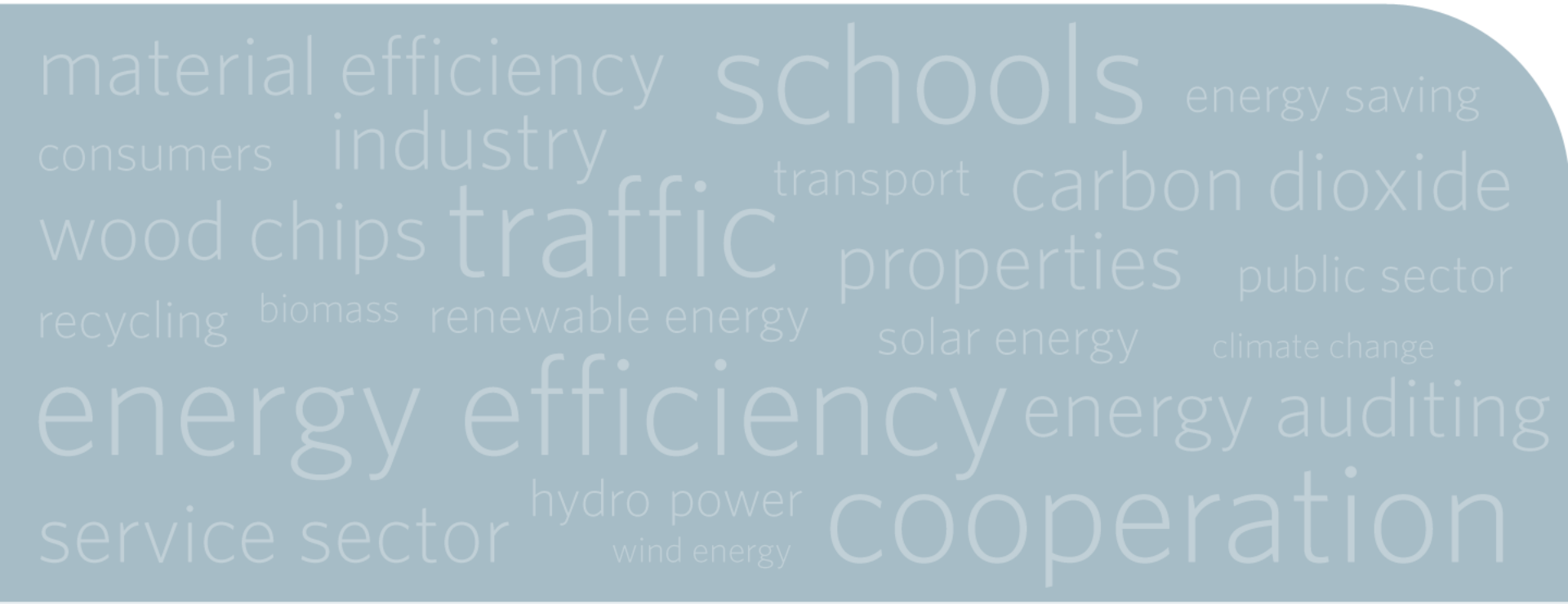

Designing measures for behavioural change – literature study

CA EED Working Group Report 6.3, Athens meeting 27.3.2014

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Introduction

- Background: Previous CT6 WG 2 questionnaire (2013) showed:
  - Different information measures are used to promote behavioural change in MS.

- The aim of this literature report:
  - to exchange information on methods and research related to the design of measures for behavioural change for the fulfilment of Articles 12 and 17
  - to give some practical hints and ideas of programmes and activities which have already been implemented in this field
  - to broaden our views a little

- Please note, this is not scientifically approved literature review.

The complexity of human behaviour

- Different approaches to human behaviour:
  - From the fields of economics, psychology, sociology
  - Be aware of ideas from several schools' research into behavioural change
- Well known "Attitude-action-gap"

- Practise theory (Schatzki 2002)
  - A frameworks to explain everyday life consumer practices.
  - Practices are social and need collectively shared links to hold together the sayings and doings, such as practical and general understandings, rules etc.
  - Consciously or unconsciously people respond to social conventions of "how to do things", or to socially defined beliefs of "normal behaviour"
  - Practises are not static, e.g. daily showers nowadays / a weekly bathing a century ago

