

GOVERNMENT OBSERVATIONS ON THE EIGHTH REPORT FROM THE SELECT COMMITTEE ON
ENERGY - SESSION 1984-85

Memorandum from the Secretary of State

Introduction

1 The Select Committee's Report on the Energy Efficiency Office (HC 87), published in November 1985, provided a timely commentary on the activities of the EEO at the start of Energy Efficiency Year. The Government welcomes the Committee's continued interest in energy efficiency and shares its conviction that improving energy efficiency must be a prime aim of energy policy. The eighth report recognised that the Government is committed to that aim. Raising energy efficiency is not, however, just an energy policy aim - it is part of and contributes significantly towards the Government's wider aims of improving economic efficiency and hence the competitive position of United Kingdom industry, enhancing efficiency in the public services and providing better value for money for consumers.

2 The Government has considered carefully the observations and recommendations in the eighth report. This memorandum, like the report, deals not only with the promotional and information programmes of the Energy Efficiency Office, but also with more general aspects of the Government's energy efficiency policy. It provides the statement of the EEO's priorities and the logic behind these requested by the Committee.

3 Where possible, the memorandum provides the "statistically hard" facts about the achievements of the Energy Efficiency Office requested by the Committee. The Government agrees with the Committee that the Office should seek to quantify its overall impact and the response to individual programmes.

Appropriate surveys are in hand, and monitoring procedures are an integral part of all its main programmes. However, while it may be possible to monitor awareness of energy efficiency and the take-up of specific schemes, a significant interval may elapse before a decision to improve energy efficiency is taken and many other factors, outside the control of the Office, can influence that decision. Any assessment of the impact of the Office on national energy efficiency must therefore be subject to considerable uncertainty.

General policy framework

4 In its observations on the Committee's fifth report, the Government set out the principles which underlie its policy on energy efficiency. Chief of these is the belief that reducing energy use for its own sake is neither desirable nor wise. The value of any reductions achieved must be related to the investment needed and to any social or behavioural changes required. The programmes of the Energy Efficiency Office are therefore aimed at stimulating decisions about energy use which are, and are seen as, cost-effective by the decision-maker, whether in industry, the public sector or the home; the Office does not promote energy conservation irrespective of cost.

5 If energy consumers are to make optimum decisions on energy efficiency, energy prices must properly reflect the resources required to supply energy both now and in the future. The correct signals must be given to the consumers. In addition, the consumer will be assisted by competition between energy supply interests, each seeking to satisfy his energy needs in an economical fashion and therefore keen to promote appropriate energy efficiency measures. The twin foundations of the Government's energy efficiency policy are therefore the encouragement of realistic pricing for energy, in order that

consumers may have the right economic framework for evaluating energy efficiency measures, and the encouragement of competition among energy supply interests. By these means, economic forces can act most effectively to encourage consumers to use their energy efficiently.

6 The Government recognises, however, that if these forces are to operate properly in all areas of energy use, the barriers which may impede their operation must be identified and tackled. The Energy Efficiency Office was therefore created in October 1983 in order to devise, administer and promote programmes that would help energy markets operate more effectively.

Energy Efficiency Office achievements

7 The Government welcomes the Committee's recognition that in the Energy Efficiency Office it has a vigorous and effective organisation for promoting energy efficiency. Since its formation, the Office has an impressive list of achievements to its credit. It has:

- enabled 16,000 senior executives to hear about energy efficiency at 40 breakfast-time meetings addressed by Department of Energy Ministers
- stimulated a great increase in the number of energy managers; membership of energy management groups has increased 70% to 8,500 over the past two years
- agreed to provide grants towards the cost of over 5000 energy surveys which are expected to identify ~~£~~160 million of savings - a 20% reduction for the organisations covered

- arranged over 70 seminars under the Energy Efficiency Demonstration Scheme, and through the Scheme stimulated £120 million worth of energy savings

- completed the development of Monitoring and Targeting systems in 10 industrial sectors with a further 10 under way; such systems are now in use on 100 major energy-using sites

- commenced promotion of monitoring and targeting systems in four sectors, the first of which is already showing energy savings worth £11 million annually

- contacted 150,000 professional staff concerned with energy use in industry and commercial buildings and for the first time given them yardsticks against which to measure energy performance

- exhibited at 18 major exhibitions and, through its touring exhibition caravans, at nearly 300 local events

- provided start-up funding for 176 voluntary sector insulation groups, whose members were previously unemployed, which have so far insulated over 130,000 homes of disadvantaged members of the community

- established a Technical Sales Data Service, now operating wholly commercially, which enables prospective customers to identify suitable suppliers of equipment and services.

8 The Office has also been active in promoting energy efficiency in the Government estate, local authorities and other parts of the public sector, with consequent benefit to tax and rates payers. It has:

- stimulated decisions to appoint an energy manager in every Government Department and every military site
- promoted, in conjunction with the Department of Health and Social Security, major initiatives to improve energy efficiency in the National Health Service
- prepared, jointly with the Audit Commission, systems for energy value-for-money studies by the Commission's auditors starting in 1986, and trained the auditors in their use
- prepared and published detailed guidance on the employment of contract energy management companies by local authorities and promoted the use of such companies
- published, in collaboration with the National Housing and Town Planning Council and the Association for the Conservation of Energy, a guide to good energy practice in local authority buildings
- produced energy monitoring and targeting systems suitable for all local authorities (to be promoted during 1986).

