Timsbury Environment Group

A group established as a result of responses to the Timsbury Village Plan questionnaire Timsbury, near Bath, Somerset

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Carbon emissions and Climate Change: Report of a meeting with the Hon. Jacob Rees-Mogg, Member of Parliament for North-East Somerset

TEG found alarming the opinions on climate change of our M.P., Jacob Rees-Mogg

1. Concern in Timsbury about environmental sustainability and climate change

The responses to the section of the Timsbury Village Plan questionnaire on "*Environment & Sustainability*" showed widespread concern about threats to environmental sustainability, and an appreciation of the dangers of climate change (global warming). The importance of the reduction of emissions of greenhouse gases (carbon dioxide and other gases) was recognised, and some support was expressed for wind power [1]*.

Resulting from the consequent "Action Plan", the **Timsbury Environment Group** (TEG) was set up to investigate questions of sustainability, and to report back where appropriate.

2. Climate change (global warming): the background

There is widespread international consensus that that the emission of greenhouse gases e.g. carbon dioxide from burning oil, gas, petrol and coal is causing the climate to change and that, unless these emissions are curbed, the global warming will have serious, even catastrophic effects.

This international consensus is based on an overwhelming scientific consensus expressed (for example) through the reports of the International Panel on Climate Change (IPCC), to which thousands of experts contribute. It is endorsed by the Royal Society, the U.S. National Academy of Sciences and the leading science academies in most of the world.

Although it is recognised that there is no such thing as "safe" climate change, many countries (including the U.K. & E.U.) have adopted a goal of a maximum global temperature increase of $2^{\bullet}C$ since pre-industrial times to prevent dangerous climate change [2].

Climate Change Act 2008 in the U.K. set targets for greenhouse gas reduction at a level considered necessary to limit climate change to "safe" levels. This Act of Parliament was supported by the vast majority of M.Ps. of all parties, Labour, Conservative, Liberal Democrat and others [3].

3. Climate change (global warming): recent developments

Timsbury Environment Group (TEG) was worried by a number of recent developments in the U.K. which seemed to call in question a commitment to address the climate change issue. These included:

- cuts in photovoltaic feed-in tariff for clean renewable energy;
- opposition to wind power generation by 101 M.Ps., including Jacob Rees-Mogg, our own M.P.
- fears expressed by the Parliamentary Energy and Climate Change Committee and other expert bodies that the draft Energy Bill, published May 2012, would allow expansion of coal and gas fired power generation *incompatible with the safe emissions targets* for greenhouse gas emissions of the Climate Change Act [4].

4. Meeting with Jacob Rees-Mogg, M.P.

The Timsbury Environment Group (TEG) sought a meeting with the local M.P. to enquire about these recent developments, and to find out his views on the issues. Three members of the group were able to

^{*} Numbers in square brackets are References listed in Appendix 2 below.

meet him on 15th September 2012 for this purpose, and made it clear that a report would be made to the TEG and to the wider community.

After the meeting the three members set out in a note their recollection of the views R-M expressed. The note was sent to the M.P., and subsequently modified in the light of his comments in response. This is the basis of the report of the M.P's. views given here.

5.1 Jacob Rees-Mogg's views on Climate Change Science.

The International Panel on Climate Change (IPCC) has published graphs showing rising global temperature in recent years followed by larger projected rises in the future, depending on the extent to which greenhouse gas emissions are lowered (e.g. the Figure in Appendix 1 below, which was included in the TEG note sent to R-M). However R-M's position appeared to be that climate has changed much in the past (true), and that any present change could well be due to natural causes, not to human activity (a suggestion regarded as "very unlikely" in the cautious language of the IPCC) [5]. R-M expressed the view that we cannot have confidence in future climate predictions because they cannot be proved by a controlled experiment. (Predictions, such as those based on modelling, are widely used in science, engineering and many other disciplines. When, as with the IPCC, appropriate techniques are competently employed the conclusions can have a significant probability of being realised. Indeed, we are for ever using predictions in the conduct of our everyday life.)

R-M did not appear to accept the judgement on climate change of the International Panel on Climate Change (IPCC), endorsed by the Royal Society, the U.S. National Academy of Sciences and the leading science academies in most of the world, and believes that lots of scientists hold seriously different views. (Science has no way of providing absolute certainty, so range of views can always be found among scientists. There are scientists who deny the link between smoking and lung cancer; others support the view that the world was created literally in seven days. Oil companies are known to fund some of the pressure groups with neutral sounding names and effectively to "sponsor" scientific reports, even individual scientists and sympathetic journalists to oppose the consensus view on climate change. R-M said he found "attractive" the opinions of the pressure group led by Nigel Lawson, former chancellor of the exchequer. This group will not say how it is funded. It may well not be funded by vested interests, like the oil industry, but ultimately those who are not deeply knowledgeable about climate science have to decide on their judgement of the balance of probabilities: the Royal Society or Nigel Lawson.)

