

# COMMISSION OF THE EUROPEAN COMMUNITIES

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## MEMBER STATES' ENERGY SAVING PROGRAMMES : SITUATION MAY 1980

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**Member States' Energy Saving Programmes : Situation May 1980**

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Member States' Energy Saving Programmes : Situation May 1980

A. Commentary

1. On 9 June 1980, the Council of Ministers adopted a resolution concerning "new lines of action by the Community in the field of energy saving".

2. Paragraph 2 of that resolution reads as follows:

(The Council) "agrees that Member States should, where this proves necessary, adapt their energy saving programmes so that by the end of 1980 each Member State has an energy saving programme covering all the main sectors of energy use and an appropriate energy pricing policy. In order to produce comparable effects, these programmes should be based on energy pricing guidelines and measures recommended in the basic programme set out in Annex to this Resolution. They must, however, be adapted to the specific priorities and conditions in the Member States."

3. In this document, a detailed comparison is made between the energy pricing guidelines and recommended measures annexed to the resolution, and the energy-saving programmes adopted by Member States as of 13 May 1980. Not every measure adopted by Member States is listed because the comparison is limited to the basic energy-saving programme described in that annex.

4. A table is also given showing best estimates of the public sector budgets for energy saving in 1978, 1979 and 1980. Every effort has been made to give accurate figures, but some inaccuracies may remain because such expenditures are spread across many departments of government, and between central, regional and local government, and in no Member State does any official unified estimate exist. Clearly, there is a need to prepare and publish programme budgets similar to those attempted in this document, in every Member State of the Community.

5. Finally, a comparison is made of the principal elements of some of the larger incentive schemes for energy saving in the home. With the exception of France, it is known that all these schemes are under active review, and important changes will probably be proposed.

2.

6. This document, which is descriptive in character, will be followed by an analytical review of Member States' programmes to be prepared early in 1981, together with proposals for such further action as may seem appropriate at a national and at a Community level.

**COUNCIL RESOLUTION**

of 9 June 1980

**concerning new lines of action by the Community in the field of energy saving**

**THE COUNCIL OF THE EUROPEAN COMMUNITIES,**

Having taken note of the communications of 21 June 1979 from the Commission entitled 'Third Report on the Community's programme for energy saving' and 'New lines of action by the European Community in the field of energy saving',

Having taken note of the opinion of the European Parliament ('),

Having taken note of the opinion of the Economic and Social Committee ('),

Having regard to the Council resolutions of 17 December 1974 concerning, on the one hand, Community energy policy objectives for 1985 ('') and, on the other hand, a Community action programme for the rational use of energy ('),

Having regard to the conclusions reached by the European Council in July 1978 and March 1979, which reaffirmed and enlarged the scope of the objectives for the rational use of energy for 1985,

Whereas it is necessary to determine objectives for 1990 for the Community energy-saving programme;

Whereas the Member States and the Community as a whole have, in general, made good progress towards achieving the objectives set for 1985;

Whereas, however, all the Member States must contribute to the achievement of the Community

objectives by the adoption of comparable energy-saving programmes, with due regard for the circumstances peculiar to each Member State;

Whereas coordination of the programmes of the Member States and, where necessary, of specific actions at Community level can contribute to better results, in conformity with the Treaties,

1. *approves the objective of progressively reducing the average ratio for the whole of the Community between the rate of growth in gross primary-energy consumption and the rate of growth in the gross domestic product to 0.7 or less by 1990;*
2. *agrees that Member States should, where this proves necessary, adapt their energy-saving programmes so that by the end of 1980 each Member State has an energy-saving programme covering all the main sectors of energy use and an appropriate energy-pricing policy. In order to produce comparable effects, these programmes should be based on energy-pricing guidelines and measures recommended in the basic programme set out in the Annex. They must, however, be adapted to the specific priorities and conditions in the Member States;*
3. *agrees that work must be speeded up, particularly in international organizations, on the technical specifications of methods for measuring energy consumption and on performance standards, especially those relating to heat generators and domestic appliances;*
4. *invites the Commission, on the basis of the information provided by the Member States, to keep it abreast of progress made with national energy-saving programmes and calls upon the Commission to report to it on progress made towards attaining Community energy-saving targets.*

(') OJ No C 117, 12.5.1980, p. 66.

(\*\*) OJ No C 113, 7.5.1980, p. 1.

(') OJ No C 153, 9.7.1975, p. 2.

(\*\*) OJ No C 153, 9.7.1975, p. 5.

**ANNEX****GUIDELINES FOR A BASIC ENERGY-SAVING PROGRAMME RECOMMENDED TO  
EVERY MEMBER STATE****A. ENERGY PRICING**

Energy pricing should be based on the following principles:

- consumer prices should reflect representative conditions on the world market, taking account of longer-term trends;
- one of the factors determining consumer prices should be the cost of replacing and developing energy resources;
- energy prices on the market should be characterized by the greatest possible degree of transparency.

