

Sustainability

Sustainability is a major health issue, considered by many to be the greatest long term threat to health. Addressing this requires changes in behaviour in the same way as any other health improvement area.

Sustainable development: meeting our needs today without compromising the ability of others to meet their needs - today or tomorrow.

Key resources are **food, water and fuel**. Globally these are limited. Distribution of resources is not equal across countries, and use is also not equitable. The virtual water content of products below shows this – much of the water used comes from poor countries where access to clean water is a problem.

Products' virtual water content (litres)

- glass beer (250ml) = 75
- glass milk (200ml) = 200
- glass wine (125ml) = 120
- glass apple juice (125ml) = 190
- cup coffee (125ml) = 140
- cup of tea (125ml) = 35
- slice of bread (30g) = 40
- slice of bread (30g) with cheese (10g) = 90
- 1 potato (100g) = 25
- 1 bag of potato crisps (200g) = 185
- 1 egg (40g) = 135
- 1 hamburger (150g) = 2400
- 1 cotton T-shirt (medium, 500g) = 4100
- 1 sheet A4 paper (80g/m²) = 10
- 1 pair of shoes (bovine leather) = 8000

Source: WWF (2006) rich countries, poor water.
www.panda.org/freshwater

www.sdu.nhs.uk

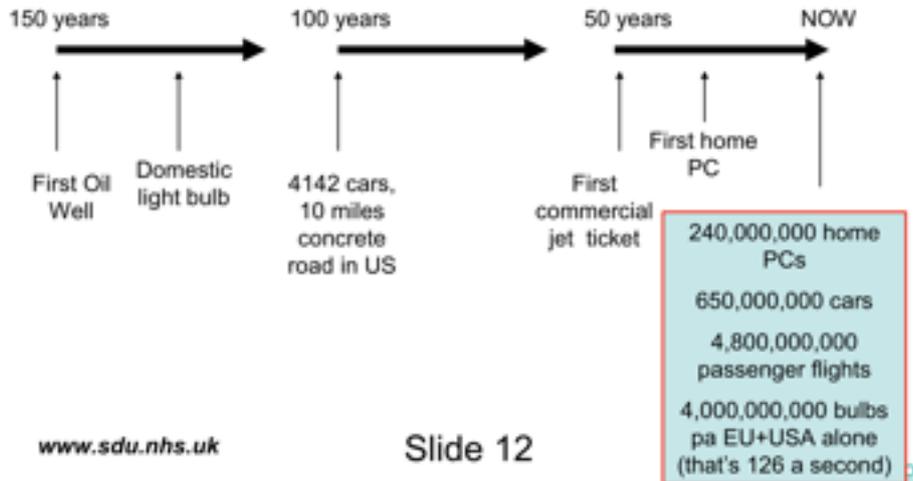
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Sustainability is not the same as climate change, although the two are related. There is general acceptance of the need to adopt a more sustainable approach, even from those who do not accept climate change as a reality.



We're releasing 350million years of stored CO₂ VERY quickly



The speed of this change is unprecedented. Changes like this have happened before, but over millions of years and THAT has been fast enough to be catastrophic to dinosaurs and other living things in previous mass extinctions.

We are seeing some of the consequences of climate change now. Debate persists over how much this change is due to human development, and whether a tipping point will be reached after which further change will be unpreventable. There are growing numbers of severe weather events globally.



food poisoning, cataracts, vector borne disease, heat wave, flooding, skin cancer



drought, crop failure, economic collapse, mass migration, civil unrest, societal collapse

Most of these impacts are not in the UK yet. They are disproportionately in the developing world, as shown in the following maps.

