

# **Behaviour change in the context of sustainability, health & social inclusion**

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# Acknowledgments

- Funders including



- The Health Psychology Research Team

- The Centre for Behaviour Change

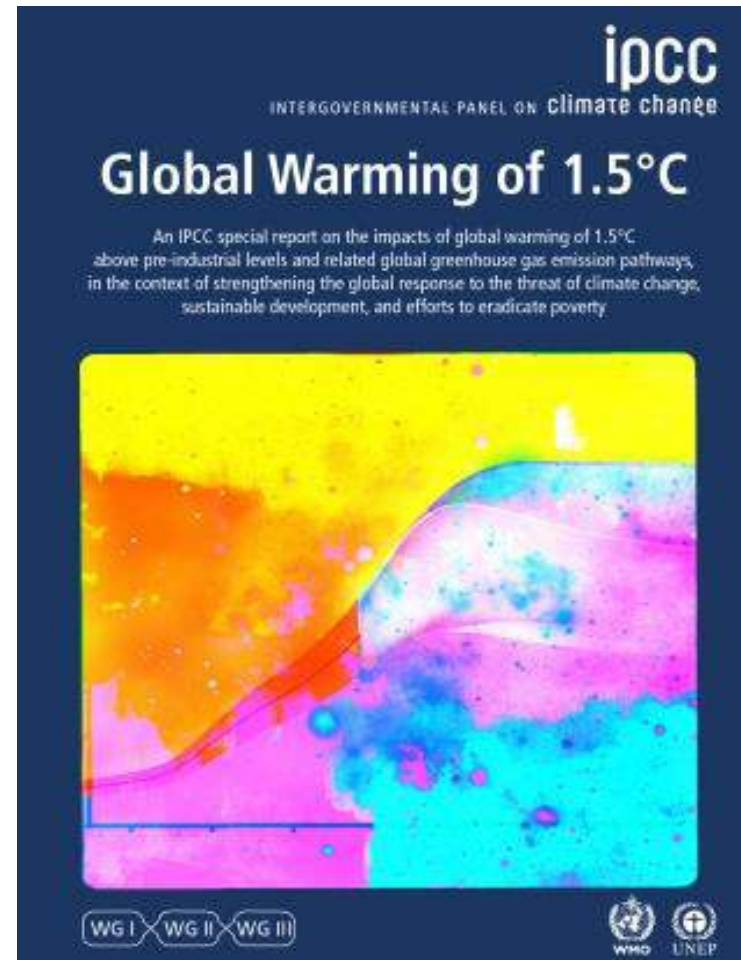
[www.ucl.ac.uk/behavior-change](http://www.ucl.ac.uk/behavior-change)



## Behaviour is everywhere ...

- Understanding and changing patterns of behaviour are key to
  - promoting **health** and well-being,
  - social **cohesion** and **equity**
  - a sustainable **environment**
  - efficient and **equitable** delivery of services
  - a productive **economy**
  - .... *and pretty much everything!*

# Behaviours relevant to climate change



## PRODUCTS

## FOOD

## BUILDINGS

## TRAVEL

Use low-emission alternatives to aluminium

Reduce food waste

Insulate buildings

Use solar water heaters

Drive electric vehicles

Walk or cycle short distances

## POLITICS

Buy less meat and dairy

Install heat pumps

Use low-carbon building materials

Replace business travel with teleconferencing

Engage as a citizen

Buy local, seasonal food

Use energy efficient appliances

Line dry laundry

Lower thermostats

Use mass transit rather than flying

# Systems approach to changing behaviour

- Need changes at city/population-wide levels AND individual levels
- Not either/or, these can work synergistically with each other



# City-wide transformation



# How will we bring about transformation?

- **Aim:**
  - Transform environmental quality, sustainability, population health and health equity
- **Methods:**
  1. **Participatory engagement** and systems thinking
  2. **Partner** with local organisations to:
    - improve understanding of the effects of policy actions and
    - develop viable paths for policy implementation



*Stakeholder workshop,  
Kisumu, Kenya*



# Systems and implementation

1. Analyse **multiple interactions** between different parts of the urban system and draw on the best global and local scientific evidence
2. Consider policy **implementation** and **behaviour change** from beginning

