

Harnessing the Momentum of the Climate Emergency to Influence Waste Behaviours

Maria Lunetto

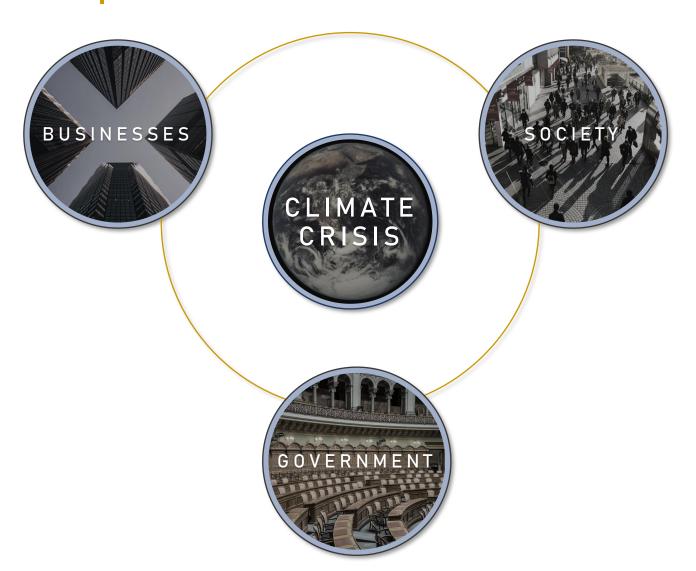
for North London Waste Prevention Exchange 2022 March 2nd 2022







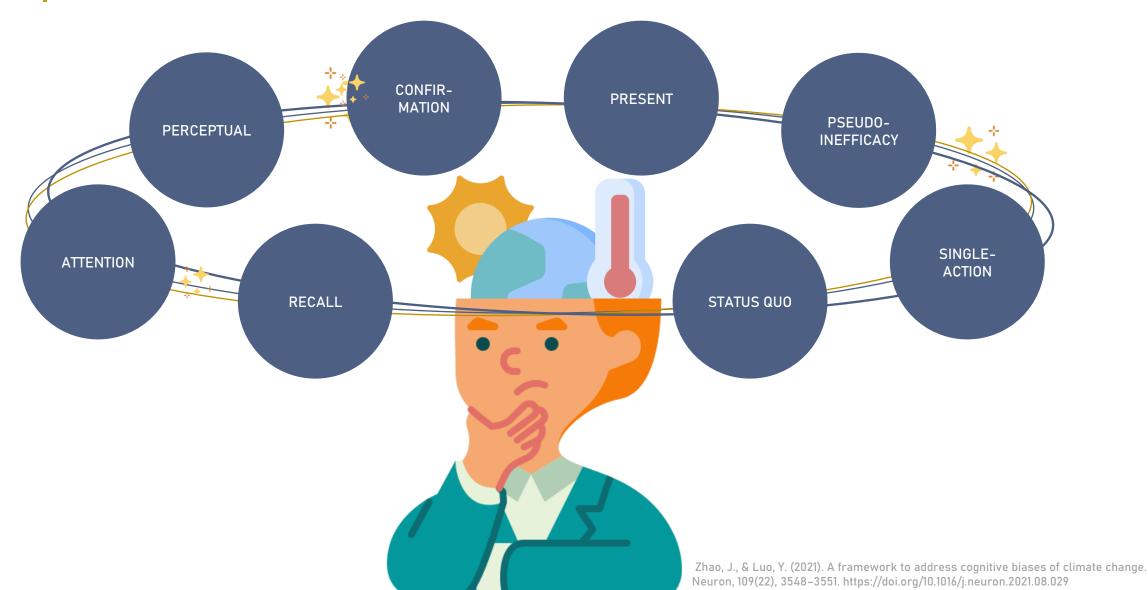
THE CLIMATE CRISIS & BEHAVIOURAL SCIENCE