Energy Efficiency Office aims and priorities

9 Extensive studies (eg the Committee's fifth report on Energy Conservation in Buildings and "Energy Use and Energy Efficiency in UK Manufacturing Industry up to the Year 2000", published by the Office as Energy Efficiency Paper No 3) have shown that improvements of at least 20% could be obtained across all energy use sectors by cost-effective measures employing known technology. In 1983, when the Energy Efficiency Office was launched, this represented a potential saving to consumers of £7 billion annually, made up as follows:-

	£bn
Industry and commerce	1.9
Public sector	0.4
Domestic	1.9
Transport	2.8
TOTAL	<u>7.0</u>

These are inevitably broad-brush figures and in 1986 the £7 billion figure still represents the magnitude of the opportunity open to the nation for cost reductions through improved energy efficiency.

10 In general in industry and commerce, half of the potential energy savings identified may be obtained through management measures that involve little investment while the other half require investments with pay-back periods acceptable to the managements concerned. Securing senior management commitment to the improvement of energy efficiency is therefore an essential first step; this has to be followed by the provision of appropriate management tools and of information on energy usage and efficiency measures relevant to the needs of

the particular firm or site. Major energy users can be identified and contacted individually; programmes can be targeted on the needs of specific sectors and priority given, where feasible and appropriate, to sectors with high potential for improvement.

11 In the public sector, there are the same needs although management structures and approaches to energy efficiency differ; in particular, the principal incentive to raise energy efficiency is not to improve competitiveness, but to release cash for services more related to the main objectives of the organisation or to enable overall running costs to be reduced. Financial arrangements also differ.

12 The aims of the Energy Efficiency Office in both sectors are therefore:

- (i) to create and sustain in senior management awareness of energy efficiency as a factor in their firm's competitive position or their organisation's running costs and thus a matter deserving their attention;
- (ii) to encourage the establishment of effective management structures, procedures and skills for controlling energy costs and to assist the development of management methods and performance standards relevant to the needs of specific sectors;
- (iii) to encourage managements to obtain professional advice on the potential for energy efficiency improvements in their own plant or buildings;

(iv) to overcome reluctance to invest in novel energy efficiency technology;

(v) to assist prospective customers for energy efficiency equipment and services to identify potential suppliers.

13 The domestic sector differs markedly from industry and commerce or the public sector. First, energy use is highly fragmented into 20 million households. This means that the energy efficiency message can reach a high proportion of domestic energy users only through advertising media or through organisations such as the gas and electricity supply industries with much more extensive contact with the public. Secondly, annual energy bills are small by comparison with non-domestic users; it is therefore very difficult to provide advice tailored to the needs of the individual in a cost-effective manner. Thirdly, domestic consumers have diverse and non-economic objectives in discretionary expenditure - entertainment, comfort, leisure interests etc - and are not necessarily motivated by the prospect of reducing energy costs. (While industrial and commercial managements may choose not to invest in energy efficiency measures, they will all recognise the relevance of cost reduction to their business activities.) Finally, many of the households most in need of improved energy efficiency are unable to afford the measures that would enable them to obtain better value from their energy expenditures.

14 The aims of the Energy Efficiency Office in the domestic sector are therefore:

(i) to increase awareness of the measures that can be taken to improve energy efficiency in the home;

- (ii) to provide house owners and tenants with advice, tailored as closely to their individual circumstances as can be accomplished without excessive cost, on the potential benefit to be derived from different energy efficiency measures;
- (iii) to encourage and assist professional, financial and trade organisations that influence the housing and home improvement markets to draw householders' attention to the benefits of improved energy efficiency;
- (iv) to ensure as far as possible that statutory requirements and non-statutory codes relating to buildings and domestic appliances reflect cost-effective energy efficiency standards;
- (v) to accelerate the installation of energy efficiency measures in low-income householders.

15 In the transport sector, both consumers and equipment suppliers are very conscious of energy costs, since they are a large proportion of total running costs. There is therefore competition between suppliers to improve energy efficiency and active promotion of the energy efficiency features of different types of car, goods vehicle or aircraft. Economic forces act effectively to improve the inherent efficiency of transport equipment and as less efficient vehicles are replaced by progressively more efficient models, the 20% improvement sought in this sector should be achieved. The Department of Transport issues guidance on driving habits and vehicle maintenance procedures that promote economy in fuel use. For the Energy Efficiency Office, this is not at present a priority area.

16 The following sections outline the principal initiatives taken by the Energy Efficiency Office in the industrial and commercial, public sector and domestic markets and respond to the Committee's comments on these programmes.

Industry and Commerce

Breakfast Briefings

17 Ministers from the Department of Energy have addressed 40 Breakfast Briefing meetings on energy efficiency, attended by a total of 16,000 senior executives from industry, commerce and the public sector. Representatives were invited from virtually every firm with more than 100 employees and many smaller firms. At the briefings, the importance of having a named executive responsible for energy management was stressed; a follow-up survey has shown that, of the firms in the sample surveyed, a third had appointed an energy manager, three-quarters had started to monitor their energy use and nearly a half had arranged an energy survey.

18 Thirteen follow-up seminars to the Breakfast Briefings have been organised by the Energy Systems Trade Association and the CBI on behalf of the Office. 2000 delegates have attended these in order to hear presentations on general techniques for improving energy efficiency such as waste heat recovery and building energy management systems. Associated exhibitions have enabled suppliers of energy efficiency equipment and services to meet prospective customers.

