

WORKING PAPER 374

LOCAL AUTHORITIES AND ENERGY CONSERVATION - THE INSTITUTIONAL ENVIRONMENT

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**Local Authorities and Energy Conservation  
The Institutional Environment**

**Table of Contents**

	page
1. Introduction	1
2. Institutional Environment	4
2.1. The Cabinet	6
2.2 Parliament and Legislation	9
2.2.1 Direct legislation	10
2.2.2 Indirect legislation	12
2.2.3 General legislation	13
2.2.4 Limitations of legislation	15
2.3 Central Government Departments	20
2.3.1 Departmental responsibilities	21
2.3.2 Controls and influences	23
(a) circulars and guidance	23
(b) national policy and plans	25
(c) finance	28
(d) legislation	31
2.4 Implications for Local Authority Involvement with Energy Conservation	34
3. Local Authority Influence on the Institutional Environment	39
3.1.1 Local authority associations	40
3.1.2 Energy manager groups	42
3.1.3 Code of practices	43
3.1.4 Joint working parties	44
3.1.5 Consultative councils	45
3.1.6 Innovation	46
3.2 Limitations on Local Authority Influence	47
4. Concluding Remarks	50
Appendix A - Advice on Energy Conservation issued to Local Authorities by Central Government	

**Bibliography**

## ABBREVIATIONS/ACCRONYMS

ACC	-	Association of County Councils
ACE	-	Association for the Conservation of Energy
ACEC	-	Advisory Council on Energy Conservation
ADC	-	Association of District Councils
AMA	-	Association of Metropolitan Councils
BGC	-	British Gas Corporation
BRE	-	Building Research Establishment
BRECSU	-	Building Research Energy Conservation Support Unit
CHP	-	Combined Heat and Power
CHP/DH	-	Combined Heat and Power/ District Heating
COSLA	-	Convention of Scottish Local Authorities
CPRE	-	Council for the Preservation of Rural England
CPRS	-	Central Policy Review Staff
DE	-	Dept. of Employment
DEn	-	Dept. of Energy
DES	-	Dept. of Education and Science
DHSS	-	Dept. of Health and Social Security
DOE	-	Dept. of the Environment
DOT	-	Dept. of Trade
DTp	-	Dept. of Transport
ECC	-	Electricity Consumers' Council
ECDPS	-	Energy Conservation Demonstration Project Scheme
EEC	-	European Economic Community
ETSU	-	Energy Technology Support Unit
GLC	-	Greater London Council
GREA	-	Grant Related Expenditure Assessment
HCD	-	House of Commons Debates (a.k.a. Hansard)
HIP	-	Housing Investment Programme
HO	-	Home Office
ILEA	-	Inner London Education Authority
LACMEE	-	Society of Local Government Chief Mechanical and Electrical Engineers
LAMSAC	-	Local Authority Management and Services Advisory Committee
LBA	-	London Boroughs Association
LEB	-	London Electricity Board
LECC	-	London Electricity Consultative Council
MSC	-	Manpower Services Commission
NALGO	-	National Association of Local Government Officers
NCC	-	National Consumers' Council
NCHA	-	Northern Consortium of Housing Authorities
NCVO	-	National Council of Voluntary Organisations
NEEF	-	National Energy Efficiency Forum
NEMAC	-	National Energy Managers' Advisory Committee
NGCC	-	National Gas Consumers Council
PSA	-	Property Services Agency
PSI	-	Policy Studies Institute
RECC	-	Regional Energy Conservation Officer

RIPA	-	Royal Institute of Public Administration
RSG	-	Rate Support Grant
SCALA	-	Society of Chief Architects in Local Authorities
SCBC (HL)	-	Select Committee on European Community (House of Lords)
SCOE	-	Select Committee on Energy
SCSA	-	Select Committee on Scottish Affairs
SCST	-	Select Committee on Science and Technology
SDD	-	Scottish Development Directorate
SED	-	Scottish Education Directorate
SEPD	-	Scottish Economic and Planning Directorate
SERA	-	Socialist Environment Resources Association
SHHD	-	Scottish Home and Health Directorate
SI	-	Statutory Instrument
SLACE	-	Society of Local Authority Chief Executives
SLASH	-	Scottish Local Authority Special Housing Group
SLC	-	South London Consortium
SO	-	Scottish Office
SICELA	-	Standing Technological Conference of European Local Authorities
TPP	-	Transport Policies and Programmes
WPHE	-	Working Party on heating and Energy Conservation
WO	-	Welsh Office

LOCAL AUTHORITIES AND ENERGY CONSERVATION:  
THE INSTITUTIONAL ENVIRONMENT.

1. INTRODUCTION

Local authority involvement with energy conservation will be examined here with reference to its institutional environment. Underlying this examination is Stanyer's (1976) description of local authorities in terms of remote variables - those which are common to all local authorities - and proximate variables - those arising from the particular conditions, relationships, and characteristics of individual localities - which will modify the remote variables as they are internalised. In this paper the remote variables are further divided into the institutional environment and diverse influences. The latter would include, amongst others, the global energy debate, fluctuating oil prices and the resultant uncertainty for future planning, and significant events (eg. the 1973/74 and 1979 fuel crises, the Three Mile Island Nuclear Reactor accident in 1979, and national public inquiries). While no attempt will be made to quantify the impact of these diverse influences explicitly, they undoubtedly will have had an effect on the nature of the institutional environment and the local authority response to it.

Yet, has the identification of this institutional environment any significance other than purely academic interest? This question is not entirely rhetorical. Surrey and Cook (1977) identified ten categories of organisations whose views should be canvassed and represented, and take responsibility, and monitor future energy planning. It is not an exaggeration to say that the only major institution not included was local government. More bluntly, Hall (1979, p. 80) noted:-

"I tried to point out the powerful implications I feel the energy problem has for town planners, and frankly it did not go down too well. They simply didn't really agree with me."

Despite these doubts, an increased focus on local authority involvement with energy conservation has come from both, inside local government (South London Consortium, 1975; Birmingham, 1980; Newcastle upon Tyne, 1979 and 1980; G.L.C., 1979, 1981 and 1983; Cheshire C.C., 1981; Hutchinson, 1981; Milton Keynes Development Corporation, 1982; S.T.C.E.L.A., 1980 and 1982; Ince, 1980; Lamsac, 1977, 1979, 1980, 1981a, 1981b, 1982 and 1983;

L.B.A.etal, 1983; Levermore, 1982) and out (D. Hall, 1978 and 1979; Raine, 1980; M.A.L.G.O., 1982; Street, 1982; S.C.O.E., 1982 and 1983; Birley, 1982; E.C.C. and N.C.C., 1981; Olivier et al, 1983; Lord Avon, 1983; S.E.R.A., 1981; Owens, 1978, 1979 and 1981; Savage-Jones, 1981; NEEF, 1983; N.C.V.O., 1980; Brand, 1983; Planning Exchange, 1980; Green, 1980; Joesbury, 1983; N.G.C.C., 1983).

Two reasons behind this growing concern may rest with central government, and its denial that it can influence the actions of millions of consumers effectively, other than through realistic energy pricing, the provision of information and the functioning of the market mechanism (Lawson, 1982). The first reason is directly related to the government's own arguments. Local authorities are no mean consumers of fuel. Amongst their own multifarious activities, in a variety of premises, exists a potential annual saving of £100m (L. Avon, 1983) waiting to be realised by their overcoming internal obstacles that prevent the appropriate response to the price signals. Achieving this potential will reduce local government's overall expenditure with consequent benefits accruing to local rate-payers either in reduced rates or the retention of services.

The second reason is a reaction against the government stance - a perceived non-achievement of national policy, lack of central government commitment to energy conservation, and single-minded emphasis on economic savings. By relying on such an approach it could be argued the the present government is absolving itself of any responsibility for achieving wider social-welfare objectives through its energy strategies, and consequently causing, unnecessarily, undue hardship.

Fundamentally, the two positions are separated by their conceptions of energy conservation, both in their implications and in their realization. Energy conservation could be used to achieve a variety of objectives, depending on the nature of the definition ascribed (Fig. 1). Of these definitions of energy conservation, only the thermodynamic ones are measured in terms of energy units - and it is the least helpful in the formulation and pursuit of public policy. Both the economic and social welfare categories are measured by other criteria, and it is here the discrepancy between the two positions identified above is to be found. The significance attached to these other criteria will determine the nature of policies, and ultimately, the magnitude of the benefits to society.

The definitions are not rigid categories (eg. social welfare objectives

**Fig.1. DEFINITIONS OF ENERGY CONSERVATION**

<u>DEFINITION</u>	<u>IMPLICATIONS</u>	<u>REALISATION</u>
<b>THERMODYNAMIC</b>	Energy availability.....(1st LAW)	increased ratio of delivered energy/primary energy (e.g. CHP)
	Energy utilisation.....(1st LAW)	improved efficiency of energy consumption by appliance, use or process (e.g. boiler controls or recycling)
	Energy conversions.....(1st LAW)	improved efficiency of converting energy from one for to another (e.g. change boiler or process )
	Quality of end-use.....(2nd LAW)	matching grade of energy with end-use (e.g. not using electricity for space heating)
<b>ECONOMIC</b>	Cost-effective.....	economic returns are greater than costs over the lifetime of the measure
	Payback periods.....	economic costs of measure to be recouped within a specific time period (e.g. loft insulation has a payback period of 2 to 3 years compared to >25 years for double glazing)
	National output.....	reducing energy intensiveness of GNP/energy consumption ratio (e.g. substituting labour or capital for energy in the production process)
<b>SOCIAL WELFARE</b>	Thermal comfort.....	increased standard of warmth (e.g. improved insulation may not achieve reduced fuel bills or necessarily result in reduced consumption but will result in a warmer living environment)
	Health.....	reduction in illnesses related to living in cold or damp housing (e.g. through improved insulation and heating standards)
	Employment prospects.....	jobs provided as a result of engaging in insulation programs (e.g. insulating houses is a labour intensive activity)
	Mitigating fuel poverty.....	the ability to obtain, and pay for, a minimum level of warmth and light (e.g. increasing fuel prices affects the poorest sections hardest as fuel expenditure represents a larger % of their income than other economic groups)

may be pursued because they will result in other economic savings, CHP because it is more economic than other fuels, or that it will improve the heating standards of the community). To place undue emphasis on economic energy conservation may not only result in society foregoing other benefits, but may further reinforce social inequalities "Inadequately heated homes ... lie outside governmental promotion of insulation" (Cooper, 1981). Because of the low heating standards, fuel expenditure in such dwellings is not large enough to justify energy conservation measures; the resultant payback periods will be too long for the measures to be considered economic. Without these measures fuel consumption in such houses will be greater than it need be, representing unnecessary expenditure and a further strain on financial resources. To counteract both situations - the non-realisation of economic energy conservation in local authority premises, and the need to examine the social impacts beyond economic energy conservation - an increased local authority involvement with energy conservation is required.

Justification for increased local authority involvement is often made on the basis of comparisons with situations outside the U.K., often to illustrate marked improvements on the U.K.'s performance. The U.S. has enacted several pieces of legislation requiring the establishment of state and municipal energy conservation programs, and the mandatory adoption of specific measures. State energy offices, established in each of the 50 states, have developed energy conservation plans and begun to serve as the infrastructure to implement a wide range of conservation programs (Hunt, 1982). The more decentralised governments of Denmark and Sweden, especially the involvement of local authorities in public utilities in the former, are seen as major contributing factors to the large scale existence of district heating. In Denmark district heating accounts for 35% of all space heating (von Bulow, 1982) while in Sweden, it accounts for 21% (Lucas, 1979). France has illustrated how a centralised government can take the lead with energy conservation. With the firm commitment of the President a vigorous conservation program has been implemented aimed at reducing France's energy imports from 71% to 50% of its energy consumption by 1990; with the active participation of local communities (de Missocq, 1982). However, it is always suspect to attempt international comparisons regarding the adoption or nature of policies because of the many prevailing differences between nations, including the institutional environment.

The last statement should not be read as a vindication of the achievements or the arrangements affecting energy conservation in the U.K. A past Parliamentary under Secretary of State for Energy has noted that:



"As far as energy conservation is concerned there are still two categories of local authority. There are those whose record is long and distinguished and others who have made no attempt to be energy conscious". (Mellor, 1981)

Yet, this description represents a simplified reality, as there are not just two categories of local authority, but a broad spectrum ranging between the two extremes. Some responsibility for this variance will lie within the institutional environment, and it is precisely the institutional arrangements that have been severely criticised for energy conservation not becoming more pervasive in the U.K. (R.I.P.A., 1981; P.S.I. and R.I.P.A., 1982; Lucas, 1979; S.C.O.E., 1982 and 1983; Mayer and Hillman, 1983; House of Lords, 1983; Rayner, 1982; N.G.C.C., 1983).

This examination of the institutional environment, and its adequacy, as it affects local authority involvement with energy conservation, will be undertaken in two parts. The first will identify the major components, the general climate created and the implications these have for local authorities. The second will assess the channels open to local authorities to influence the institutional environment, and the extent to which they can be employed.

## 2. INSTITUTIONAL ENVIRONMENT

Modern local government has been described as essentially a creature of statute, with the rules within which it operates originating with central government. (HCD, 12 Nov. 1981, c. 672). Local authorities are obliged to provide a number of statutory services (eg. education, planning, waste management), are dependent upon central government for over half its finance (eg. in 1982/83 the R.S.G. represented 56% of local authority current expenditure, though falling to 53% in 1983/84), and are open to ministerial circumspection (eg. Structure Plans, Housing Investment Programs (H.I.P.), and Transport Policies and Programs (T.P.P.) must be submitted to the appropriate minister for approval, rejection or to be returned for specific alterations). It is not unfair to state that central government expects to have a voice in local government. With the overriding national interest as central government's concern, this is to be expected.

A central domination thesis would require all local authorities to respond favourably to central government directions. Local authorities do enforce compliance with centrally determined Building Regulations and administer the Home Insulation Scheme for central government. However, local authorities are not

just administrators of central government policy or dictates, nor are they an homogeneous lot. They do not have the same powers, responsibilities, or political compositions. They do not observe the same priorities, advocate the same programs, nor employ identical strategies or tactics. While they do have specific statutory obligations there also exists discretion (eg. Sec. 137 Local Government Act (England) (1972) allows a local authority to spend up to the equivalent of a 2p rate demand on activities the local authority deems to be in the interest of the community). The same legislation further affords local authorities (some) protection against a ministerial free hand.

Local authorities obviously respond to central government, but not necessarily in the manner or to the degree envisaged by the latter, or interpret the latter's policies to suit themselves. While local government is dependent upon central government for its powers and the majority of its finance, and subject to central government scrutiny on a number of issues, central-local relations are only one aspect of the institutional environment affecting local authority involvement with energy conservation. The main components of this environment are identified in Fig. 2.

