Advancing Climate and Health Equity: Integrated Modelling for Transformative Policy Action

Achieving the UK's Net Zero targets presents an opportunity to not only reduce greenhouse gas emissions but also improve population health and address health inequities. There is a critical gap in integrating health and equity considerations into the design, implementation, and evaluation of these policies, as well as in understanding their cross-sectoral impacts on different population groups. The Policy and Implementation for Climate and Health Equity.

(PAICE) project aims to address this gap by adopting a systems-based, transdisciplinary approach to integrate health and equity considerations into the UK's Net Zero policies. As part of PAICE, advanced modelling tools are being developed to assess the effects of policies across key sectors (housing, energy, food, and transport) on population health and health equity. These models incorporate a synthetic population framework, linking environmental exposures and behaviours to health outcomes, while quantifying disparities and co-benefits under various scenarios. An expected outcome is an enhanced understanding of the ancillary health effects of climate mitigation policy options, including co-benefits and unintended consequences, informed by robust data on multiple impacts. This approach will support decision-making processes at national and regional levels to achieve both emissions reductions and health benefits.

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