19 A new series of breakfast meetings has now started; the first took place at Grosvenor House on 23 January. These will build upon the first series by giving senior managers an insight into modern techniques and technologies for improving energy efficiency. The presentations will include working demonstrations and each briefing will have an associated exhibition.

Energy Efficiency Survey Scheme

20 This provides financial support for energy surveys. The committee commended the Scheme as a thoroughly worthwhile way of spending public funds, with annual savings worth £70 being identified for every £1 spent by Government on short surveys and £30 for every £1 spent on extended surveys. The Government agrees that this Scheme has provided a most worthwhile initiative and looks to enhanced take-up by industry and commerce in 1986. The Committee recommended its extension to charitable and non-commercial building users; it is already available to charities and to public authorities and covers all commercial and non-commercial buildings, except dwellings and buildings managed by the Property Services Agency.

Energy Efficiency Demonstration Scheme

21 The Government welcomes the Committee's support for this Scheme, which supplements the other information activities of the EEO by providing objective information on the performance of novel energy efficiency technology or building designs. The principles and targets for the Scheme were published in September 1984 as Energy Efficiency Paper No 1; the December 1985 target of 1.5 mtce (million tonnes of coal equivalent) savings, worth £120 million, has been achieved. Table 1 shows how these savings were spread across different energy use sectors; it is the product of detailed monitoring of the take-up of individual projects, as urged by the Committee.

22 The Committee commented on the apparently large proportion of the Scheme's costs taken up in administrative costs. In fact, as the EEO's supplementary evidence to the Committee showed, these amount to only some 10% of the "management and promotion" costs of the Scheme (or less than 5% of its total costs). The remainder is accounted for by the staff costs of assessing and

preparing new proposals, providing technical management for the 134 currently active projects within the Scheme, and the organisation of the 43 seminars held during 1985, attended by a total of 5,100 delegates, which provide opportunities for promoting not only the technology under consideration, but also more general energy efficiency messages, to technical decision-makers.

23 The Committee also commented on the decline in the number of projects approved under the Scheme since the peak year of 1981/2. In part, this reflects the increased proportion of staff effort at the Energy Technology Support Unit (ETSU) and the Building Research Energy Conservation Support Unit (BRECSU) devoted to the promotion of results from earlier projects in order that the benefits from these may be obtained rapidly. There has been a steady increase in the complement of both ETSU and BRECSU in order to accommodate the increasing portfolio of projects and the extra promotional activity. Both units are also employing consultants to supplement their technical management resources and expect this form of support to grow. In 1985, there was a welcome rise in the projects accepted under the Scheme but the true test of the Scheme's success is not the number of projects accepted, but the energy savings that it generates.

Monitoring and Targeting

24 Adequate monitoring of energy usage, so that consumption for a particular building or process can be compared with a standard which takes account of weather conditions, output levels etc, is essential for good energy management. Deviations from the consumption expected under efficient conditions can be identified and remedial action taken. Action programmes may then be initiated and targets for improvements set. The Energy Efficiency Office is helping sectoral bodies to develop "monitoring and targeting" systems in the major

sectors of energy use. These systems establish a management method for energy use relevant to each sector which takes fully into account the processes and characteristics of the sector. When a development project is completed, the resulting M & T system is promoted throughout the sector by the Office and the relevant sectoral body. In the paper and board industry, for example, a system is now in operation at mills accounting for 50% of the industry's output, and in total they are currently saving ~~£~~11 million annually, which represents a 12% improvement in efficiency.

25 Work is underway in 20 sectors and by the end of 1986, 15 systems are expected to be completed. The Energy Efficiency Office plan to cover 40 sectors by the end of 1989 and to have M & T systems installed in 800 major energy-using sites by then. This should result in expected annual savings of £300 million for an estimated Government expenditure of £9 million.

26 Owners and occupiers of commercial and industrial buildings have been provided with guidance on expected energy costs through the Energy Efficiency Office publication "Energy Efficiency in Buildings". This has drawn together information on different types of buildings - offices, warehouses, retail stores etc - in a form which enables owners and tenants to see how the energy costs of their buildings compare with those of similar buildings with different levels of efficiency. This publication has been widely promoted and very well received.

Support for energy managers

27 The Office continues to support local Energy Manager groups which enable managers to exchange experience and to hear about new techniques for improving energy efficiency. These efforts are assisted also by the monthly newspaper of

the Office, "Energy Management", which has a circulation of 40,000 copies and which in 1985 has been complemented by a series of highly regarded two-monthly "Focus" magazines, each dealing with a particular aspect of energy efficiency, which have rapidly become established as reference works on current developments. The ninth National Energy Management Conference and Exhibition, held at the National Exhibition Centre in November 1985, attracted record attendance.

28 Much of the day-to-day work of assisting energy managers and informing industrial and commercial managements about the potential for improving energy efficiency falls to the Regional Energy Efficiency Officers and their staff. The REEO teams have all been strengthened to cope with the enhanced demands upon them.

Financial aspects

29 The Committee invited the Energy Efficiency Office to prepare possible selective grant or low interest loan schemes for energy efficiency improvements in industry. As the Committee will know, the Government does not consider that taxpayers should subsidise investments that are so clearly advantageous for energy users; furthermore, such subsidies are unlikely to be as cost-effective in stimulating energy efficiency improvements as existing schemes. It is far preferable for managers (including managers of financial institutions) to be fully aware as a result of the Office's activities of the opportunities available for cutting operating costs through energy efficiency measures that offer short pay-back periods and to take these into account in setting investment priorities and making funding decisions. Similarly, the Government would not wish to favour this type of investment as compared with others in its

fiscal arrangements, although it is, of course, willing to examine any instances where these appear to prejudice the improvement of energy efficiency, and to consider the merits of any amendments within the framework of its general fiscal and economic policies.