Publicity about energy prices and the cost to the consumer of energy used by appliances and installations should be as widespread as possible.

**B. MEASURES TO ENCOURAGE THE RATIONAL USE OF ENERGY**

The following measures are recommended:

**1. Energy saving in the home**

- a substantial upward revision of compulsory minimum performance requirements for new housing and heating systems;
- regulations to ensure individual metering, billing and control of heating systems in multi-occupied residential buildings;
- performance standards and control of servicing of heating systems;
- publicity campaigns and advice centres for energy saving in the home;
- financial aids for necessary improvements to existing houses, an exemplary programme for dwellings in public ownership;
- labelling to indicate the energy consumption of domestic appliances.

**2. Energy saving in industry**

- energy auditing, especially in industries consuming large volumes of energy;
- financial aids for small and medium-sized businesses, publicity campaigns;
- financial and tax aids to encourage investment to save energy;
- financial aids for the commercial promotion of new energy-saving technologies, equipment or methods (demonstration projects).

**3. Energy saving in agriculture**

- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly;
- rational use of chemical fertilizers;
- better use of locally available alternative energy sources to heat farm buildings and glass houses.

**4. Energy saving in offices and in commerce**

- an exemplary public-sector programme;
- compulsory minimum performance standards for new offices;
- performance standards and control of servicing of heating, cooling and ventilation systems.

**5. Energy saving in transport**

- information and publicity campaigns;
- implementation of a standard method of measuring the fuel consumption of vehicles;
- if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community;
- collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level.

**6. Energy production**

Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks.

**7. Information and education**

- sustained publicity drives on energy saving;
- educational programmes in schools, technical colleges and universities and vocational retraining programmes.

**8. Sustained efforts in research, development and demonstration**

Section C

**Comparison of Member States' Energy Saving Programmes  
and the basic energy saving programmes recommended to  
Member States.**

1.

BELGIUM : Energy Pricing Practices

Taxes on energy are generally fairly high. Higher taxes on gas consumption are being considered.

Gas prices are under review. Increase in excise tax of 0.012 ECU per m<sup>3</sup>, September 1979.

BELGIUM : Specific Measures

2.

<u>Title</u>	<u>Action</u>	<u>Public Sector Budget</u>	
		<u>1978</u>	<u>1979</u>
			<u>1980</u>
1. <u>Energy Saving in the Home</u>		*	
	- a substantial upward revision of compulsory minimum performance requirements for new housing and heating systems	Advisory standards for the thermal insulation of new buildings, compulsory standards for some categories of public buildings	
	- regulations to ensure individual metering, billing and control of heating systems in multi-occupied residential buildings		
	- performance standards and control of servicing of heating systems	No performance standards. Mandatory regulations for the annual servicing and adjustment of coal and oil-fired boilers	
			Publicity campaigns through TV, radio and press until end 1979; in all the media from January 1980. Free advisory service
			Regional aids for thermal insulation and double glazing for new or renovated buildings but subject to limiting conditions
			Voluntary labelling system for domestic appliances
			* The budget for regional aids cannot be identified.

3.

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>
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- energy auditing, especially in industries consuming large volumes of energy

- financial aids for small and medium-sized businesses, publicity campaigns

- financial and tax aids to encourage investment to save energy

- financial aids for the commercial promotion of new energy-saving technologies, equipment or methods (demonstration projects)

Advisory service and free computing for, amongst others, small and medium-sized businesses  
Some aid to demonstration projects through non-specific programmes. Service to support industrial prototypes.  
Scientific Research Programme (IRSLA)

2. Energy Saving in Industry

4.

3. Energy Saving in AgricultureAction

## Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
--	-------------	-------------	-------------	------

- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly
- rational use of chemical fertilizers
- better use of locally available energy sources to heat farm buildings and glass houses

4. Energy Saving in Offices and in Commerce

<u>Action</u>	<u>Public Sector Budget</u>		
	<u>1978</u>	<u>1979</u>	<u>1980</u>
- an exemplary public-sector programme	Mandatory requirements for public buildings or for new or modernized offices in the public sector		
- compulsory minimum performance standards for new offices	Mandatory standards only for public buildings		
- performance standards and control of servicing of heating, cooling and ventilation systems	Mandatory annual adjustment and servicing of boilers.		

6.

Action

## Public Sector Budget

Action

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
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5. Energy Saving in Transport

Information campaign concerning, amongst others, drivers and users of public transport.

- information and publicity campaigns
- measuring the fuel consumption of vehicles
- if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community
- collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level

1

### Action

Public Sector Budget

MECU      1978      1979      1980

Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks

## 6. Energy Production

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	0.6			1.7

- sustained publicity drives on energy saving

According to the new energy saving programme, TV, radio and press will be used until end of 1979, and in 1980 there will be a sustained campaign in all the media.

