European Green Deal: a major opportunity for health improvement

The European Green Deal aims to respond to the escalating climate crisis by achieving net zero greenhouse gas (GHG) emissions from the EU by 2050. Current policies will achieve only 60% reductions by 2050 from 1990 levels, indicating the need for increased ambition. Additionally, the deal aspires to “protect the health and well-being of citizens from environment-related risks and impacts” and establish a toxic-free environment, deliver healthy and sustainable diets, and protect biodiversity. This ambitious agenda would support planetary health.

Europe alone cannot ensure that the global mean temperature increase is kept to below 2°C above pre-industrial levels as laid out in the Paris Climate Agreement, but the EU’s intention is to have a leadership role by cutting its own emissions rapidly and using its financial resources, knowledge, and influence to encourage other nations to increase their climate actions. The European Green Deal emphasises the importance of reducing the likelihood of GHG leakage—ie, more carbon-intensive imports to replace EU products from countries with lower ambitions for GHG-emission reduction—by ensuring that import prices reflect carbon footprints.

Many details of the proposals in the European Green Deal remain to be worked out, but, if successfully implemented, this deal has the potential to achieve major health improvements in the near term while reducing the growing health risks from climate change.

The near-term health benefits can arise through successful policy implementation in sectors, such as the energy, housing, transport, food, industry, and healthcare sectors, that substantially contribute to emissions of carbon dioxide and short-lived climate pollutants like methane and black carbon. Successful policies would reduce GHGs, fine particulate air pollution, and tropospheric ozone with major benefits to health. Replacing fossil fuels by clean renewable energy across these sectors could prevent about 3.6 million premature deaths annually worldwide (at 2015 population) from ischaemic heart disease (IHD), stroke, chronic obstructive pulmonary disease, and other causes, with about 430 000 of these premature deaths being in the EU.

When prevented deaths are valued using a standard economic approach (value of a statistical life), economic benefits of reduced mortality substantially offset the costs of scaling up renewable energy.

The acceleration in a shift towards sustainable transport strategies, as proposed in the European Green Deal, could result in major health benefits particularly if active travel, such as walking and cycling, together with greater use of public transport is promoted. For example, one study suggested that if the urban population of England and Wales walked and cycled as much as their counterparts in Copenhagen, Denmark, there would be substantial reductions in incidence of diabetes, IHD, stroke, and other conditions related to a sedentary lifestyle and that £17 billion costs (in 2010 prices) could be averted to the National Health Service (NHS) over 20 years. Health benefits occur particularly from encouraging sedentary middle-aged and older people to walk and cycle. Accessibility of suitable sustainable transport options would be crucial—eg, electric bicycles could increase the likelihood of continuing to cycle into older age. The health benefits of increased active travel are likely to exceed the adverse effects of increases in injury risk, which in turn can be reduced through policies to improve road safety.

The importance of green space and biodiversity in European cities is highlighted in the deal. Provision
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of green space in urban areas can influence health in multiple ways. For example, a WHO review found evidence that proximity to urban green spaces was associated with improved mental health and pregnancy outcomes, together with reduced cardiovascular morbidity and mortality, obesity, and risk of type 2 diabetes. Green space can also reduce urban heat islands and associated ill health, as well as reduce further energy requirements for cooling. Nature-based solutions for adaptation and mitigation can protect biodiversity and can improve flood control and watershed protection as well as act as carbon sinks, but potential unintended consequences such as increased vector-borne disease transmission must be anticipated and addressed.

Energy-efficient housing, including through retrofitting programmes to insulate existing houses and shutters to shade windows, can reduce cold and heat exposure, respectively, and improve health, providing that build-up of household air pollutants, including radon, tobacco smoke, and pollutants from cooking, is averted by adequate ventilation.

The “Farm to Fork Strategy” is an important component of the European Green Deal and addresses the sustainability of EU food systems. Besides the positive health impacts of reduced emissions and pollution from sustainable production and processing of food, the strategy aims to engage the consumer by encouraging dietary shifts towards increased consumption of sustainable foods, including vegetables, fruit, whole grains, nuts, and seeds, and reduced consumption of red and processed meat. Health benefits would include reduced obesity prevalence and reduced risk of non-communicable diseases such as IHD and stroke. A UK modelling study found that a reduction in dietary GHG emissions of 17% (by switching from current to WHO-recommended diets) was associated with an average increase in life expectancy of about 8 months. On the basis of the evidence presented in this study, further dietary changes resulting in emission reductions of up to about 40% might be achievable, but larger reductions may be limited by acceptability and attenuated benefits for health.

Health care was estimated to be responsible for an estimated 4.4% of GHG emissions worldwide in 2017. For the UK, this was estimated to be 6.3% for the NHS and Public Health England combined, but its importance could be greater: health professionals could have potentially large impacts on social attitudes towards decarbonisation and behaviour change. Procurement policies for zero carbon energy and reducing the environmental impact of pharmaceuticals and medical equipment can promote decarbonisation.

Besides production-related emissions, consumption-related emissions must be addressed to achieve climate targets. The European Green Deal advocates rapid movement towards a circular economy based on recycling, reuse, remanufacturing, and shared use. To avoid increased exposure to toxic chemicals from these processes, health risks must be minimised by better regulations and their implementation.

Overall, there are major health and environmental benefits to be had from implementation of the European Green Deal, but capitalising on their potential will require careful design and evaluation of policy choices. Challenges include potential unintended adverse consequences such as increased inequities if, for example, raised fossil fuel prices increase fuel poverty. Where feasible, so-called triple win policies that benefit health, the environment, and equity should be implemented.

National policy priorities may vary—e.g., coal phase-out should be a priority in countries of central and eastern Europe where considerable amounts of coal are still burnt. A systematic assessment should be undertaken of the health implications and GHG emission reductions from different sectoral mitigation strategies for EU countries alongside careful assessment of all potential unintended negative consequences of implementation of the European Green Deal for health, environment, and economy. Successful implementation of the European Green Deal will have implications for other countries that will be scrutinising the EU experience.

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Andy Haines, *Pauline Scheelbeek

pauline.scheelbeek@lshtm.ac.uk

Centre on Climate Change and Planetary Health, London School of Hygiene & Tropical Medicine, London WC1E 7HT, UK


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