# Example of indoor air pollution system in Nairobi

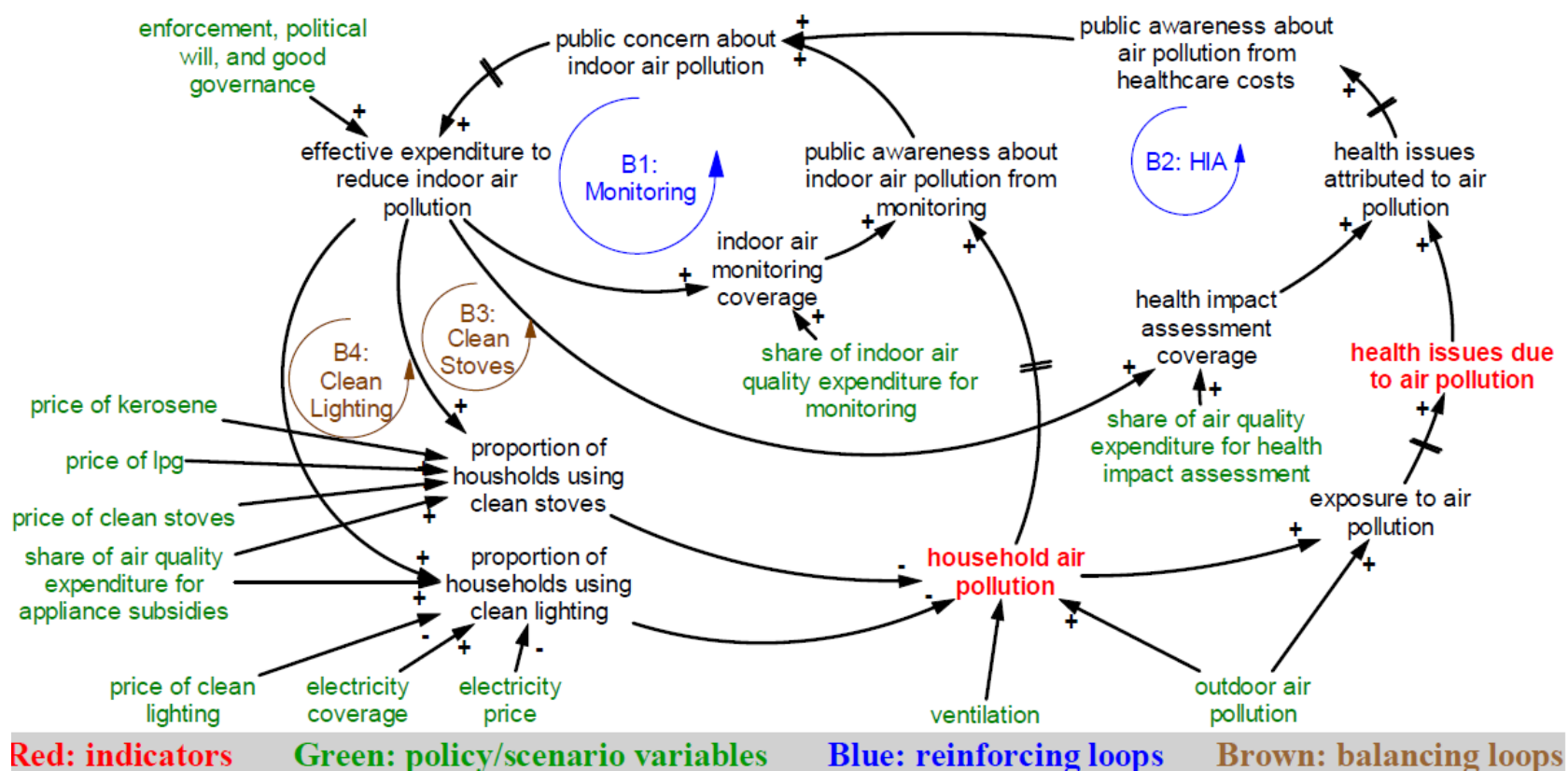


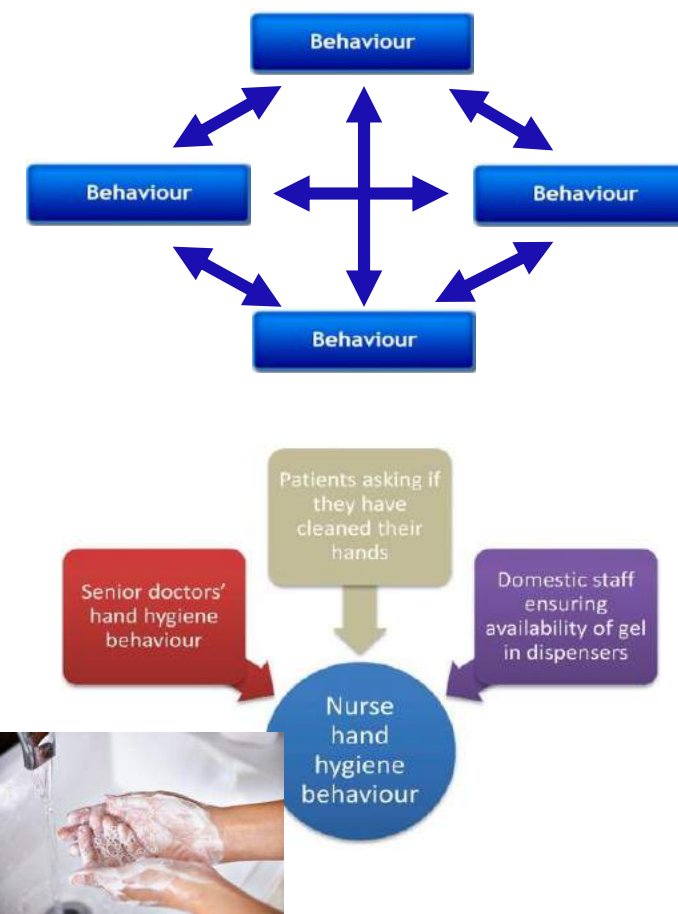
Figure 6: Simplified causal loop diagram of the model

# Designing behaviourally-sensitive policies requires ...

1. A **model of behaviour** for understanding behaviour in its context
2. A **framework** linked to this model for designing interventions and policies to change behaviour