30 The Government has, though, recognised that financial assistance can be helpful in overcoming firms' reluctance to invest in untried technology - hence the grants offered under the Energy Efficiency Demonstration Scheme - or for conversion to coal firing, widely and wrongly associated with environmental and handling problems, but which does have high initial capital costs. The Committee recommended that the Coal Firing Scheme should be extended to industrial wastes firing. This would not be appropriate since the essential purpose of the Scheme is to promote industrial markets for coal; however, projects are eligible for support if coal provides 75% or more of the annual fuel input and so up to 25% could come from wastes. The Coal Firing Scheme has already assisted some 400 projects with annual coal burn in excess of 2.5 million tonnes. Because of its success, the Government has extended the deadline for receipt of applications to June 1987 and has lifted the ~~£~~75 million ceiling on the Scheme.

31 As the Committee noted, one of the more significant and encouraging developments in the promotion of energy efficiency over the past year or two has been the growth of contract energy management companies. These offer to take over and operate the energy services of a firm's buildings or industrial processes, install any energy efficiency measures necessary, and so provide energy at lower overall costs to the client. Through using such companies, firms can reduce energy outlays while preserving their capital budgets, and

staff and management time, for their main business areas. The Energy Efficiency Office has accordingly supported the marketing activities of contract energy management companies to industry and commerce through the publication of case histories and looks to their making an increased contribution to national energy efficiency.

32 In summary, therefore, the Energy Efficiency Office has in place an effective set of schemes for improving the ability of commercial and industrial managements to identify and appraise cost-effective energy efficiency measures and for providing the requisite information about the needs of individual sites and the technical measures that can be utilised. There is also clear evidence that these schemes are having the desired impact. The Energy Efficiency Office will continue to promote them vigorously in Energy Efficiency Year and beyond, in order that effective energy management should in due course be generally accepted as an essential component of good management practice.

Public Sector

33 The public sector spends about 2 billion annually on energy. The Committee are right to point out that many opportunities still exist for reducing this in a cost-effective manner, despite the attention given to energy costs by many public bodies over the past decade. Many of the initiatives and programmes described in relation to the industrial and commercial sector apply also to the public sector.

34 For Local Authorities, the Audit Commission has published a report prepared in conjunction with the Energy Efficiency Office on how authorities should analyse energy consumptions in their non-domestic buildings and identify the potential for efficiency improvements. ("Saving Energy in Local Government

buildings", HMSO, 1985). This report describes performance standards for different types of buildings which take into account usage and weather conditions. In 1986, the Commission will be auditing the energy management activity and energy efficiency of individual authorities.

35 The Energy Efficiency Office has also funded the development of systems for monitoring energy consumption and setting targets for reductions that are suitable for the range of local authorities, from small district authorities to county authorities with energy bills of $\frac{1}{3}$ million or more. LAMSAC is promoting and supporting these systems.

36 Contract energy management companies can offer local authorities and other public sector bodies improved energy efficiency without the need to commit additional capital or staff resources. The Government wishes to encourage their use; the Energy Efficiency Office has published detailed guidance to aid local authorities who are employing or who wish to employ a contract energy management company and will be promoting and monitoring the use of such companies during 1986.

37 The Committee acknowledged the commitment of Health Ministers to promoting energy efficiency in the National Health Service and referred to the issue of Focus, the Energy Efficiency Office's new magazine, that was devoted to that subject. Senior NHS administrators have attended Breakfast Briefings and Health Service buildings have accounted for 17% of the grants under the Energy Efficiency Survey Scheme. The use of contract energy management companies by the Health Service will be promoted. A significant development in energy

management within the NHS has been the production by the Department of Health and Social Security of a comprehensive Energy Code for the Health Service (ENCODE) which provides guidance on energy management. This is being actively promoted by both DHSS and the Energy Efficiency Office.

38 A special briefing meeting was held in November 1985 for staff within the armed forces and Ministry of Defence responsible for energy management. This was addressed by the Secretaries of State for Defence and Energy and attended by more than 250 senior officers and officials. A Rear Admiral has been appointed energy co-ordinator for the military estate and each major site will shortly have an energy manager with a duty to audit energy use in 1986. The Government intends to secure substantial improvements in energy efficiency in the military estate.

39 Much has already been achieved in The Government civil estate. But more remains to be accomplished. The Prime Minister has instructed each Department to appoint an energy manager and to report progress in improving energy management by July 1986. The Property Services Agency will be giving full support to these energy managers through training packages and technical guidance (including guidance on monitoring and targetting systems) and will make energy performance indices available for all buildings. PSA will take the lead in securing collaboration among tenants in multi-tenanted buildings and will also be exploring the use of contract energy management in the civil and military estates.

40 The Government therefore agrees with the Committee that all Departments should be committed to the effective use of taxpayers' money through efficient energy management. It has taken steps to make Departments aware of their responsibility for improving energy efficiency; the extent to which the Public Accounts Committee wishes to examine Accounting Officers on this subject is a

matter for that Committee. The Government welcomes greater private sector involvement in public sector activities where this is likely to lead to greater efficiency and lower costs and is always prepared to consider sympathetically proposals which meet these criteria. The initiatives outlined above show, for example, that the Government is actively promoting the use of contract energy management companies.