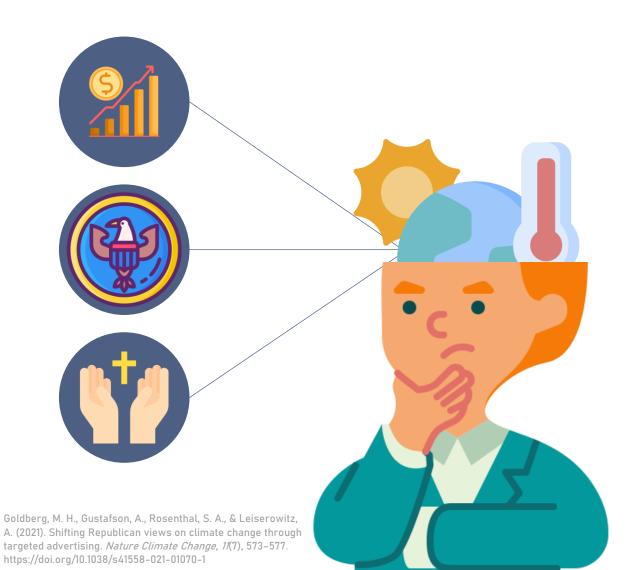


62% of emissions reductions for reaching net zero will require some form of societal and behaviour change



COGNITIVE BIASES OF CLIMATE CHANGE

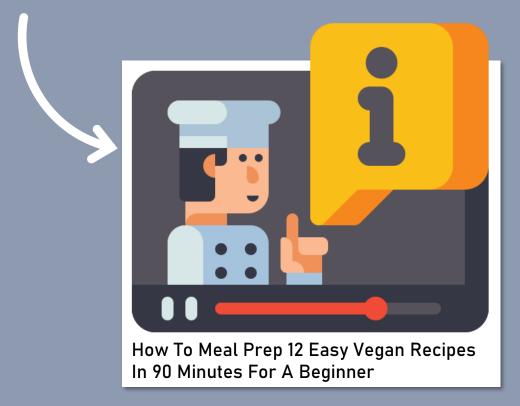




1. FRAMING: aligning climate communication with peoples' ideologies and values

Adapted from Zhao, J., & Luo, Y. (2021). A framework to address cognitive biases of climate change. Neuron, 109(22), 3548-3551. https://doi.org/10.1016/j.neuron.2021.08.029

"A global shift to a plant-based diet could reduce greenhouse gases caused by food production by 70% by 2050."



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- 2. MODEL BEHAVIOUR AND ACTION FOCUS: giving recommendations for action and showing how to

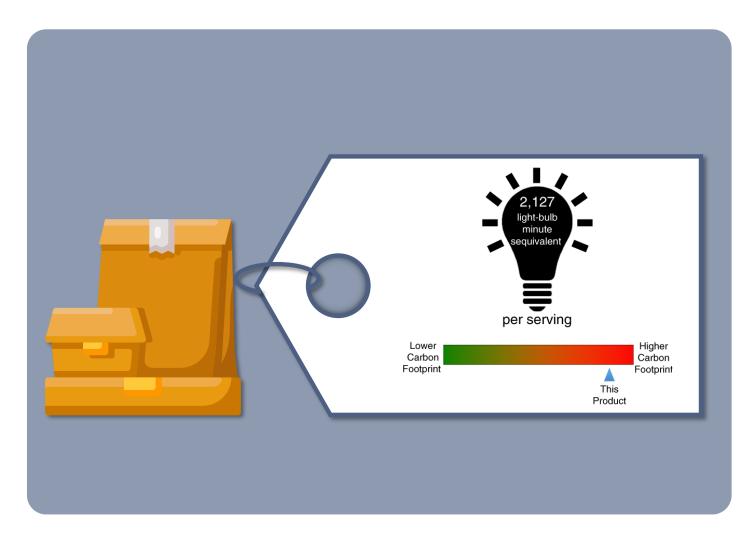
"A clean energy future will "We are going to go extinct save X number of lives!" due to climate change"

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- 2. MODEL BEHAVIOUR AND ACTION FOCUS: giving recommendations for action and showing how to
- 3. POSITIVE MESSAGES: encourage people to act, don't scare (too much)

O'Neill, S. J., & Nicholson-Cole, S. (2009). "Fear Won't Do It": Promoting Positive Engagement With Climate Change Through Visual and Iconic Representations. Science Communication, 30(3), 355–279. https://doi.org/10.1177/1075547008329201