# Behaviour: part of a system of behaviours ....

- ... that facilitate and compete with each other
  - within and between individuals
  - influenced by their social and material world
- Understanding the **system** of behaviours and the **influences** on them is the starting point for identifying where best to intervene and how



# Behaviours are different and contexts are different

- If we are to develop interventions to change behaviour
  - identify
  - understand

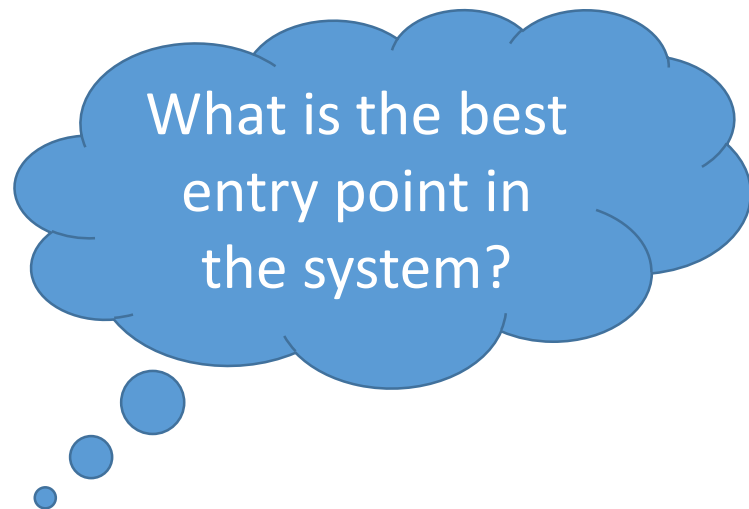
For each group of people, **who**  
needs to do

- **what,**
- **when,**
- **where,**
- **how?**

in their **specific contexts**

# Which behaviour to start with?

- Map the system of actors, behaviours and relationships between them that are relevant to your problem



1. If I change this, what is the likely **impact**?
2. How **easy** is it to bring about change?
3. **Preference**, acceptability, cost?
4. **Spillover**/generalisability to other behaviours and people?