This model does not indicate the relative significance of the various components in the environment - they are not all of equal status - nor the exact composition of the linkages. These linkages will be examined in detail in the following sections though a general description is provided here -

POLICY - national strategies

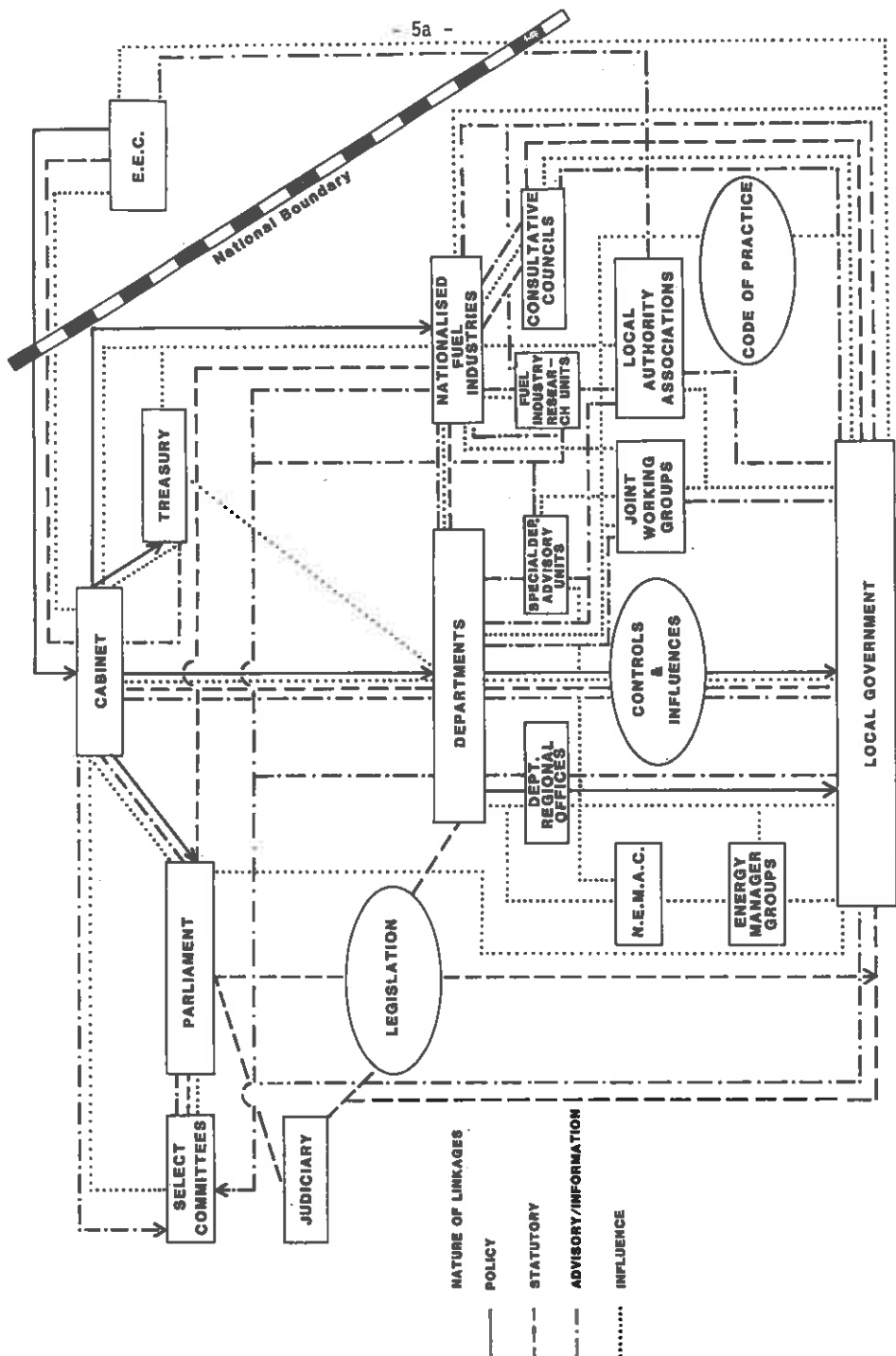
STATUTORY - formal channels established by the enactment of legislation

ADVISORY/INFORMATION - information or advice that is collected and disseminated through the gathering of evidence (eg. Select Committees), research (eg. Fuel Industries Research Units), lobbying activities (eg. Local Authority Associations), or customer-client relationships (eg. between DOE and BRE, and DEu and ETSU).

INFLUENCE - a diverse category encompassing political, financial, personal, professional, and working relationships. Of these the most significant, not singled out specifically, are the financial relationships.

To separate these linkages may be artificial for some purposes. They are not necessarily independent, and many are interdependent (eg. the U.K. is obliged to accept Policy emanating from the EEC under the Treaty of Rome - a statutory linkage; one's influence may be achieved by the threat of invoking a statutory linkage). It is not unknown for central government

Figure 2 Local Authorities and Energy Conservation: The Institutional Environment



departments to have their own policy on issues, contrary to that being pursued by central government (see Sedgemore, 1980 and Williams, 1981), rather than being just administrators of central government policy, despite the constitution. For the general purposes of establishing the nature of the institutional environment the above separation of linkages is more than adequate.

The environment can operate in three ways - by either encouraging, discouraging, or by being ambiguous and non-committal as regards energy conservation. Of the three the latter is probably the most disconcerting for local authorities, even more so than a situation where various components may be acting inconsistently with each other. Inconsistent circumstances enable the local authorities to determine the importance they attach to different components, dependent on the significance of the component and the nature of the linkage. Even these reference points are not available when the institutional environment generally is acting ambiguously or is uncommitted. In an era of economic stringency this ambiguity or lack of commitment will engender doubt regarding the validity of a course of action. The main components and the nature of the linkages affecting local authorities will now be examined in depth.

## 2.1 The Cabinet

The formulation of national policies and priorities are the function of the Cabinet, under the hegemony of the Prime Minister. It is from within this forum - the executive branch of British government - that the direction of government policy emanates.

Beyond general positional statements to the effect that the U.K.'s energy policy is based on ensuring the security of supply at the lowest possible cost to the nation, and that its central planks are coal energy conservation, and nuclear power (CoCoNuc), a detailed energy policy has not been forthcoming. Instead, the present Tory government has delineated a number of strategies, including:

- that one nuclear power station be ordered each year, for the decade commencing 1982 (though this has been delayed, and tempered)
- that sections of the electricity and gas industries be privatised, or opened to competition

- that the realistic pricing of energy and the market mechanism provide the basis for energy conservation. (This was also a major element in the previous Labour government's strategy though it began to pursue a more social welfare orientated strategy, eg. public sector program and Home Insulation Scheme during its last 18 months.)

The synthesis of such diverse strategies into a detailed energy policy has been described as a "recipe for frustration" (Powell, 1976), as was evinced shortly after the last occasion such a white paper appeared (Cmd 3438, in 1967).

In itself, the lack of a detailed policy does not prevent local authorities pursuing their own objectives. The Cabinet has not been opposed to local authorities becoming involved with energy conservation per se. Since 1980, it has been left to the local authority to determine its own energy conservation related expenditure - theoretically, all of its H.I.P. allocation could be spent on energy conservation. In the 1982 Budget the total local authority allocation for loft insulation grants was given a supplemental increase, while all bids for 1983/84 were met in full. (DOE, 1983). These tokens however, should not be equated with positive encouragement.

Beyond 'good housekeeping' measures and exhortation energy conservation often requires expenditure to achieve even greater financial savings, and this is not necessarily cheap. Central government's estimate to raise the housing stock's thermal standards by installing loft and cavity wall insulation, draught proofing and double-glazing in the nation's uninsulated dwellings, was £18Bn (HCD, 24 May 1982, Vol 24 c 249-50 WA).

In contrast to its energy policy the Tory government has been quite specific about its economic policy - the drastic reduction of public expenditure. This represents a continuation of the 1974-79 Labour administration's policy. While the reasoning may now be different, ideological rather than circumstantial, the result has been the same for local authorities - financial stringency. Yet, economic and energy conservation policy can coincide in one area - the reduction of expenditure. This could enable a local authority either "to cut expenditure without cutting services" (DEn Press Release 52, 1981) or to reduce the rates. The Tory government has not been unwilling to publicise this message (ibid; DEn Press Release 57 (1983); DOE Press Notice 336 (1981)).

With local government's public expenditure being squeezed by lower R.S.G. settlements, increasing the total volume of money available by less than the rate of inflation, abolishing supplementary rate demands, and severely penalising the over-spending of centrally-determined targets,

the emphasis is on contracting local authority activities. During the 1960's and early '70's, an era of local authority expansion, the financial questions concerned which budgets should grow the fastest. Now, increasing expenditure in any one area will be at the expense of another, rather than one program growing less fast than another. Central government has been able to avoid the unpleasantness of taking the actual, unpopular, decisions of where to reduce expenditure through the introduction of the block grant allocation. Implicit government priorities cannot even be determined by analysing the allocation because the money is no longer tied to specific services, nor are the determining variables and weightings published. Central government can fall back on its defence that local authorities are now able to determine their own priorities and expenditure within the R.S.G.

Increasing expenditure in any area would be more politically acceptable for local authorities, if backed by a strong central commitment. Such a commitment for energy conservation has not been forthcoming, most significantly from the Prime Minister, to the point where a ministerial committee disappeared as a result (S.C.O.E., 1982). Further, the reduction in the allocation of the Home Insulation Scheme in 1981/82 was prefaced by the statement by the Prime Minister:

"The allocation of resources to the homes insulation scheme necessarily reflects the government's continuing policy to restrain public expenditure" (HCD, 4 Dec '80, Vol 995 c 336 WA).

More recently the Prime Minister has summarily dismissed claims (A.C.E., 1983) that a cost-effective energy conservation program could create 150,000 jobs (HCD, 24 Mar '83, col. 1019) while a briefing document supplied to Tory candidates, in the run up to the 1983 general election, described "the programme as simply a proposal to reflect the economy, with conservation thrown in to make it more respectable". (Guardian, 1.6.83). Despite energy conservation's position as 'one of the three central planks of energy policy' it would appear to rank a very lowly third indeed.

For local authorities, despite increasing concern over certain recent trends in central-local relations (eg. local government autonomy, finance and transport) energy conservation is one area in which they would appreciate more guidance.

"The lack of a commonly understood national energy policy is a major handicap to general public acceptance to the need to conserve energy" (GLC, 1981)

Yet energy conservation policy has only occasionally risen above the level

of being ad hoc and incremental (see Sheldrick, 1983). This state of affairs is only further encouraged by the lack of an explicit framework in which to relate and reconcile conflicting policies and strategies. At present much cost-effective energy conservation is going unrealised - estimated to be worth £100m annually in local authority premises alone (L. Avon, 1983).

## 2.2 Parliament and Legislation

Parliament is the ultimate legislative body in the country, and as has already been stated, all local authority activities must be sanctioned by legislation. Energy conservation has not been ignored by Parliament. As Swain noted in 1976, "at least 40 Acts of Parliament affect energy conservation in one way or another", but as he goes on to note

"Most of this legislation was prepared primarily for purposes quite different from energy saving and its influence on energy is merely an indirect by-product. For example only one Act of Parliament has fuel economy as its declared objective." (Swain, 1976)

Though reflecting the times, the intrinsic message remains valid. The legislation concerned with energy conservation has increased, but not greatly. This however, refers to the general U.K. situation, not the local authority specific.

The legislation has been divided into three categories according to its specificity for local authority involvement with energy conservation:

1. direct - provisions explicitly sanctioning local authority involvement
2. indirect - provisions that enable Central government to sanction local authority involvement
3. general - provisions embedded within the broad range of local government legislation enabling involvement through the overlap of energy conservation concerns with other local authority responsibilities and services.

The concern here does not extend to examining particular Statutory Instruments - orders or regulations - that can be affected by a Minister, without requiring Parliamentary consent, through powers conferred by existing legislation. These will be examined in Section 2.3.2.

### 2.2.1 Direct legislation

Parliament has only turned its undivided attention to local authorities and energy conservation on one occasion - the Homes Insulation Act (1978). Several other Acts of Parliament contain sections, amongst other provisions, particularly relevant to local authorities wanting to pursue energy conservation objectives.

Homes Insulation Act (1978) "In accordance with such schemes as may be prepared and published by the Secretary of State [for the Environment] and laid by him before parliament, local authorities shall make grants towards the costs of works undertaken to improve thermal insulation of dwellings in their area" (Sec.1). To date only one scheme, in its various embodiments, has been so enacted - the provision of a grant for loft insulation in dwellings where the loft is uninsulated.

Control of Pollution Act (1974) Under Sec. 21 of this act, local authorities derive limited powers to generate heat and electricity in connection with their powers relating to waste disposal - effectively, the metropolitan and shire counties, the G.L.C., and Scottish regions. This includes the production of heat and electricity for use at, or in connection with, "the installation at which it was produced", and for the use of heat outside this area or sell it to other parties. The generation of excess electricity can only be sold to an area board, with their agreement, and that of the Secretary of State for Energy.

Local Government (Miscellaneous Provisions) Act (1976) Prior to 1976, local authorities derived powers for district heating schemes under the Control of Pollution Act (1974), otherwise, from more general legislation or private Acts of Parliament. Sec. 11 of this Act clarified the situation and extended the power to produce heat or electricity, or both, to all local authorities. Similar curtailments on the sale of electricity, as enacted under the Control of Pollution Act (1974), were also included. This Act only applies to local authorities in England and Wales, not Scotland.

Health and Safety at Work Act (1974) The Secretary of State for the Environment's powers to enact Building Regulations were extended to



"further the conservation of fuel and power" (Sec. 61).

Previously such regulations could only be enacted for public health reasons (eg. under the Public Health Act (1961) - which was cited as the authority for the initial thermal standards in new domestic premises in 1965). These regulations apply to all new dwellings, except in Inner London, with their enforcement falling to the respective district authority. Inner London's building regulations are laid down, presently, under London Bye-laws, though they do not include any thermal standards. Consultations have been undertaken concerning this anomaly (Cmd. 8179, 1981; DOE, 1982).

Electricity Act (1947) Besides nationalizing the electricity supply industry, removing the responsibility for electricity generation from an approximate 350 local authorities, this Act established the Consultative Councils for each Area Board. Their membership would be made up of a minimum of 2/5 to a maximum of 3/5 "from a panel of persons nominated by the area" (Sec. 7(2)(a)). (In Scotland, this requirement occurs under Sec. 17 of the Electricity (Scotland) Act (1979).) Their wide ranging remit includes, amongst other things, reviews of tariffs, the nature of services, and the notification of their conclusions to the Area Board, and in turn, the Electricity Council and the Secretary of State for Energy. The latter can issue such directions as necessary for rectifying the situation. Similar provisions were enacted for the gas industry under the Gas Act (1948) but the area consultative councils were subsumed into National Gas Consumers' Council by the Gas Act (1972) without the obligatory local authority representation. The government has announced its intention to abolish the statutory membership of the Electricity Consultative Councils (DOT, 1982).

Energy Act (1983) The statutory monopoly to supply electricity as the main activity of business was repealed by this act. Further, it facilitates the generation and supply of electricity by persons other than the electricity board, by providing access to transmission lines, placing an obligation on the area boards to purchase, and requiring the publication of tariffs. Local authorities generating electricity will benefit from the published tariffs under Sec. 18, as previously they were fixed by negotiation, to which they either agreed, or were denied access to their only outlet. The

GLC calculates the Eastern Electricity Boards realised a £500,000 profit at its expense in 1979/80, because of the low buy-back price (GLC, 1981). Sec. 19 places a duty on the area boards to adopt and support CHP schemes, subject to the Secretary of State's consent and the scheme meeting its normal financial criteria. This is a positive encouragement to those local authorities that have shown a keen interest in CHP (Southward, 1981; GLC, 1981; Newcastle upon Tyne, 1980; S.C.O.E., 1982b) and the eight cities that were found to meet a 5% rate of return on investment into CHP (Aitkens, 1982).

### 2.2.2 Indirect legislation

Neither piece of legislation listed under this section was enacted with the original intention of pursuing energy conservation, nor for the involvement of local authorities, though both have been employed for these purposes, amongst others.

Science and Technology Act (1965) This Act enables up to 25% of the capital cost of an innovatory project, and its full monitoring costs incurred by the host organization, including local authorities, to be grant aided by a central government department. The Energy Conservation Demonstration Project Scheme aims to overcome reluctance to change by providing financial backing for new methods and techniques, and encouraging replication by the rapid dissemination of results. Presently 18 local authorities are participating in the scheme.

Industry Act (1972) Section 8 provides for the payment of grants to host organizations to undertake specific activities for improving their efficiency. The Energy Survey Scheme, and Extended Survey Scheme, provide for the costs, up to a set limit, of a one-day energy survey of the organization's premises, and a follow-up report by a consultant. Approximately 60 local authorities have applied for some 5728 one-day surveys and 62 local authorities have submitted applications for 244 extended surveys (DEn, 1982a).

### 2.2.3 General Legislation

The limited latitude of both direct and indirect legislation obliges local authorities to look to their broad range of powers to sanction their involvement with energy conservation.

Local Government Act (1972) This Act embodies the 1974 reorganization of local government in England and Wales, including the separation of powers between tiers of local government, the right to levy rates, and scope for discretion. Sec. 137 enables local authorities to spend the equivalent of a 2p rate levy on anything it deems to be in the interest of the community. Sec. 141 permits a county council to conduct, or assist, in research into matters concerning the county on any part of it. Under Sec. 142 the dissemination of information or services or other local government matters can occur. These powers have been used by the G.L.C. to initiate the development of its alternative energy strategy for London (GLC, 1983).

