





Health and fiscal co-benefits of emissions reductions: a summary for negotiators

Summary: Policies to reduce greenhouse gas emissions will substantially reduce the burden of disease from heart disease, cancer, obesity, diabetes, dementia, depression, osteoporosis, road deaths and injuries, and air pollution (and thus lung disease). These benefits are associated with substantial and meaningful savings in healthcare costs which offset much of the cost of mitigation. Such information should encourage negotiators: whilst climate change threatens health, mitigation strategies can save both lives and money.

Independent scientific research published in the leading international medical journal *The Lancet*, documents the multiple health effects of reducing fossil fuel use¹. Meeting emissions targets in the transport sector will require modest substitution of car use with walking & cycling. The associated increase in physical activity would dramatically cut rates of chronic disease, with 10% to 20% less heart disease and stroke, 12% to 18% less breast cancer and 8% less dementia. Mental health would improve, with an estimated 6% less depression- and more if the impacts of neighborhood greenness and reduced community severance, fatness & noise pollution are considered.

Reducing livestock production diminishes cattle related methane emissions and deforestation. Consuming less animal products lowers food prices (& reduces malnutrition) because cattle are fed on grain. Reducing the amount of animal products in the diet would reduce consumption of harmful saturated animal fats, yielding a further large fall (30%) in the incidence of chronic disease, including cardiovascular disease and cancer of the colon & rectum (the 2nd commonest cancer in men).

Together, changes in diet and physical activity would reduce levels of population fatness, when current trends will lead to nine in ten adults in most developed countries will be overweight or obese by 2050. Rates of diabetes would thus fall, as will those of cerebrovascular disease. By improving diet & physical activity levels, climate change mitigation policies would dramatically cut rates of premature death and disability for hundreds of millions of people around the world.

Insulating homes in high income countries prevents winter cold deaths and reduce greenhouse emissions. Fuel efficient cook stoves in low income countries cut respiratory deaths in children: 1 million children die every year from respiratory infections caused or made worse by the burning of solid fuels. De-carbonizing energy supplies would reduce air pollution from coal extraction.

Such health benefits **save money**: moving the EU greenhouse gas emissions reduction target from 20% to 30% domestically by 2020 (compared to 1990 levels) would cost €46 billion per year in 2020^{2 1} but save <€30.5 billion annually² though reduced medical bills or ill-health avoided, in addition to the <€52 billion health gains associated with the current 20% target. This is equivalent to just under 0.2% of EU GDP, and would meet nearly 2/3 of the cost, estimated by the European Commission, of reaching the 30% internal target. And a healthy workforce increases economic productivity. Negotiators might consider the fact that low carbon lifestyles improve health and wealth.

CONTACTS AT CANCUN: Climate and Health Council, www.climateandhealth.org Dr. Hugh Montgomery, +44 7981 654 009, h.montgomery@ucl.ac.uk; Health and Environment Alliance HEAL www.env-health.org and Health Care Without Harm HCWH www.noharm.org, Dr. Pendo Maro, +32 495 28 14 94, pendo@env-health.org.

References: ¹ Friel et al. 2009. Public health benefits of strategies to reduce greenhouse-gas emissions: food and agriculture. *Lancet*. Woodcock et al. Public health benefits of strategies to reduce greenhouse-gas emissions: urban land transport. *The Lancet*, 374, 1930-1943.

²European Commission Communication, May 2010, COM (2010) 265 final. Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage. http://ec.europa.eu/environment/climat/pdf/2010-05-26communication.pdf (accessed 14.08.2010)

² "Acting Now for better health, A 30% reduction target for EU climate policy", HEAL and HCWHE, Brussels, September 2010