

## Global Warming

Global warming is bringing flood misery to Britain and drought and disease world-wide. Pollution from fossil fuels (oil, coal and gas) is the main culprit. If companies like Esso carry on unchecked, Britain will experience much more serious and frequent storms and floods. We can stop this situation from becoming catastrophic by switching from fossil fuels towards renewable energy and green transport fuels.

### The Impacts

With more than 10,000 households in the UK affected by floods in 2000, the relationship between these bouts of extreme weather and fossil fuel pollution cannot be ignored. It is no longer possible to separate the natural variation in our weather patterns from the effects of global warming.

In 2000 more rain fell in the UK than in any year since records began. Extreme weather events are on the increase globally, and between 1997 and 2000 killed 100,000 people <sup>1</sup>. UN and UK Government scientists predict that by 2080, 94 million people around the world will be at risk from flooding *every year* as a result of global warming <sup>2</sup>. 290 million additional people will also be at risk from Malaria <sup>3</sup>. By 2025 increasing drought will mean that five billion – or two out of three people – will lack sufficient water and millions more will starve <sup>4</sup>.

The world's top climate scientists, the UN Intergovernmental Panel on Climate Change (IPCC), recently confirmed the urgency of the situation; publishing three reports in 2001 <sup>5</sup>. The first concluded that fossil fuels were the primary cause of climate change. The second painted a stark picture of a world affected by global warming. The IPCC predicts that: We will experience more heat waves and floods; in Europe river flooding will increase over much of the continent.

Glaciers and polar ice are set to continue melting, with an outside chance that we may lose the Greenland and Antarctic ice sheets completely. This could add around 6 metres to global sea level, with catastrophic effects. The greatest impacts will be on the world's poorest people in parts of Africa and Asia – those least able to protect themselves from rising sea levels and increased drought and disease.

The IPCC's third report confirms that it will be possible to stabilise concentrations of carbon dioxide (the main global warming gas) in the atmosphere at low, safe levels. But the choice of energy investments in the next few decades will determine whether or not this will happen.

### The Bottom Line – How much oil can we use?

UN scientists estimate that if the planet warms faster than just 0.1 degree C every 10 years, or a total of 1 degree C, we will have crossed the line beyond which changes in our weather patterns will become rapid, unpredictable and irreversible.

This means that we cannot burn more than a quarter of known fuel reserves if we are to prevent global warming careering out of control. In other words,

three quarters of the oil, coal and gas already found must remain locked underground and never be used. Exploring for more reserves is reckless and irresponsible. Yet Esso is demanding \$1 trillion of new spending on oil and gas development in the next decade. The problem is not that oil will run out, but that it must be shut down.

### **The alternatives to oil – Renewable Energy**

As the risks associated with fossil fuels become more significant, renewable energy technologies, which harness the power of the sun, wind and waves, are enjoying a boom. Government subsidies, targets and market interventions for clean technology, as well as consumer support for renewable energy, are driving investment by forward-looking companies. The UK wants 10% of its electricity to come from renewable sources by 2010 – and in March 2001 Prime Minister Tony Blair announced £100 million investment for sun, wind and wave power.

The big oil companies are well placed to capitalise on this trend. But Esso continues to dismiss the potential of renewable energy, and has not invested in any renewable energy projects. In contrast, BP and Shell will each have invested \$500 million over the next three years.

### **The alternatives to oil – Green Fuels**

Breaking the link between transport and oil is vital as pollution from petrol and diesel is the fastest growing cause of global warming. There are alternatives to oil. Bio-fuels made from plants can be used in existing vehicles. Other green fuels like hydrogen and green electricity could power the next generation of vehicles. If renewable energy is used to produce the hydrogen and charge the electric vehicles, the only emission will be water.

Oil companies are holding back the growth of real green fuels in the UK, refusing to sell them on their forecourts. Esso have no plans to offer alternatives to fossil fuels. The UK Government, too, should invest in hydrogen and green electricity for transport, and give a much-needed boost to genuine green fuels.

<sup>1</sup>

*Catastrophe*, David Keys, 2000

<sup>2</sup>

*Climate change and its impacts*, DETR, October 1999

<sup>3</sup>

ibid

<sup>4</sup>

Working Group II of the Intergovernmental Panel on Climate Change, on *Impacts, Adaptation and Vulnerability*, February 2001

<sup>5</sup>

Reports were issued from Working Groups I, II and III of the IPCC in January, February and March 2001. These covered I: Science, II: Impacts and III: mitigation of climate change.