Local Government (Scotland) Act (1973) This act enabled the reorganization of Scottish local authorities in 1975. While similar in scope to the above act it does provide for different arrangements in the separation of local authority responsibilities and in central-local relationships. Scottish local authorities are open to greater degrees of intervention from the appropriate minister. Sections 137, 141, and 142 of the Local Government Act (1972) above, have their respective equivalencies under this Act in Sections 83, 87 and 88. A slight difference does exist in Sec. 87, in that research can be carried out by any council rather than restricted to the county tier (i.e. the region in Scotland).

Town and Country Planning Act (1971) This is the major piece of planning legislation in existence, delineating the responsibilities for the production of structure and local plans, and establishing the development control machinery. Structure plans are strategic documents concerned with the long-term evolution and needs of an area, while development control is used to regulate specific proposals. Both could be employed in planning a more energy efficient community, whether high density (suitable for CHP projects) or low (appropriate for the utilization of ambient energy sources, eg. solar).

Housing Acts (1974) and (1980) Local authority responsibilities for housing are laid out in these acts, including the circumstances surrounding the availability of renovation grants - circumstances prescribed by the Secretary of State for the Environment. Loft insulation has now been included in the list of basic standards to be met when determining the eligibility of an application (DOE, cir 21/80). The latter Act modified the nature of central control over local authority housing investment, replacing the cost-yardstick (responsible for the significant alteration of at least one low-energy housing development (see Everett, 1980) with the less-detailed project control.

Inner Urban Areas Act (1978) This Act classifies urban areas under one of three groupings - Partnership, Programme or Other. Special allocations of finance are made to the Partnership Authorities, and to a lesser extent the Programme authorities for the establishment of projects, including energy-related activities, aimed at the revitalisation of inner urban areas. The funding is provided by both the DOE (75%) and the authority (25%) for projects meeting joint approval. The Birmingham and Newcastle partnerships have been at the forefront, funding respectively, the FOE insulation project in 1978, and the Energy Advice Unit in 1979, and providing an impetus and encouragement for initiating similar projects in other partnership areas.

Transport Act (1968), Transport (London) Act (1969) and Transport Act (1983) These Acts provide various local authorities with the responsibility for running public transport services, the power to subsidise those services, while the latter provides for ministerial circumspection on the level of subsidy presented in the authorities' budgets. All local authorities with transport responsibilities are required to prepare T.P.P.'s annually.

Local Government, Planning and Land Act (1980) This Act introduced the block grant allocation system for local authority financing, enabling them to determine their own expenditure priorities from the lump sum. This ended the specific allocation for local authority energy conservation works that had operated during 1978/79 and 1979/80. The authorities were left "to decide within their overall capital investment allocations how much they spend on insulation" (HCD, 15.2.82, Col. 141).

#### 2.2.4 Limitations of the legislation

Despite the varying degrees of specificity for local authorities and energy conservation, the above legislation has a common characteristic - a passive, rather than active, encouragement for local authorities. Where the legislation is directly relevant to energy conservation, often, the responsibility for initiating schemes is vested with the Secretary of State (eg. Home Insulation Scheme, Energy Survey Scheme) or the local authority is reliant upon the co-operation of other parties. To sell electricity the local authority has to come to arrangements with the Area Board and obtain the consent of the Secretary of State for the Environment. This dependence upon others can effectively

- limit the number and nature of schemes (it has never been central government intention to introduce any insulation scheme, other than for loft insulation, under the Homes Insulation Act (1978))
- control the standards (as with the Building Regulations)

Even the viability of a scheme may be determined by someone other than the local authority wanting to implement it. (This was the situation with the price negotiated with the Area Board for electricity generated by a local authority prior to the Energy Act (1983) (see GLC, 1981).)

Where scope exists for a more active role local authorities are still not entirely free of external dependence or constraints. Under the urban program, energy conservation projects designed to benefit the fabric of the community can emanate from within the local authority or from the community (and accepted by the local authority), but must also be approved by the DOE. The DOE has not been averse to such projects, and a variety of projects effecting both the private and public sector have been initiated under the Newcastle/Gateshead Inner City Partnership (1982). Yet local authorities involved in these partnerships are few (only 14 of 521) and the level of finance made available to them is not proffered to Programme authorities or under the general urban program. The finance made available to the partnerships has contributed significantly to the innovative nature and success of Newcastle and Gateshead schemes (G. Owens, 1983). Similar projects are passed over in non-partnership authorities because of competing claims or unwillingness of the local authority to approve them (John, 1982). With limited finance it is unlikely that DOE would be willing to fund more than one project (often small in size with limited intentions) in an area outside a conurbation.

Parliament has recently engaged itself in attempting to provide for an enhanced local authority role with energy conservation.

Underlying this was the recognition of the passive nature of the local authority role -

"We know that on the continent the major reason why district heating and combined heat and power has extended so much further than here is that local authorities have been involved" (HCD, Standing Committee 'G', 20.1.83,C 251)

Support running across party lines during the committee stage of the Energy Bill (1982) forced the government to extend the scope of the original bill to include local authorities and CHP provisions (i.e. Sec. 18 and 19 of the Energy Act (1983)). These concessions however may be more superficial than real.

Section 18, while extending access to published tariffs and the procedures for disputes to local authorities, still debars them from selling electricity other than to an area board. A private generator or supplier is defined by Sec. 5(1) as "a person other than a ... local authority". Further, local authorities remain subjected to the more restrictive conditions of the Control of Pollution Act (1974) and Local Government (Miscellaneous Provisions) Act (1976). The area boards must comply with any technically feasible request to purchase electricity from a private supplier, yet are only obliged to purchase from a local authority once arrangements have been agreed and only in accordance with those arrangements. Protracted negotiations could introduce time lags into the local authority situation that do not exist for a private supplier. These arrangements then require the Secretary of State of the Environment's approval. "We consider these provisions adequate in the context of the very limited generation of electricity by local authorities"(DEn, 1983a) Only the GLC received approval under the Control of Pollution Act (1974) to generate electricity from waste, while no approvals have been granted under the Local Government (Miscellaneous Provisions) Act (1974). If this 'context' is attributable to the nature of the existing legislation - the low prices paid by the area boards, and the need for consent from two parties, then it would have seemed appropriate for the government, if it wanted to provide more conducive conditions, to bestow local authorities with the same status as private suppliers. This did not happen.

Sec. 19 of the Energy Act (1983) has placed a duty on the electricity supply industry to support and adopt CHP schemes. In the past, the general position with the area boards has been a marked reluctance, with notable

exceptions, to become involved with CHP/DH. Sec. 19 does not place a duty on the industry to initiate the schemes. As this initiative is unlikely to arise in the private sector where district heating is negligible - reflecting legal ambiguities and the private developer's belief that house purchaser's want individual control over their heating system (ECC, 1980) - then any impetus for CHP/DH will have to come from the public sector.

Though enthusiasm has been shown by some authorities (eg. those participating in the 'lead-city' studies) this has not been matched on a national basis. From Table 1 the percentage of new local authority dwellings connected to a district heating system can be seen to have reached 10% on only one occasion in the last two decades, and averaging just under 5%. This can be contrasted with Denmark and Sweden, where district heating accounts for 35% and 21% of their national space heating demands respectively. These U.K. local authority statistics may belie the present national situation.

District heating was once seen as having a price advantage, and ensuring a minimum continuous level of heating in dwellings (thus diminishing the problems of condensation), in contrast with other heating systems, but has been beset with problems:

- the oil price rises of the last decade
- the phasing out of bulk tariffs for electricity and gas
- system breakdowns
- extensive complaints over heat metering and billing

Table 1 does indicate a decline in the installation of new district heating schemes since 1973. Where district heating has been installed there have been conversions recently to individual systems.

"Forty-eight such schemes [involving 27 local authorities] in various stages of conversion [to individual heating systems] ... amount to approximately 12,500 dwellings. Feasibility studies are known to be under investigation on at least 2,900 units" (BGC, 1982).

British Gas can further prevent new district heating schemes utilising the cheapest fuel presently available, gas, by its right to refuse to connect to the gas network premises with an annual consumption greater than 25,000 therms. This right does not extend to premises where consumption is less than 25,000 therms annually.

While the passive role embodied in the direct legislation extends to the general legislation other factors have to be considered as well.

- local authorities can actually be debarred for using it
- financial pressures
- legal constraints
- uncertainty of scope of legislation

TABLE 1 : District Heating as % of New Local Authority and New Town Dwellings (all fuels)

Year	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
% Central Heating of total new dwellings	57.9	66.6	78.8	87.7	91.3	89.6	90.4	92.4	91.7	92.7	91.7	88.7	96.3	98	98	98.6	98.7
% of C.H. represented by District Heating	1.8	0.8	5.5	5.1	2.9	6.7	6.7	7.3	10.9	9.6	8.1	5.3	7.8	3.5	2.6	3.7	4.3
% District Heating of Total	1.0	0.5	4.3	4.5	2.6	6.0	6.1	6.7	10.0	8.9	7.4	4.7	7.5	3.4	2.5	3.6	4.2

(Derived from Housing and Construction Statistics, DOE 1964-80)



All can create a climate inconsistent with encouraging an energy conscious community. These factors are now illustrated.

Under the sections 57 and 105 of the Housing Act renovation grants cannot be paid out for works not sanctioned by the Secretary of State for the Environment. Thermal insulation generally was not sanctioned, though special consent could be obtained to meet the special needs of the elderly and disabled. During the three years which this consent operated (1974-77) it was only sought by local authorities on 3 occasions, covering 10 dwellings (HCD 18 May 77, WA c150). In all other circumstances under the renovation grant system, it was expressly forbidden until 1980 (DOE, 1974, 1976 and 1977).

The introduction of the block grant system has permitted local authorities to determine their own priority to attach to energy conservation and the amount of money to spend. It also removed the specific energy conservation allocation for the public sector, at a point when a "public expenditure was being severely restrained. I do not want to give the wrong impression, that energy conservation is not regarded as a priority, but there are many priorities in local government and that is the problem at the moment" (SCOE, 1981, para 299). The evidence indicates a drastic reduction in local authority energy conservation programs with the removal of the block grant (GLC, 1981; ECC & NCC, 1981; ACE, 1982a; Sheldrick, 1983).

"The way a company produces or conserves energy can only be affected in so far as it impinges on local planning and pollution controls, not as a direct instrument of local energy policy" (Newcastle, 1980). Yet, recourse to planning legislation may be denied legally.

"Although the planning authorities are given very wide powers to impose those conditions as they think fit nevertheless, the law says that those conditions to be valid must fairly and reasonably relate to the permitted development. The planning authority are not at liberty to use their powers for an ulterior object however desirable that object may seem to them to be in the public interest" (L. Denning, 1958).

The government has resisted calls to require the energy implications of strategic plans to be singled out (Cmnd 6575), nor have they called for any energy considerations to be incorporated formally into the process of preparing these documents. The inclusion of strategic statements, concerning energy conservation in relation to land use, in structure plans would not necessarily result in a new form of planning or community. Such documents, while to be taken into consideration by a local authority when determining a planning decision, are not in themselves definitive. That they would be available for consideration would allow a local authority to cite them in appropriate circumstances, where, at present, this possibility does not exist.

In attempting to encourage switching from private to public transport, subsidisation of the latter may be crucial. It is also steeped in much uncertainty. If an economic transport service is interpreted as requiring a local authority to break even financially, in some areas the result may be a vicious downward spiral - massive fare rises, reducing attractiveness of public transport, resulting in declining passengers, lost revenue, leading to further fare increases. The end product would then be an increase in private transport, with, *ceteris paribus*, a concomitant rise in energy consumption. Public transport is only more energy efficient than private if it can attract enough passengers who would otherwise go by car. Against the national trend, the South Yorkshire Public transport system has been carrying 3 million more passengers annually, attributable to its policy of maintaining low fares. Yet the Transport Act (1983) may consign such a policy to a short future. Only those authorities that subsidise public transport below the appropriate level of expenditure, as determined by the Secretary of State for Transport, will be deemed to have shown "for all purposes a proper exercise of power". The Minister will also determine "the manner in which the benefits of such grants is justified", and thus could decide that energy conservation benefits were not a justification of subsidies. Though the Act does not define 'improper exercises of power', local authorities not falling within the Secretary of State's determination could be liable to court action by the local authorities setting the rates, disgruntled rate payers, or the Secretary of State.

With all the general legislation, acting either illegally or *ultra vires* opens a local authority to court action. Where local authorities are uncertain about the appropriateness of the legislation for their purposes they can apply for judicial review (eg. the GLC received such a review prior to implementing its second 'cheap fare' policy). A determination under judicial review, as in a court action, can be appealed against. Pursuing the appeal to its natural conclusion leaves the final decision with the House of Lords. At this stage the only avenue open to a local authority wishing to undertake an activity is to petition Parliament to alter the law. Such changes would appear to be necessary if local authorities are to have a positive, active and unambiguous role with energy conservation.

### 2.3 Central Government Departments

The conventional interpretation of local authorities in terms of agents or in partnership with central government has been argued to be mythical (Rhodes, 1981). Conventional descriptions characterise some aspects of central-local relations, eg.:

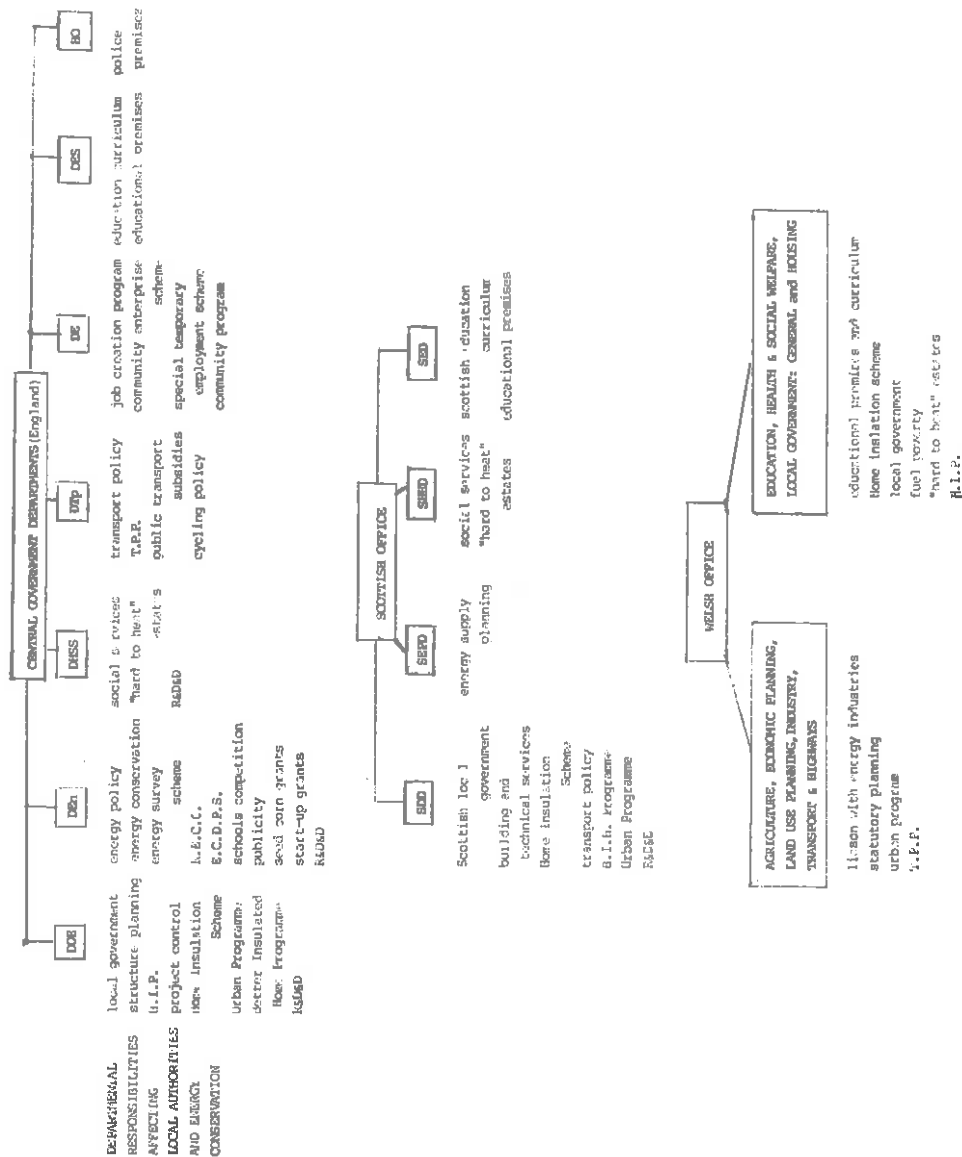
- local authorities are central government's agents in the operation of the Home Insulation Scheme - the scheme devised, the money allocated and its efficiency monitored by the DOE. Local authorities can only grant payment under the conditions determined by the DOE.
- the DHSS have asked local authorities to assist them in the identification of "hard to heat" estates to enable the payment of an extra heating allowance to tenants claiming supplementary benefit.

