Climate friendly public health policy makes economic sense

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Investing in public health policies that help tackle the climate emergency makes economic sense, as well as being good for human and planetary health. Investments made by governments that are centred around healthier environments and healthier livelihoods provide national public goods, while also supporting nationally determined contributions and global mitigation efforts, a global public good.

There are four critical areas where a more holistic approach to public health overlaps with efforts to tackle the climate emergency, bringing clear health-climate co-benefits and potentially benefiting the broader economy: reducing air pollution; encouraging healthier diets; increasing active lifestyles; and greening urban landscapes. However, while the potential is clear, more evidence is needed as to what the overall benefits are for individual countries, relative to the investments required, and the distributional implications.

Fossil fuel air pollution is estimated to be responsible for around one in five deaths worldwide.[1] The combination of higher temperatures and air pollution is particularly dangerous, especially for older people and those with a pre-existing health conditions.[2] Tackling air pollution has been shown to be a cost-effective investment in European countries. Specifically, an optimal air pollution strategy has been found to cost around 0.01-0.02 percent of GDP, and save around 5 percent or more of GDP, primarily due to increased life expectancy and lower morbidity costs.[3] Further evidence suggests that in Europe, air pollution reduces GDP through a reduction in output per worker.[4]

A less sedentary lifestyle, supported by better access to "active" and low-carbon public transport, has climate-health co-benefits. Yet to date, excepting some major cities, public transport is still inadequate for many people. The extent of these health benefits is still being explored, but one study found fewer road traffic crashes, lower air pollution, and higher physical fitness and mental health to be associated with increased public transport use, suggesting that "public health improvements are among the largest benefits provided by high quality public transit and transit-oriented development".[5] More broadly, the worldwide economic costs of physical inactivity on health care systems have been estimated at over US$50 billion in 2013, and productivity losses an additional US$13.7 billion.[6] A challenge to adopting a more active lifestyle is that in many countries, global warming is leading to fewer "safe" hours to exercise outdoors,[7] making solutions oriented around increased activity and active transport less straightforward.

Due to urban heat island effects, towns are often warmer than the surrounding countryside, and so focusing on how towns and cities are designed is increasingly important for creating a healthier living environment. In addition to improving air quality, especially during heatwaves, this includes the design of buildings and taking advantage of nature-based solutions, including urban green spaces that can both provide localised cooling and mental wellbeing benefits, and also contribute to carbon sequestration.[8] While the costs of increasing the area of green spaces in cities and towns is relatively easy to determine, the benefits, mental and physical, while intuitively clear, are harder to quantify. However, a recent study suggests that greening 35 percent of the European Union's urban surface could reduce

summer temperatures by between 2.5 and 6 degrees centigrade, and have a net present value of over 200 billion euros over a 40-year period.[9]

Agriculture is a major contributor to the climate emergency, and an important part of any climate solution. Diets that emphasise the consumption of less meat and more fruits and vegetables could improve people's health, again taking pressure off health services, while leading to a reduction in methane emissions. This is particularly relevant in higher-income countries where diets higher in meat are more common. The global health-related costs of overconsumption of red and processed meat have been estimated at around £219 billion in 2020.[10] Recent estimates suggest that a shift away from animal-sourced food, combined with broad food system transformation, could save trillions of dollars, through reducing ecosystem degradation, human health burdens, and carbon emissions.[11]

Achieving these health co-benefits of climate action requires collaboration across, and investments in, health-determining sectors including energy, transport, building, agriculture, and urban settings; a broader conceptualisation of healthcare; and a transformation of health systems to address socioeconomic and environmental factors across the life course, including healthy ageing. But it also requires a recognition that there will inevitably be "losers, in addition to winners, whenever any new policy is enacted. This can lead to conflict and friction that can slow down efforts and increase costs of tackling the climate emergency, making the need for a just climate-health transition ever more important. For example, arguments in the UK over London's ULEZ (ultra-low emissions zone), designed to reduce air pollution to improve health outcomes, make clear that that there is a divide between those drivers with older more polluting cars who have to date had the "right to pollute" versus those who want the right to breathe cleaner air. Introducing a charge for those with non-compliant vehicles is an effective policy instrument, but it can act as a *de facto* ban for lower-income households and workers, while having little impact on the travel choices made by higher-income people, thereby potentially increasing inequalities.

Policy makers broadly have a choice of environmental policy instruments. These may be price-based measures, such as taxes and subsidies; regulation-based, including bans; and behavioural, such as nudges. Each type of policy has potentially different distributional implications, which, when explicitly taken into account, can influence the optimal policy mix. While some governments across the globe appear tempted to renege on their climate commitments, whether due to dogma or imagined or real political pressures, their constituents' health is being unnecessarily harmed. There is a clear sense of urgency for economists, health sector workers, and policy specialists, to work together to provide further evidence and more clarity on the health and economic benefits of investing in tackling climate change.

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