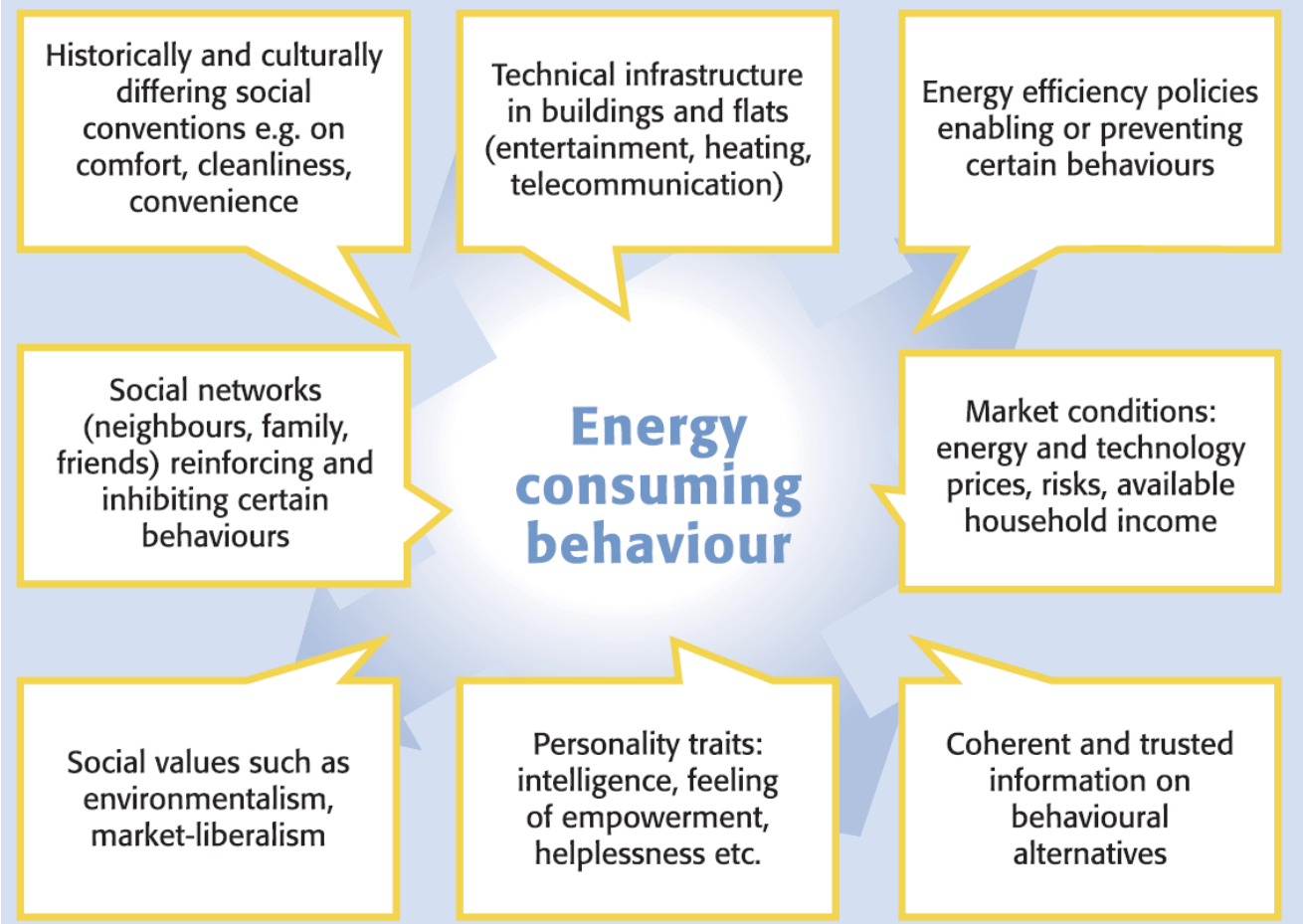

Figure 1. The complexity of human behaviour (BewareE 2007).

