

2. About the UCL Centre for Behaviour Change

2.1. [The Centre for Behaviour Change](#) (CBC), based at University College London, brings together cutting-edge, cross-disciplinary academic expertise in behaviour change and translates it through research, consultancy, training and events to address key challenges facing society, including threats to human health and well-being, environmental sustainability and social cohesion. The CBC authored [Achieving behaviour change: A guide for national government](#), commissioned and published by Public Health England in 2020.

3. (E) What can be learnt from successful and unsuccessful behaviour change interventions by the UK Government and other government actors (including in other policy or geographical contexts)?

3.1. From previous behaviour change interventions, we can seek to learn about (a) what works , and (b) practices associated with designing successful interventions.

What works and what doesn't?

3.2.

from past government interventions is challenging for two reasons. Firstly, past successful interventions by government actors mainly reflect incremental change in personal

3.4.

Identifying what influences current behaviour. Theories and models can inform the process of gathering information about what influences current behaviours.
Applying theory to select intervention components which address the influences on current behaviour. We summarise pros and cons of theoretical frameworks in section 4.

sustainable food consumption,²⁶ and household air pollution.²⁷ It is used by national and local governments in the context of sustainability.^{4,28,29}

²⁶ Hedin et al. (2019). [A systematic review of digital behaviour change interventions for more sustainable food consumption](#). *Sustainability*, 11(9), 2638.

²⁷ Williams et al. (2020). [Designing a comprehensive behaviour change intervention to promote and monitor exclusive use of liquefied petroleum gas stoves for the Household Air Pollution Intervention Network \(HAPIN\) trial](#). *BMJ open*, 10(9), e037761.

²⁸ West et al. (2019). [Achieving behaviour change: A guide for local government and partners](#). PHE publications.

²⁹ <https://local.gov.uk/our-support/climate-change-hub/behaviour-change-and-environment>

<p>Behaviour Change Wheel (BCW)¹⁷ Theoretical and methodological framework for designing interventions, comprising: COM-B model of behaviour Capability Opportunity Motivation 9 Intervention types 7 Policy options</p>					<p>Strengths: Comprehensive and coherent synthesis of 19 existing frameworks. Clear basis in a model of behaviour. Provides a systematic approach for linking influences on behaviour to intervention types and policy options. User-friendly guides and a wide range of accessible training materials available. Limitations: Requires some training to get the most from the framework.</p>
<p>Behavioural Systems Mapping⁴ Method for representing actors, behaviours, influences on behaviour within complex systems, and the relationships between these elements.</p>	NA	NA			<p>Strengths: Enables the integration of knowledge about the influences on multiple behaviours within a system, which can increase fairness, quality and legitimacy of intervention strategies. Influences on behaviour can be linked to theories and models such as COM-B. Limitations: Needs to be used in conjunction with other frameworks for selecting among intervention options. Requires some training to get the most from the method.</p>
<p>EAST³³ Principles for encouraging behaviour: Easy Attractive Social Timely</p>					<p>Strengths: Simple, user-friendly. Limitations: -response' view of human behaviour. Focuses on incremental change through Focuses on automatic motivational influences on behaviour and neglects influences such as capability. Little guidance on how to design and implement interventions.</p>
<p>Energy Cultures³⁴ Theoretical framework for understanding energy behaviours: Material culture Cognitive norms Energy practices</p>					<p>Strengths: Descr34.8 41i90.51 8 41i90.51 8 41i01.77 226.49 BDC</p>

Signalling Emotional impact					
Intervention Mapping ³⁶ Methodological framework: 1. Logic model of the Problem 2. Program Outcomes and Objectives 3. Program Design 4. Program Production 5. Program Implementation Plan 6. Evaluation Plan					Strengths: Describes a comprehensive and coherent set of elements in intervention design, including evaluation. Facilitates the development of multi-level interventions (individual, interpersonal, organisation, community). Limitations: Needs to be used in conjunction with other frameworks for selecting among intervention options.
ISM ³⁷ Theoretical framework of influences: Individual Social Material					Strengths: Describes a comprehensive and coherent set of influences on behaviour. Simple, user-friendly with a step-by-step guide to using the framework within a participatory intervention design process. Limitations: Does not specify intervention options linked to ISM influences on behaviour.
MINDSPACE ³¹ Checklist for policy-makers of influences: Messenger Incentives Norms Defaults Salience Priming Affect Commitments Ego					Strengths: Simple, user-friendly. Integrated with the 4Es/6Es

6.1. We can consider

6.5. All sections of society need to be represented in contributing to the development and implementation of policies and interventions to enable these actions. The links between the groups of actors and between activities within a system of mutual influence need to be identified and disseminated. Joined-up action can be facilitated through a combination of co-design and systems thinking approaches.⁵⁰ A large body of international systems research in the domains of policy-making and sustainability demonstrates that bringing stakeholders together in developing a systems view of a problem can help to: build shared insight and agreement about the nature of a problem and shared commitment to tackling it, develop interventions that work and are accepted.^{50,51,52}

7. (U) What are the main strengths and weaknesses of current Government policies on behaviour change, and what are the key improvements that could be made?