41 The Committee recommended that a "conspicuous" energy efficiency campaign should be mounted at the Palace of Westminster. This is, of course, a matter for the House of Commons (Services) Accommodation and Administration Sub-Committee in conjunction with the Property Services Agency.

Domestic Sector

Finance and advice

42 The Government agrees with the Committee that the problems of securing finance for energy efficiency measures in the domestic sector can constitute a constraint on take-up. For owner occupiers, energy efficiency measures must generally be financed from savings or loans, and the Government welcomes the steps that many Building Societies are now taking to publicise the availability of home loans for this purpose. A measure of direct financial assistance for domestic householders - whether owner-occupiers or tenants - is provided by the Homes Insulation Scheme which will continue to be the Government's largest programme in the domestic sector. During 1986/7, the Scheme will continue to support the installation of loft insulation and the lagging of hot water tanks. The Energy Efficiency Office and the Department of the Environment will consider whether in later years there are additional measures that it would be cost effective to promote, and whether there should be any adjustment in the

level of grants provided. DoE and the Energy Efficiency Office are also discussing with local authority associations the financing of energy efficiency improvements in local authority housing.

43 The provision of information to consumers on the relative cost-effectiveness of measures to reduce fuel bills is an important part of the Government's programme. A new version of the Guide to Home Heating Costs will shortly be published by the Energy Efficiency Office. This will enable consumers to see by how much they could expect their fuel bills to be reduced if they adopted a succession of energy efficiency measures. The Guide will also show how much these measures are likely to cost on each type of house. It can thus be used as a "Do it yourself" home energy audit.

44 The Government notes the various recommendations made by the Committee on Home Energy Audits, has considered very carefully the lessons from the HEAT scheme and accepts the view of the Committee that energy labelling of homes is likely to make only a modest and slow impact on energy consumption in the domestic sector overall. Extension of the Energy Efficiency Survey Scheme to the domestic sector, as suggested by the Committee, would require a very significant increase in staff and would not be cost-effective because the administrative and survey costs would be high in relation to the savings of individual households.

45 Work continues, however, on the development of a simple home energy label that could be readily understood by owners and buyers of houses, and which might be used by estate agents to promote the market value of energy efficient houses. The Energy Efficiency Office will also continue to promote with the

Buildings Energy Efficiency Confederation their marketing checklist of energy efficiency measures in the home. (This is a scheme whereby a householder who has, for example, replaced his boiler, is advised by the contractor carrying out the work of further measures that he could take to reduce his fuel costs and how he could obtain information on those measures.) Studies supported by the R&D programme of the Energy Efficiency Office could lead to a more sophisticated home energy label.

Help for low income households

46 Some consumers on low incomes are unable to contemplate energy efficiency measures unless they are free or virtually free. Others live in rented premises. The Energy Efficiency Office continues to support the work of the voluntary sector insulation project groups and Neighbourhood Energy Action - the co-ordinating charitable organisation - as an effective channel through which Government help can be given to improve energy efficiency and standards of heating in low income households. These project Groups utilise resources drawn from four different Departments - labour from the Manpower Services Commission Community Programme, grants from the Department of the Environment for tank and loft insulation, single payments from the Department of Health and Social Security for draught-stripping and grants to help establish project groups from the Energy Efficiency Office. They thus illustrate how different Departments' programmes can be combined to improve energy efficiency.

47 The Government notes the Committee's recommendation that the report from a study of energy efficiency in low income households should be placed in the Library of the House. However, as the Committee are aware, that study was prepared only as a basis of policy advice for Ministers. It is not Government practice to publish such papers.

New housing standards

48 Although the main challenge in the domestic sector is the improvement of the existing housing stock, ensuring as far as possible that new dwellings are constructed to cost-effective energy-efficiency standards must also be a policy aim. The Government accepts that the Building Regulations will continue to have a role in establishing good energy efficiency standards, and that higher minimum thermal insulation standards can be justified on economic grounds. It is seeking an appropriate way of expressing these standards in the context of its general policy, set out in the White Paper "Lifting the Burden" (Cmnd 9571) of reducing bureaucratic controls on commercial activities. A simple raising of current, prescriptive standards may not be the best way ahead and the Department of the Environment, who have responsibility for the Building Regulations in England and Wales, have commissioned studies of alternative, more flexible procedures which should be completed in the Spring. A consultation document will follow, with the aim of moving as rapidly as possible to higher energy efficiency standards incorporated in Regulations that allow designers and developers maximum freedom.

49 In addition, the Energy Efficiency Office is working to strengthen market demand for higher standards through its intensive publicity programmes and its contacts with Building Societies and other financial institutions. It has also given technical and financial support for the production by the British Standards Institution of an Energy Code for Buildings (BS8207) and an accompanying Applications Guide, published in late 1985. These set out a framework for considering good, cost-effective energy design and management procedures in buildings. They will be followed by more detailed Codes and Guides for housing and different types of non-domestic building. The first of

these, on housing, will be available for public comment in 1986. These Codes will provide a valuable reference point for both builders and purchasers. They will shortly be supplemented by new publications for building professionals and householders which will provide guidance on energy efficient renovation and improvement work to existing dwellings.