Theory on Behavioural Change Programmes

- This part is based mostly on Behave 2009 project
- An instrument oriented approach
  - the behaviour to be influenced by the programme's instruments is considered to be a black box – apply an instrument and wait to see what is the outcome is.
- The change oriented approach -opens "the black box"
  - Motivating factors (internal)
    - Awareness, knowledge, attitude, social and personal norms, self-efficacy
  - Enabling factors (external)
    - Financial, organizational and technical resources and new skills
  - Motiv. and enab.factors can influence individuals to start the desired behaviour
  - Reinforcing factors (external), needed to make the behaviour permanent
    - Feedback from peers, experts, authorities and customers

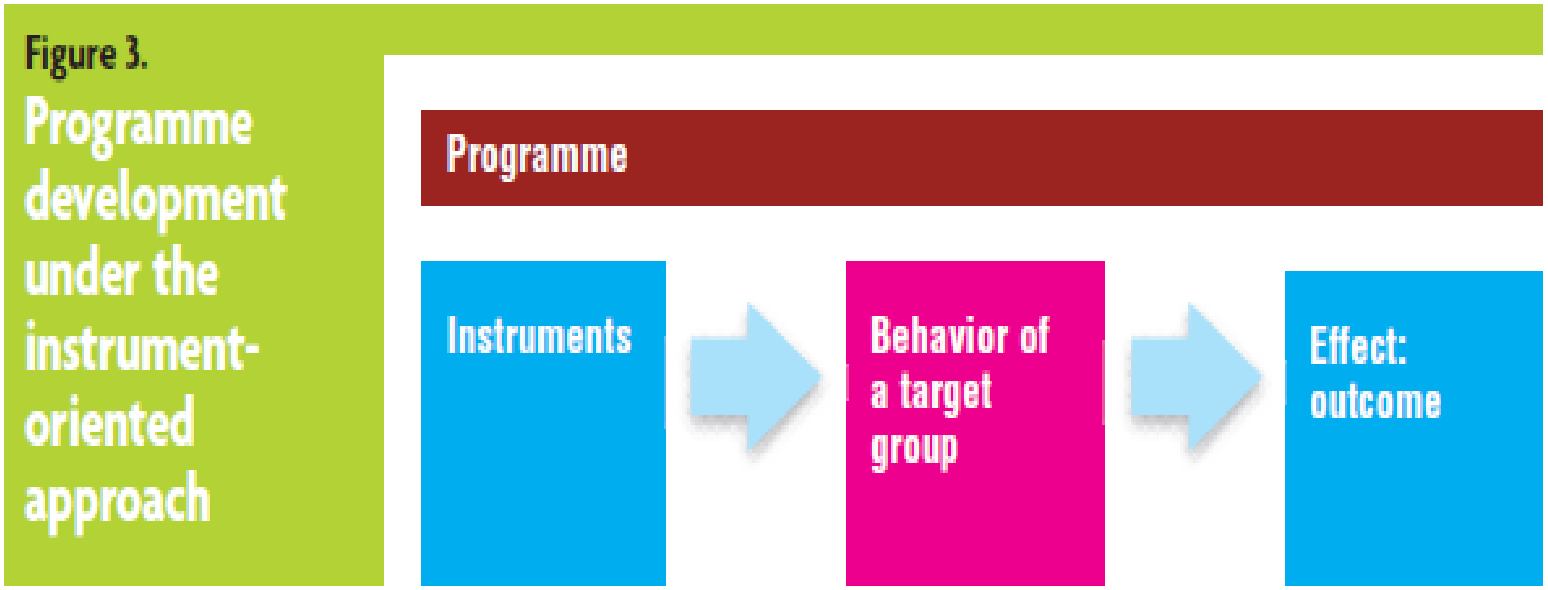

Figure 2. An instrument oriented approach to behavioural change (Behave 2009).

