

Changing Climate: What do we need to know?

Having spent much of my professional life teaching about the state of the world I've often been challenged to explain this in as simple a form as possible. The problems we face now are particularly challenging and will result in a future very different to today. There are four 'big' issues which it's vital to understand: changing climate, energy matters and the limits to growth which, taken together, are leading us into a long and maybe difficult transition.

In each of these four strands I consider the same questions: What is the problem? What are people doing to resolve this? What choices need to be made? What therefore can I do? In such a short space my answers will, of course, be oversimplifications. So, this offers an outline map of what is happening in the world right now and why it matters to all of us.

1. Changing climate

What's the problem?



Over geological time the planet's climate has varied enormously but only over the last 200 years did humans accidentally begin to alter the climate themselves. This arose from the burning of fossil fuels – coal, oil and gas – during the 19th and 20th centuries, a period of huge industrialisation, growth and 'progress' for richer countries of the world. However, the scientific evidence is clear - burning fossil fuels releases gases such as carbon dioxide which has led to global warming and changing climate. This has resulted in more extreme weather

around the world – storms, floods, droughts, forest fires, rising sea levels. In turn, this is beginning to affect people's homes and livelihoods in difficult and far reaching ways.

What are people doing?

Over the last 25 years locally, nationally and internationally, millions of people have begun to face up to this dilemma. In essence, we urgently need to move from a high-carbon to a low-carbon lifestyle. On the one hand, we need to *mitigate* the impact of climate change which will last for centuries, on the other to *adapt* our lifestyles to increasingly difficult weather conditions. Mitigation requires decreasing our carbon footprint, how much carbon our homes, workplaces and consumption creates. We have unthinkingly become addicted to fossil fuels to provide our energy and many of the basics of everyday life. This is why many are turning to renewable energy sources – solar, water and wind – in their homes and communities. This is also why the ways in which we live, build and travel are now beginning to change.

What choices need to be made?

Choosing to do nothing will create even more hazards, for us and for future generations. Three major areas of choice arise. Firstly, what is our attitude towards the natural world, the biosphere, our life support system? Should this be damaged to meet our wants or protected to meet our needs? Secondly, does climate change require token or fundamental changes to our lifestyles? Thirdly, can technology help resolve climate change? In the face of climate change, protection of our life support system has to be of highest importance, fundamental changes need to occur in all the life-choices we make and whilst green technology has an important part to play it will not miraculously resolve everything. The choices we face are social, economic, political, ethical and environmental.

What can I do with others?

The first thing to do is to find others who have similar concerns about climate change or who want to know more. The second is to track down initiatives in your community and elsewhere which are committed to action. Learn more from reliable sources. Making such connections provides a platform from which to work where you are supported by others. There is a growing army of concerned young people, parents, adults, councillors and politicians working for such change. Examine every aspect of your life and its 'carbon footprint'. Start with what it is easiest to change: saving energy, better insulation, switching to a green supplier, going solar, low emission vehicles, travelling less. Is there an eco-team in your local school, a nearby Transition Group? Spread the word.

2. Energy matters

What's the problem?

The problem is that we have got used to abundant energy always being available at the touch of a switch. We have become addicted to fossil fuels and are only now waking up to the consequences of this. It seems impossible that the progress of the 20th century could have led to such a dilemma. CO₂ emissions continue to grow because oil, coal and gas have become the lifeblood of society. They are also the lifeblood of the big fossil fuel corporations many of which fund climate change denial. The problem is that most remaining fossil fuels need to be left in the ground however valuable they appear to be. This means that energy saving, energy efficiency and widespread use of renewable sources of energy need to be prioritised by politicians and economist alike.

What are people doing?