King, M. W. (2019, March 8). How brain biases prevent climate action. BBC Future. https://www.bbc.com/future/article/20190304-human-evolution-means-we-can-tackle-climate-change

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- 4. LOCUS OF CONTROL: linking behaviours to contributions to climate change as opposed to natural causes

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India may suffer devastating climate change impact in 80 years: Study

Annual mean temperatures across India are likely to increase by 4.2 degrees Celsius under a high emission scenario by the end of the 21st century, researchers said,



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- 5. PERSONAL MESSAGING: pointing both to local impacts and local solutions

India may suffer devastating climate change impact in 80 years: Study. (2020, June 5). India Today. https://www.indiatoday.in/science/story/india-maysuffer-devastating-climate-change-impact-in-80-years-study-1685987-2020-06-05

Derysh, I. (2020, July 26). "Poster child for climate change": Study predicts polar bears will die off within 80 years. Salon. https://www.salon.com/2020/07/26/the-poster-child-for-climate-change-study-predicts-polar-bears-will-die-off-within-80-years/

Climate change drives Europe's record 2021 summer

Author: Press Office 00:01 (UTC) on Wed 3 Nov 2021

New analysis shows the summer seasonal temperature recorded across Europe in 2021 would have been impossible without human induced climate change.

The summer of 2021 was Europe's hottest on record with temperatures close to 1°C

Our impact

Flash floods will be more common as climate crisis worsens, say scientists

Overhaul of UK infrastructure needed to ensure it is not overwhelmed by impact of extreme weather











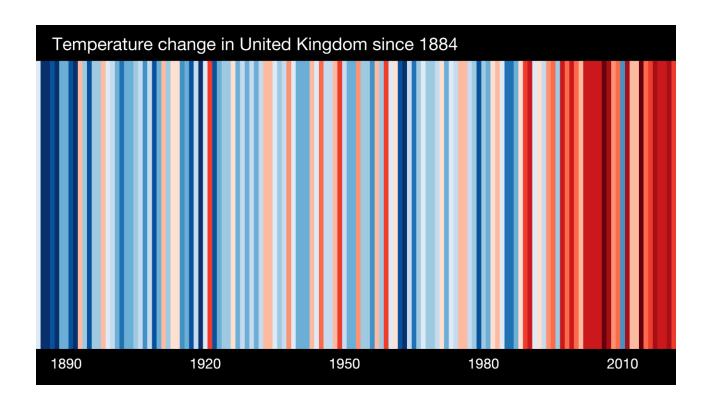
313 kWp



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Harvey, F. (2021, July 26). Flash floods will be more common as climate crisis worsens, say scientists. The Guardian. https://www.theguardian.com/environment/2021/jul/26/flash-floods-will-be-more-common-as-climate-crisis-worsens-say-scientists-london-floods Power Up North London. (n.d.). Power Up North London. Retrieved 24 February 2022, from https://powerupnorthlondon.org/ Press Office. (n.d.). Climate change drives Europe's record 2021 summer. Met Office. Retrieved 24 February 2022, from https://www.metoffice.gov.uk/aboutus/press-office/news/weather-and-climate/2021/2021-european-summer-temperature-impossible-without-climate-change

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- 7. ...

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KNOWLEDGE CAN HELP, BUT...

NEWS 28 October 2020 | Correction <u>16 November 2020</u>

Who are science's frequent flyers? Climate researchers

Survey finds climate scholars take more flights on average per year – but make greater effort to offset their emissions.