— educational programmes in schools, technical colleges and universities and vocational retraining programmes

8.

8. Sustained Efforts in Research, Development  
and Demonstration

<u>Action</u>	Public Sector Budget		
	<u>1978</u>	<u>1979</u>	<u>1980</u>
MECU	2	2	2

Extension of the programme adopted in 1977 (for 3 years  
with a budget of 6m ECU)

DENMARK : Energy Pricing Practices

1.

Taxes on energy are generally the highest in the Community. Taxes on oil products were increased by a further 20% in June 1979. A gas consumption tax was introduced and taxes on electricity increased (on top of which VAT at 20-25% must be paid by domestic users).

2.

DENMARK : Specific Measures

<u>Title</u>	<u>Action</u>	Public Sector Budget		
		<u>1978</u>	<u>1979</u>	<u>1980</u>
1. <u>Energy Saving in the Home</u>				
- a substantial upward revision of compulsory minimum performance requirements for new housing and heating systems		13	57	MECU
- regulations to ensure individual metering, billing and control of heating systems in multi-occupied residential buildings				
- performance standards and control of servicing of heating systems				
- publicity campaigns and advice centres for energy saving in the home				
- financial aids for necessary improvements to existing houses, an exemplary programme for dwellings in public ownership				
- labelling to indicate the energy consumption of domestic appliances				

A regulation to ensure individual metering and billing in multi-occupied dwellings will be proposed shortly.

Legislation for performance standards is being prepared. In May 1979, an annual control of all oil-fired boilers of less than 60 kW was introduced.

A system of "accredited" energy consultants with fixed fees is established. The list of consultants is widely published.

Tax credit of 50% of costs of insulation for owner-occupied dwellings, maximum 428 ECU. However, it is expected that this will be transformed into a multi-year grant scheme. For 1978/80, grants of 30% for insulation of rented apartments up to a maximum of 256 ECU, programme budget is approx. 80m. ECU.

Legislation is being prepared.

3.

Action

## Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	5.9	8.6		

2. Energy Saving in Industry

- energy auditing, especially in industries consuming large volumes of energy

- financial aids for small and medium-sized businesses, publicity campaigns

- financial and tax aids to encourage investment to save energy

- financial aids for the commercial promotion of new energy-saving technologies, equipment or methods (demonstration projects)

Energy audits are encouraged but are not mandatory. A register of the 600 most energy-intensive industries has been established, which are kept regularly informed.

0.85m ECU spent on free advisory services, and 1.43m ECU granted in specific aids. A staff of consultants is available from the technological service institutes.

20m ECU spent 1977 to 1979 in grants to support energy saving investment in industrial processes. Subsidies can be up to 40% of the project cost but average 28%. Average payback 5 years. Projects with a payback of less than 2 years are excluded. Grants are also available to improve space heating.

This scheme exists within the framework of general aids to investment in energy saving.

4.

	<u>Action</u>	Public Sector Budget			
		<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
<u>3. Energy Saving in Agriculture</u>					
	- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly				
	- rational use of chemical fertilizers				
	- better use of locally available energy sources to heat farm buildings and glass houses				

5.

Action	Public Sector Budget			
	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
- an exemplary public-sector programme	10.4	17.1		
- compulsory minimum performance standards for new offices				
- performance standards and control of servicing of heating, cooling and ventilation systems				

4. Energy Savings in Offices and in Commerce

Budget of 11.5m ECU to 1980 for improvements to existing buildings.

Improved standards effective January 1979.

No action presently proposed.

6.

5. Energy Saving in Transport

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
- information and publicity campaigns	-	-	-	Radio and TV campaigns.

No timetable for legislation.

- Not relevant - discussions proceeding in EEC context.
- implementation of a standard method of measuring the fuel consumption of vehicles
  - if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community
  - collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level

20

V

Action

## Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	9.3	9.3		

6. Energy Production

Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks

Framework legislation for the Danish Heat Plan, May 1979. Danish power stations encouraged to produce up to 40% of output in form of heat. District heat to cover 1/3 of total requirements by 1990. Grants are available up to 25% of investment cost. A total of 37m. ECU is available 1978-82.

7. Information and Education

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	0.3	0.14		

- sustained publicity drives on energy saving
- educational programmes in schools, technical colleges and universities and vocational retraining programmes

Campaign concentrated on housing, industry and trade. Free air time given on state broadcasting. Touring exhibitions.

8.

8. Sustained Efforts in Research, Development  
and Demonstration

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>
<u>MECU</u>	3	3	

22

1.