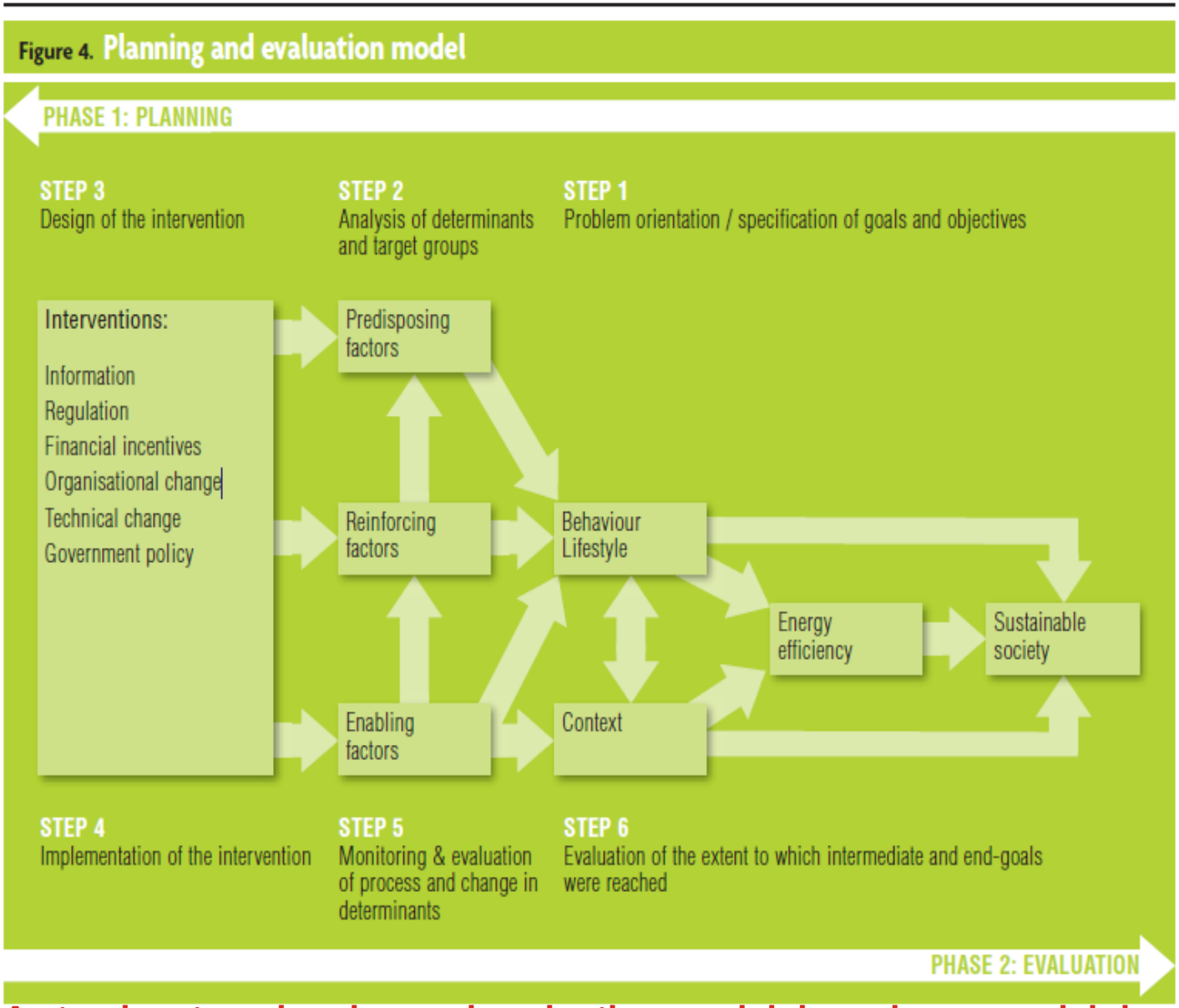

Figure 3. A step by step planning and evaluation model, based on a model developed by Green and Kreuter (1999).

Research and programmes related to the design of measures for behavioural change

- Several projects related to energy behaviour have been carried out
- A lot of work and programmes are ongoing to analyse daily energy behaviour and consumption patterns.
  - Real time (hour to hour) measurements – need to analyse the information – need to get people to act
- Behaviour in Demand side management – IEA DSM Task 24
- Changing Behaviour (2009)
- BEHAVE (2006)
- BewareE (2007)
- Four Dimensions of Behaviour (2014)
- UserTEC - User Practices, Technologies and Residential Energy Consumption (2014)
- Evaluation, Measurement, and Verification (EM&V) of Residential Behavioural Based Energy Efficiency Programs: Issues and Recommendation

Behavior change in Demand side management (IEA DSM – Task 24) -ongoing programme

- 40 case studies from more than 10 countries in the areas of building retrofits, transport, smart meters, and SMEs
- Retrofitting

  - focus on the social side, a systemic perspective as starting point acknowledge that "retrofitting can be a "gateway" into other more habitual behaviour changes
- Transport
  - to make smart driving a social norm, also recommendation to change the institutional and infrastructural environment in urban design
- Smart meters
  - "Information isn't everything - it needs to be coupled to active/shared learning"
- SMEs
  - shared goals, leadership, tailored advice, building capacity within an organization
- Two main approaches:
  - Based on information and incentive, "take it or leave", top down
  - Systemic and participatory, bottom up www.ieadsm.org

Changing Behaviour (EU 7th Framework project)

Figure 4. The toolkit offers the step-by-step guide advice and tools for preparing, designing and evaluating your energy saving project http://mechanisms.energychange.info/.