5.2 Prepared to abandon "safe" climate change targets.

The Climate Change Committee, an independent body established under the Climate Change Act (2008) to advise the UK Government on setting and meeting carbon budgets and on preparing for the impacts of climate change, has recently warned the Government that "Extensive use of unabated gas-fired capacity (i.e. without carbon capture and storage technology (CCS)) in 2030 and beyond would be incompatible with meeting legislated carbon budgets. Unabated gas-fired generation could therefore not form the basis for Government policy, given the need under the Climate Change Act to set policies to meet carbon budgets and the 2050 target" [6]. This is warning about the extensive use of gas (e.g. shale gas) as an energy source. R-M favours development towards exploitation of shale gas despite the fact that this might be incompatible with meeting carbon targets of the Climate Change Act of 2008. He is prepared to see the carbon reduction targets of the Climate Change Act of 2008 changed to allow increased carbon emissions. These targets were set in order to limit global warming to a "safe" level of 2°C. Without such limits, there is probability that climate change will approach the point of no return, leading to an environmental "domino effect" where "in a volatile and unpredictable dynamic, things such as melting ice and the release of carbon from the planet's surface are set to feed off each other, accelerating and reinforcing the warming effect" [7]. There is serious concern at the prospect of changes such as the run away melting of Greenland and West Antarctic ice sheets which would add thirteen metres to sea levels world wide, a shut down of the Gulf Stream would give northern Europe near-Siberian temperatures and the release of huge stocks of methane currently frozen in the Siberian tundra and beneath the Arctic seabed – stocks sufficient to raise global temperatures by a further 10 degrees C or more. R-M seemed indifferent to concerns of such scientists as Lord Rees (the Astronomer Royal) that anthropogenic climate change could threaten

the survival of the human race [8]. Only a few days ago the Prime Minister himself warned that "the problems of *uncontrollable climate change* are problems that will come and visit us at home" [9].

5.3 R-M's solution to the energy crisis

R-M is in favour of developing nuclear energy and appeared to lack concern about the safety of the technology or about problems over the very long term storage of radioactive wastes. He expressed the view that there is plenty of oil left, enough energy for 300 years.

5.4 The 2010 Conservative Manifesto

It is not clear to what extent R-M's expressed views can be reconciled with his party's 2010 election Manifesto which stated:

- We will reduce UK greenhouse gas emissions
- We need to cut our carbon emissions to tackle the challenge of climate change.
- A Conservative government will cut carbon emissions and rebuild our energy security.
- In this vision, our homes require less energy and more of the energy we produce comes from renewable sources.
- We will reduce carbon emissions in line with our international commitments.
- We need to generate 15 per cent of our energy from renewables by 2020, but we have one of the worst records of any EU nation when it comes to renewable energy.
- Britain is uniquely placed to be the world's first low carbon economy: we have the natural resources to generate wind and wave power, a skilled workforce trained in the energy industry,
- **Ambitious goals for reducing emissions:** As part of our commitment to move towards a low carbon future, we can confirm our aim of reducing carbon emissions by 80 per cent by 2050.
- **Promote low carbon energy production** [to] allow a huge increase in renewable power, and far greater choice for consumers.
- To limit harmful emissions from UK power stations, we will take steps to encourage new low carbon energy production, including:
 - creating four carbon capture and storage equipped plants, taking coal one of the most polluting fuels of all and transforming it into a low carbon fuel of the future;
 - allowing communities that host renewable energy projects like wind farms to keep the additional business rates they generate for six years

6. Cause for alarm?

In conclusion the TEG considers that it is appropriate that views of our elected representative should be widely known. Members of the community must decide for themselves whether the contents of this report constitutes cause for alarm.

David Packham
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October 2012

APPENDIX 1

IPCC Global temperature projections from IPCC Fourth Assessment Report: Climate Change 2007 [10] Detailed explanation below the figure.

