

Strategy for a changing climate

A **climate change Guide** for Lewes District

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Lewes District Council
www.lewes.gov.uk

foreword

Local Authorities have a pivotal and indispensable role in climate security.
Local Government Association, How authorities can meet the challenge of climate change,



Climate change – above and beyond that which can be explained by natural variation – is happening, and it poses a significant danger to our world and our future. No continent and no country is ‘safe’.

It is very tempting, in the current financial crisis with consequential cuts in public spending, rising unemployment and business bankruptcy, to regard concern for the environment as a luxury we cannot afford. However, we have only one world and even a cursory glance at the international reviews of the state of the environment will show there is no time to lose in addressing the serious damage we continue to inflict upon it.

It is time to use some of the creativity that has made us wealthy to come up with solutions to the problems that wealth has produced. Pollution, loss of wildlife habitat, and the excessive demand for scarce natural resources, for example water, leave millions of people in dire poverty as well as contributing to climate change.

Even with the undoubted creativity we possess to find solutions to our current problems and challenges, we still need to have the will to take the necessary action. So the new National Indicators, which reflect the Government’s priorities for local government, are very welcome. These indicators now include some important environmental targets under the broad heading of ‘Environmental Sustainability’.

Although many issues require international action, what will matter for the future is what each one of us will do now – are we willing to help tackle the big issue or just allow it to get worse?

Councillor Eddie Collicot

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This Guide contains some specialist words and phrases which may not be familiar. These are explained in the glossary which follows, which can be read as an introduction or referred to as you read.

1 glossary

Adaptation

Adaptation is the action taken to minimise the adverse impacts of climate change, and take advantage of any opportunities that are presented.

Carbon capture & storage (CCS)

The process of capturing the carbon dioxide that is emitted when fossil fuels are burned. It involves capturing the carbon before or after combustion and storing it under-ground in depleted oil and gas fields, coal seams or deep saline aquifers. Because it avoids the release of carbon dioxide into the atmosphere, CCS is being developed as a way to help limit climate change.

Carbon dioxide

Carbon dioxide (CO₂) is one of the naturally occurring gases in our atmosphere, but it is also released by burning any type of carbon compound. As a result of the world's increasing use of carbon-rich fossil fuels by cars, aircraft, power plants and domestic heating systems, the amount of carbon dioxide in the atmosphere has increased significantly over the last century. Trees (as well as other plants and oceans) absorb carbon dioxide from the atmosphere. Felling trees stops them absorbing carbon dioxide, and burning them releases it, so deforestation is also adding to atmospheric carbon dioxide levels.

Carbon Footprint

A carbon footprint is a measure of the total amount of carbon dioxide emissions that are directly and indirectly caused by human activity

Climate change

Climate change covers the changes in global weather patterns over an extended period of time (usually 30 years or longer) and the effects they produce. Weather occurs over a much shorter period of time, and does not necessarily reflect the trends associated with climate change. Climate change can be natural or man-made (anthropogenic). From the onset of the industrial

revolution in the 18th century observers have noticed variations in local climates which seem to have been caused by human activities. The fourth assessment of the Intergovernmental Panel on Climate Change stated that most of the global warming over the last 50 years is attributable to human activities.

EMAS

The Eco Management and Audit Scheme (EMAS) is a European regulation which sets high standards for environmental management. To meet the requirements of EMAS, an organisation must continuously improve its environmental performance above and beyond legislative requirements.

Fossil fuels

The term 'fossil fuel' covers carbon-rich materials like oil, natural gas and coal. These were formed hundred of millions of years ago from fossilised plant and animal remains, locking up carbon and energy. Burning such fuels releases the energy, but it also unlocks the carbon and releases it as carbon dioxide. Since the carbon was originally absorbed so long ago, releasing it effectively adds carbon dioxide to the atmosphere. The process of forming these fuels also takes millions of years, so once we have exhausted them they will not be replaced. Stocks are rapidly dwindling, and it is becoming increasingly difficult to guarantee security of supply. This is one of the reasons for increasing fuel prices.

Greenhouse effect

Gases such as carbon dioxide and methane in the atmosphere allow solar radiation to warm the earth, but stop some of the resulting warmth escaping back into space. In this they act rather like the glass of a greenhouse, so they are known as greenhouse gases. Without them the planet would freeze and life would be impossible. However, the greenhouse effect is increasing, making the earth warmer, and this is changing the global environment.

continued