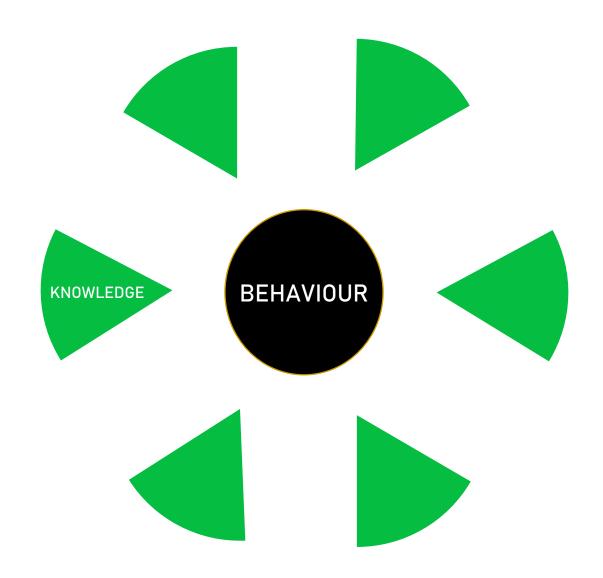
Mega, E. R. (2020, October 28). Who are science's frequent flyers? Climate researchers. Nature. https://www.nature.com/articles/d41586-020-03000-1

Whitmarsh, L., Capstick, S., Moore, I., Köhler, J., & Le Quéré, C. (2020). Use of aviation by climate change researchers: Structural influences, personal attitudes, and information provision. *Global Environmental Change*, 65, 102184. https://doi.org/10.1016/j.gloenvcha.2020.102184

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KNOWLEDGE CAN HELP, BUT... "THERE IS MORE

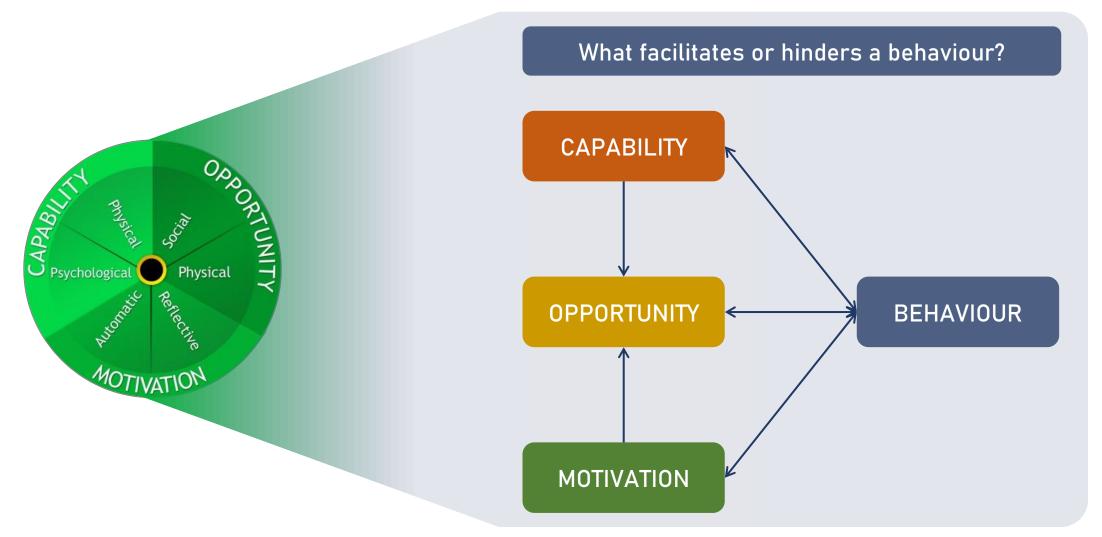


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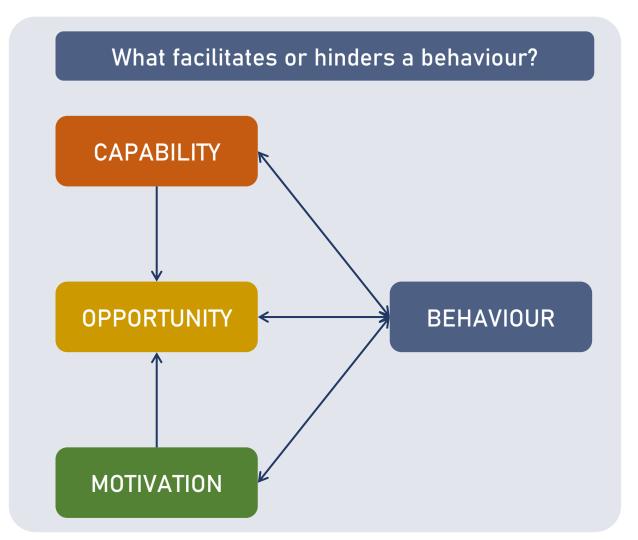