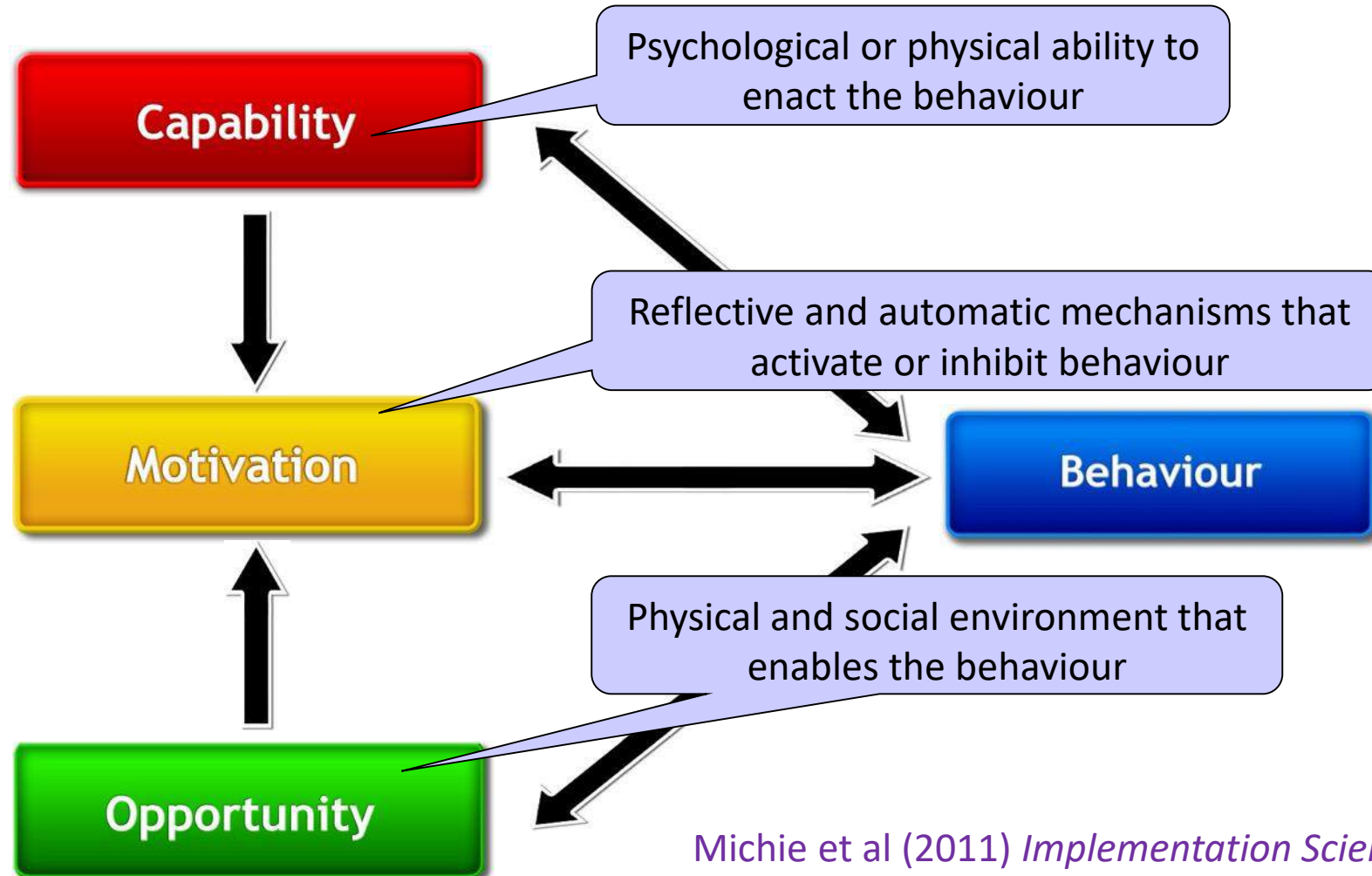
# Understand the behaviour in context

- **Why** are behaviours as they are?
- **What needs to change** for the desired behaviour/s to occur?



- Answering this is helped by a **model** of behaviour ...

# The COM-B system: Behaviour occurs as an interaction between three necessary conditions

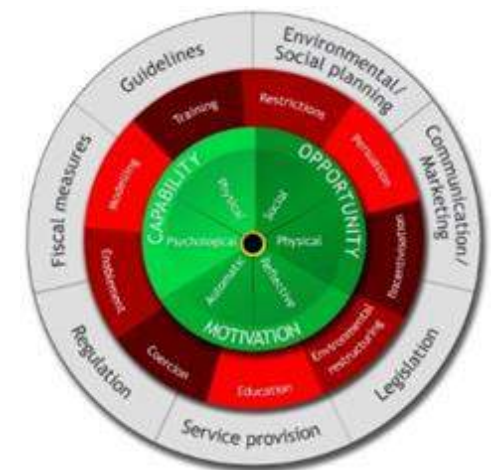


**Frameworks simplify  
complexity**

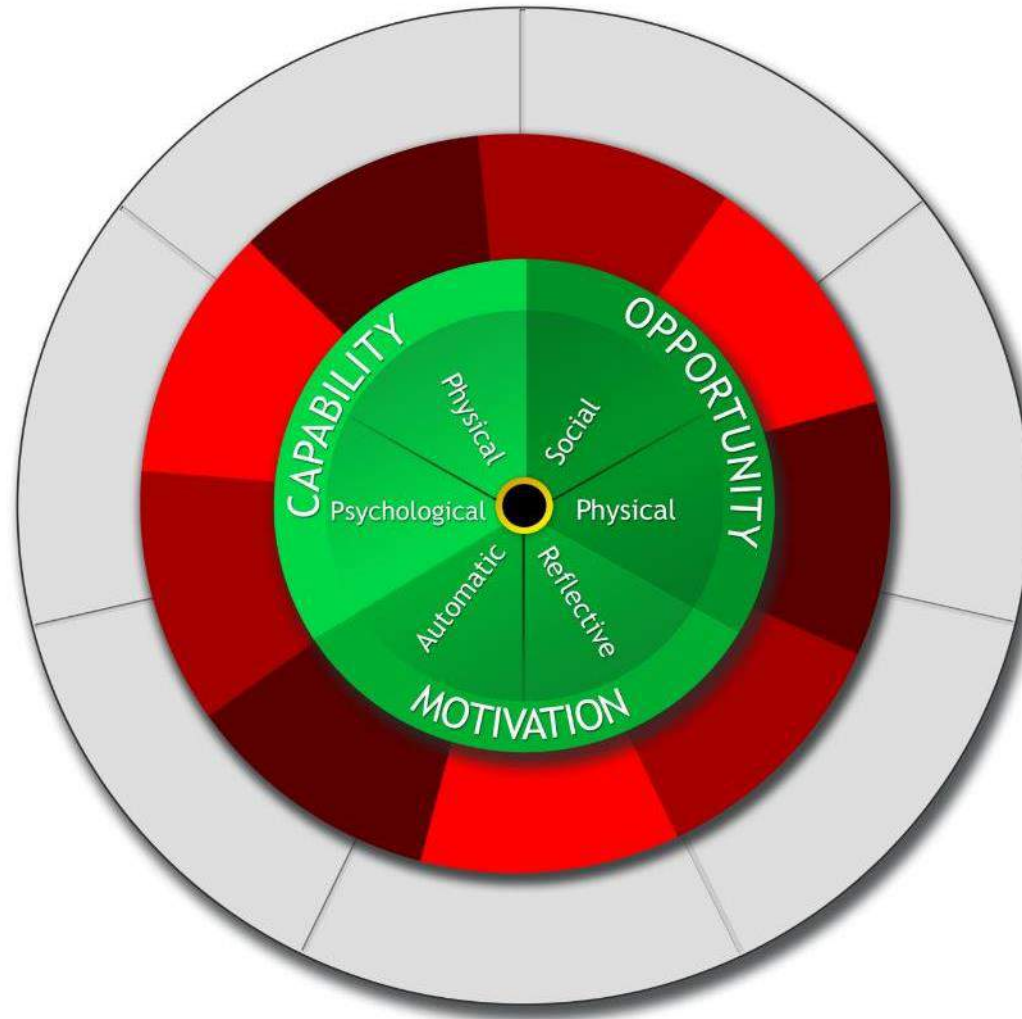
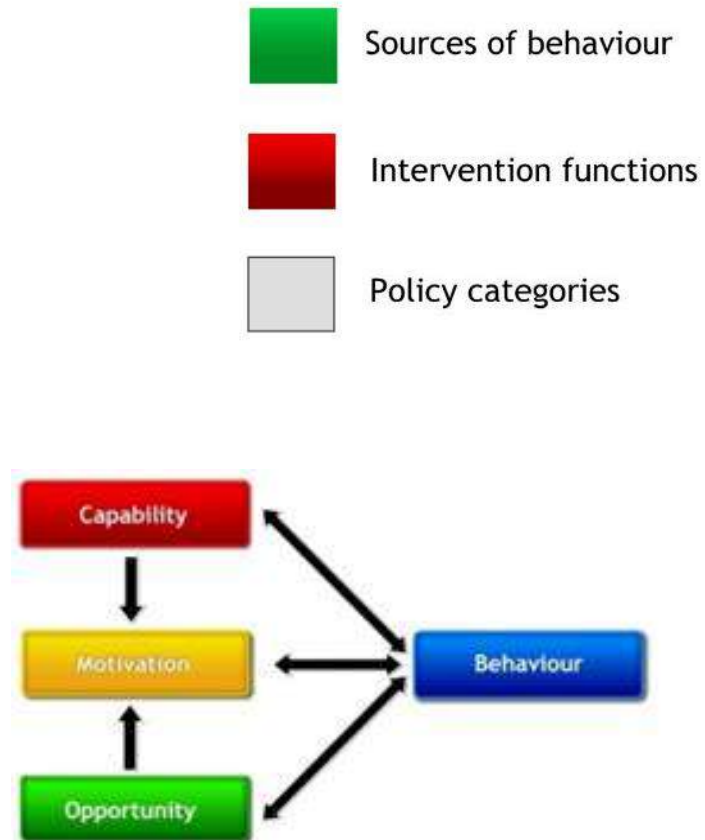
# Frameworks of behaviour change

