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Lead Sentence

ENERGY POLICY EFFECTS OF GREENHOUSE EFFECT: DRAFT PAPER FOR IPCC

My Secretary of State's predecessor minuted the Prime Minister on 19 May to describe the work which the UK had proposed should be carried out within the work programme of the Intergovernmental Panel on Climate Change (IPCC) on practical options for limiting the emissions of energy related greenhouse gases. This work will be a contribution to the major report on the consequences of the greenhouse effect which will be prepared by IPCC towards the end of next year.

The relevant IPCC working group has asked for an interim report from countries and I attach a summary of the working document my Secretary of State approved for submission. Final reports from countries are expected to be submitted towards the end of the year and the intention is for this Department to improve the analysis and extend it to cover other cases (eg in renewables).

I am copying this to the Private Secretaries to those Ministers who received copies of the minute of 19 May.

*Yours
David*

DAVID MURPHY
Private Secretary

CC PS/MOS
PS/PUS
MR GUINNESS
MR PRIDDLE
MR DAVIES
DR FINER
DR HEATHCOTE
MR E PRICE
MR WILLCOCK
MR PREMANTHE
DR EVANS
MR MOLLARD
MR DUXBERRY
MR CANNON
J. RAE

WORKING DRAFT: SEPTEMBER 1989

REPORT FOR IPCC ENERGY AND INDUSTRY SUBGROUP

UK COUNTRY STUDY

SUMMARY

1.1 This report responds to the remit agreed at the May meeting of the subgroup for countries to prepare reports on possible options which they consider relevant to reducing emissions of energy related greenhouse gases in the period up to 2020, and the costs associated with such options.

1.2 After reviewing the past pattern on CO2 emissions in the UK (Chapter 3) it develops energy scenarios for the UK's energy sectors based on assumptions about possible economic growth and world energy prices provided by the IEA for use in all participating country studies (Chapter 4). These scenarios are used to provide the basis for examination of the impact of different options for reducing CO2 emissions.

1.3 The report then considers (in Chapter 5) some examples from a range of different options to assess their impact on CO2 emissions and possible costs:-

- i. energy efficiency concentrating on the domestic sector and CHP
- ii. nuclear power
- iii. renewable energy (concentrating on wind)
- iv. removal of CO2 from flue gases
- v. the increased use of gas in electricity generation.

It also considers the effects of increases in cost of energy and the contribution of methane emissions in the UK to the greenhouse effect and options for reduction of this (Chapter 6).

1.4 As the report is interim and incomplete, we are able at this stage only to draw partial conclusions:-

- i. energy efficiency can play a major role in reducing CO2 emissions without additional cost, but the achievement of the savings depends on the actions of a large number of individual consumers which the Government's influence is limited;

- ii. expanded nuclear power programmes could also reduce CO2 emissions without very great economic penalty - but of course there are other non-economic difficulties;
- iii. renewables can play a cost effective role in reducing CO2 but their contribution is likely to be limited to only a very small proportion of total CO2 emissions;
- iv. the removal of CO2 from conventional coal fired power stations could also play some role in reducing CO2 emissions, but the costs are very high and the need to build up experience of such plant could limit the scale of its contribution.
- v. there is considerable scope for saving CO2 emissions in the early years by a rapid increase in the use of gas for electricity generation. Towards the end of the period, the scope is less as the system may well have developed into increased reliance on gas (dependent on its price) and thus reducing the headroom for further CO2 savings.