However, these models do not explain vagaries in local authority performance, eg.

- why do some local authorities exhaust their Home Insulation Scheme allocation before the end of the financial year, when others have money left over unclaimed
- why have a few local authorities used the MSC's various special programs for energy conservation activities while many others have not, even when specifically encouraged to by various departments.

The central-local relationship, then, is not one of complete subservience on the part of the latter. It is often more subtle and complex. "The power-dependence model of inter-governmental relations developed ... suggests that these relations are simultaneously rational, ambiguous and confused" (ibid.). Evidence of this simultaneous multiplicity can be found in the dispersed nature of departmental concern for local authorities and energy conservation, further reinforced by the essential features of the two. Local government is a collection of multifarious responsibilities and services, while "few concepts are interpreted as diversely as energy conservation" (Gibbons and Chandler, 1981). Local authority involvement with energy conservation falls within the remit of a variety of central government departments (see Fig. 3) whose concern is manifested through a variety of controls and influences, spanning both formal and informal relationships.

Fig. 3 Central Government Departmental Responsibility for Energy Conservation Activities in Local Authorities



### 2.3.1 Departmental responsibilities for energy conservation and local authorities

The main concern for local authorities and energy conservation is vested within three departments - DEn, DOE and S.D.D.

DEn has the responsibility of co-ordinating the nation's overall energy conservation policy, and that of the other departments. Within its Energy Conservation Division a specific branch exists to oversee local authorities. The relationship is very much informal. Local authorities are under no general obligation to provide DEn with information - a questionnaire sent out under the last Labour administration received a very poor response (DEn, 1982b). Regular contact can occur through local authority participation in Energy Manager groups - a forum to enable industry, commerce and local authorities to exchange and compare information and experience. DEn's R.E.C.O. are requested to have a particular regard to liaising with these groups, and provide monthly reports on their activities to the parent department. Any direct control over their energy conservation activities only occurs through DEn's sponsorship of R & D projects with an individual local authority.

The DOE does have a formal relationship with local authorities, having the overall administrative responsibility for local government. This responsibility encompasses:

- the collation of obligatory statistical returns from local government
- the determination of variables and formulae employed in the Grant Related Expenditure Assessments
- the calculation of RSG and capital allocations within the total volume limits for individual local authorities
- the scrutiny of structure and local plans and H.I.P.
- the allocation of finance to local authorities for the Home Insulation Scheme
- the approval of council tenders for new dwellings (Housing Project Control)
- the issuing of advice relevant to local government.

While all these elements can have repercussions for a local authority's attitude towards energy conservation, only the Home Insulation Scheme has a singular purpose. Energy conservation is relatively insignificant responsibility in the DOE's relationship with local authorities. Like DEn,

DOE does not keep a comprehensive tract of their activities, but may be more aware of their interests and activities than DEn, through the perusal of expenditure data, project control and strategic plans, and through their more frequent contact.

The Scottish Office, with its greater responsibilities, in comparison with other departments, as a result of the devolved powers for administering Scotland and its different legal systems, is divided into four departments (see Fig. 3). The SDD is the Scottish equivalent to the DOE and has similar responsibilities for local government in Scotland. Both the S.D.D. and S.E.P.D. are concerned with energy-related developments and the fuel industries, and within the S.D.D.'s Building Directorate exists a post for an energy conservation officer, though no department has a specific responsibility for energy conservation. The Minister for Energy in the Scottish Office has stated "that there is no remit for energy conservation because we have neither the expertise nor the resources" (Lothian Energy Group, 1982). The remit is considered to lie with DEn.

The Welsh Office lies between the Scottish Office and the other departments in the scope of its responsibilities - the administration of Wales has been devolved, though much of its legislation is common with that in England. Other departments have a lesser concern, and, as a result, lesser involvement with local authorities on energy conservation matters. This reduced concern is not identical and can be differentiated into three categories:

1. Pursuant to the department's administration of policy - The DHSS and SHHD's concern with the general impact of fuel poverty and the particular identification of 'hard to heat' estates have brought them into contact with local authorities. The DES (working with DEn) have attempted to encourage the incorporation of energy related subjects by local education authorities into school curriculum. The DTp has overall responsibility for transport policy of which energy conservation has been an identified component generally (Cmd 6836) and in its encouragement of cycling (DTp 1981 & 1982).
2. Infrastructure - Some departments are involved with the provision of the necessary infrastructure for a local service. The DTp has increased its concern for local cycleways and is able to monitor and facilitate such investment through the T.P.P. The DES, SED and H.O. have, in the past, made specific allocations to local authorities for energy conservation works in school and police premises, as well as publishing technical advice (DES 1977, 1978, 1979 and 1981).

3. Through third parties - The Manpower Services Commission (MSC) was set up under the aegis of the DE. A variety of its special programs (eg. Job Creation Programme, Special Temporary Employment Programme, Community Enterprise Programme, in the past, and now the Community Programme) have enabled participation by unemployed people on insulation projects to the benefit of the community. Local authorities have been encouraged (DEn and S.O. issued a circular letter to local authorities in August 1976) to use these programs for "work on roof insulation for publicly owned housing and other buildings" (HCD, 13 Oct. '76, c133 WA).

How this concern and involvement of central government departments and the interaction with local authorities, is manifested will now be examined in more detail.

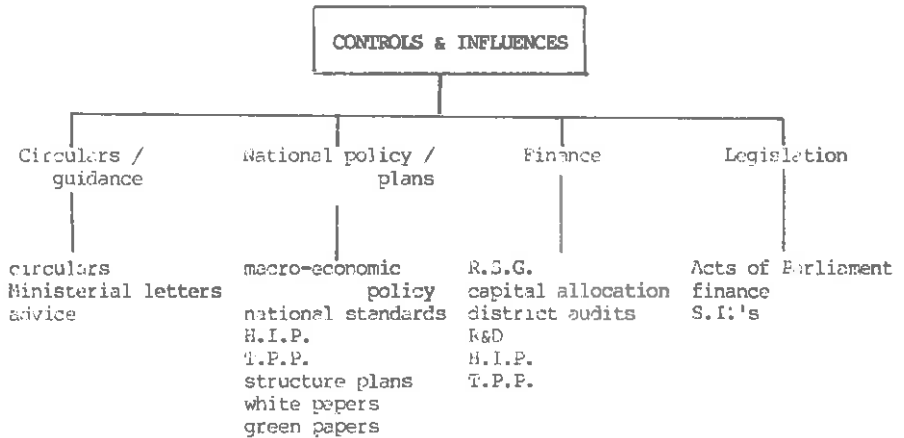
### 2.3.2 Controls and influences

Central-local relations are characterised by the variety of controls and influences available to the government departments. As regards local authority involvement with energy conservation these have been separated into four categories (Fig. 4). The categories are not exclusive and some indication of the overlap is illustrated by double listing of elements.

Circulars and Guidance Local authorities regularly receive advice, information, and interpretation on a multitude of topics through circulars issued by government departments. These are usually of advisory significance - providing information, interpretation or outlining guidelines - or statutory nature - announcing changes in the rules. Occasionally they assume a mandatory role, compelling local authorities to pursue a course of action (eg. DOE circular 19/80, announcing the indefinite moratorium on local authority capital housing expenditure). Ministerial letters cover similar ground to circulars, though more discerning and discreet. As Levitt (1980) notes "letters often concern more sensitive policy issues where co-operative action or unwelcome news has to be discussed".

The circulars issued regarding energy conservation have been of the first two types only. They are not necessarily a recent phenomenon. In 1959 the Ministry of Housing and Local Government recommended the installation of 1" of loft insulation in new local authority dwellings (MHLG circular 63/59), predating its statutory enactment in the 1965

Fig.4 CENTRAL GOVERNMENT DEPARTMENTAL CONTROLS and INFLUENCES





Building regulations. Between 1973 and 1978 energy conservation only appeared in circulars relating to Renovation grants, and then, it was often negative in implication. Local authorities could not make payment "for any application for an improvement grant wholly or partly in respect of works required for insulating a dwelling against heat loss" without the consent of the Secretary of State (DOE circular 160/74). This blanket exclusion, reaffirmed again in 1976 (DOE circular 13/76), was relaxed slightly, but only for the elderly and disabled, in 1977 (DOE circular 38/77). It was not until 1980 that loft insulation was included as one of the standards to be met to be eligible for a renovation grant (DOE circular 21/80). By this point applicants could obtain a specific grant for loft insulation under the Home Insulation Scheme. The introduction of this scheme, and its many modifications since, have been a regular source of statutory circulars (see Appendix A).

Circulars can also represent lost opportunities in what they omit in their advice. Two circulars are cited as examples:

- Adaptations of Housing for People who are Physically Handicap (DOE 59/78)
- Improvement of Older Housing: Enveloping (DOE 29/82)

The former details items covered by grants for "any works in [a disabled person's] home ... designed to secure his greater ... comfort" (Sec 2(1)(e) of Chronically Sick and Disabled Persons Act (1970)). It specifically lists central heating or supplementary radiators, but does not make any mention of thermal insulation or draught proofing, despite the potential of achieving the same result - improved thermal comfort - at a lower running cost. The latter represents an opportunity to install wall insulation on solid wall dwellings during the "renovation of external fabric ... of dwellings which have deteriorated beyond the scope of routine maintenance" (DOE 29/82, p.1) - an expensive undertaking normally, but one where a large percentage of the cost would be lost in the works being undertaken anyway. As a criteria of upgrading houses in Housing Action Areas (the only area where enveloping can occur) is to increase a dwelling's life span by a minimum of 15 years, not utilising the opportunity to install wall insulation during the enveloping process reinforces the dwelling's poor thermal characteristics or greatly reduces the incentive to undertake this measure in the future. Though neither circular excludes insulation measures - the list in the former is "not exhaustive", while the latter states that the scheme (and its costs) will be decided on merit - their omission will reduce the number of local

authority applications which incorporate such measures.

That most circulars emanate from DOE reflects its overall concern for local government, although any department may issue them. DEN, in comparison with DOE, has never been a prolific source of circulars (four in total), embodying its internal philosophy of non-intervention as regards energy conservation - local authorities should manage their own affairs. This position has been reinforced since 1979 by the Conservative administration's intention to reduce central bureaucracy.

As well as circulars the departments are a source of advice, both published and otherwise, on a wide array of technical and design matters, and problem solving. Published advice has come from the H.D.D. (before its demise) and the P.S.A. (within DOE), the S.D.D., the D.E.S., and the DTp. Informal advice can be acquired through contacting the appropriate branch within a department, or through its regional offices (eg. DEN R.E.C.O. or DOE Regional Office). This contact will often be technique, technology, or problem specific but may be of great value in disseminating experience.

National Policy and Plans The government produces consultative documents (Green Papers) to provide a basis for comment and discussion during the policy formulation stage, and policy statements (White Papers). The absence of a coherent, overall U.K. energy conservation policy has been noted already, though energy conservation has not been ignored totally. The 1978 Green Paper (Cmnd 7101) had a specific chapter on it, while the 1977 White Paper on Transport stated that "the conservation of energy must be a major national objective, and in Transport we must pursue it by all means that are practical and cost-effective" (Cmnd 6836). Such attention represents only two entries amongst many, even within the two encompassing documents, and are not necessarily compatible with other objectives. Further, these documents were published by the last Labour government.

Energy conservation, under the present Conservative administration, revolves around the realistic pricing of energy, backed by publicity and education. This represents a reduced emphasis from the green paper -

"There is ample evidence that the response of the individual consumer to the price mechanism, even if reinforced by information and advice, will not bring about all energy conservation that is cost-effective by comparison with investment in energy production" (Cmnd 7101, para 5.6).

It is consistent with the government's macro-economic policy of reducing public expenditure. Transport-related energy conservation has disappeared

altogether from recent Transport and Road Policy white papers. If the function of the departments is to administer central government policy then a reduced emphasis at the top will be reflected in a reduced emphasis within the departments. Evidence suggests this is the case (S.C.O.E., 1982, Appendix 45).

One method of ensuring local authority compliance with national objectives occurs through the vetting of statutory plans and programs by departments. Obligations have been placed on local authorities to produce long-term strategic documents (i.e. Structure plans) and annual investment plans for housing and transport (i.e. H.I.P. and T.P.P. respectively). Though there have been calls for the energy implications of these plans to be assessed during their preparation (C.P.R.E., 1974; S.C.S.T., 1975) this has not been accepted by central government -

"The government accepts the Committee's view that energy implications must be weighed in reaching decisions on transport and related planning proposals but it would not wish to see them accorded an overriding importance. Energy conservation is only one of the factors that should contribute to planning policies and practices" (Cmd 6575).

Energy conservation, quite rightly, should not have undue prominence. The rejection of the 'overriding importance' however, would appear to have evolved into the conventional wisdom amongst departments against incorporating any such assessments into the preparation of local authority plans. DTp circulars on the preparation of T.P.P. and topics to be included have not identified energy as a specific area of concern. Neither the DOE's Memorandum on Structure Plans (COE circular 4/79) nor the SDD's planning advice notes on Structure and Local Plans (SDD, 1981a and 1981b) contain any reference to the consideration of energy implications, however elementary, in their land-use proposals. The closest any of these documents comes to identifying energy conservation is under 'Consultation with Public Authorities or Bodies' -

"The Department of Energy (or the Welsh Office) should always be consulted on matters which affect energy industries ..., the development and use of energy resources and patterns of energy consumption" (DOE circular 4/79, para 2.54).

This situation has not been altered in the recent draft revision of the Memo on Structure Plans.

With this paucity of advice also comes straightforward discouragement at extending local authority interest into this area. A joint study,

involving the SDD and Strathclyde Region, on the information constraints confronting local authorities undertaking energy planning studies, was shelved by the SDD because "the time was not ripe for the document to be circulated to the Government departments and local authorities" (Dible, 1982). This reluctance on the part of the SDD, from where the impetus for the study arose, dampened Strathclyde's interest. "In view of the SDD's negative response the report has not been circulated within the authority" (Hickey, 1982). A valuable study lies gathering dust, rather than comment.

The inclusion of an energy conservation policy in the Dyfed Structure Plan was rejected by the Welsh Office in exercising its powers to reject such plans either in whole or in part. This is despite recommendations from the inspectors, at the plan's examination in public, that the policy be included. The Welsh Office is not averse to its inclusion in the explanatory statement "and it would still be Dyfed C.C. policy" (John, 1983). Whether this rejection of the inclusion of an energy conservation statement in the Structure plan proper, is founded on possible technical reasons (DOE, 1983) though not elaborated, or because "it is not a land-use policy" (John, 1983) the result is to deny it statutory status with potential legal implications for development control (see Section 2.2.4).

National objectives may be realised by setting minimum standards. The Building Regulations have been utilised in achieving dramatic reductions in heat loss - up to 60% - in new dwellings compared with uninsulated dwellings. The thermal standards of the Building Regulations have been increased twice for domestic premises and once for non-domestic buildings since 1974, and are one area of the regulations that the government is not contemplating relaxing (Cmnd 8179, 1981, para 7).

National standards can have unintended consequences. The Housing Cost yardstick was used by the DOE to achieve value for money in local authority housing construction programs. It was replaced in 1981 by Project Control, reflecting the realization in the DOE that uniform standards related to minimum cost were not necessarily best value for money in the long term (sometimes, even in the short term). The cost yardstick is held at least partially responsible for the employment of system building techniques, and the installation of electric heating systems, on local authority estates. The former was encouraged by successive governments obsessed with the statistics on new dwellings started annually. The latter occurred because of their low capital cost. Both have had consequent

repurcussions on fuel consumption - the former have suffered from excessive condensation necessitating increased heating to maintain a dry environment, while the latter have become too expensive to run properly, reducing the ambient temperature and abetting condensation. Supplementary benefit claimants living on those estates identified by the DHSS as 'hard to heat' - usually with on-peak electric heating systems, and often system-built dwellings - receive an extra heating supplement. These are not the only extra costs to the national exchequer as it is both extremely expensive to rectify the problems, or to demolish the estates and rebuild.