- Systematic literature review identified 19 frameworks of behaviour change **interventions** and **policies**
  - related to health, environment, culture change, social marketing etc.
  - none met criteria of comprehensive, coherent, linked to model of behavior
- So .... Synthesised the 19 frameworks
- ‘The Behaviour Change Wheel’

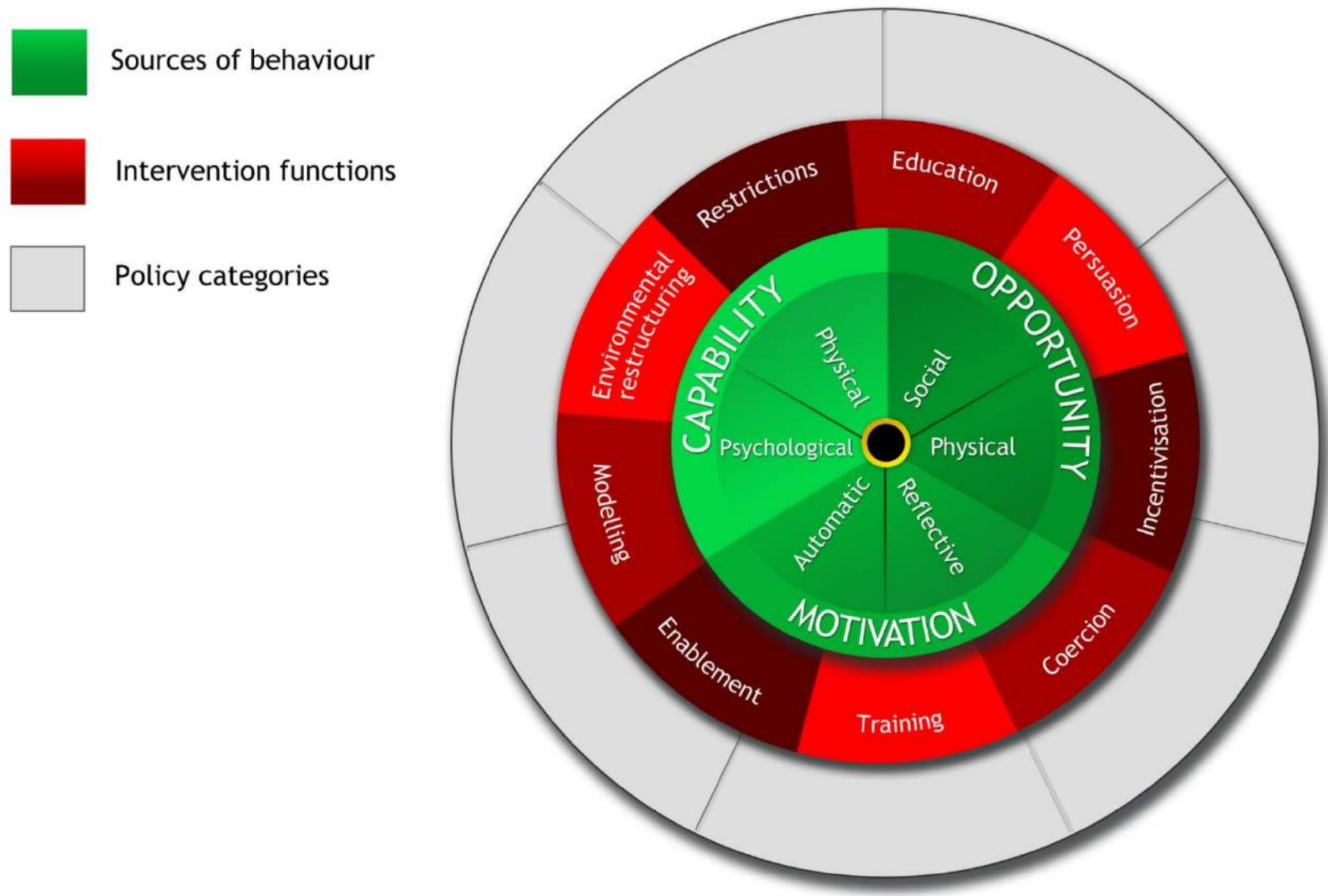
Michie et al (2011) The Behaviour Change Wheel: a new method for characterising and designing behaviour change interventions, *Implementation Science*.