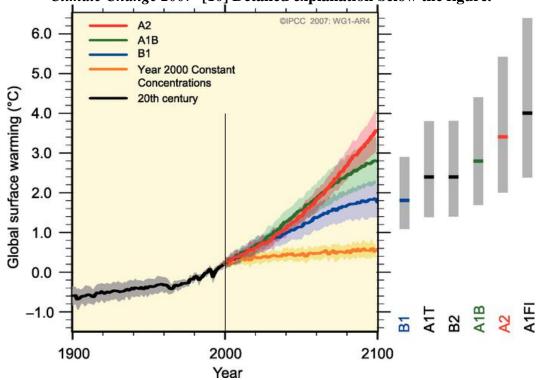


Figure SPM.5. Solid lines are multi-model global averages of surface warming (relative to 1980–1999) for the scenarios A2, A1B and B1, shown as continuations of the 20th century simulations. Shading denotes the ±1 standard deviation range of individual model annual averages. The orange line is for the experiment where concentrations were held constant at year 2000 values. The grey bars at right indicate the best estimate (solid line within each bar) and the likely range assessed for the six Special Report on Emissions Scenarios (SRES) marker scenarios. The assessment of the best estimate and likely ranges in the grey bars includes the AOGCMs* in the left part of the figure, as well as results from a hierarchy of independent models and observational constraints.

*There are both atmospheric general circulation models GCMs (AGCMs) and oceanic GCMs (OGCMs). An AGCM and an OGCM can be coupled together to form an atmosphere-ocean coupled general circulation model (CGCM or AOGCM). With the addition of other components (such as a sea ice model or a model for evapotranspiration over land), the AOGCM becomes the basis for a full climate model.

Some details of the scenarios.

The A1 scenarios are of a more integrated world. The A1 family of scenarios is characterized by: Rapid economic growth.

A global population that reaches 9 billion in 2050 and then gradually declines.

The quick spread of new and efficient technologies.

A convergent world - income and way of life converge between regions. Extensive social and cultural interactions worldwide.

There are subsets to the A1 family based on their technological emphasis:

A1FI - An emphasis on fossil-fuels (Fossil Intensive).

A1B - A balanced emphasis on all energy sources.

A1T - Emphasis on non-fossil energy sources.

The A2 scenarios are of a more divided world. The A2 family of scenarios is characterized by: A world of independently operating, self-reliant nations.

Continuously increasing population.

Regionally oriented economic development.

The B1 scenarios are of a world more integrated, and more ecologically friendly. The B1 scenarios are characterized by:

Rapid economic growth as in A1, but with rapid changes towards a service and information economy.

Population rising to 9 billion in 2050 and then declining as in A1.

Reductions in material intensity and the introduction of clean and resource efficient technologies.

An emphasis on global solutions to economic, social and environmental stability.

The B2 scenarios are of a world more divided, but more ecologically friendly. The B2 scenarios are characterized by:

Continuously increasing population, but at a slower rate than in A2.

Emphasis on local rather than global solutions to economic, social and environmental stability. Intermediate levels of economic development.

Less rapid and more fragmented technological change than in A1 and B1.

APPENDIX 2 References

- 1. Timsbury Village Website http://www.timsbury.net/
- 2. The Royal Society, *Preventing dangerous climate change The need for a global agreement,* December 2009; Document 12/09 DES1723
- 3. http://en.wikipedia.org/wiki/Climate_Change_Act_2008#Political_parties
- 4. http://www.decc.gov.uk/en/content/cms/legislation/energybill2012/energybill2012.aspx; http://www.parliament.uk/business/committees/committees-a-z/commons-select/energy-and-climate-change-committee/news/energy-bill-report-published/; Committee on Climate Change, *The need for a carbon intensity target in the power sector*, letter to Secretary of State, Department of Energy & Climate Change, 13.9.12 (on line)
- 5. IPCC Fourth Assessment Report, 2007
- 6. Committee on Climate Change, *The need for a carbon intensity target in the power sector*, letter to Secretary of State, Department of Energy & Climate Change, 13.9.12 (on line)
- 7. Andrew Simms expressing some consequences of the non-linear, chaotic nature of the climate system in simple language, Guardian 1.10.12
- 8. Martin Rees, Our Final century Our Final Century, Will the Human Race Survive the 21st Century? William Heinemann, 2003.
- 9. David Cameron reported in Daily Telegraph 26 10.12
- 10. *IPCC Fourth Assessment Report: Climate Change* 2007: Working Group I: The Physical Science Basis. Projections of Future Changes in Climate.

http://www.ipcc.ch/publications_and_data/ar4/wg1/en/figure-spm-5.html