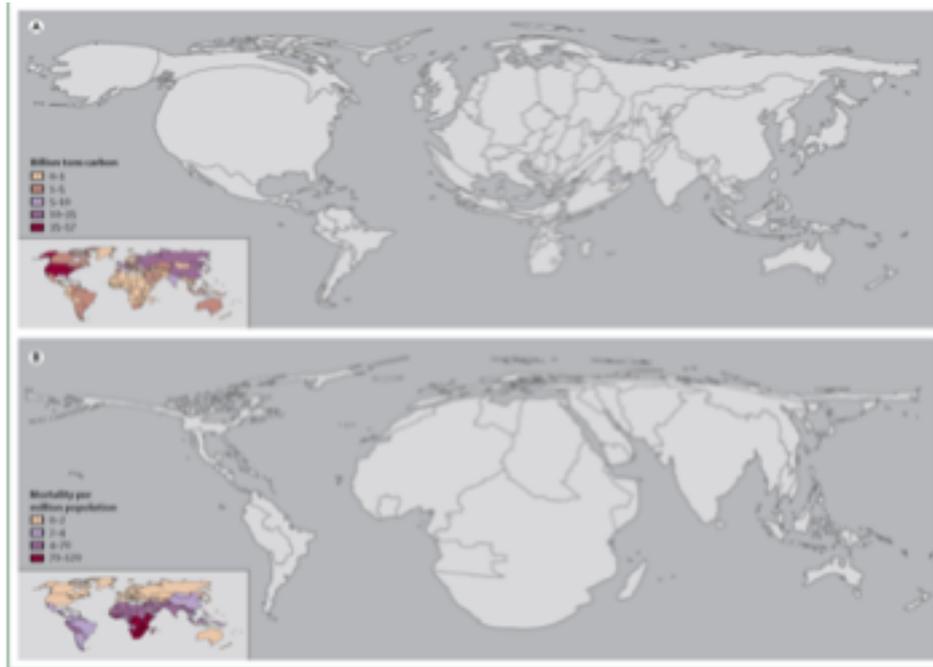


Figure 4: Density equalizing cartogram. Comparison of unadjusted cumulative CO₂ emissions by country for 1950-2000 versus the regional distribution of four climate-sensitive health consequences (malaria, malnutrition, diarrhoea, and inland flood-related fatalities).¹⁷



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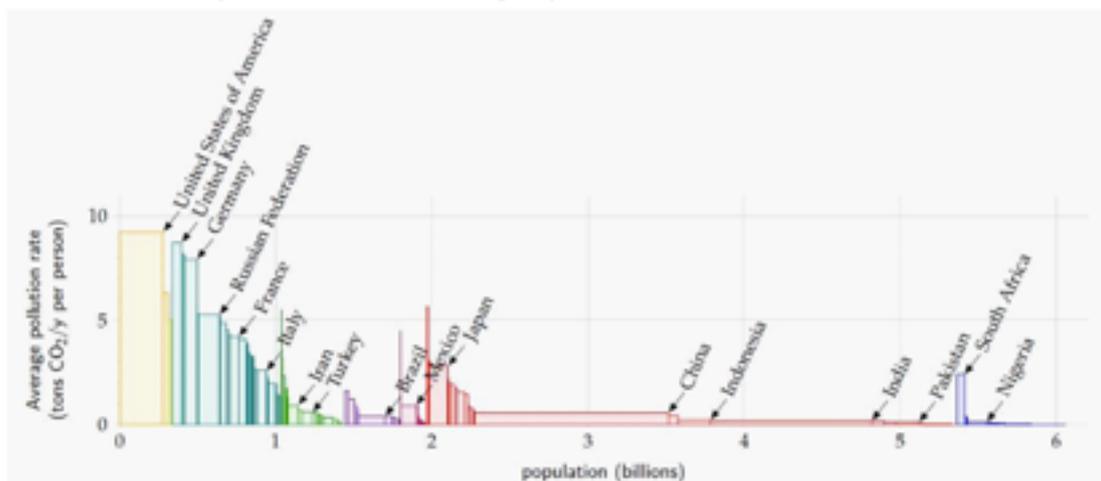
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The top figure shows CO₂ emissions by country 1950-2000. Bottom is the distribution of 4 climate-sensitive health consequences (malaria, malnutrition, diarrhoea, inland flood-related fatalities). Ref: Climate Change presents the biggest threat to health in the 21st Century” The Lancet (373;9697;1659-1734, May 16-22 2009).