Finance Even if local government was autonomous in all other aspects, central government would expect an input into their affairs because of the financial arrangements. Central government, through the DOE, provides the greater percentage of local authority current expenditure (via the R.S.G.) and fixes the limits on capital expenditure (the permission to borrow). Both the total volume of local government expenditure, and revenue expenditure have been under sustained pressure - the R.S.G. has fallen (see Table 2) - reflecting the government's determination to reduce public expenditure.

TABLE 2 : Central Government Share of the Rate Support Grant (1981-84)

<u>Financial Year</u>	<u>R.S.G. Settlement</u>
1981/82	59%
1982/83	56%
1983/84	53%

This determination has been pursued, reinforced by legislation, so that

"the Rate Support Grant changed from being a statement of central government financial commitment to local government for the forthcoming year to being a key part in a piece of legal machinery available to central government to force local government to comply with central government directives" (McAuslan, 1981, p. 228)

Legislative changes enable local authorities to be penalised through grant clawbacks for overspending, as defined by central government, and prevent them from issuing supplementary rate levies. The future holds the prospect of a centrally determined limit by which a local authority can raise its rates.

Within these expenditure constraints an anomaly has arisen. Local authorities can be labelled overspenders despite spending less than their Grant Related Expenditure Assessments (GREA - a DOE-calculated expenditure

total) that would be incurred by a local authority, if it provided a standard level of service. This results from their expenditure targets being derived, not from their GREA, but from their 1978/79 expenditure - prior to the existence of GREAs.

Within their overall limits, local authorities are free to decide their own priorities. The advent of the Block grant allows local authorities to combine their R.S.G. allocation into a lump sum, in spite of its calculation under five separate headings - housing, personal social services, transport, education and other. Yet, the statutory duty to provide certain services (eg. education, waste management, planning, social services), and the declining real value of total expenditure assures this discretion is largely illusory. Public expenditure is largely inflexible (Griffiths, 1966), with priorities, consequently, determined at the margins. For many local authorities energy conservation will be a marginal activity at best.

This financial climate has necessitated a critical review of services and programs by local authorities, with the view to pruning expenditure. Bramley and Stewart (1982) have delineated four variables influencing the decisions arrived at during this process

- feasibility of making the saving
- immediacy of realising the saving
- micro-politics
- hints from economic policy.

Energy conservation programs score high on both the first two factors. The potential benefits, reducing expenditure through decreased fuel costs, may not accrue for several years depending on the payback period. All capital investment programs can realise immediate savings, as underlined by the government-imposed six month moratorium on new construction projects by local authorities in October 1980. Energy conservation is further at risk because of a lack of primary, or perceived, urgency.

The micro politics of implementing expenditure cuts fall within the 'proximate' environment, and therefore, not within the scope of this paper, though this element will be influenced by the institutional environment.

This leaves the fourth variable "hints from economic policy". One direct consequence of the Block grant was the subsuming of the specific allocation for the public sector energy conservation program within the total amount. This program must now compete with every other local authority

priority for limited financial resources. Further local authorities saw the total allocation for the Home Insulation Scheme reduced in 1980/81. They have been specifically excluded from the scheme to convert oil-fired boilers to coal. The public expenditure elements of the 1977 10-year energy conservation program have not been renewed after their initial 4-year funding. The Energy Survey Scheme is now limited to 20 applications per organisation, thus restricting its value to local authorities. Total government expenditure on energy conservation has been declining each year. Certainly the 'hints' have not been uni-directional - since 1981/82 the allocation for the Home Insulation Scheme has been rising annually, the March 1982 budget provided for supplementary allocations to this scheme, in October 1982 local authorities were told they could incur unlimited capital expenditure on housing programs, including energy conservation works, without need for DOE approval, and all Home Insulation Scheme bids were met in full, for the first time, in 1983/84. Circumstances surrounding these latter two detract from the impact they may otherwise have had. In both instances no advance notice was provided, so that local authorities could prepare their programs accordingly. This is especially significant with the 'unlimited capital expenditure' approval as it only covered activities until the end of the financial year. Further, local authorities were warned that future revenue expenditure arising from this capital expenditure would be viewed unfavourably by the DOE.

"It would be a bold or foolhardy local authority that in the present or foreseeable future climate of relations with central government armed as it is with a panoply of legal powers over capital spending, departed too far from what central government thought it alright to spend on a particular service area" (McAuslan, 1981, p. 231)

The general tenor for local authority energy conservation expenditure, while not entirely negative, has been far from unambiguously positive.

Where the local authority is completely at odds with central directives, or acting ultra vires, their accounts can be examined by the Audit Commission (which replaced the District Auditor Service on April 1, 1983) either at the behest of the Minister, through an objection raised by an elector, or as a result of routine scrutiny by an auditor appointed by the commission. This scrutiny could be double-edged as regards energy conservation.

"Over the years the district auditors have been focussing attention on wasteful expenditures or procedures (mode of borrowing, fuel consumption [emphasis added], cost controls over repairs expenditure,

etc.) and increasingly on value for money" (Byrne, 1981, p. 213) Where evidence of a local authority incurring expenditure unnecessarily or illegally is uncovered, a judicial declaration to that effect can be sought, whereby the individual responsible within the authority can be held personally liable for the expenditure. It would appear that both unnecessary fuel consumption, and measures to counteract it (if not sanctioned), could open the local authority to court action.

The one outright financial carrot for local authority involvement with energy conservation lies in the departmental R & D budgets. Such sponsorship has been used by DEN to underwrite the cost of Southampton City Council's geothermal project. Essex County Council's appointment of an Energy Curriculum Co-ordinator and LAMSAC's development of a computer-based energy information system for local authorities. The DOE has sponsored Tyne and Wear and South Yorkshire County Council's adoption of mechanical waste separation/reclamation plants. The former produces waste derived fuel to be burned in Newcastle City's Byker district heating scheme, while the latter reclaims glass and aluminium, to be recycled, with resultant national energy savings, as well as fuel pellets. This finance may be provided through an intermediary (eg. ETSU, BRE or BRESCU - special advisory units under contract to the departments to undertake research or manage various schemes, as in the case of ECDPS (see Table 3) or assist with authority applications for a similar scheme under the European community (see Table 4).

This sponsorship is constrained by its very nature -

"It is difficult with an inevitably limited R & D budget to give assistance to a borehole only 4 miles away [Eastleigh] if the technology is the same used at Southampton. If there is any novelty in relation to the Eastleigh project my department will be prepared to consider further representations that may be made" (HCD, 21 Dec 1981, col 609).

This illustrates both the necessity of projects to be innovative and the limited availability of finance. Thus, while encouraging this involvement with energy conservation, it also circumscribes it.

Legislation The specific Acts of Parliament affecting local authorities and energy conservation have been detailed in Section 2.2. Under the auspices of this legislation, where allowed, statutory instruments and orders can be brought into force without submission to parliament. The Energy Act (1976) and Energy Conservation Act (1981) provide a wide



**TABLE 3. LOCAL AUTHORITY PROJECTS SPONSORED UNDER ECDPS**

COUNCIL	PROJECT DESCRIPTION	SPONSOR
Essex	solid wall insulation	ETGU
Coventry	boiler baffles	ETSU
Portsmouth	office lighting	ETSU
S.L.C.	low energy houses as integrated systems	BRESCU
Grampian	remote monitoring & control in schools	ETSU
Salford	monitoring low energy dwellings	ETSU
Hereford & Worcester	remote monitoring of school boilers	ETSU
Staffordshire	remote monitoring of coal-fired school boilers	ETSU
Bradford	office lighting controls	ETSU
Ealing	aerial infra-red thermography	ETSU
Tewkesbury	external insulation	BRESCU
Manchester	insulation in new council housing	BRESCU
Gwent	lighting	ETSU
Harrow	rehabilitation: improved insulation & heating	BRESCU
Rushmoor	gas-driven heat pump	ETSU
Birmingham	rehabilitation	BRESCU
Islington	billing & control system in DH scheme	BRESCU
Essex	controlled ventilation & heat recovery	ETSU
Devon	heat recovery	ETSU
Wandsworth	gas heat pump in swimming pool	ETSU
Kingston upon Thames	remote monitoring & energy control in schools	ETSU

**TABLE 4. LOCAL AUTHORITY PROJECTS ACCEPTED FOR SPONSORSHIP BY THE BEC**

COUNCIL	PROJECT DESCRIPTION
Darlington	heat recovery at a recreation centre
Greater Manchester	fuel from waste
S.L.C.	low energy houses
Newcastle	district heating scheme using refuse derived fuel
Essex	computer monitoring program
Southampton	space heating
GLC	methane recovery

latitude to introduce statutory regulations for the purposes of energy conservation. The government's position, in keeping with its belief in individual free-choice and the functioning of the market mechanism, is to encourage energy conservation rather than superimpose it. The realisation that the market does not function perfectly has resulted in

- the setting of maximum temperature of non-domestic buildings
- the compulsory fuel consumption testing of new automobiles
- changes in the thermal standards of the Building Regulations
- the Home Insulation Scheme.

For local authorities, the statutory instruments arising from legislation can have implications beyond those related solely to energy conservation, engendering bureaucracy and anomalies, often to the prejudice of pursuing energy conservation.

Grants paid out by local authorities under the Home Insulation Scheme must meet with conditions shaped by the DOE. They are only permitted for dwellings where no loft insulation already exists regardless of whether it is less than the recommended standard or the building regulations. Eligible applicants cannot proceed with installation without the council's approval. Until 1981/82 a local authority's allocation could be exhausted by winter (the financial year begins in April), at which point they were not permitted to approve any more applications. This resulted in eligible applicants either having to endure the heating season without loft insulation, or forsake the grant. The DOE has rectified this situation by enabling local authorities to draw upon the next year's allocation (which could exacerbate the situation by exhausting that allocation even earlier in the year) or apply for DOE approval to increase its allocation by decreasing expenditure elsewhere in its H.I.P. To pay out grants knowingly to ineligible applicants or overspend its allocation could open the authority to court action.

Both heating and insulation standards come together in DES's Design Note 17 (1979 and 1981) which acquired statutory status in 1981 (SI 1981 No. 909). This represented the first time the statutory requirements in educational buildings had included energy conservation. While this status belies the word "recommendations" in Design Note 17's Introduction (1981) (although this is what they were in the document's first edition (1979)), for most educational buildings the energy conservation requirements amount to no more than recommendations. The consequence of this

regulation can be increased school running costs as the minimum heating standards were raised. Older school buildings have to comply with these heating standards regardless of heating system, type of building, its age, or the cost (the local authority actually pays the bill). The energy conservation standards only apply to new school buildings (SI 1981, No. 909, para. 25(2)), this proviso being included by the DES, on the grounds of cost. Energy, and money, could both be saved by applying the heating and insulation standards across the board.

The Homes Insulation Act (1978), while restricting the coverage and eligibility of grant-aided schemes to those determined by the DOE on behalf of the Secretary of State, has provided the schemes with a modicum of protection. The schemes remain a separate, prescribed expenditure allocation within the H.I.P. This does not protect it from reductions in funding, theoretically to the point of a nil allocation. However, it "continues to be a separate provision within the Housing Investment Program allocation because of the Home Insulation Act (1978)" (HCD 29th Feb. 1980, col. 800). This has prevented the allocation being subsumed within the Block grant, as was the public sector program allocation. Given the decline in local authority energy conservation programs after the commencement of block grants, the grants paid out under this scheme remain significant only because of the legal protection of the prescribed expenditure allocation.

Not all the various controls and influences are of equal weight, effect or implication, neither within identified categories (eg. different types of circulars) or between categories (statutory obligations vs recommendations). Those that are employed are not necessarily, nor automatically, determined by the policy itself. Levitt (1980; p. 160) notes that the controls and influences that are exercised are of interest because "the less this aspect of policy is left to chance the less likely there are to be unforeseen difficulties in implementation arising from this aspect". A corollary to this would be that the more central, or urgent, a policy is to the government's philosophy, the more likely it is to ensure implementation through the manipulation of controls and influences at its disposal. Energy conservation could hardly be said to have been the target of a concerted and co-ordinated emphasis by government or its departments.

## 2.4 Implications for Local Authority Involvement with Energy Conservation

A review of central-local relations by the CPRS (1977) highlighted 'real defects' in the relationship:

- central departments act, for the most part, in isolation to each other
- it is greatly confused by uncertainty
- central government had difficulties in envisioning local authorities in the whole, as corporate entities trying to deal with interrelated problems.

Each of these can be detected in the central-local relationship affecting energy conservation, with consequent implications for local authority involvement.

DEn, officially, is at the centre of the government's energy conservation policy, with its responsibility for formulating national policy and co-ordinating energy conservation activities between departments. However, the overall lack of co-ordination has been criticised by three different Select Committees (SCST, 1975; SCOE, 1982; SSEC (H.L.), 1983), and was an important instigating factor in the initiation of the Rayner review during autumn 1982 of central government's arrangements for energy conservation. A contributing factor to this lack of co-ordination is the autonomy of each department - DEn has no overriding right to direct other departments to undertake specific activities. This national situation can be extended to central-local relations. As was seen in Fig. 3, seven departments plus the Scottish and Welsh Office are involved with some aspect of local authority involvement with energy conservation. DEn has no direct control over the other departments, nor over local authorities. Its position is one of responsibility without power. The DOE, SO and WO, with their direct controls over local authority finance and other aspects of behaviour, do have a more influential voice, yet energy conservation is only a minor concern with them.

This distinction would be academic if the various departments were consistent in their approach and emphasis on energy conservation. Different departments, even sections within departments, have different priorities, and can issue conflicting advice. While the DOE was directing local authorities to reduce public expenditure in 1976, DEn and the SO were issuing ministerial letters encouraging local authorities to make use of

the Job Creation Program to insulate council houses. While the local authority would have incurred no labour cost, it still had to find the cost of the materials (of the 334 authorities eligible only 101 made use of the scheme during its 3-year existence and then only on a limited scale). DEn and DOE have disagreed over the thickness of loft insulation to be installed in dwellings - DEN's interest with cost-effective insulation (100mm) conflicted with that of the department funding the loft insulation grants (80mm).

Further confusion arises in determining departmental responsibility. The Control of Pollution Act (1974) and Local Government (Miscellaneous Provisions) Act (1976) require a local authority to obtain the Secretary of State's consent prior to generating electricity for sale to an area board, but does not indicate explicitly of which department. The then-Minister of State for Energy stated it was the Environment Secretary (HCD Standing Committee G, 20 Jan. 1983, c. 251). On writing to the DOE to ascertain the number of occasions that such consents had been granted the response was that these were matters for DEN (DOE, 1983b). The same questions were put to DEN, who did provide the information but only after obtaining the figures from the department responsible - the DOE (DEN, 1983a).

Despite the potential of energy conservation to be employed in achieving objectives in a range of local authority services, government exhortations have focussed only on in-house activities. "Local authority thrust in energy conservation must be aimed at reducing its own energy consumption" (L. Avon, 1983). A broader perspective would be more appropriate given the interaction of energy issues with local authority responsibilities and services. Though often ignored by central government, local authority influence and involvement extends far beyond their own consumption eg. through planning, housing, and education responsibilities.

Even at the level of the government's focus - energy consumption in local authority buildings - the government has erected what appear to be unnecessary obstacles for local authorities. They are eligible for the Energy Survey Scheme, whereby the cost of a 1-day energy survey of a building by a consultant (up to a set maximum) is paid for by DEN. Local authorities can act as consultants, but not for themselves. The result is generally, that local authorities are slow to take up the grants to pay external consultants as it would remove work from their own staff

(thus the identification of potential savings are being unduly delayed by limited manpower), and occasionally, that local authorities are acting as consultants for each other. Where the Energy Survey Scheme did not fulfil all the requirements of a local authority it employed a specialist firm to undertake extensive surveys in its 500 plus buildings, yet was ruled ineligible by DEN for any grant aid because the firm carrying out the surveys did not have a heating and ventilation engineer on its staff. The few local authorities that have used the Energy Survey scheme extensively will now remain the exception, as DEN has limited the scheme to 20 premises per organization.