THE COM-B MODEL OF BEHAVIOUR



05

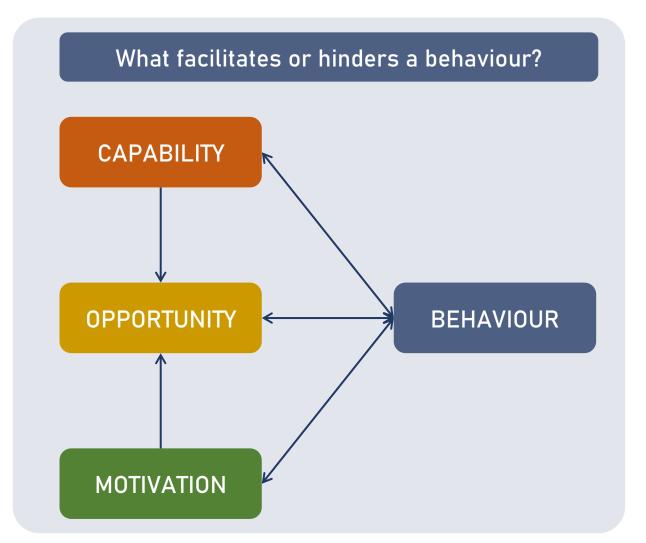


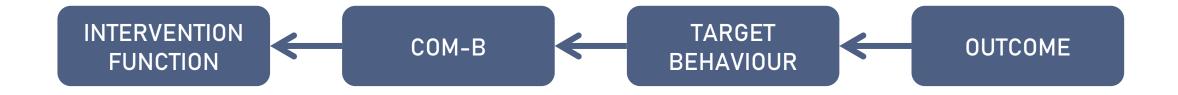


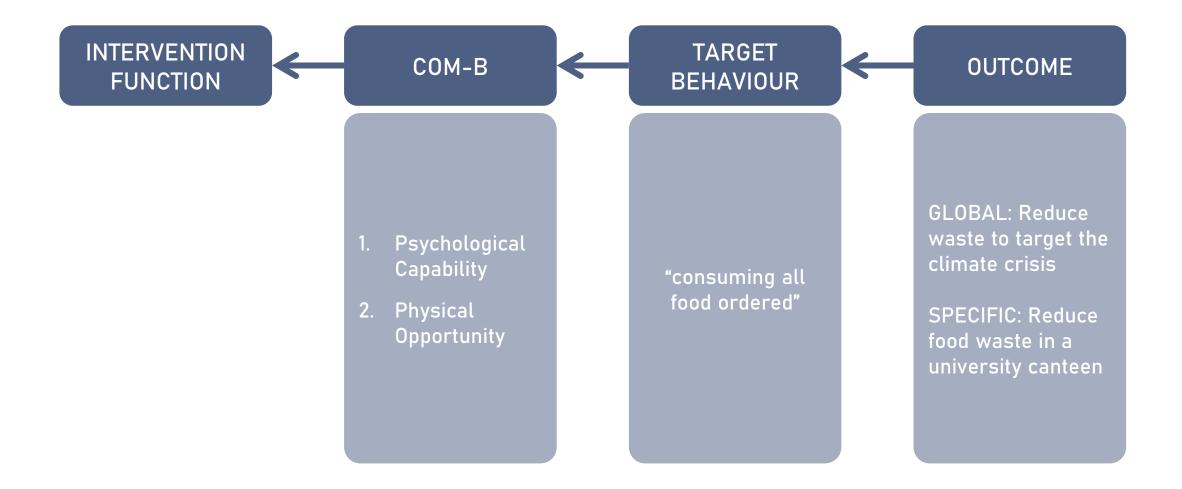
05

- Knowledge about the environmental impact of food waste and production, especially of certain products
- Basing portion sizes on appetite
- Served portion sizes
- Atmosphere at the canteen
- Waste behaviour of other students