Global footprint over the period 1880 – 2004 – by country, by continent (colour), per capita (vertical axis), by population (horizontal axis), and absolute amount (area of rectangle)



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Acting more sustainably will have immediate health benefits, on 3 levels:

1. Benefits for the individual: low carbon lifestyles are healthier lifestyles. Walking and cycling rather than driving: physical activity, mental health, road traffic deaths, air pollution, Improved diet: increased fruit and vegetable consumption, reduced meat consumption and processed food consumption, ...

2. Benefits for the health care system: Sustainability is very well-aligned with other health care priorities, for example:

- providing care closer to (or in) the home and self care (less travel);
- more prevention and primary care;
- better use of ICT (information & communication technology);
- more flexible workforce;
- reduced energy costs:...

3. Benefits for the world:

Including reduced international health inequalities.

Further information

<http://www.sdu.nhs.uk>

<http://actonco2.direct.gov.uk/index.html>

<http://www.transportdirect.info>

<http://footprint.wwf.org.uk/>

www.nef.org.uk/

www.energysavingtrust.org.uk/

www.projectgenie.org.uk

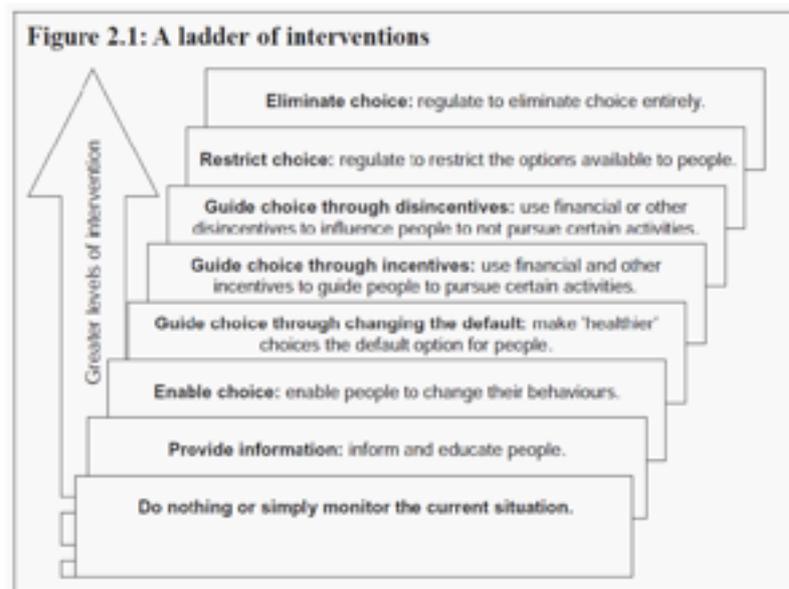
Personal carbon footprint:

<http://actonco2.direct.gov.uk/index.html>

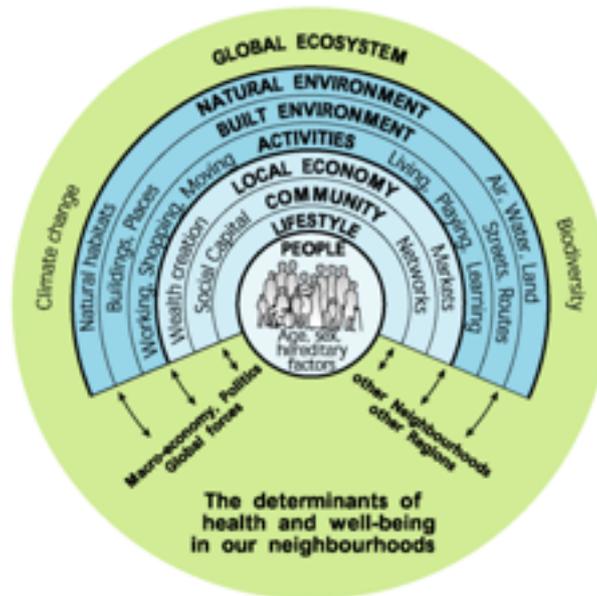
<http://www.transportdirect.info>

<http://footprint.wwf.org.uk/>

Nuffield Council on Bioethics Intervention Ladder



What determines Health/being Healthy? The wider determinants of health



Barton and Grant 2005 based on Whitehead and Dahlgren 1991