The government's energy conservation strategy, based on realistic energy pricing, reinforced by exhortation and publicity, is very much a passive non-event. The onus is on the consumer, including local authorities, to respond to the price signals, thereby determining their own priority for energy conservation. While the government has enacted new legislation, imposed new standards, issued guidance and advice, and even provided finance, their significance is undoubtedly diminished by the lack of central government commitment. A general CPRS (1977, p. 5) observation on central government advice can be applied specifically to energy conservation: "It is not always clear how far local authorities are intended or expected to follow it or what will happen if they don't". This can be contrasted with the Conservative government's macro-economic policy.

Intrinsic to this policy, to which most other policies including energy conservation have been subordinated, is the reduction of public expenditure. Rather than relying on exhortation, persuasion or the market mechanism, the government has acquired new powers to facilitate implementing this strategy, manifesting as grant-related expenditure assessments, total volume of expenditure, grant penalties, housing project control and abolition of supplementary rate levies. The result is an attempt to exert control through a hierarchical system of government - i.e. policy emanating from the Prime Minister, Cabinet and Treasury, administered through the departments and implemented by local authorities, enabling active intervention by central government in local services to realise its goals. This may contrast with local authorities being allowed to 'determine their own priorities' but the trend is towards discretion only in the question of minor detail.

Given this emphasis on economic services and reducing public expenditure the government has failed local authorities.

"Would clear guidelines for financial evaluation and conservation laid down by the Department of Energy and the Treasury be of any assistance?

(Mr Atkinson, LACMEE) 'Yes - very much'

(Mr Stanfield-Smith, Hampshire County Council) 'Yes'" (SCOE, 1981, para 334)

This type of information has not been forthcoming. Instead the government resorts to 'local authorities are free to determine their own priorities'. This freedom might be a workable arrangement if the government was consistent in its commitment to energy conservation. With their financial resources being tightly constrained, local authorities are determining their own priorities - they are spending the money nominally allocated for energy conservation on more pressing needs. As has been noted:

"...it would certainly greatly aid those anxious to ensure that conservation gets every penny it deserves, for the details of the bids, the acceptance figures and the eventual out-turn expenditure to be made publicly available, authority by authority. In all conscience, how can the Government make a national conservation plan work, if it is dissipated at local level? Or is it more convenient to have Town Hall scapegoats to which to pass the buck on the failure of our conservation programme?" (Warren, 1982)

Further, the government has begun to mount a campaign against energy conservation investment, dismissing it as public expenditure in disguise -

"simply a proposal to reflate the economy with conservation thrown in to make it more respectable" (Conservative Party's Central Office, 1983)

Local authorities have witnessed other areas of their public expenditure that have fallen foul of central government's views (eg. transport subsidies and the budgets of the Metropolitan Counties in general) come under threat - the transport subsidies led to the enactment of the Transport Act (1983) while the Metropolitan Counties have been promised dissolution. With the development of the government's recent attitude towards energy conservation investment, do penalties await local authorities adopting large-scale energy conservation programs?

The CPRS (1977) cited three reasons for central intervention in local affairs

- the development of national policy
- guidance aimed at providing good examples and disseminating

good advice

= intervention is invited by elements within local government. Within Rhodes' description of central-local relations - "simultaneously rational, ambiguous and confused" (1981) - the CPRS's reasons all embody the rational aspect of the relationship. Yet, energy conservation has never been consistently pursued as a national policy. The government has not applied its experience - that it is necessary to spend money to save even greater amounts of money, and energy - that enabled its own PSA to achieve a 35% reduction in its fuel consumption between 1973 and 1978, and a further 12% saving since 1979, in the government estate. Calls from local authorities for more guidance on energy conservation have gone unheeded. From the evidence, the rational aspect of Rhodes' description, for energy conservation purposes, characterises central intervention in local affairs the least.

Even if central government's position was unambiguous, complete compliance by local authorities is not guaranteed. Not all local authorities took up their whole allocation under the public sector energy conservation program, when the money could only be spent for that purpose or forfeited. The powers acquired by the Conservative government in support of its economic intentions have not prevented some local authorities from resisting them to the point of acting illegally. Unless local authorities become entirely subservient to central dictates then discretion will remain and should do so in "a large measure" (CPRS, 1977). However the failure by both Labour and Conservative governments to espouse consistently any of the above reasons in their pursuit of energy conservation, or in their concern over local authority involvement, can only further contribute to the existing ambiguity and confusion.



### 3. LOCAL AUTHORITY INFLUENCE ON THE INSTITUTIONAL ENVIRONMENT

The emphasis so far, has been very much on the 'top-down' nature of the environment, the effects of policy, legislation, and controls and influences acting on local government. Though not reduced solely to a role of local administrators of central government decisions - discretion exists either by design, or as a result of the linkages being far from all embracing - local authorities have least control over this area. Yet, these linkages are not all one-way. Individually, local authorities can

1. lobby parliament to promote their own legislation, or with regards to proposed legislation. The GLC was acknowledged as one of the reasons the subject of local authorities was raised during the committee stage of the Energy Bill (1982), with the end result being the extension of some of its provisions to include local authorities (HCD, Standing Committee G, 20 Jan. 1983, col. 242).

2. utilize their working relationship with departmental regional offices. The DOE apportions HIP money on a regional basis, of which only 60% (in the last two years) has been allocated directly to individual local authorities. The remaining 40% allocation has been determined by the regional offices on the basis of local authority needs and activities (DOE, 1981 and 1982b).

3. submit evidence to parliamentary Select committees. The Energy Committee has taken local authority evidence, both written and oral, on CHP (GLC, Southwark and Newcastle) (SCOE, 1982b) on energy conservation in buildings (Hampshire) (SCOE, 1981), and on energy conservation (GLC and ILEA) (SCST, 1975). Similarly, the Scottish Affairs Committee has examined heating and insulation problems related to dampness in housing (Glasgow, Edinburgh and Aberdeen) (SCSA, 1983).

Other channels by which they can influence this environment are

- local authority associations
- energy manager groups
- code of practice
- working parties
- consultative councils
- innovations.

These can enable their concern to be focussed with increased effect,

rather than be dissipated by various individual approaches, possibly operating in different directions.

### 3.1.1 Local authority associations

These associations exist to provide forums for information and co-ordination of local government members (eg. ACC, AMA, ADC, and COSLA), of local government officers (eg. SLACE, SCALA, LACMEE), between local government and central government (eg. Consultative Council on Local Government Finance), on specific local government interests (SLASH) or on general services (LAMSAC). By representing more than an individual authority the various associations can act as pressure groups to lobby ministers, departments and parliament on behalf of their members.

This impact can occur through different channels:

- strength in numbers, reflecting the principle 'divided we fall'. This describes the political forums of elected representatives (the ACC, AMA, ADC, COSLA)
- professional respect, reflecting common "professional" qualifications, learning or membership (eg. SCALA or LACMEE). Their judgements will not be dismissed as readily as that of a lay person or concerned individual, by similarly qualified people in central government or industry.

While the associations do not speak with a unanimous voice, even within individual groups, and have been seen on occasions to be manipulated by central government as legitimating agents for controversial policies (eg. Consultative Council on Local Government Finance) Griffiths (1966) would not doubt their value -

"It is difficult to exaggerate their importance in influencing legislation, governmental policies and administration, and in acting as co-ordinators and channels of local authority opinion".

Central government finds it more convenient to use the associations for consultation on new measures than consult the 521 local councils individually - and does so frequently.

LAMSAC has a designated Energy Working Party which disseminates information on energy matters, especially energy management, to all local authorities. This has taken the form of several reports (LAMSAC 1977, 1979, 1981a, 1983), the publishing of survey data (in conjunction with SCALA)(LAMSAC 1981b, 1982) and an energy officer register (LAMSAC 1980), and provides an

advisory service for local authorities considering increased involvement with energy conservation. This interest and activity was responsible for their being awarded a contract by DEN to develop an interactive, computer-based energy management information system for local authorities. When completed, the system will provide local authorities with access to the experience of others; a service not previously available.

A major study of heating and energy conservation in public sector housing was carried out in Scotland by SLASH (1980). The results, which showed a deteriorating housing stock and a paucity of measures to improve conditions, have been employed to bring pressure on the Scottish Office. This play did not result in any diversion of government finance to rectify conditions, though the concern it engendered has been picked up by the Select Committee on Scottish Affairs who have taken the issue further. The SCSA have collected evidence from local authorities and their associations, tenants groups and central government prior to publishing a report (SCSA, 1983).

A European connection for local authorities and energy conservation exists in STCELA via its U.K. Energy Conservation Interest group. This group embraces local authority personnel and representatives of DEN and DOE, promoting the exchange of technology and innovation with regard to energy conservation. The publishing of 'Guidelines For A Positive Local Authority Energy Policy' (STCELA, 1980) was an attempt to fulfil an identified need - "although many local authorities in the U.K. were carrying out fairly extensive conservation measures, few had made energy policy statements". This need was accepted, at least in principle, by central government. DEN provided the finance and acted as publisher for the revised, 2nd edition of the guidelines (STCELA, 1982).

The majority of the other associations have indicated an interest in energy conservation issues - the ACC, AMA and ADC have all submitted memoranda to the SCST, and SCOE during their respective gatherings of evidence on energy conservation. A LACMEE representative actually presented oral evidence before the SCOE (1981), as well as a written submission. Further, all of the elected member associations have vested their responsibility for issuing advice pertaining to energy management with LAMSAC upon which they are all represented. Within themselves, their concern would appear more ad hoc - both the ADC and ACC have committees with wide remits that include energy conservation, but neither have a committee devoted specifically to energy conservation (ADC, 1983; ACC, 1983).

### 3.1.2 Energy manager groups

These groups are a forum whereby industry, commerce and local authorities can exchange and compare information and experience regarding energy management, technologies and techniques. Since the first group's inception in 1976 the idea has spread widely, with 74 such groups, including one solely composed of local authorities, throughout the country. The movement has been considered an outstanding success by central government nationally (Energy Manager, 1979) and compares favourably internationally (ACE, 1982). DEN's interest in these groups extends to providing

- financial assistance to cover their running expenses
- a representative in its R.E.C.O.
- assistance with the National Energy Managers Conference

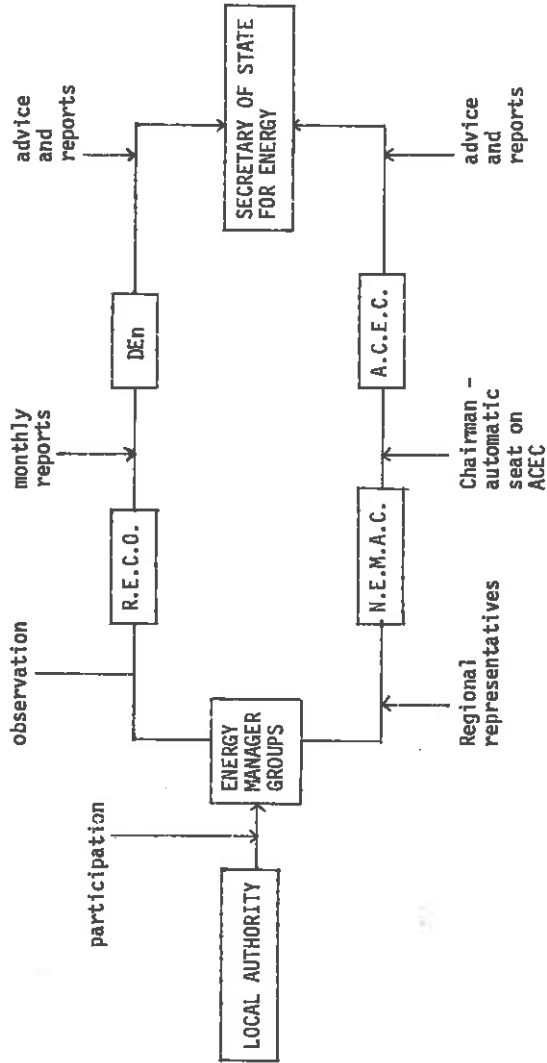
though it considers its role to lie with nurturing the groups rather than directing them.

Participation in energy manager groups offers local authorities two channels by which to influence the Energy Secretary (Fig. 5):

- the RECO (their job description includes their having a particular regard for local energy management groups) act as observers in these groups, and keep them up-to-date with DEN thinking and initiatives. They make monthly reports to DEN on the various groups' activities including recommendations for action and future measures. DEN can pass this information onto the minister.
- the National Energy Management Advisory Council, established in 1981, with its membership derived from regional representatives of energy management groups. Since its formation NEMAC has become actively involved in the annual conference, and its chairperson has been granted an automatic place on the Energy Secretary's own independent ACEC. There is nothing to exclude a representative of a local authority becoming the chairperson NEMAC; several are chairing their local groups already.

Recommendations emanating from these groups as a result of local authority initiatives, may carry a particular influence because of the inclusion of representatives from industry in them rather than coming direct from local authorities to DEN.

FIGURE 5 : Local Authority Influence Through Energy Manager Groups



### 3.1.3 Code of practice

The code of practice is a voluntary arrangement entered into by the nationalised fuel industries with the DHSS and local authority social service departments. The code includes provisions for

- consumers experiencing repayment difficulties
- the availability of easy payment schemes
- the installation of pre-payment meters
- conduct of the fuel industries on disconnection especially where those being disconnected fall within various hardship categories.

The intention is to reduce the number of disconnections, especially through misunderstanding or where there is evidence of hardship; lessen the impact of disconnection when it does occur, and to accelerate the reconnection process. While all of these have come to pass, a survey sponsored by the fuel industries (PSI, 1981) found 90% of all disconnections still fall into one or more of the hardship categories identified in the code. In response to this report the nationalised fuel industries and the government announced a number of modifications to the code to improve its effectiveness, though it remains contentious, particularly because of its voluntary nature.

Local authorities have also been reviewing the general issue of fuel poverty and the code of practice.

"We believe that local authorities have a clear responsibility to undertake their own examination of the provisions and their effectiveness" (L.B.A. et al, 1983)

The rising fuel prices of recent years has left their social services departments increasingly burdened with fuel hardship problems, and the discovery that there was very little they could do. In making a variety of recommendations, including a more vigorous approach to energy conservation by both local and central governments, and statutory backing for the Code of Practice, they expressed strong dissatisfaction with the government's limited response to the PSI report on the Code of Practice, and its position on fuel hardship generally.

A private member's bill to afford the Code of Practice statutory backing, including the role of the social services departments, was introduced to Parliament in January 1983, though was lost with Parliament's dissolution in May 1983 (House of Commons, 1983).

#### 3.1.4 Joint working parties

Central government and its departments, though responsible for formulating and administering policy, are usually far removed from the actual implementation of local services and the problems encountered. Local authorities can have too narrow a focus in pursuing policy or in attempting to overcome problems. Joint working parties can provide a forum whereby representatives of local authorities and central government can come together formally to examine matters that are of both common and serious interest.

Weight is added to such deliberations, in comparison to informal discussions covering similar ground, because government permission must be received for central departments to participate. This is tantamount to a recognition that the problem does exist. The outcome may be solely a distillation of good advice and practice, and a better understanding of the various participants' position, but recommendations may have consequences for future policy formulation.

Two joint working parties with ramifications for energy conservation have been concerned with the subjects:

- heating and energy conservation in public sector housing
- fuel hardship.

The former was initiated in order "to assist those concerned with public sector housing in making decisions concerning heating systems and levels of insulation, both in new and existing dwellings" (WPHE, 1977). Its deliberations were responsible for the Domestic Energy Notes 1 to 4 (WPHE 1977, 1978a, 1978b, 1979) and the basis of DOE circulars on

- Energy Conservation in Public Sector Housing (DOE circ. 23/78)
- Improvements to Electric Heating Systems in Public Sector Dwellings (DOE circ 66/78)

The two circulars referred local authorities back to the appropriate Domestic Energy Note for further guidance or clarification, and were issued during the period central government was making specific financial allocations to local authorities for energy conservation works.

The latter was established specifically as a result of action by several local authority associations. A report 'Fuel Bills and the Poor' prepared by the AMA (LBA et al, 1983) was followed by a meeting between the associations and ministers representing DEu, DOE, DHSS and the WO.

The outcome was an agreement that the DHSS would participate on a joint committee. Its many recommendations are still being studied by central governments.