50 The Energy Efficiency Demonstration Scheme also provides valuable guidance on energy efficient housing design. The Committee called for an assessment by Government of the potential for greater take-up of the Demonstration Scheme in the domestic sector. Such an assessment was included in the strategy for the Scheme published as Energy Efficiency Paper No 1. This showed that 90 out of the eventual 530 projects were intended to be in the domestic sector. The Building Research Energy Conservation Support Unit (BRECSU), on behalf of the Energy Efficiency Office, is steadily assembling a portfolio of projects. Identifying projects that will provide results of wide applicability is not straightforward; nevertheless, very useful outputs have already been obtained from early projects such as the £100 a year energy savings obtained in Manchester for a £200 increase in the initial cost of each house. These results are now being widely promoted. As well as new buildings, the Scheme covers measures that are appropriate to the rehabilitation of existing dwellings.

Appliance standards

51 The Government is also taking action to improve the energy efficiency of domestic appliances. Initial consumer reactions to a pilot labelling scheme, operated by the Eastern Electricity Board in close consultation with the Energy Efficiency Office, in which domestic refrigerators and freezers were labelled

with estimated running costs, are very encouraging. For heating appliances, minimum efficiency standards will be set through Orders under the Energy Conservation Act 1981. The Committee referred to the long period that has elapsed between the passage of the Act and the laying of the first Order. The intervening period has been taken up by the preparation of British Standards that can be cited in the Orders, and in consulting industrial interests fully - as the Government undertook to do during debates on the Bill - about the draft Orders. The consultations with manufacturers have already resulted in substantial improvements in the average efficiency of gas fires and boilers now marketed in the United Kingdom; for example, the typical gas fire now on sale has an efficiency of 65 to 70% compared with 50% a few years ago. Thus the benefits of the Act are already reaching consumers, even though the formal Orders have not been laid.

Education

52 The Energy Efficiency Office is active in promoting energy efficiency in schools. A teaching pack of energy projects has been produced for primary and secondary schools and is now available together with a miniaturised electronic measuring instrument for temperature and lighting levels developed by the British Gas Corporation. Another national energy competition for schools is being promoted by the Electricity Council. The Office will continue to sponsor the touring Energy Theatres for schools throughout 1986. These and other efforts are aimed at the next generation of energy consumers who it is hoped will absorb through the teaching syllabus an early awareness of the importance of energy efficiency in the home and in industry.

53 In pursuing many of the initiatives outlined above, the Energy Efficiency Office has worked closely with other bodies: the fuel utilities, the suppliers of energy efficiency goods and services, and local authorities, as well as voluntary organisations and other bodies. The Energy Efficiency Office has regular contact with the major energy efficiency industry trade associations, and values its links with the Association for the Conservation of Energy, the Buildings Energy Efficiency Confederation and the Central Heating Energy Efficiency Confederation. Amongst local authorities, the initiative of Cardiff City and South Glamorgan County Councils in mounting Cardiff Energy Action is of particular note. This one-year project is an intensive effort to improve energy efficiency in all sectors in one geographical area through an integrated approach involving all sectors of the community. The Energy Efficiency Office has appointed independent consultants to monitor the initiative, and their report will help the Office in promoting this concept to other local authorities.

54 The Government agrees with the Committee that Energy Efficiency Year provides a valuable opportunity for putting across the energy efficiency message to the domestic sector. Through the programmes outlined above, the Energy Efficiency Office is taking advantage of that opportunity.

Energy Efficiency Year 1986

55 The programmes and activities of the Energy Efficiency Office and other parts of Government outlined in previous sections will have their effectiveness enhanced through the Government's decision to give energy efficiency an even higher profile in 1986.

56 The announcement of Energy Efficiency Year has already encouraged many organisations to take energy efficiency as a theme for conferences, seminars, exhibitions and publications. Already more than 700 such events have been identified and the Energy Efficiency Office hope the first target of 1,000 events will soon be exceeded.

57 The Year has also brought together the advertising and promotional programmes of Government, the energy supply industries and suppliers of energy equipment and services under the common theme "Get more for your MONERGY". For the first time, all energy interests are collaborating to promote energy efficiency. The Strategy Board for the Year, which advises the Secretary of State for Energy on its content and direction, includes representatives of manufacturing, retail and financial interests as well as the energy supply industries.

58 Thus Energy Efficiency Year is different in character from previous energy efficiency campaigns. It is not just a Government campaign; it has secured commitment and support from a wide range and large number of industrial and commercial organisations, all of whom can see that there is mutual benefit in promoting energy efficiency to their customers and clients.

59 The Committee said that the Year should not be a year of gimmicks. The Government agrees. There is a role for imaginative publicity in bringing energy efficiency to the attention of consumers but this must rest on solid foundations and must lead on to decisions. The Year therefore builds upon the continued provision of the sound advice and stimulus to action provided by the EEO's existing programmes and the growing response to them. The success of the Year cannot be separated from the success of these programmes.

60 The Energy Efficiency office will publish a report on Energy Efficiency Year in 1987. This will provide an account of the events and achievements of the Year and will attempt to make judgements on its contribution to the Government's campaign - but, given the time-lags between awareness, decision, action and effect of which the Committee is well aware, these judgements will inevitably be tentative.