Changes are occurring at all levels of society but often with variable government support. Individuals, communities and companies, however, have begun to pioneer a new wave of initiatives, whether in relation to electricity generation, insulation, building materials or electric/hybrid vehicles and developing processes which have a low rather than high carbon footprint. A growing number of schools have begun to invest in renewable sources of

energy with students monitoring their own energy use. In the UK, the government pays a tariff to householders who've made the shift to renewable sources of electricity and heating. This can help households and communities switch from fossil fuels to renewable sources of energy thus significantly cutting their carbon footprint.

What choices need to be made?

The backdrop, as with climate change, is how we choose to view the planet's life support system (the biosphere: land, air, water, plants and creatures) and whether we view the necessary changes as major or minor. Any aspect of our lifestyle which damages people or the planet is 'unsustainable' and therefore needs challenging. The hidden costs of what we consume are often 'paid for' by people and environments elsewhere in the world. This is particularly true in relation to extraction of fossil fuels. Finding out about and understanding these wider impacts can be a great encouragement in beginning to alter one's own lifestyle. Choosing our energy habits, leaving fossil fuels in the ground or burning them, will totally alter the face of society – one way or the other.

What can I do with others?

As with climate change the first thing to do is to become more knowledgeable about these matters and to find others of like interest in your school and community. They may be the same people as those concerned about climate change. Investigate and visit the nearest examples of renewable energy schemes, they can often really be inspiring. They may alter the look of the landscape but they are now essential to our survival. Monitor your own energy use and see where this can be reduced. Change to an energy provider that relies entirely on renewable sources. Choose a vehicle which has low carbon emissions. A low-carbon future is one in which we use less energy more efficiently. Follow and be involved in local and national initiatives. Learn from what goes on in other parts of the world.

3. Growing limits

What's the problem?



The problem is that we live on a finite planet yet treat its resources as if they are inexhaustible. Everything we create and use derives from natural resources, whether minerals, soil, forests, rivers or oceans. At some point finite resources, such as minerals and fossil fuels will run out, or as with the latter their use will turn out to be dangerous. Other resources, such as forests and fisheries, can be run sustainably through replanting and restocking, but are often not protected in this way. We also produce all sorts of wastes, dumped on land or in water in more quantities than the biosphere can handle. Some people and countries consume more than their fair share of resources and create more waste too. In ecological terms there are clear limits to growth and our consumption which we ignore at our peril.

What are people doing?

One of the central dilemmas is that there is enough to meet people's needs but not people's greed. There are thus many national and international initiatives that work to

ameliorate global poverty and highlight the linkages between rich and poor. This may be in relation to child labour, dangerous working conditions or exploitation of women. Similarly there are numerous initiatives which focus on concern for and care of the natural environment in all its aspects. Any actions which cause damage to people or planet are unsustainable for those put at harm or risk, human or non-human. Consequently there is widespread national and international action in relation to the wellbeing of both people and planet. Climate change, fossil fuel use and resource consumption all directly threaten the ecological limits to growth.

What choices need to be made?

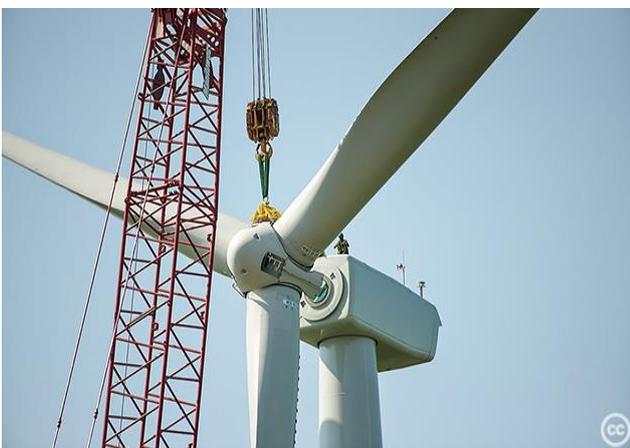
The choices here are equally plain but are hedged in by our beliefs about how we feel society should and does work. Does it matter if we are causing damage to the biosphere and what damage am I actually responsible for? Do I take a 'technocentric' stance on life, believing that human inventiveness can overcome all such problems, or an 'ecocentric' stance in which care and respect for the biosphere and its life-support systems come first? Do I believe existing society is capable of clearing up these dilemmas or that a 'business as usual' approach lies at the very heart of our problems? Do we need just to reform the systems that have brought us to this point or to recreate them in a new form?