Four Dimensions of Behaviour

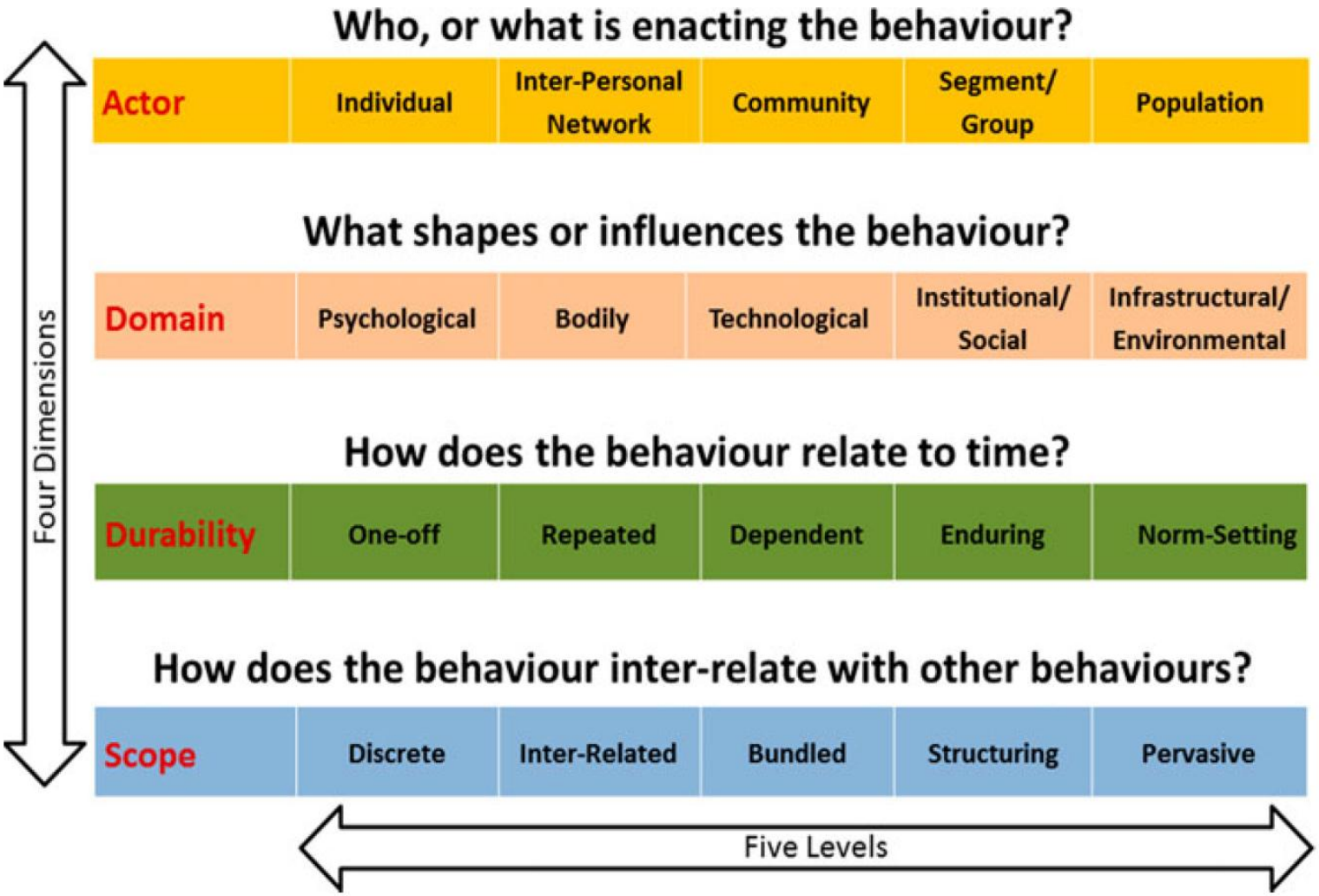

Figure 6. The Four Dimensions of Behaviour (Chatterton 2014).