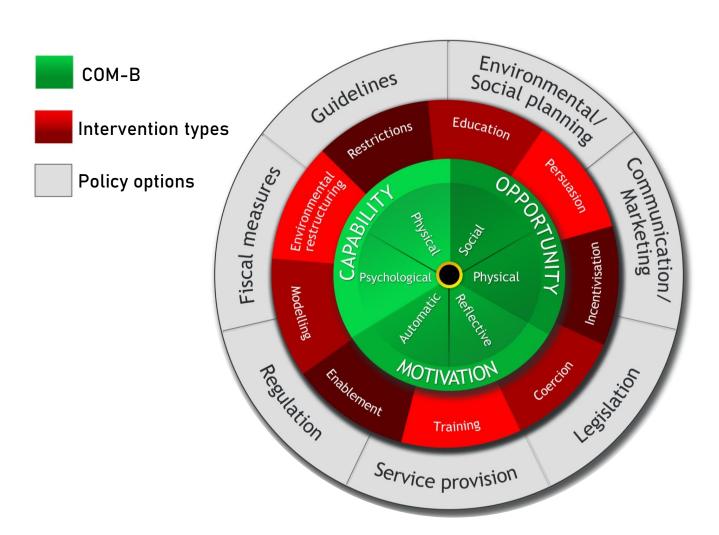
- Seeing oneself as an environmentalist
- Feelings when throwing away food





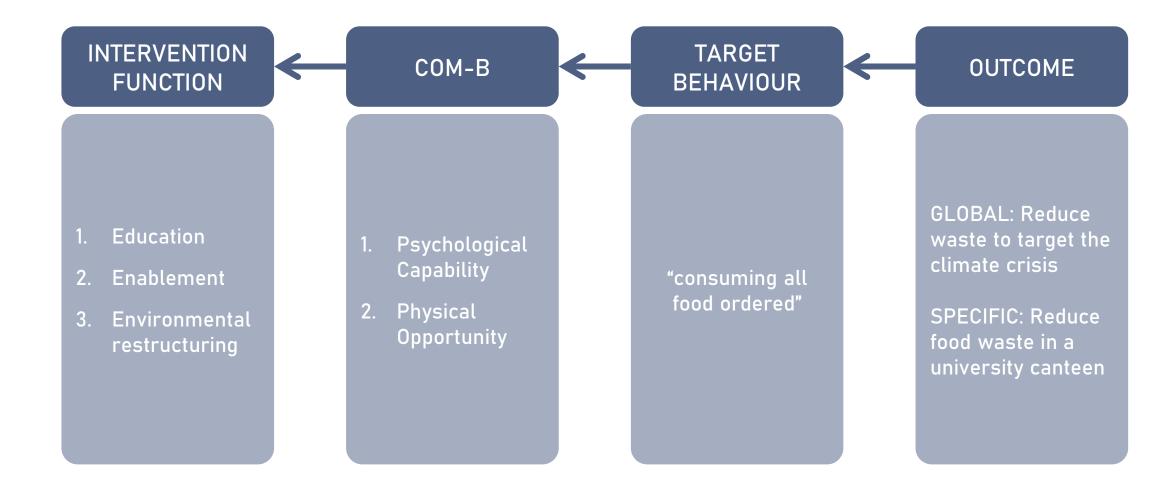


COM-B & THE BEHAVIOUR CHANGE WHEEL



- COM-B was developed from a systematic review of 19 behaviour change frameworks
- Many frameworks overlapped, but none were comprehensive and few were linked to a model of behaviour
- COM-B is the basis of the Behaviour Change Wheel framework