### 3.1.5 Consultative councils

The responsibilities of the Electricity Consultative Councils, and their local authority statutory membership were set out in Section 2.2.1. Suggestions that local authorities are not taking full advantage of this representation ("towards the lower limit" if anything), were made in a local authority association report (LBA, 1983). This suggestion led to a brief survey of the electricity consultative councils regarding local authority-nominated representatives undertaken in February 1983. The results are set out in Table 5.

Local authority representation would appear to be towards the lower limit with 5 councils below the statutory minimum, and 12 of the 14 below 46%. This situation will have been abetted by central government's declared intention to remove this statutory representation. The local authority position is that "it is not worthwhile pursuing the revision of the quota", instead they recommend a more extensive use of existing representatives.

"With authorities, members on the fuel councils should be fully briefed by a nominated local authority officer within their authority" (LBA et al, 1983; para 3.7.1)

Faced with the removal of the statutory representation, this is not an unreasonable strategy. It is unlikely that no local authority nominee would be on these councils.

A resolution passed at the 1982 National Consumer Congress called on the consultative councils of the nationalised fuel industries to promote the efficient use of resources. Two electricity consultative councils have acted directly on this request - London (1983) and South Eastern (1983). The former had its origins in a joint LEB/LECC paper (1982) prepared for a seminar with local authority housing department representatives to explore ways to help them and their tenants use electricity efficiently. Both reports indicated deficiencies in the local authority involvement with energy conservation, with the latter report concluding



TABLE 5. LOCAL AUTHORITY NOMINEES ON THE ELECTRICITY CONSULTATIVE COUNCILS

Consultative Council	Membership (inc chairperson)	L.A. or L.A.A. nominees	%	Energy Conservation/ Local Authority related activities
South Wales	22	9	41	(1981/82) review of PSI report
Yorkshire	23	9	39	(1981/82) review of reports by PSI, and ECC & NCC, circulating summary of latter to MP's and local authorities, and meetings with local authorities
Midlands	25	10	40	(1981/82) review of PSI report
North Eastern	27	10	37	(1980/81) meeting with Social Services representatives re: Code of Practice
South Eastern	22	8	36	(1981/82) review of PSI report
				(1983) survey of energy conservation measures in electrically heated council housing
North West	25	12	48	(1981/82) review of PSI report
Southern	23	8	35	(1981/82) review of PSI report
South Western	24	11	46	(1981/82) review of PSI report
East Midlands	23	10	43	(1979/80) views on Code of Practice sent to P.U.S.S. (last report published)
Eastern	20	9	45	(1981/82) review of PSI report
London	18	8	44	(1982) joint LEB/LECC paper prepared for meeting with local authority housing representatives
				(1983) paper published calling for more vigorous conservation campaign by LEB
Merseyside and North Wales	19	11	58	(1981/82) review of PSI report
South of Scotland	28	13	46	(1981/82) review of PSI report
North of Scotland	29	10	34	

Table was compiled from information and annual reports provided by the consultative councils.

"There would appear still to be scope for the closer involvement of elected members and local authority officers in monitoring energy conservation schemes and participating in community energy projects" (South Eastern Electricity Consultative Council, 1983; p. 10)

The survey also illustrated the general interest, understandably, shown by the electricity consultative councils in the PSI report 'Fuel Debts and Hardship' (1981).

The National Gas Consumers Council has also acted upon the National Consumer Congress resolution with a report produced by its Energy Conservation Working Party (1983). Amongst other things it recommends

"better co-ordination of responsibility between central government departments and local authorities. The Energy Conservation division of the Department of Energy should be given a clear mandate to overcome the problems of diversification between different government departments and the inertia of many local authorities". (NGCC, 1983; p. 26)

### 3.1.6 Innovation

The responsibility of providing local services enables local authorities to influence the institutional environment through the adoption of innovatory schemes. While the impetus will have been provided within the more general energy debate, local authorities, unlike central government, have ready access to sample populations when initiating new projects (eg. the DES used two of Oxfordshire's Schools (DES, 1978) to provide empirical support for the energy conservation recommendations in Building Bulletin 55 (DES, 1977)). The scope for such initiatives is enhanced, for enterprising local authorities, by the lack of comprehensive directives on their activities.

Three local initiatives that have since been elevated to national status are:

- Cheshire's school energy competition which was sponsored during 1977/78 (Cheshire, 1977). This was picked up by DEN and opened to national competition the following year.
- Somerset and Avon counties' involvement with the first energy managers group during 1976. Energy manager groups are now established nationwide, and actively encouraged by DEN.
- Newcastle's Energy Advice Unit, with its assorted activities, in conjunction with Neighbourhood Energy Action. DEN has been encouraged by their success to provide national funding for neighbourhood energy projects.

Local authority participation in the ECDPS also enables them to take the initiative. Though the scheme is financed by DEN the projects funded are not canvassed by the support agencies (ETSU or BRESCU), but submitted by interested organizations. Successful projects are accepted after an assessment that includes their potential to be replicated elsewhere - originally it was £5 for every £1 invested by the government.

### 3.2 Limitations on Local Authority Influence

These influences enable local authority input into the institutional environment, though the extent of its impact remains to be seen. This will be obvious in a number of situations:

- where innovative schemes have been elevated to national programs by central government, thus providing encouragement, experience, and occasionally, finance for other local authorities.

- where reports and recommendations are absorbed into central government policy.

- where direct intervention by local authority associations or consultative councils can be attributed to the initiation of programs or changing legislation.

- where the community benefits through the effective working of the Code of Practice.

However, these represent only the most visible successes, and not the many limitations on the efficacy of their influence.

A major weakening of their influence occurs because, too often, the channels are not direct, but involve an intermediary, either for approval or implementation. The nature of the Code of Practice, and the workings of the consultative councils, joint working parties and energy manager groups are illustrative of the need for third party consensus. Innovative schemes may fall into this category (eg. the need for approval of the electricity boards and the Secretary of State for Energy for the generation of electricity for sale).

Local authorities may be increasingly burdened by fuel hardship cases, but there is little that they can do except provide advice and lobby for changes in the system. This is true even when infringements of the Code of Practice have occurred. While it has reduced indiscriminate disconnection, its voluntary status works against it being more effective.

Yet, where statutory backing does exist, this does not guarantee that a group or its participation will be any more efficacious. Any action promoted by the consultative councils, to be effective, requires the acceptance of their conclusions, and being acted upon, by the area boards, Electricity Council or the Secretary of State. In the case of the latter the minister must then require the area board or Electricity Council to act accordingly.

The recommendations of the local authority associations or joint

working parties may be no more than pious hopes without the availability of finance to undersee their implementation. The DOE circular (66/78) on improving electric heating systems, and referring to recommendations in Domestic Energy Note 3 (WPHE, 1978b), while recognising that

"some housing authorities will with to undertake urgently measures to improve the heating performance of those [electric] systems which have given rise to such problems"

went on to state that the

"costs of works of a remedial nature ... will be chargeable to an authority's Block 1 allocation ... and will have to be found within existing allocations" (emphasis added)

Although 18 local authorities applied for financial assistance for the removal of electric heating systems in 2900 dwellings, following DOE circular 66/78 (1978) none was forthcoming from central government (HCD, 4.7.79, col. 636). For local authorities to undertake urgent action (that central government accepted, and was at least partially responsible for advocating) to rectify a situation that central government both implicitly (through the housing cost yardstick and the Parker-Morris Standards), and explicitly (through encouraging the adoption of system-built housing) sanctioned, it would be at the expense of their general housing renovation program.

Finance can circumscribe the scope of central government participation further. The then

"Parliamentary Under Secretary of State of the DHSS subsequently agreed that her officials should join the working groups on the understanding that they could not enter into detailed discussions of options that would require increased resources" (LBA et al, 1983; para 1.1.2).

Despite the many valuable recommendations to arise from the two joint working parties those emanating from the former have not been implemented to their potential because of the unavailability of finance, and with the latter, any recommendations involving increased expenditure have been disowned in advance by central government, though they are now studying the report.

Financial arrangements could threaten the existence of the most concerned local authority group with energy conservation - LAMSAC. Although independent of central government, 50% of its funding comes from them, and the government has declared its intention to withdraw this money. Eith local authorities will meet the full share of LAMSAC's finance, or it will have to cut back dramatically on its work or shut down completely. The latter option would put the development of the information system at risk.

Local authority associations have also had negative implications for energy conservation. Investment campaigns during periods of tight

expenditure control are more likely to survive, given evidence of the benefits accruing from them. During the financial years 1978-82 local education authorities received allocations for energy conservation works in educational buildings.

"As regards the evaluation of measures stemming from the special programme I am afraid I cannot be of very much help. Annual monitoring of the expenditure was envisaged but was not pursued in a detailed form because of objections by the local authority associations on the grounds of the time and effort involved" (Rhodes Boyson, 1983).

With the disappearance of the special allocation, the local authority associations cannot produce evidence of savings accruing from this program as a justification for their reinstatement. Central government remains adamant in its refusal to do so.

The potential influence of local authorities on this institutional environment cannot be great because of the very nature of the channels. Local authorities are only one of several participants in each of the Code of Practice, the energy manager groups, the consultative councils and the joint working parties, and not necessarily the predominant one. Except for the local authority associations, these channels were designed for purposes other than those specific to local authorities, and for the most, the pursuit of energy conservation (eg. the consultative councils are to represent the views of all consumers, not just local authorities, despite their statutory representation on the council, and provide a watchdog service over all the industry's activities). Innovation is limited in itself, not all will be successful, and if so, will not necessarily meet individual circumstances not be adopted on a national scale. Within the local authority associations, the one channel designed to provide local authorities with a strong voice, energy conservation is only one of many concerns, and a minor one at that. Given the requirements for third-party cooperation, or the availability of finance, the impact of local authorities will be dependent upon the perceived need, urgency and commitment to energy conservation. The descriptions 'need', 'urgency' and 'commitment' are not those generally associated with energy conservation's status in the U.K.

#### 4. CONCLUDING REMARKS

Local authorities are involved with energy conservation. This involvement is encouraged by central government's position that energy conservation is one of three central planks in its overall energy strategy, the lack of legislation preventing local authority involvement, the lack of central dictates discouraging involvement, and the existence of channels enabling local authority influence on the institutional environment. Unlike the signals emanating from central government on public expenditure, local authorities have been repeatedly told they are free to decide their own priorities with regard to energy conservation.

Yet this freedom is both illusory and a deterrent, reinforced by the institutional environment. The illusion is created by the double-sided nature of the encouragements stated above -

- energy conservation is a weak third plank in the national strategy after nuclear energy and coal
- the lack of legislation prohibiting energy conservation is matched by the lack of specific legislation containing positive powers for local authorities to undertake measures
- central dictates that are concerned with energy conservation topics are far from encouraging, often indicating that resources must be found within existing programs, which may be in the process of being cut back
- the channels permitting local authority influence were not designed for the purpose, and consequently are inadequate.

This is compounded by the failure to designate a local authority role with energy conservation, either in the legislation, or through central guidance, positive incentives, finance or direct influence. The institutional environment can actually deter local authorities by denying them the information necessary to determine their priorities, both in relation to national policy and objectives, and in evaluating local factors. Local authority freedom to determine its own priorities is subsumed within the wake of central government's continuing drive to reduce public expenditure and lack of commitment to energy conservation.

While local authorities pursue energy conservation, to a greater or lesser degree, its potential will go unrealised without a perceived increased commitment in central government intentions. This would encompass increased allocation of resources rather than cutting back on allocations and programs, removing unnecessary legislative obstacles to

local authority activities and the issuing of criterion relevant to be considered when determining the priority of energy conservation. The institutional environment, as it is presently constituted, operates on local authorities to such a degree that for many, energy conservation is unlikely to rise above a very marginal concern at best.

APPENDIX A  
ADVICE ON ENERGY CONSERVATION ISSUED TO LOCAL AUTHORITIES BY CENTRAL GOVERNMENT

CIRCULARS	TITLE	STATUS	BRIEF DESCRIPTION OF CONTENTS
<u>REFERENCE</u>			
<u>Dept. of Energy</u>			
1/75	Energy Conservation (Scotland)	advisory	provides justification and advice on practical energy conservation measures
1/76	Energy Conservation (Scotland)	advisory	reviews advice of 1/75 to suit conditions of Scottish local authorities
<u>Dept. of Environment</u>			
160/74	Housing Act 1974: Home Renovation Grants	statutory	para. 7, appendix - directs local authorities not to pay out improvement grants in respect of works including insulation
13/76	Housing Act 1974: Home Renovation Grants	statutory	reinstated 160/74's position regarding insulation work
38/77	Housing Act 1974: Home Renovation Grants	statutory	grants including insulation works could be paid to elderly and disabled, but general non-payment principle still applied
23/78	Energy Conservation- Public Sector Program	statutory	announced commencement and general conditions of 10-year public sector program and its annual target of 200,000 dwellings
56/78	Energy Conservation Measures	advisory	amplified and up-dated advice in DEn 1/75 and 1/76 and announced intention to monitor local authority progress
66/78	Homes Insulation Act 1976: Home Insulation Scheme 1975	statutory	announced the commencement of the first home insulation grants and the conditions under which the grants could be paid out - 66% up to £50 maximum. Permission to pay out grants to elderly and disabled under 38/77 was withdrawn, as they were covered by this scheme
66/78	Improvements to Electric Heating Systems in Public Sector Dwellings	advisory	refers local authorities to Domestic Energy Note 3 for guidance on measures to improve heating standards and reducing running costs in electrically heated council dwellings
4/79	Memorandum on Structure and Local Plans	advisory	para 2.55- local authorities should consult DEn on matters affecting patterns of energy consumption
19/79	Thermal Insulation (Industrial Buildings) Act 1957	statutory	announced new regulations coming into effect applying thermal regulations to industrial buildings
27/79	Homes Insulation Act 1978: Home Insulation Scheme 1978, amendment (No.1) 1979	statutory	extended insulation grants to council tenants



3/80	Homes Insulation Act 1978: Home Insulation Scheme 1978 Amendment (No.1) 1980	statutory	added a product to eligible loft insulation materials
12/80	Homes Insulation Act 1978 Home Insulation Scheme 1980	statutory	higher grant rate introduced for the elderly: 90% of £90 maximum; general grant limit increased to £65
21/80	Housing Acts 1974 & 1980: Improvements To Older Housing	statutory	appendix A, U-value of 0.4 W/ C included in standards required for renovation grants
23/80	Homes Insulation Act 1978: Home Insulation Scheme, Amendment (No.1) 1980	statutory	increased administrative fees and added 13 products to those eligible
21/81	Homes Insulation Act 1978: Home Insulation Scheme 1980, Amendment (No.1) 1981: Housing Act 1980- Compulsory Improvements	statutory	loft insulation included in 'full standard' for purposes of improvement grants
33/81	Homes Insulation Act 1978: Home Insulation Scheme 1980, Amendment (No.2) 1981	statutory	added 2 new products to those eligible
34/81	Building Regulations	statutory	announced new thermal standards for new domestic dwellings
37/81	Homes Insulation Act 1978: Home Insulation Scheme 1981	statutory	extended higher grant to include severely disabled on low income
11/82	Homes Insulation Act 1978: Home Insulation Scheme 1982: Housing Acts 1974 & 1980- Compulsory Improvements	statutory	increased required insulation thickness from 80mm to 100mm; grant maxima raised to £95 and £89 respectively
30/82	Homes Insulation Act 1978: Home Insulation Scheme 1982, Amendment (No.1) 1982	statutory	extended severely disabled category
12/83	Homes Insulation Act 1978: Home Insulation Scheme 1983	statutory	increased administrative fees, abd clarified position on disabled dependents
<u>Dept. of Transport</u>			
3/77	White Paper: Transport Policy	advisory	announced publication of Cmd.6836 which included statements on energy conservation
1/79	Ways of Helping Cyclists In Built-up Areas	advisory	refers local authorities to Local Transport Note 1/78

OTHER ADVICE

Dept. of Education and Science

Building Bulletin 55 - Energy Conservation in Educational Buildings

- details energy conservation measures that could be undertaken in schools

Design Note 16 - Energy Conservation in Two Oxfordshire Schools

- empirical assessment of information published in Building Bulletin 55

Design Note 17 - Guidelines for Environmental and Fuel Conservation in Educational Buildings

- recommendations for design standards, including energy conservation, in educational buildings. These recommendations were revised in 1981 they were given statutory status