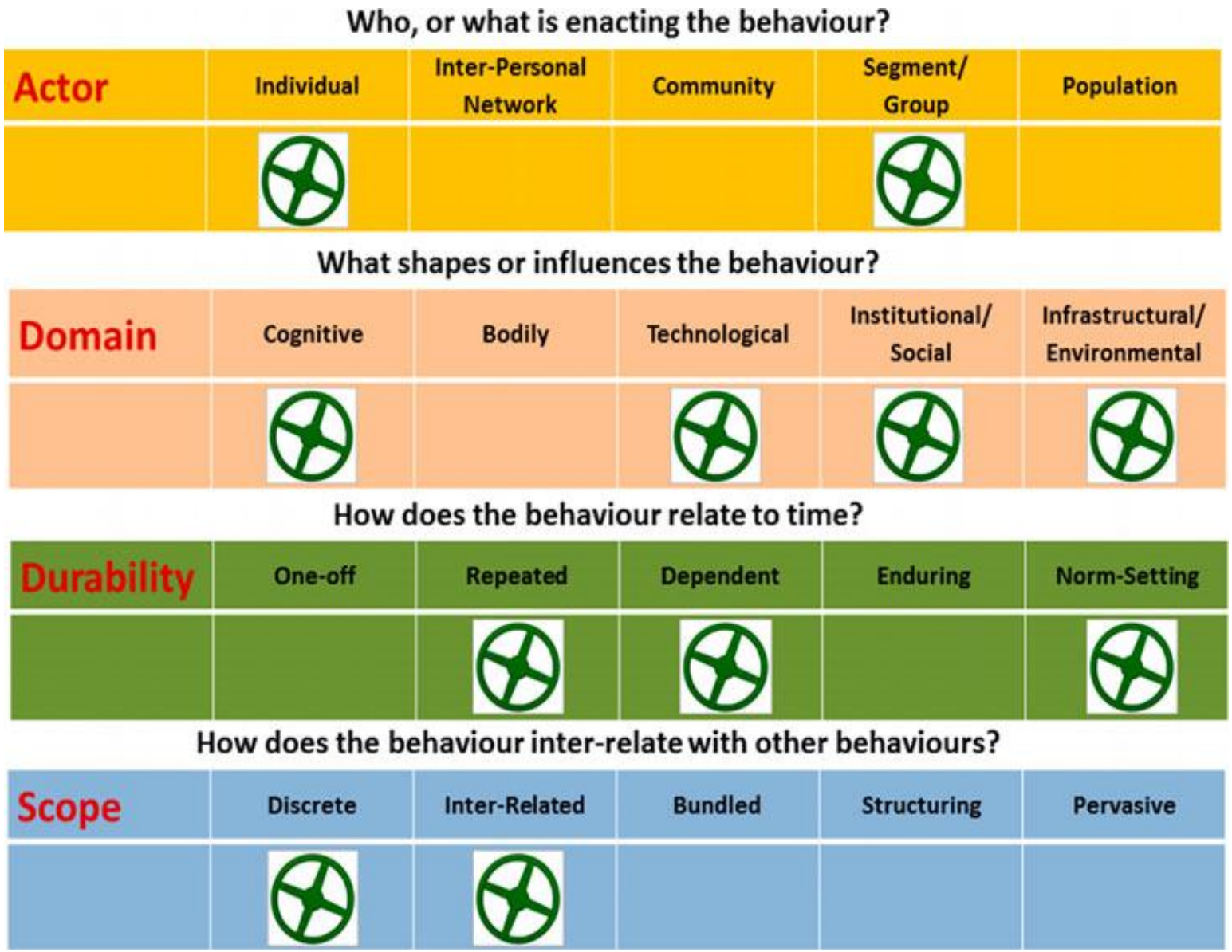

Figure 6. An Example of using The Four Dimensions of Behaviour for Characteristics of 'eco-driving'. (Chatterton 2013).

UserTEC - User Practices, Technologies and Residential Energy Consumption

- A five year research program by the Danish Council for Strategic Research launced in June 2013
- The aim of the project is to use unique data to analyse in detail the everyday life practices of households in relation to energy consumption.
- Furthermore the aim is to use these insights to enhance communication on energy consumption between actors as well as to develop energy efficient building technologies and renovation processes

- http://sbi.dk/usertec

Preliminary conclusions

- The planning phase is crucial in designing projects primarily affecting behaviour change.
- The necessity to understand the basics of behavioural change issues.
- It is not only question of “behaviour” since behaviour is grounded all over the society.
- Keep in mind different approaches; behavioural, economic, technical, sociological view of thinking.
- A lot of work has done (and especially is ongoing) on the field of behavioural projects and programmes, please acquaint with them.

- Any comments and examples are warmly welcome!

Motiva

More information

www.motiva.fi/en