What are the main strengths and weaknesses?

7.1. Current policies do not do enough to change behaviour carbon emissions. The UK is on course to overshoot the fourth, fifth and sixth carbon budgets for reaching net zero.⁵³ assessment of the Net Zero strategy highlighted that the role for behaviour change in those policies did not meet the level of ambition recommended by the CCC, and that this needs to be urgently resolved.⁵⁴ The CCC calculate that 62% of emissions reductions for reaching net zero will require some level of societal or behavioural changes, but this is a conservative estimate, as the remaining reductions expected from low-carbon technologies or fuels will also only be achieved through action by government, businesses and other organisations.

7.2. We are not on track to reduce carbon emissions because current policies do not sufficiently target the full range of actions needed to reduce emissions, summarised in section 6 above. In particular, the Net Zero strategy lacks any policies to shift diets away from meat and dairy or limit increasing demand for flying,⁵⁴ which are high-impact changes associated with co-benefits for health and the environment.^{48,55} Policies set out in the Net Zero strategy place too much emphasis on technological innovations without enough consideration of the behaviour changes needed to achieve these.

What are the key improvements that could be made?

7.3. These weaknesses can be addressed by better integration of best practice for designing behaviour change interventions into policy development. Best practice includes engaging with the people whose behaviour the intervention seeks to change, identifying what influences current behaviour, applying theory to select intervention components, and creating an

⁵⁰ Jebb et al. (2021). [Systems-based approaches in public health: Where Next?](#) Academy of Medical Sciences.

⁵¹ Barbrook-Johnson & Penn (2021). [Participatory systems mapping for complex energy policy evaluation](#). *Evaluation*, 27(1), 57-79.

⁵² Antunes et al. (2015). Using participatory system dynamics in environmental and sustainability dialogues. In *Handbook of research methods and applications in environmental studies*. Edward Elgar Publishing.

⁵³ Committee on Climate Change Committee on Climate Change. [Climate Change Committee on Climate Change. Net Zero Strategy: Industrial Deep Decarbonisation](#). 2023. [https://www.climatechange.org/industrial-deep-decarbonisation](#)

implementation plan (see section 3 above). These features were highlighted in a 2011 inquiry by the House of Lords Science and Technology Committee⁵⁶ but still are not consistently reflected throughout government policy development to change behaviours and are mainly limited to the work of small behavioural science teams.

7.4. Key improvements can be made in the following areas:

Greater specification of behaviour changes needed to achieve targets for carbon emissions and other environmental outcomes.

Greater coordination and systemic analysis of how different policies will work together. The Net Zero strategy does not sufficiently specify how this will be achieved.

Greater analysis of structural and social influences on behaviours and use of criteria to select and apply suitable frameworks to develop appropriate interventions. Currently departments and teams select among frameworks without robust basis.

More consistent specification and inclusion of plans for implementing and evaluating interventions.

8. (W) For behaviour change efforts, how effective is the coordination between government departments and the split of Ministerial and departmental responsibilities, and are sufficient resources in place (staff and budgets)?

8.1. Coordination between government departments on behaviour change efforts is characterised by informal networking, exchange and ad-hoc collaboration between behavioural science teams. Behaviour change is a primary function of the Government Communication Service, but it is important not to over-rely on communications for achieving behaviour change. Behavioural science teams in other departments are relatively small and projects frequently involve procurement from or collaboration with behavioural scientists outside of Government.

8.2. These levels of coordination and resource are insufficient, leading to a situation where current policies work against each other. Examples are encouraging people to use the train not the

Thank you for your consideration of this submission of evidence. For any inquiries, or requests for further evidence, please contact us.

Dr Jo Hale

Senior Research Associate, UCL Centre for Behaviour Change
Corresponding author, jo.hale@ucl.ac.uk

Maria Lunetto

Research Assistant, UCL Centre for Behaviour Change

Ay e Lisa Ustao lu-Allison

PhD Researcher, UCL Centre for Behaviour Change

Prof Mark Maslin

Professor of Earth System Science, UCL

Prof Susan Michie

Professor of Health Psychology, UCL Centre for Behaviour Change

Dr Liz Corker

Senior Research Fellow, UCL Centre for Behaviour Change

December 2021