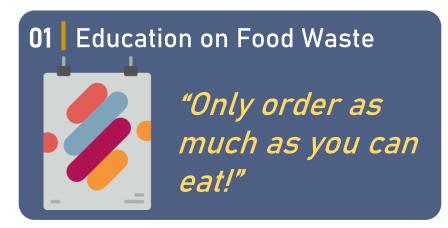
THE BEHAVIOUR CHANGE WHEEL FOR FOOD WASTE BEHAVIOUR



THE BEHAVIOUR CHANGE WHEEL FOR FOOD WASTE BEHAVIOUR

INTERVENTION FUNCTION

- 1. Education
- 2. Enablement
- 3. Environmental restructuring











TAKE HOME MESSAGES

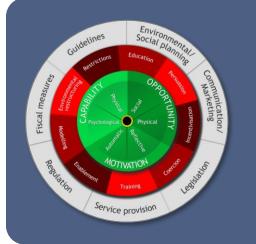




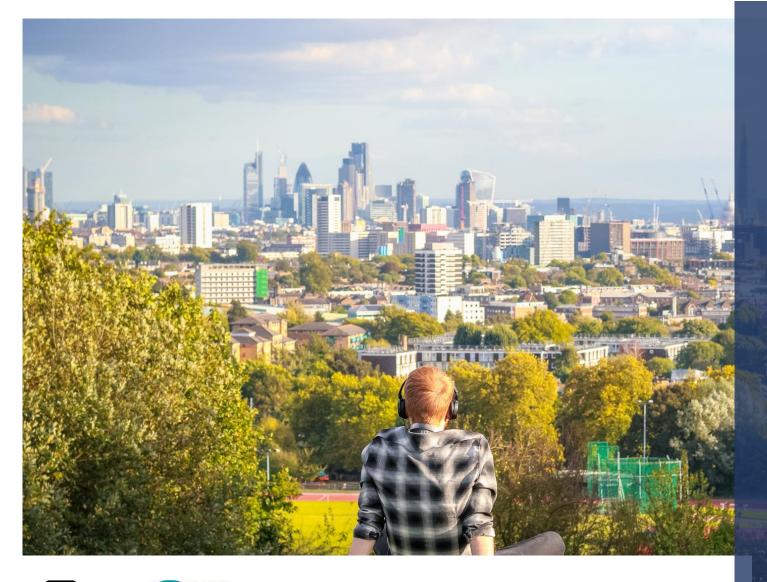
Communication around the climate crises can be improved by addressing cognitive biases



Information provision and knowledge on the climate crisis alone is not enough to change behaviour



Behavioural theories and models can inform the process of gathering information about what influences current behaviours and guide the selection of intervention components



THANK YOU! QUESTIONS?

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for North London Waste Prevention Exchange 2022 March 2nd 2022

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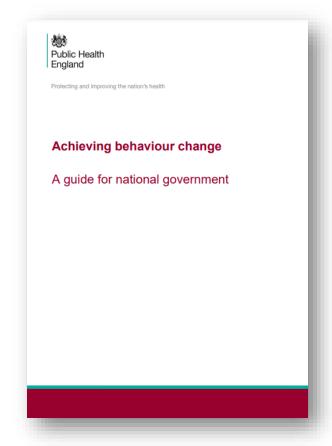






RESOURCES







UnlockingBehaviourChange.com

RESOURCES

- Local Government Association: Behaviour change and the environment pages:
 - Step-by-step guide based on the BCW
 - 9 illustrative examples related to sustainability

Six steps to undertaking a climate behaviour change project

Looking at the six steps you can take to begin a behaviour change project to tackle climate change in your community.

- Step 1: Before you do anything else, think precisely about the behaviour that you are trying to change what, who, where, when, how?
- ∨ Step 2: Understand what is driving the current behaviour
- ∨ Step 3: Choosing your intervention
- Step 4: I know what is driving the behaviour. I know what intervention types I could use. How do I put them together?
- Step 5: What happens if you end up with too many options, and you cannot choose between the intervention types?
- \lor Step 6: How can you measure whether your intervention has worked?

How can we apply this six step guide to our local climate behavioural challenges?

A series of climate change behavioural challenges can be found in this resource. Each will need to be modified for your local behavioural diagnosis and context but they provide a starting point for thinking about the behaviour which you want to change, the questions you may wish to consider in your behavioural diagnosis and examples of interventions to set you well on your way to making local changes.

The behaviours include those which we can change in our own homes, in the community, consumption and travel. It is a not a comprehensive list of green behaviours but using the format, you can hopefully apply it to any behaviour which you wish to change.





https://www.local.gov.uk/our-support/climatechange-hub/behaviour-change-and-environment

RESOURCES

 Change Wildlife Consumers: free openaccess online course covers COM-B and other theories/models of behaviour change



https://www.changewildlifeconsumers.org/change/beha viour-change-for-conservation-online-course/