





The Clean Air (W1) programme is led by NERC and the Met Office, with Innovate UK, EPSRC, ESRC, MRC, NPL & Defra as delivery partners.

Joining Forces to Improve Air Quality and Health Sector Involvement

Behaviour, perceptions, practices and lifestyles

Stuart Capstick

Centre for Climate Change and Social Transformations (CAST Centre)





The Clean Air (W1) programme is led by NERC and the Met Office, with Innovate UK, EPSRC, ESRC, MRC, NPL & Defra as delivery partners.

Social science, climate change and air quality

- Air quality and air pollution as part of wider set of environmental, social problems
- Centre for Climate Change and Social Transformations (CAST Centre)
 - · Focus on mobility as one of four key sectors
 - Transport emissions hardly budged in recent years
 - · Common causes and benefits from acting











The Clean Air (W1) programme is led by NERC and the Met Office, with Innovate UK, EPSRC, ESRC, MRC, NPL & Defra as delivery partners.

Public risk perceptions

- Climate change perceptions
 - High levels of concern, despite covid-19
 - 74% think addressing climate change requires (extremely) high level of urgency
 - Worry about climate comparable to covid (May, '20)

Air quality perceptions

- Around half of people in England concerned / not concerned about air quality (DfT, 2020)
- Cars and lorries/vans main causes of concern (73% and 82%)
 'Household sources' only 16%

"How concerned, if at all, are you about air quality in your immediate area?"



Concern over air pollution by settlement type







The Clean Air (W1) programme is led by NERC and the Met Office, with Innovate UK, EPSRC, ESRC, MRC, NPL & Defra as delivery partners.

Perceptions of air quality

- Outdoor air pollution
 - Awareness and concern strongly linked to
 - physical senses visual, smell, taste
 - soot, dirt, degradation of trees, nature
 - personal experience, including health symptoms (Oltra & Sala, 2014)
 - Indoor air pollution
 - Little evidence on perceptions, understanding
 - Some links to SES, basic measures of behaviour e.g. window opening, cleaning (Ferguson et al., 2020)









The Clean Air (W1) programme is led by NERC and the Met Office, with Innovate UK, EPSRC, ESRC, MRC, NPL & Defra as delivery partners.

Next big developments?

- Transformative shift away from petrol and diesel cars
 - Ban on new purchases by 2030?
 - Government support and investment for active travel? (vs proposed £27bn on new roads)
 - 15 minute cities?
 - Lifestyle change as if we mean it? (UNEP, 2020) (vs 'simple and painless' small-scale action)
 - Integration of health, climate, community, air quality?
 - Meaningful, ongoing citizen engagement with better alternatives?

Jon Featenber List of 'School Streets' set to expand this October

By Frankie Adkins | I frankie_adkins3 Community reporter



Roads pedestrianised in Wandsworth for 'School Streets' scheme

Action: Create '15-minute cities'

We are implementing urban-planning policies to promote the '15-minute city' (or 'complete neighbourhoods') as a framework for recovery, whereby all city residents are able to meet most of their needs within a short walk or bicycle ride from their homes. The presence of nearby amenities, such as healthcare, schools, partie food outlete and methouse according to the standard efficient





The Clean Air (W1) programme is led by NERC and the Met Office, with Innovate UK, EPSRC, ESRC, MRC, NPL & Defra as delivery partners.

Current problems, limits

- Understanding of 'behaviour' in research and policy
 - Behaviour and lifestyle change ≠ voluntary, individual, unsupported choices
 - Behavioural science useful, but hard limits on its own
- Inertia and established ways of life
 - Cultural conventions, well-ingrained patterns = high levels of car use
- Absence of transdisciplinary thinking
 - Psychologists do individual behaviour
 - Economists model price effects, etc.
 - Social contract and the governance trap





The Clean Air (W1) programme is led by NERC and the Met Office, with Innovate UK, EPSRC, ESRC, MRC, NPL & Defra as delivery partners.

Integration, collaboration

- Develop multiple benefits approach
 - Health, wellbeing, air quality, jobs, climate, environment, SDG objectives are well-aligned
 - Focus on e.g. better communities, better ways of life
 - Applies to other areas also e.g. diet









The Clean Air (W1) programme is led by NERC and the Met Office, with Innovate UK, EPSRC, ESRC, MRC, NPL & Defra as delivery partners.

Integration, collaboration

- Focus on practical implementation
- Work with e.g. cities, grassroots groups, campaign orgs.
- Useful: describing, understanding <u>More</u> useful: making change happen in practice
- Legal, infrastructure, health interventions, habit disruption, communication, (dis)incentives, transport policy, etc. etc.
- Citizen engagement on air quality and neighbourhood transformation

"Climate policies that promote co-benefits (that tackle climate change whilst also delivering on other priorities) can bolster support from local stakeholders, increasing the likelihood that they will be approved by decision makers."



Inspiring climate action





The Clean Air (W1) programme is led by NERC and the Met Office, with Innovate UK, EPSRC, ESRC, MRC, NPL & Defra as delivery partners.

Thanks and plugs

CAST Centre
 <u>www.cast.ac.uk</u>
 @CAST_Centre

- Capstick, S., Lorenzoni, I., Corner, A., & Whitmarsh, L. (2014). Prospects for radical emissions reduction through behavior and lifestyle change. *Carbon management*, *5*(4), 429-445.
- Nielsen, K. S., Clayton, S., Stern, P. C., Dietz, T., Capstick, S., & Whitmarsh, L. (2020). How psychology can help limit climate change. *American Psychologist*.
- Capstick, S., Khosla, R., Wang, S. et al. (2020). *Lifestyle change for emissions reduction*. UNEP Emissions Gap report, forthcoming.