Housing Development Directorate (DOE)

Housing Development Notes -

IV Thermal Insulation in Housing 1. The Case For Better Insulation (1973)

2. Relationship Between Construction and Heating Costs (1974)

An Exploratory Project On Heating for the Elderly (1978)



## BIBLIOGRAPHY

- Association for the Conservation of Energy (1981), Domestic Energy Conservation and the U.K. Economy, report prepared by Economists Advisory Group, A.C.E., London
- Association for the Conservation of Energy (1982), Comparison of the Energy Conservation Programmes of the UK and Other EEC Communities, A.C.E., London
- Association for the Conservation of Energy (1983), Employment Generation Potential of a Major Conservation Programme, report prepared by Environmental Resources Ltd., A.C.E., London
- Association of County Councils (1983) personal communication
- Association of District Councils (1983) personal communication
- Aitkens, W.S. (1982) CHP/DH Feasibility Programme: Stage 1 Report and Recommendations, DEN, London
- Lord Avon (1983) Speech to Northern Consortium of Housing Authorities Seminar, April 27, 1983, Darlington, Co. Durham
- Berthoud, R. (1981) Fuel Debts and Hardship, PSI Report 601, PSI, London
- Birley, Tom (1982) Planning and Energy Use: Towards Energy Efficiency in the Built Environment, paper presented to Town and Country Planning School, printed in The Planner (1983) Feb.
- Birmingham City Council (1980) Report on Phase 1 of the E.I.K. Project, Housing Dept., Birmingham C.C.
- Boyson, Dr. R. (1983) personal communication
- Bramley, G. and Stewart, M. (1982) Implementing Public Expenditure Cuts, in Barret, S. and Fudge, C., Policy and Action, Methuen, London
- Brand, J. (ed) (1982) Energy and Planning: Report of a Conference held at the U. of Strathclyde, Dec. 1980, U. of Strathclyde, Glasgow
- British Gas (1982) Central Heating Systems to Individual Heating, memo to the SCOE, Appendix 10, 3rd Report on Combined Heat and Power, Session 1982/83, HC314-ii, HMSO, London
- Byrne, T. (1981) Local Government in Britain, Penguin, Harmondsworth
- Central Policy Review Staff (1974) Energy Conservation: A Study, HMSO, London
- Cheshire C.C., (1978) Energy Management Competition, Cheshire C.C.
- Cheshire C.C., (1981) Energy and Cheshire: The Way Ahead, Planning Dept, Cheshire

- Cmd.3438 (1967) Fuel Policy, HMSO, London
- Cmd.6575 (1976) Energy Conservation, HMSO, London
- Cmd.6836 (1977) Transport Policy, HMSO, London
- Cmd.7101 (1978) Energy Policy: A Consultative Document, HMSO, London
- Cmd.8179 (1981) Future of the Building Regulations, HMSO, London
- Commission of the European Community (1981) The Community's Energy R&D Programme: Energy Conservation, Eur7389En, CEC, Brussels
- Control of Pollution Act (1974), HMSO, London
- Cook, P. and Surrey, A., (1977) Energy Policy: Strategies for Uncertainty, Martin Robertson, London
- Cooper, Ian (1981), Energy Conservation in Britain: Technical Problem or Social Issue, Martin Centre for Architectural and Urban Studies, U.of Cambridge, Cambridge
- C.P.R.E. (1974) Energy Conservation, appendix 28 in SCST (1975) First Report on Energy Conservation, Session 1974/75, HMSO, London
- DEn. (1982a) personal communication
- DEn. (1982b) personal communication
- DEn. (1983a) personal communication
- DEn. (1983b) European Economic Community Support for Demonstration Projects: Notes for Applicants, DEn, London
- DEn. Press Release (1981) No.52, DEn, London
- DEn. Press Release (1983) No.57, DEn, London
- DES (1977) Energy Conservation in Educational Buildings, Building Bulletin 55, DES, London
- DES (1978) Energy Conservation in Two Oxford Schools, Design Note 16, DES, London
- DES (1979) Guidelines for Environmental Design and Fuel Conservation in Educational Buildings, Design Note 17, first edition, DES, London
- DES (1981) Guidelines for Environmental Design and Fuel Conservation in Educational Buildings, Design Note 17, second edition, DES, London
- Dible, J. and Hickey, P. (1981) An Energy Plan for Strathclyde Region: Feasibility Study Report, unpublished SDD report, SDD, Edinburgh
- DOE (1981a) Future of Building Control in England and Wales, Cmd. 8179, MSO, London

DOE (1981b) HIP Letter-1982/83, DOE, London

DOE (1982a) The Future of the Inner London Building Control System, DOE, London

DOE (1982b) HIP Letter-1983/84, DOE, London

DOE (1983a) personal communication

DOE (1983b) personal communication

DOE Press Release (1981), No.336, DOE, London

DoT (1982) Nationalised Industry Consumer Councils: A Strategy for Reform, DoT, London

DTP (1981) Cycling: A Consultation Paper, DTP, London

DTP (1983) Cycling Policy: A Statement by the Secretary of State for Transport, DTP, London

Electricity Act (1947), HMSO, London

Electricity Consumers' Council (1980) Heating and Insulation Decisions in New Homes: An Exploratory Study, ECC, London

Electricity Consumers' Council and National Consumers Council (1981) Improving Insulation in Existing Dwellings, ECC and NCC, London

Electricity (Scotland) Act (1979), HMSO, London

Energy Act (1983), HMSO, London

Everett, R. (1980) Passive Solar In Milton Keynes, ERG031, Energy Research Group, Open University, Milton Keynes

Gas Act (1948), HMSO, London

Gas Act (1972), HMSO, London

Gibbons, J. and Chandler, W. (1981) The Conservation Revolution, Plenum Press, N.Y.

GLC (1978) Energy policy and London, GLC, London

GLC (1981) Evidence to the Select Committee on Energy - Energy Conservation, 9\* Report (no.2) of the Policy and Resources Committee, GLC, London

GLC (1983) An Alternative Energy Strategy for London, Industry and Employment Committee, IEC 663, GLC, London

Green, D. (1980) Energy: A Programme for the Inner City, NCVC, London

Griffith, J.A.G. (1966) Central departments and Local Authorities, Allen and Unwin, London

Guardian, The (1983) Tories Knock Down Energy Saving Plan, 1.6.83.

Hall, D. (1978) Energy Options and Planning, paper presented to the T CPA Summer School 1978, printed The Planner, Feb., 1979

Hall, D. (1979) The Way Ahead - Practical Proposals for Action by Planners, in CPRE (1979) Energy Policy and Local Planning, CPRE, London

HCD, 13.10.76., col.133(WA)

HCD, 18.5.77., col.150(WA)

HCD, 29.2.79., col.800(WA)

HCD, 4.7.79., col.636(WA)

HCD, 4.12.80., col.336(WA)

HCD, 12.11.81., col.672

HCD, 15.2.82., col.141(WA)

HCD, 24.5.82., col.249(WA)

HCD, 21.12.82., col.609(WA)

HCD, 24.3.83., col.1019

HCD, Standing Committee 'G', 20.1.83.

Health and Safety at Work Act (1974), HMSO, London

Hickey, P. (1982) personal communication

Hillman, M. and Whalley, A. (1983) Energy and Personal Travel: Obstacles to Conservation, PSI report no.611, PSI, London

Homes Insulation Act (1978), HMSO, London

House of Commons (1982) Energy Bill, Bill 11, HMSO, London

House of Commons (1983) People's Right to Fuel Bill, Bill 66, HMSO, London

Housing Act (1974), HMSO, London

Housing Act (1980), HMSO, London

Hunt, V.D. (1982) Handbook of Conservation and Solar Energy: Trends and Perspectives, Van Nostrand Reinhold, N.Y.

Hutchinson, D. (1981) Local Authorities and Energy Planning, paper presented at Energy Costs and Conservation seminar, London 1981

Ince, M. (1980) Energy Saving Measures for Municipal and Other Office Buildings, S.I.C. Energy Group, London

Industry Act (1972), HMSO, London

Inner Urban Areas Act (1978), HMSO, London

Joesbury, M. (1983) A Description of Research Development and Method in Evaluating Local Authority Energy Conservation Publicity Campaigns, in B. Stafford (ed), Consumers, Buildings and Energy: Proceedings of a Conference, CURS, U. of Birmingham, Birmingham

John, B. (1983) personal communication

LAMSAC (1977) Economic Energy Consumption, LAMSAC, London

LAMSAC (1979) Energy Savings Schemes in Local Authorities, LAMSAC, London

LAMSAC (1980) Register of Energy Conservation Officers and Schemes, LAMSAC, London

LAMSAC (1981a) Energy Conservation - Team Awards 1981, LAMSAC, London

LAMSAC (1981b) SCALA/LAMSAC Energy Management Survey for 1979/80, LAMSAC, London

LAMSAC (1982) SCALA/LAMSAC Energy Management Survey for 1980/81, LAMSAC, London

LAMSAC (1983) A Review of Energy Management in British Local Authorities, LAMSAC, London

Levermore, G. (1982), 'Local Authorities Show the Way to save Energy', Municipal Journal, 6.8.82, vol.90, no.31.

Levitt, R. (1980) Implementing Public Policy, Croom Helm, London

Local Government Act (1972), HMSO, London

Local Government (Scotland) Act (1973), HMSO, London

Local Government (Miscellaneous Provisions) Act (1976), HMSO, London

Local Government, Planning and Land Act (1980), HMSO, London

London Boroughs Association et al. (1983) Fuel Hardship: Towards a Social Policy, LBA, London

London Electricity Board and London Electricity Consultative Council (1982) Using Electricity Wisely, LEB/LECC, London

London Electricity Consultative Council (1983) Energy Conservation: Selling the Wiser Use of Electricity, LECC, London

Lothian Energy Group (1982) personal communication

Lucas, N. (1978) Local Energy Centres, Applied Science Publishers, London



- Mellor, D. (1981) speech reported in Energy Management, 'Seeing for Himself', Nov.1981,p.3.
- McAuslan, P. (1981) 'Local Government and Resource Allocation in England: Changing Ideology, 'nchanging Law',Urban Law and Policy,no.4,1981
- Milton Keynes Development Corporation (1982) Energy Projects in Milton Keynes, Energy Consultative Unit, MKDC, Milton Keynes
- NALGO (1982) Energy for the Future, NALGO, London
- National Consumer Council (1980) Paying for Loft Insulation: A Review of the Home Insulation Scheme, NCC, London
- National Energy Efficiency Forum (1983) A Pilot Energy Conservation Area: Blueprint for Action, Consumers' Association, London
- National Gas Consumers' Council (1983) Report of the Energy Conservation Working Group, NGCC, London
- Newcastle City Council (1979) Combined Heat and Power/District Heating - A Local Authority Perspective, Planning Dept., Newcastle City Council
- Newcastle City Council (1980) Energy: Newcastle Tackles the Energy Problem, Newcastle City Council
- Newcastle City Council (1982) Energy Efficiency: An Action Plan for the Domestic Sector, Newcastle City Council
- Newcastle/Gateshead Inner City Partnership (1982) Energy Conservation Initiatives, Newcastle/Gateshead Inner City Partnership
- Olivier, D., Miall, H., Nectoux,F., Opperman,M. (1983) Energy Efficient Futures: The Solar Option, Earth Resources Research, London
- Owens, G. (1983) personal communication
- Owens, S. (1978) The Energy Implications of Alternative Rural Development Patterns, paper presented to 1st International Conference on Energy and Community Development, Athens, July 1978
- Owens, S. (1979) 'Energy and Settlement Patterns', Built Environment,Vol.5, No.
- Owens, S. (1981) 'Energy: Why Planners Must Be Involved',International J. Of Environmental Studies, Vol.16, 1981
- Planning Exchange (1960) Energy and Planning, Occasional Paper No.8, Planning Exchange, Edinburgh
- Powell, E. (1976) Speech to 1st National Energy Conference, Energy Paper 13, DEn, HMSO, London
- PSI and RIPA (1982) Institutions and Energy Conservation: Proceedings of a Conference, RIPA, London

- Raine, J.W. (1980) 'Energy and its Local Implications', Town Planning Review, vol.51, no.4, 1980
- Rayner Scrutiny (1982), How The Government Handles Energy Conservation, DEN., London
- Rhodes, R.A.W. (1981) Control and Power in Central-Local Relations, SSRC/Gower, London
- Royal Institute of Public Administration (1981) Facing the Energy Future: Does Britain Need New Energy Institutions, RIPA, London
- Savage-Jones, Peter (1982) Local Authorities and Energy Conservation, South London Energy and Conservation Group, London
- Scottish Development Directorate (1981) Structure Planning, P.A.N.27, SDE, Edinburgh
- Scottish Development Directorate (1981) Local Planning, P.A.N.28, SDD, Edinburgh
- Scottish Local Authority Special housing Group (1981) Heating Policies and Energy Conservation, SLASH, Edinburgh
- Science and Technology Act (1965), HMSO, London
- Select Committee on Energy (1981) Minutes of Evidence of the Society of Local Government Chief Mechanical and Electrical Engineers and Hampshire County Council, Session 1980/81, HC352-iv, HMSO, London
- Select Committee On Energy (1982b) Minutes of Evidence: Combined Heat and Power -GLC, Tyneside Local Authorities and Southwark LBC, Session 1981/82, HC60-v, HMSO, London
- Select Committee on Energy (1982a), 5th Report on Energy Conservation in Buildings, HC 401 (1981/1982), HMSO, London
- Select Committee on Energy (1983), Third Report on Combined Heat and Power, Session 1982/83, HC314, HMSO, London
- Select Committee on European Communities (House Of Lords) (1983) Rational Use of Energy in Industry, Session 1982/83, HL83, HMSO, London
- Select Committee on Science and Technology (1975), First Report on Energy Conservation, Session 1974/75, HMSO, London
- Select Committee on Scottish Affairs (1983) Dampness in Housing: Minutes of Evidence, Session 1982/83, HC207, HMSO, London
- Sheldrick, Bill (1983), Energy Conservation as a UK Government Policy ( up to mid-1982), WP354, School of Geography, University of Leeds
- Socialist Environment and Resources Association (1981) Towards An Energy Policy For Greater London, SERA, London

- South Eastern Electricity Consultative Council (1983) Energy Conservation and Electric Heating, SEEC, Maidstone, Kent
- South London Consortium (1975) Energy Conservation Working Party Report, SLC, London
- Southwark LBC (1981) CHP in the London Borough of Southwark, Housing Dept, Southwark LBC.
- Stafford, B.(ed) (1983) Consumers, Buildings and Energy: Proceedings of a Conference on the Social Research on the Use of Energy in Buildings, Conference and Seminar Papers 7, CURS, U. of Birmingham
- STCELA (1980) Guidelines for a Positive Local Authority Energy Policy, STCELA, London
- STCELA (1982) Guidelines for a Positive Local Authority Energy Policy, second edition, DEN, London
- Stanyer, J. (1976) Understanding Local Government, Fontana, London
- Statutory Instrument (1981) The Education (School Premises) Regulations, No. 909, HMSO, London
- Street, E. (1982) 'Energy Considerations in Local Planning - A Case Study of the Surrey Docks', Town Planning Review, vol.53, no.4, 1982
- Swain, C.P. (1976) Legislation and Energy Conservation, in A.F.C. Sherratt (ed) (1976) Energy Conservation and Energy Management in Buildings, Applied Science, London
- Town and Country Planning Act (1971), HMSO, London
- Transport Act (1968), HMSO, London
- Transport (London) Act (1969), HMSO, London
- Transport Act (1983), HMSO, London
- Von Bulow, H. (1982) Denmark, in PSI and RIPA (1982) Institutions and Energy Conservation, RIPA, London
- Warren, A. (1983) 'Over To You Councillor', Energy Manager, vol.5, no.9
- Working Party on Heating and Energy Conservation (1977) Selection Criteria for Electric Space and Water Heating in New Dwellings, DEN 1, DOE, London
- Working Party on Heating and Energy Conservation (1978a) Condensation in Domestic Pitched Roof Spaces, DEN 2, DOE, London
- Working Party on Heating and Energy Conservation (1978b) Remedial Work for Existing Electrically Heated Dwellings, DEN 3, DOE, London
- Working Party on Heating and Energy Conservation (1979) Condensation and Mould Growth, DEN 4, DOE, London.