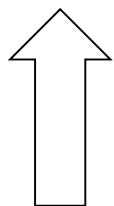
# Behaviour at the hub .... COM-B



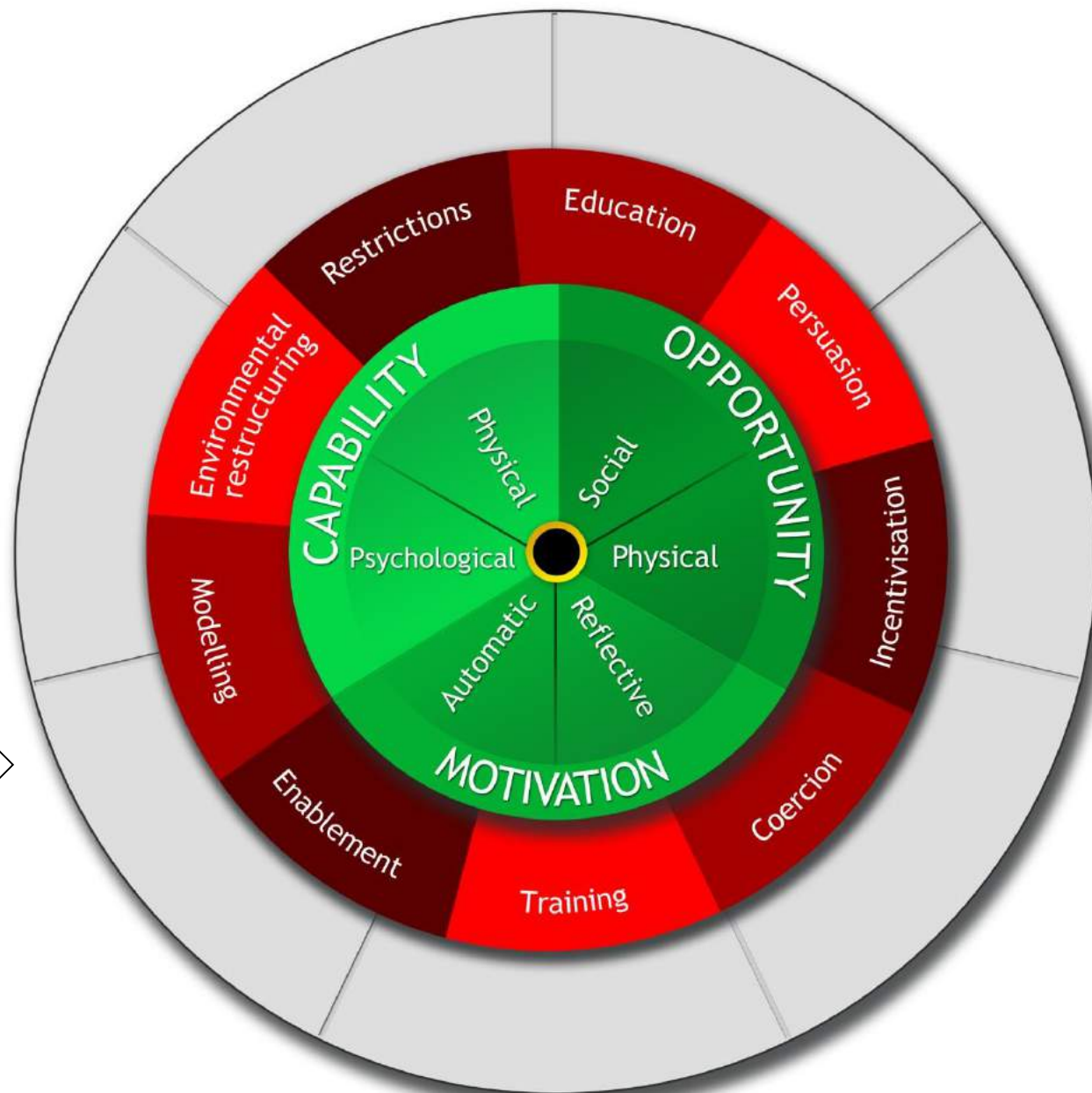
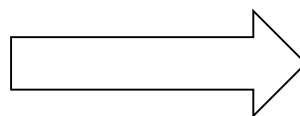
# Nine intervention 'functions'



