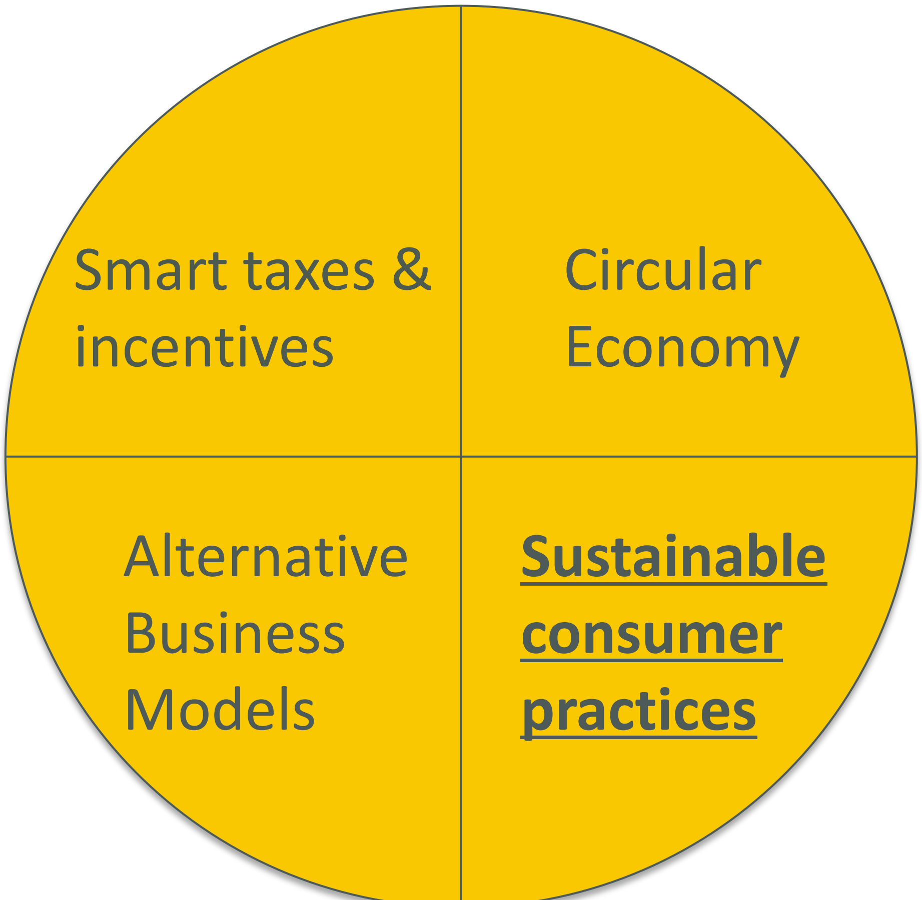
DESIGNING THE POLICY MIX - EXAMPLE

Drivers
- Inadequate resource pricing

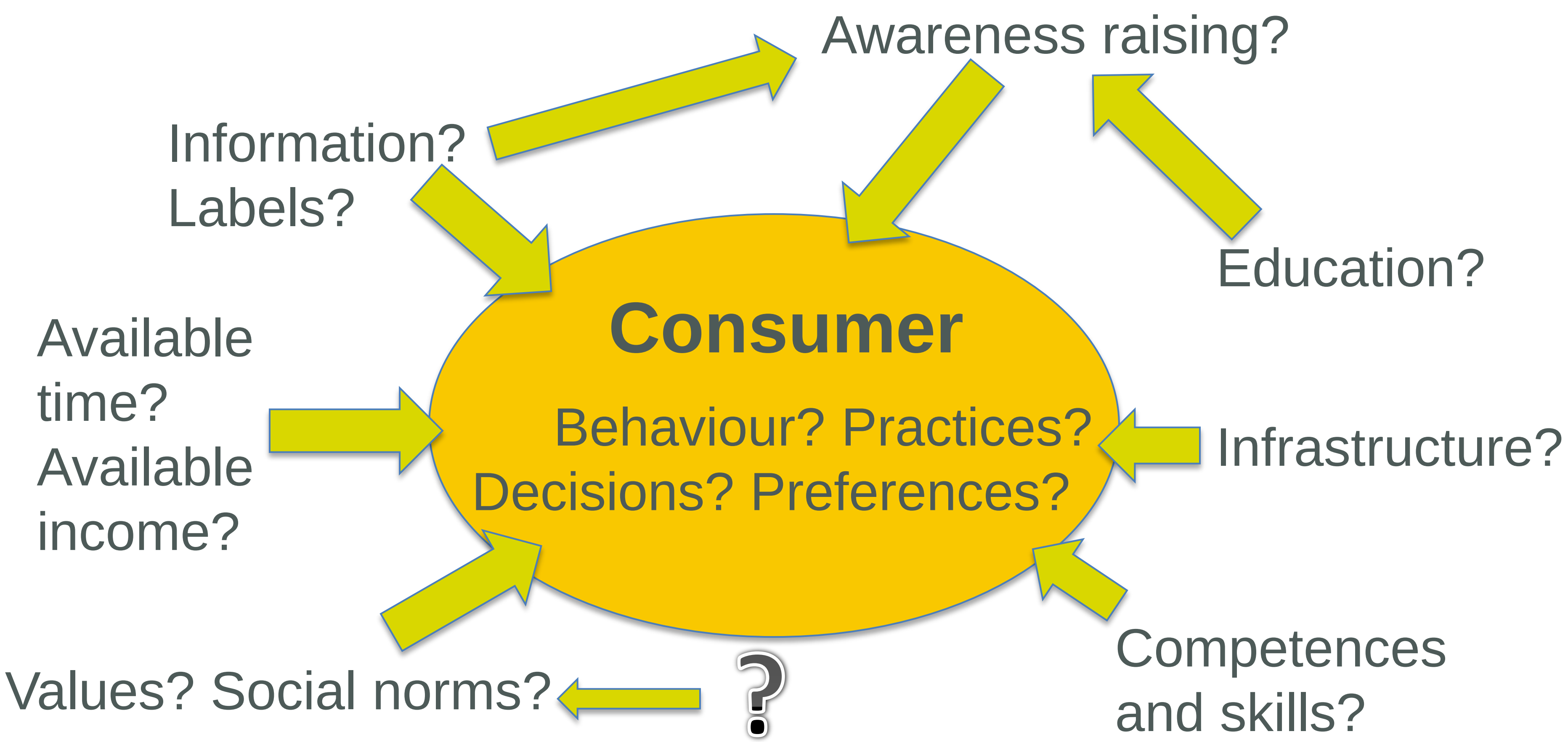
Objective
- All resource and extrnal costs fully internalised

Policy
- Tax on material use

Designing the policy Mix – Four clusters



How To Change Consumer Behaviour?



POLICIES ON CONSUMER PRACTICES

- Step-by-step restrictions on advertising and marketing
- Policies enabling voluntary subsitution of income by leisure
- Extending labelling to include information on average total consumption levels
- Public infrastructure spending programme for enabling sustainable behaviour

Thank you.