

How We Can Save the Planet

Mayer Hillman (with Tina Fawcett), Penguin Books, June 2004

Summary of the book's key messages



Climate change is the most serious threat faced by mankind

Tony Blair has identified it as 'unquestionably the most urgent environmental challenge'. Sir John Houghton, former head of the Met Office, has called global warming a 'weapon of mass destruction'. Climate change will affect the planet for tens of generations to come, and is very likely to make more of its regions uninhabitable. The threat cannot be overstated.

Damaging impacts are already evident

Nearly all the hottest years since records have been taken have occurred since the mid-1980s. The world has seen an average temperature rise of 0.6°C. Even this apparently small rise has led to mountain glaciers retreating, sea levels rising, and rainfall patterns altered. In the UK, spring is arriving up to 3 weeks early.

Possible future changes are extremely alarming

If greenhouse gas emissions go unchecked, a global temperature rise of up to 6°C is predicted by 2100 (the same difference as between the Ice Age and now). By 2050, more than one million species could become extinct and 150 million environmental refugees created. An even bleaker future is likely if the process creating global warming accelerates beyond our control.

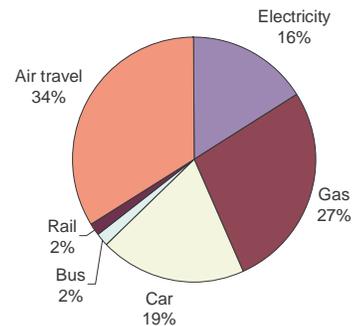
Energy use is the key source of the greenhouse gases causing climate change

Our use of coal, oil and gas is responsible for over four-fifths of the UK's carbon emissions. Their concentration in the atmosphere has risen by a third since the Industrial Revolution.

Current action is far from sufficient

Global emissions are continuing to increase along the 'worst case' trajectory. Government has not yet responded adequately to the enormity of the problem. And industry has no magical technical fixes that can assure us that realistic targets can be met. In the UK, half of all emissions stem directly from energy use within the home and personal transport by road, rail and air, in the proportions shown in the pie chart below.

Personal direct carbon emissions by source



An effective policy framework is needed at both national and international levels

Globally, the only framework for agreement which has any chance of success is '**Contraction and Convergence**', as devised by the Global Commons Institute. It is based on the principles of security and fairness. It involves a cap on global emissions, to keep concentrations in the atmosphere below dangerous levels, and a phased programme of carbon dioxide allowances for all by an agreed year.

As part of this global agreement, the UK will have to reduce its overall emissions by between 60% and 80% by 2050. The fairest way to achieve this reduction is the allocation of *equal* carbon 'rations' or allowances per person which decrease over time. Everyone must face up to their responsibility for climate change, and take steps to reduce their burden on the planet.

The moral imperative

If we in the developed world do not agree to restrict our own carbon dioxide emissions, there are only two possible outcomes: either there will be an inevitable and devastating intensification of the problems caused by climate change, or we will have to prevent people in poorer countries from having their fair share in the energy required to maintain even a basic standard of living.

There is no third way. Doing nothing is not an option.

What you can do: Ten key actions

- 1. Wise up!** Find out about climate change by reading, watching TV or searching the web.
- 2. Calculate your own carbon dioxide emissions:** Find out how much you contribute to global warming by using a carbon calculator (see below)
- 3. Drastically reduce or stop flying:** it is not only the most damaging means of travel per mile but it is also associated with long-distance journeys (www.chooseclimate.org/flying)
- 4. Save energy at home:** insulate, turn heating down and use hot water sparingly
- 5. Buy energy efficient lights & appliances:** look at the labels and see how much energy they use. See www.saveenergy.co.uk or call the energy efficiency helpline on 0845 727 7200
- 6. Switch to a renewable energy supplier** (see www.greenprices.com)
- 7. Change your travel patterns:** walk or cycle for local trips, use the bus rather than drive, use local shops and services, use local schools, take holidays close to home, get rid of the car or use it a lot less
- 8. Talk with people about what you are doing to save energy and prevent climate change**
- 9. Join an environmental pressure group**
- 10. Call on the government to press for a global agreement on the 'Contraction and Convergence' of greenhouse gas emissions:** fair shares for all is the only way to save the planet from dangerous climate change

Action 2: Audit your carbon emissions

We invite you to calculate your own emissions - it won't take long - and then enter into a pact with yourself and your household to reduce them. What are the emissions from your use of energy? How do these compare with the national average? More importantly, how do they compare with what is necessary to meet future reduction targets – 3 tonnes by 2020 and 1.5 tonnes by 2030?

Instructions for carrying out your carbon audit

- For the gas, electricity and oil used in your home, calculate your annual consumption in kilowatt hours (kWh) from your energy bills. Divide each total by the number of people in your household, to get your *personal* energy consumption.
- For transport, roughly estimate your own annual travel in kilometres (for miles multiply by 1.6).
- Put these figures for YOUR annual consumption in the table below. Then use the multiplier in the next column to get the figure for YOUR carbon dioxide emissions in kilograms (kgCO₂).
- Add up your emissions from all your different activities to get an annual figure.

Annual carbon dioxide emissions (kgCO₂) for personal energy use

Energy use	YOUR annual consumption	Multiplier	YOUR emissions	Average individual
In the household				
electricity	kWh	x 0.45		870
gas	kWh	x 0.19		1,480
oil	Litres	x 3.00		
Personal travel				
Car:	petrol (as driver)	km	x 0.20	} 1,060
	diesel (as driver)	km	x 0.14	
Rail:	intercity	km	x 0.11	} 100
	other services	km	x 0.16	
	underground	km	x 0.07	
Bus:	within London	km	x 0.09	} 90
	outside London	km	x 0.17	
	express coach	km	x 0.08	
Air	within Europe	km	x 0.51	} 1,800
	outside Europe	km	x 0.32	
Total for 2004, kilograms CO₂				5,400
Target for 2020, kilograms CO ₂				3,000
Target for 2050, kilograms CO ₂				1,100

By 2020, a return flight from London to New York alone will exceed the annual personal ration for *all* your fossil fuel purposes!