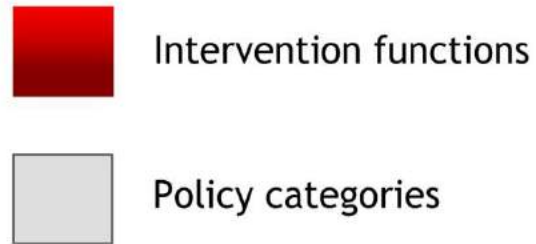




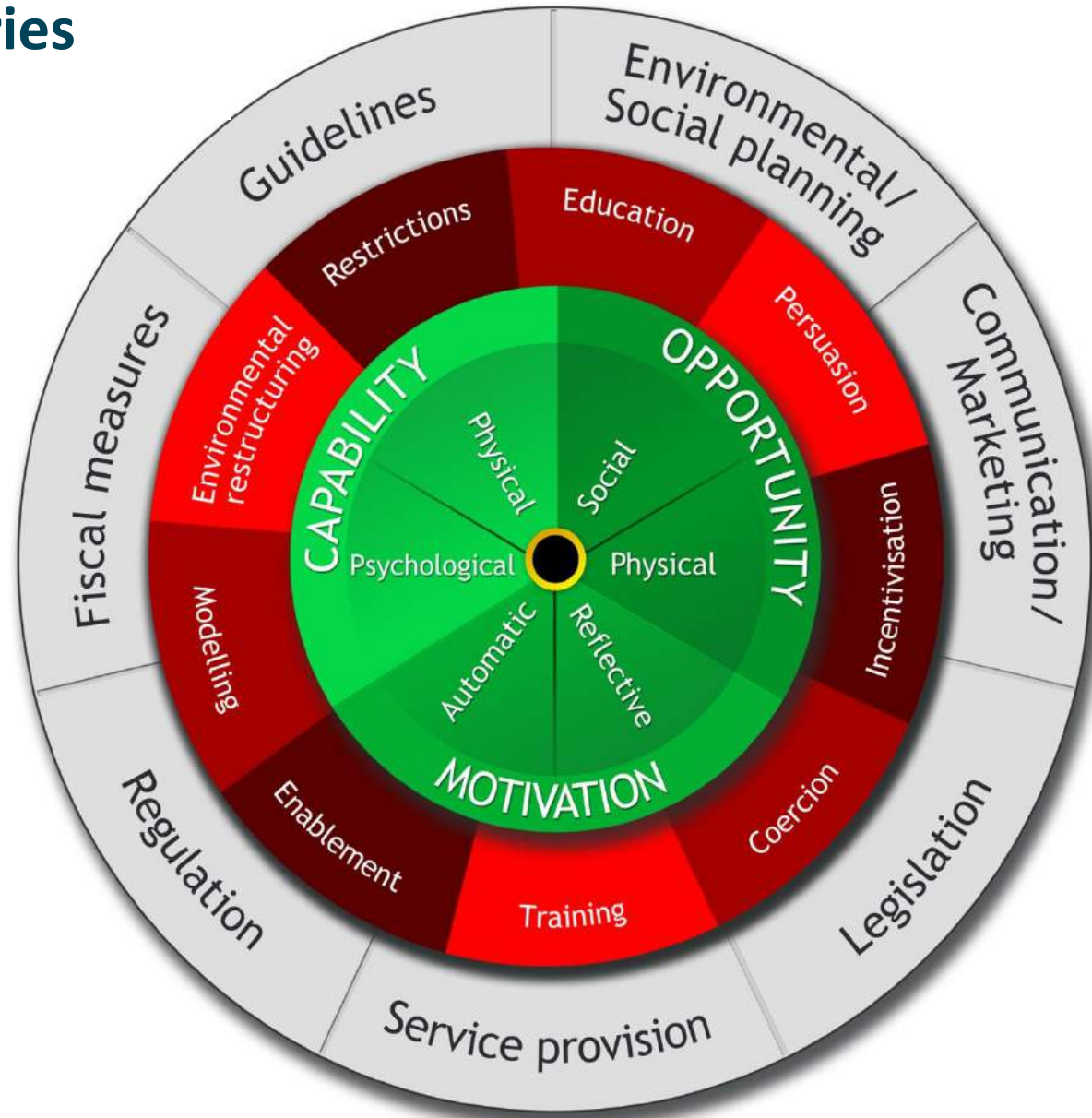
Add policies to  
maintain change  
**long-term**