Energy supply interests and supply investment

61 The Committee have drawn attention, not for the first time, to the important role that energy supply interests can play in promoting energy efficiency and the need to judge investments in energy supply and energy efficiency by the same criteria. They have linked policy initiatives on these matters with Energy Efficiency Year. The Government would not accept that this is a necessary or meaningful link; these policy questions are not new; they have regularly been addressed by this and previous Governments and would be kept under review whether or not 1986 was Energy Efficiency Year.

62 The Government does not see a conflict between the need for investment in supply and the promotion of energy efficiency. There will continue to be a need for new supply investment to meet changes in energy demand, to replace worn-out plant and to reduce costs. Such investment can in itself make an important contribution to national energy efficiency (for example the average efficiency of the CEGB's coal-fired electricity generation plant has risen from 32.1% in 1974/5 to 34.3% in 1983/4); it reduces energy costs to consumers and it provides greater security and diversity of supply. The demand projections that underpin current plans for supply investment take into account substantial national energy efficiency improvements. In addition, as the Committee will

know, not all energy efficiency investments reduce peak demand - or even, in the case of the domestic sector, total energy usage. Consumers may prefer to take the benefit in the form of increased comfort. There is therefore no simple relationship between energy efficiency investments and supply capacity requirements.

63 The Government's view on the apparent difference between assessment criteria for energy supply investments and energy efficiency investments were set out in response to the Committee's fifth report and in its evidence to the Sizewell enquiry. It may be helpful to repeat the relevant paragraph from the Government's observations on the fifth report.

"6 In the public sector the Government agrees with the Select Committee that investments in energy supply and energy use ought both to be determined according to similar criteria. There are well-established criteria for determining public investments. These were set out in Cmnd 7131 in 1978 for nationalised industries (re-stated in a Note by HM Treasury "Financing of the Nationalised Industries" in Session 1980/81 (HC 348 II p44) and for the public sector as a whole in "Investment Appraisal in the Public Sector" which was revised and re-issued in 1982. The required real rate of return for new investments generally in the civil sector is 5 per cent. This does not imply that all investments with a realistic prospect of earning 5 per cent return will go ahead. In allocating resources to different activities health, law and order, education, energy, transport and so on, Government makes judgements on priorities between them and on priorities within the programme. Particular investments must be justifiable in all the circumstances and the balance between different objectives must be held."

64 The Committee recommended that the EEO should assemble a list of attractive demand management projects in the public sector for consideration by the Department of Energy and the Treasury. The Government believes that such central direction of public sector investment is not compatible with responsible management by the various bodies that would be affected by such a procedure. Far better that, stimulated by the activities set out in previous sections, they should set their own investment priorities, fully aware of the opportunities available for reducing operating costs through energy efficiency measures.

65 The commitment of the nationalised energy industries to energy efficiency has already been illustrated. They will all be taking up the "MONERGY" theme in their advertising during 1986. They operate extensive technical advisory services to help customers gain the best value from their energy expenditures. They sponsor national awards for energy efficiency (eg the Gas Energy Management and Power for Energy and Profit awards) which attract increasing numbers of entries and receive wide publicity. They have substantial R & D programmes aimed at developing new technology for improving energy use. The Government believes that these activities demonstrate the inherent soundness of its policy of encouraging competition between supply interests as a spur to improved efficiency. It welcomes the Committee's recognition that initiatives taken by energy utilities in the USA to reduce energy consumption are not necessarily appropriate in the United Kingdom. It will keep in touch with such initiatives but does not agree with the Committee's suggestion that fuel interests should be required to operate energy management companies. There are vigorous and expanding energy management companies in the private sector - the Government considers that these can adequately meet the needs of non-domestic consumers.

66 The Committee also recommended that the electricity and gas industries should submit an annual programme on energy efficiency for approval by the Secretary of State for Energy and should have a statutory duty to help all consumers to improve their energy efficiency. The Government considers that these steps would add little to the current activities of the industries. It aims to free the energy supply industries from such bureaucratic controls - hence its decision to transfer the British Gas Corporation to the private sector. The Committee will be aware, however, that the Gas Bill currently before the House places upon the Director [of Gas Supply] a duty to carry out his functions in such a way as to promote the efficient use of gas.

Conclusions

67 This memorandum has set out the policy framework for the work of the Energy Efficiency Office, summarised its achievements, reviewed its current activities and future intentions and those of other relevant parts of the public sector and responded to the suggestions and recommendations in the Select Committee's eighth report. The success of the Office in stimulating awareness of energy efficiency and take-up of its schemes, and in instilling energy efficiency into other parts of the public sector, has vindicated the Government's decision to establish the Office as an integral part of the Department of Energy, with close contact with Ministers and able to contribute fully to policy formation. Full and demonstrable Ministerial support for the work of the Energy Efficiency Office is essential for its success; this could not be as easily provided if it were one step removed from the Department. The Government does not agree that a Cabinet Committee is needed to co-ordinate energy efficiency between Government departments; the Secretary of State for Energy has that responsibility.

68 The Government recognises the contribution that outside expertise can make to the work of the Energy Efficiency Office. It is grateful to the five Marketing Advisers for the time and skills that they bring to the promotion of energy efficiency. More recently, prominent figures from industry and commerce have agreed to become "ambassadors" for energy efficiency within their sectors. The Energy Efficiency Office also makes full use of marketing, advertising and energy management consultants as appropriate. The Government does not therefore agree with the Committee's suggestions that the Energy Efficiency Office needs more staff from outside the public service and that it might have independent status within the Department of Energy or should report independently to Parliament.

