The *Lancet* Pathfinder Commission: pathways to a healthy, zero-carbon future—call for evidence

It is a priority to develop and communicate a compelling, evidence-based vision of a net-zero carbon society in which people thrive, supported by a sustainable world economy. The potential benefits to human health in such a society are considerable. For example, reductions in air pollution would reduce cardiovascular and respiratory disease; transforming food and transport systems would reduce the burden of non-communicable diseases, obesity, and undernutrition; and conserving natural spaces would safeguard human wellbeing, while protecting the planet's life support systems.[1,2] Moreover, rapid decarbonisation would reduce the major human health risks posed by climate change.[3] To move toward such a future, global, national, and subnational policy makers need to make decisions on the basis of scientific evidence. Such evidence also helps policy makers to be able to draw on examples that are illustrative of how to address implementation challenges in diverse settings and how to overcome them. The most useful evidence will describe actions that jointly benefit the environment, the economy, and human health, while highlighting transformative change, so that substantial improvements can be achieved with minimal delay.

The *Lancet* Pathfinder Commission aims to synthesise evidence on the development and implementation of multisectoral actions to sustain and improve health, while also accelerating progress towards a net zero-carbon economy. The Commission sits within the broader multi-partner Pathfinder Initiative, which was established specifically to widen the engagement of stakeholders and dissemination of Commission findings. We invite submissions of published and unpublished evaluations of actions that mitigate greenhouse gases and also benefit health and well-being. Actions may be undertaken by the public and private sectors, civil society, not-for-profit organisations, and others. Actions to reduce greenhouse gas emissions that benefit health can come from any sector, including energy, transport, agriculture and land-use, oceans, industry, human settlements, health care, and education, and from nature-based solutions (actions that work with nature to address societal challenges, providing benefits for humans and biodiversity)[4]. We also welcome evidence of cross-sectoral or system-wide actions, including actions at the nexus between mitigation and adaptation. We invite submissions of relevant examples of actions to

decarbonise the economy and improve health through the case studies section of the Pathfinder Initiative website by April 30, 2021.

The examples gathered by the *Lancet* Pathfinder Commission will be used to map the evidence for the health benefits of greenhouse-gas-reduction actions, to indicate the gaps in evidence, and to help policy makers and other actors decide where best to focus their resources. Initial findings will be published in The Lancet in advance of COP26 in November, 2021, with a full report published ahead of COP27 in 2022. Findings will also be disseminated to a wide audience of stakeholders and through key partner organisations, including OECD, C40 Cities, the Sustainable Development Solutions Network (SDSN), CDP and The Alliance for Health Policy and Systems Research.

We declare no competing interests. The Pathfinder Initiative is funded by Wellcome (grant number 221284/Z/20/Z) with support from the Oak Foundation (grant number OFIL-20-093). Pathfinder is co-chaired by Helen Clark, Joy Phumaphi and Andy Haines.

*Andy Haines, Helen Clark, Joy Phumaphi, *Sarah Whitmee, Rosemary Green*

sarah.whitmee@lshtm.ac.uk

Centre on Climate Change and Planetary Health (AH, SW, RG), London School of Hygiene & Tropical Medicine, London WC1E 7HT, UK; The Helen Clark Foundation, Auckland, New Zealand (HC); African Leaders Malaria Alliance, Dar Es Salaam, Tanzania (JP)

1 Haines A, McMichael AJ, Smith KR, et al. Public health benefits of strategies to reduce greenhouse-gas emissions: overview and implications for policy makers. *Lancet* 2009; **374**: 2104–14.

2 Whitmee S, Haines A, Beyrer C, et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. *Lancet* 2015; **386:** 1973–2028.

3 K.R., A.Woodward, D. Campbell-Lendrum, D.D. Chadee, Y. Honda, Q. Liu, J.M. Olwoch, B. Revich, and R. Sauerborn, 2014: Human health: impacts, adaptation, and co-benefits. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel,A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L.White (eds.)].

Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 709-754.

4. Seddon N, Turner B, Berry P, Chausson A, Girardin CAJ. Grounding nature-based climate solutions in sound biodiversity science. Nat. Clim. Chang. 2019; 9: 84–7.