# Seven policies categories

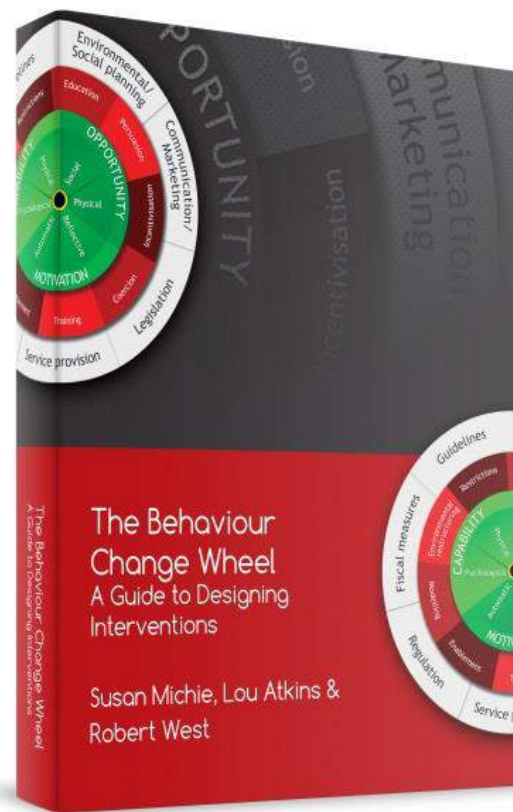


**Policies:**  
decisions made  
by authorities  
concerning  
interventions



# Applying to the local context: The APEASE criteria

- **A**ffordability
- **P** practicability
- **E**ffectiveness/cost-effectiveness
- **A**cceptability
  - public
  - professional
  - political
- **S**ide-effects/safety
- **E**quity



# Behaviour Change Wheel been used to ...

1. **Design** interventions and policies
2. “Retrofit” – **identify** what is in current interventions and policies
  - eg by Government departments
3. Provide a framework for **evaluation**
  - How are interventions working?
4. Structure **systematic reviews** of evidence



# International applications of the BCW



## Australia

- Management for Borderline Gestational Diabetes Mellitus
- Reduce hip/knee surgery in osteoarthritis



## Ghana

- Reduce risk of infection in changing toilet cartridges in slums



## India

- Smartphone app to reduce cardiovascular disease risk



## International Red Cross

- Train volunteers



## Kenya

- Improve paediatric health care



## Kosovo

- Improve maternal health guideline implementation



## Netherlands

- An organisational intervention tool



## Papua New Guinea

- Change Betel nut chewing behaviour



## Thailand

- Preventing melioidosis



## USA

- Improving colorectal cancer screening
- Providing long-acting reversible contraception to adolescents
- Improve parenting practices for children with challenging behaviour



## A final work on equity

- How far will the intervention increase or reduce,
  - Social inequality?
  - Economic inequality?
  - Health inequality?
- Conduct 'equity audits' of interventions, think in terms of systems





# Behaviour change in whose interests?

- The ‘**population**’
  - Which sections?
    - Special interest groups, marginalised groups, rich/poor
- **Government**, national or local
  - To get re-elected, to improve welfare
- **Industry** incl. multinational corporations
  - In search of maximising profit
- Within **organisations**,
  - Managers vs staff
- Etc.

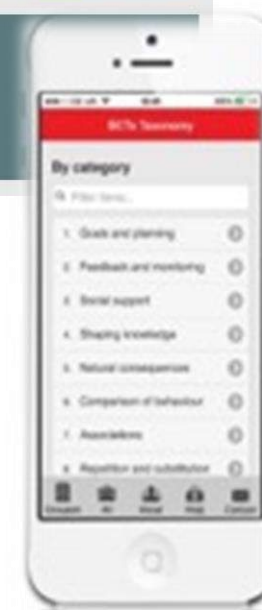
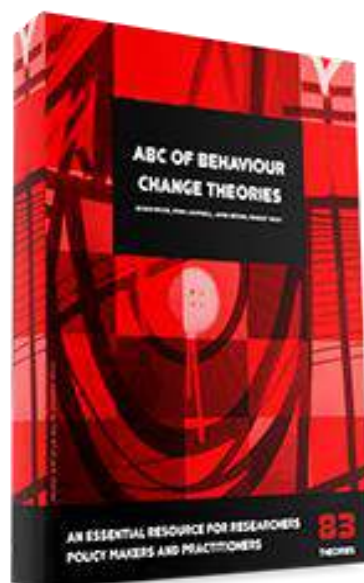
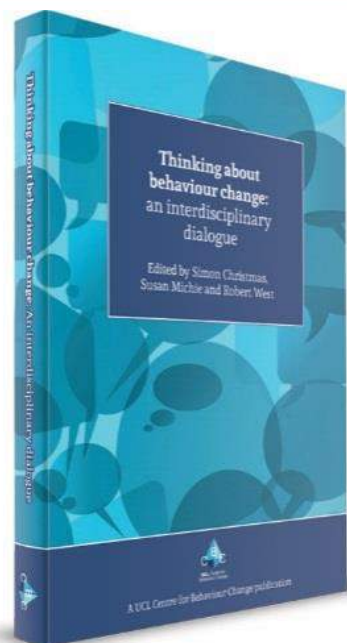




UCL Centre for  
Behaviour Change



## Centre for Behaviour Change resources... e.g.



[www.ucl.ac.uk/behaviour-change](http://www.ucl.ac.uk/behaviour-change)

All proceeds from CBC teaching, training, books and products go to further development

# MSc in Behaviour Change, UCL



*Full-time, part-time and flexible modes of study; also available as PG Certificate and PG Diploma*

**Four core modules** on behaviour change

**Three elective modules** selected from 12, topics such as **health, policy, transport, decision-making and energy use.**

**Contact Dr Leslie Gutman (Programme Director)**

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or visit <https://tinyurl.com/cbc-msc-bc>