69 The Government, like the Committee, looks to Energy Efficiency Year as a year of opportunity. It hopes that every energy user will take action during the Year to reduce the £7 billion currently spent unnecessarily on energy.

This memorandum has set out the strategy and activities of the Energy Efficiency Office at the start of the Year. The Government will be happy to provide the Committee with a further report after its conclusion.

Department of Energy

January 1986

ENERGY EFFICIENCY DEMONSTRATION SCHEME

Targets for December 1985 and monitored achievements

Sector	Target savings through take-up of demonstrated technologies (ktce)	Actual savings achieved (ktce)	Savings from original projects (ktce)	Total (ktce)
Metals and engineering	320	324.6 (393)*	31.6	356.2
Ceramics and process control	100	140.7 (1406)	62.8	203.5
Chemicals, oil CHP	110	227.5 (57)	71.5	299.0
Food, paper textiles	110	85.7 (99)	84.6	170.3
Waste as fuel	120	158.3 (36)	57.0	215.3
Building energy management systems	250	353.0 (260)	4.0	357.0
Other non-domestic buildings	70	23.1 (821)	8.5	32.4
Domestic Buildings	-	0.2 (200)	0.4	0.6
TOTALS	1080	1313.9 (5622)	320.4	1634.3

1ktce is the energy equivalent to 1000 tonnes of coal

* numbers in parentheses indicate the number of repeat applications of demonstrated technologies known to ETSU and judged to have been influenced by the scheme.

	PARAGRAPH
75. The Committee's specific recommendations are:	
— the commitment to effective use of the taxpayers' money through efficient energy management must be universal through all Departments of State (paragraph 4);	39-40
— statistically significant hard figures about the achievements of the EEO should be published (paragraph 8);	3
— there should be a thorough investigation of the reasons for the declining number of projects coming forward for energy demonstration scheme finance, and measures taken to combat the decline (paragraph 10). There should also be a clear assessment of the potential for greater take-up of the demonstration scheme in the domestic sector (paragraph 12);	23,50
— the opportunities which Energy Efficiency Year will offer for putting across the energy efficiency message in the domestic sector must not be lost (paragraph 16);	54
— the lessons of the HEAT home auditing scheme should be studied and a new auditing scheme should be brought forward by the EEO (paragraph 20);	44
— the 1982 recommendation of the Committee calling for "a programme to insulate fully the homes of those in receipt of fuel allowances" is re-iterated. The review undertaken by the Government into measures to help low income householders through energy efficiency should be placed in the Library (paragraphs 24 to 26);	47
— grants should be available for conversion of boilers to waste firing (paragraph 28);	30
— the first priority for the next year must be development and public announcement of the EEO's priorities and the logic behind them (paragraph 28);	9-15
— expected returns to energy efficiency investment can and should be compared with the returns to investment in energy supply provision (paragraph 35);	61-63
— it should be a new role of the EEO speedily to assemble and bring the most attractive demand management projects in the public sector to the attention of the Department and the Treasury. The latter should then decide, with much greater flexibility than hitherto, the qualifying discount rate for energy-related investment projects in any given year. This will assist the Government in controlling the PSBR and also assist it in avoiding the charge that it is wasting much taxpayers' money on inefficient energy use in the public sector (paragraph 39);	64
— the EEO should compile and publish a list of possible selective grant and/or low interest loan schemes for energy efficiency improvements in British industry. This should include possible fiscal measures (paragraph 41);	29
— the EEO should also set out alternative and costed proposals for the amelioration of problems of raising finance in the domestic sector for energy efficiency investment (paragraph 42);	42
— the Treasury should demonstrate its commitment to Government policy on energy efficiency by working to encourage the public sector—especially local authorities—to take advantage of private sector finance for shared saving schemes. Any necessary changes to accounting rules should be made (paragraph 47);	40
— the Government should reconsider the role of the electricity and gas industries in its energy efficiency campaign. The Secretary of State should, on advice from the EEO, approve an annual programme of energy efficiency measures by both industries (paragraph 52);	66
— inside Government, energy efficiency should not be regarded as someone else's concern, and there should be no complacency that it is all a matter to be sorted out by the Property Services Agency or the EEO (paragraph 56);	40

- the public sector should monitor, target and submit auditable returns each year showing reductions in energy expenditure. Each Accounting Officer who appears before the Public Accounts Committee should be liable to account for his own Department or service's energy efficiency (paragraph 58);

40
- a conspicuous energy efficiency campaign should be mounted at the Palace of Westminster (paragraph 60);

41
- the EEO should take the initiative in upgrading building regulations (paragraph 61);

48
- the Homes Insulation Scheme should be broadened to allow the installation of cost effective insulation not at present covered by the scheme, and to permit a higher maximum level of grant for lower income homes (paragraph 62);

42
- tax policy should seek to avoid measures which are obviously and avoidably prejudicial to Government energy efficiency policy (paragraph 63);

29
- a Cabinet Committee should be established to co-ordinate energy efficiency between Government departments. It should be responsible not just for reducing the Government's energy bill, but also for co-ordinating all policies across Government to ensure that no initiative is taken which hampers the energy efficiency drive. It should have an announced annual target reduction in energy consumption in the public sector to which it is working (paragraph 64);

67
- the EEO should submit an annual report to Parliament; it should be responsible for its own budget; it should be staffed by more persons appointed from outside the public sector and it should be able to give independent evidence to this Committee and other similar bodies. Its status inside the Department of Energy will be kept under review (paragraph 67).

67-68