What can I do with others?

At heart we need to live more lightly on the earth. Our impacts, unless beneficial, need to be lighter on both others and the environment, here and elsewhere. We thus need to research and examine the innumerable links that exist between our consumerist lifestyles and the rest of the world. Beginning to understand how our choices impact on others, our ethical and environmental footprint, reframes what we take for granted in our daily lives. We can then begin to live more sustainably through an ethos of care for both present and future generations. These interconnections make us more open to life and more aware of the whole, both in space and time. When we begin to understand that everything is connected to everything else our lives come into a better and more effective balance.

4. A long transition

What's the problem?



These three issues together present us with a major challenge. Climate change will continue to occur for the foreseeable future and burning fossil fuels will make this worse. Nor does living beyond the planetary means offer a sustainable way out. We therefore face a 'long transition' in which society as it has been must change significantly in order to survive. We have the choice of working to help create a low-carbon and lower consumption society – a challenging but rewarding task. Or we can stay in the

collective trance and watch society gradually or quickly go downhill. Other civilisations that thought themselves immortal have long gone. Being inventive and technologically advanced

doesn't guarantee survival. Whichever way, we're in for a long and interesting social, political, economic and cultural transition.

What are people doing?

Many people have not yet really woken up to the likelihood or consequences of the transition to a low-carbon future. People live in a consensus trance because alternative ways of seeing and being seem unimaginable. However, there are many groups and networks around the globe which recognise that things are out of balance and who are working first to imagine and then to create a fairer and more sustainable society. Both vision and action are needed in order to achieve this. One of the common threads is a view of sustainability which recognises and respects both human and non-human alike. Innumerable projects, often local, exist to help build a more resilient low-carbon society, whether in relation to food growing, work and healthcare or community and biodiversity.

What choices need to be made?



Increasingly the choices seem a bit stark. In the face of such crises ecologists and others stress that there are generally only two ways out: collapse or managed descent. So, do we embrace the new low-carbon worldview and the work needed to create it or do we look the other way which will result in a more problematic world where little can be managed successfully at all? And we are in the middle of contested territory here. How people feel about this analysis will vary depending on their age, socialisation, gender, income, culture and nationality,

although in various ways it's becoming increasingly accepted. Disagreement will occur because of vested interests and old ways of seeing. But a broad consensus is possible as our hearts become open to the tasks ahead.

What can I do with others?

Always be prepared to learn more. Don't just take for granted what is written here. Find kindred spirits to work with even if at first this feels difficult. They are out there in your community somewhere. Link up with networks and centres which are working for a more sustainable future low-carbon society. Whatever your walk of life, your age, work or interests there are like-minded others waiting to meet you in both obvious and unexpected places. Think carefully about what you choose to study, what job you want to do, how you want to live your life. We are the people we have been waiting for. The task before us is the greatest of a lifetime and everyone can play an important part in this. If we don't we will be helping create a much more dangerous future for ourselves and our families.

Find out more

- ✓ Hicks, D. (2016) *A Climate Change Companion: For Family, School and Community*, eBook and p/b from Amazon
- ✓ Hicks, D. (2012) *Sustainable Schools, Sustainable Futures*. At: www.teaching4abetterworld.co.uk/docs/download18pdf
- ✓ Klein, N. (2014) *This Changes Everything: Capitalism vs climate*, Allen Lane
- ✓ Klein, N. (2017) *No Is Not Enough: Defeating the New Shock Politics*, Allen Lane
- ✓ Monbiot, G. (2016) *How Did We Get Into This Mess? Politics, Equality, Nature*, Verso
- ✓ Transition Network. At: <https://transitionnetwork.org>

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