

Figure 57.1 Sunrise over the islands.

'Planet Guernsey' has demonstrated how climate change has affected our island in the past, and provided solid evidence of the global warming that is already affecting our climate, the wildlife of our island, the production of our food and even the flowers that grow in our gardens. The future will bring much greater climate change, even if immediate and effective steps are taken throughout the world to reduce the emissions of 'greenhouse' gases. The future climate for the next 20 or 30 years has already been determined, but the future of our planet and our civilisation depends on our actions now and in the years to come.

The expanding human population of the planet has already exceeded the capacity of the Earth to sustain it and has become a major 'driver' of climate change. The world population was 4 billion as recently as 1970, is over 6 billion now and predictions are that it will be over 9 billion by 2050 (Figure 57.2). There is bound to be increased migration and conflict between those that already have, and those that want an energy hungry 'western' life-style. Also, as people become more affluent they demand a meat-based diet that uses more of the planet's resources as well as producing greenhouse gases that contribute to climate change.

Climate change has been caused by the burning of fossil fuels to provide energy for our lifestyle, and by the destruction of forests to provide additional agricultural land to feed the expanding world

population. It has been caused by industrialisation, by the use of lighting, heating and air conditioning in our homes and offices; by our use of transport, our insatiable demand for new commodities, and by the whole fabric of our lives that is dependent on the profligate use of energy.

But there is a cost and until recently many of us were living in a 'fool's paradise', not realising that our planet and the future generations of human beings, and all wild creatures, would pay the price. As Brenda Boardman wrote in an earlier chapter "We are the cause, so we are the solution". We need to take responsibility for the way that we live our lives and the effect that we are having on the disadvantaged and future generations.

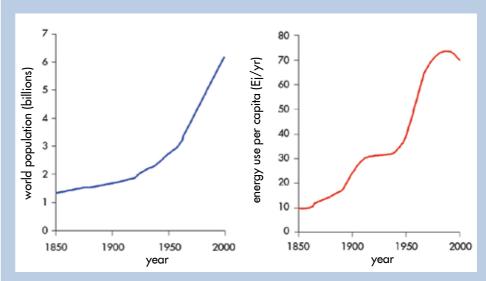


Figure 57.2 Drivers of CO<sub>2</sub> emissions: population and energy use. Source Hadley Centre for Climate Prediction and Research, data from Open University.

We can make savings. We can stop wasting heat in our homes and invest in better insulation. We can find ways to reduce our use of fuels for transport. We may do our bit by using 'bio-fuel' in the future, but will we be comfortable in knowing that food prices will increase to pay for that luxury, and others will be starving. We can and must be personally responsible. As Sir John Houghton has said, each and every one of us does have a moral responsibility to take action.



Figure 57.3 Local engineers Mark and Peter Parr have developed their own

Within our island we also have a joint responsibility to take action. Difficult decisions will need to be taken about our sea defences, and whether it will be accepted that some land is lost to the rising sea. It may be that not everywhere can be protected at a socially acceptable cost. Our future energy and transport policies must also be considered and new investment agreed to stimulate change.

Authors within our booklet have suggested a number of ways by which individuals can reduce their emissions, and lead a 'more ethical' lifestyle. But perhaps a more radical approach is needed. Guernsey has access to low CO<sub>2</sub> emission (nuclear fuelled) electricity from France, and great potential for electricity generation from renewable sources. The island, with its moderate speeds and short distances, is also ideally suited to electricity-powered transport. It has been suggested that the island's adoption of new policy initiatives could convert Guernsey to a community that is powered largely by low emission electricity. Such an initiative could lead the way to a carbon neutral future. We may just avert a disaster!



Figure 57.4 The electric car. Quiet, cheap to run and good for the environment. Just plug it into any 13 Amp socket.

## THANKS TO OUR SPONSORS

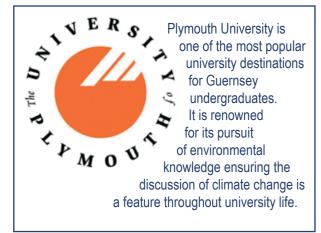
We are grateful that the following individuals and companies have donated £500 to sponsor this publication, enabling us to provide this book to you as a gift, free of charge.













We are also grateful to the following sponsors who have contributed to the launch of the booklet and the expenses incurred in bringing speakers to the island.



## THANKS TO OUR SPONSORS

We are grateful that the following individuals and companies have donated £1,000 to sponsor this publication, enabling us to provide this book to you as a gift, free of charge.

















## THE REVENGE OF GAIA

"I speak as a planetary physician whose patient, the living earth, complains of fever; I see the Earth's declining health as our most important concern, our very lives depending on a healthy Earth. Our concern for it must come first, because the welfare of the burgeoning masses of humanity demands a healthy planet."

"We suspect the existence of a threshold, set by the temperature or the level of Carbon Dioxide in the air; once this is passed nothing the nations of the world do will alter the outcome and the earth will move irreversibly to a new hot state. We are now approaching one of those tipping points, and our future is like that of the passengers on a small pleasure boat sailing quietly over Niagara Falls, not knowing that the engines are about to fail."

## James Lovelock

The Revenge of Gaia: Why the Earth is Fighting Back - and How We Can Save Humanity.'

Penquin Books Ltd.