FEDERAL REPUBLIC OF GERMANY : Energy Pricing Practices

Taxes on heating oil doubled (from 0.04 to 0.07 ECU per 150 kg)

Law to amend Federal Electricity Pricing Regulations especially to decrease degressivity, and including incentives for electric heat pumps. A new law concerning the general conditions for electricity and gas distribution gives a special place to auto-production.

Power companies required to classify clients in most advantageous tariff based on previous 12 months' consumption.

FEDERAL REPUBLIC OF GERMANY : Specific Measures

<u>Title</u>	<u>Action</u>	<u>Public Sector Budget</u>
		MECU
		<u>1978</u> <u>1979</u> <u>1980</u>
		(388)      (350)      368
<u>1. Energy Saving in the Home</u>		
- a substantial upward revision of compulsory minimum performance requirements for new housing and heating systems	Standards were raised to a high level (second only to Denmark) in 1977. A further increase is being prepared.	Individual billing for heating for publicly financed dwellings already prescribed (with a transition period). Proposals are before Parliament for unsubsidized dwellings.
		Regulation on the performance of heating systems and their operation in force October 1978.
		Publicity campaign stepped up in 1979. Consumer Association's Advisory centres are supported (1980 budget 3.8m ECU). Energy utilities have important information and advice services.
		4-year programme 1978 to 1982, budget 1734m. ECU. Subsidies 25% of investment cost, minimum 1595 ECU, maximum 4785 ECU per dwelling, or tax credits giving a special rebate of 10% of the investment costs for 10 years (equivalent to an effective subsidy of up to 40% depending on the level of taxation). Installation of solar collectors and heat pumps is also allowable.
		(1) Including expenditure by the Länder.

3.

labelling to indicate the energy consumption  
of domestic appliances

Voluntary labelling in force from spring 1978 for  
refrigerators, deep-freezers, dishwashers and electric  
cookers.

A voluntary agreement on technical improvements in  
relevant energy-using appliances to encourage energy  
saving has been made with electrical and gas appliance  
manufacturers.

	<u>Action</u>		
	Public Sector Budget		
	<u>1978</u>	<u>1979</u>	<u>1980</u>
	43	54	87
<p><u>Energy audits</u> are not mandatory. There is no government programme in support of energy audits for industry in general, other than a pamphlet service. However, industry itself and industry associations are active.</p>			
<p>A programme was adopted August 1978 (Budget 1m ECU 1978, 1.3m ECU 1979).</p>			
<p>Investment allowance of 7.5% of purchasing price and manufacturing costs of certain investments in energy production and distribution and energy-saving technology. Tax relief for diesel CHP, and gas-fired heat pumps.</p>			
<p>Programme began May 1979. Budget for 1978 : 3.3m ECU; for 1979 : 5.4m ECU.</p>			
<p>financial aids for the commercial promotion of new energy-saving technologies, equipment or methods (demonstration projects)</p>			

Action

## Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
3. Energy Saving in Agriculture	1	4		5.5

- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly

rational use of chemical fertilizers

- better use of locally available energy sources to heat farm buildings and glass houses
- Particular efforts are made for horticulture. Conversion from heating oil to district heating, gas and coal.

An extensive information and training programme is in operation covering in particular the use of agricultural machinery, the heating of agricultural buildings, washing and drying processes, the recovery of waste heat, use of heat pumps, solar and wind energy, and of mineral fertilisers.

6.

4. Energy Saving in Offices and in Commerce

<u>Action</u>	Public Sector Budget			MECU
	<u>1978</u>	<u>1979</u>	<u>1980</u>	
Requirements for energy audits and proper design evaluation for new buildings.	21	24	82	
Standards raised in 1977. New increases in preparation.				
- compulsory minimum performance standards for new offices				
- performance standards and control of servicing of heating, cooling and ventilation systems				
Regulation in force as of October 1978.				

Action

## Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
<u>1978</u>	-	-	-	-
<u>1979</u>	-	-	-	-
<u>1980</u>	-	-	-	-

5. Energy Saving in Transport

- information and publicity campaigns
- implementation of a standard method of measuring the fuel consumption of vehicles
- if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community
- collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level

Campaign renewed in 1979. Operating instructions on energy-efficient driving from manufacturers.

The ECE A-70 is used for publicity by the German motor vehicle industry and by importers of motor cars.

The German motor vehicle industry adopted a 10 to 12% saving target by 1985 in April 1979, and a similar undertaking was given by both manufacturers and importers to adapt private motor cars in 1980 to a methanol mixture of up to 15%.

8.

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	50	60	80	

Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks

A series of measures have been adopted to improve the economics of industrial CHP and co-operation between industry and the electricity utilities. A budget of 260m ECU is authorized to promote the use of waste heat from power stations. The linking of buildings to district heating schemes is eligible for grants (up to 25% of cost) under the modernization of housing law. Relevant tariff changes were adopted on 1.4.80. Further incentives for district heating plants are under consideration.

7. Information and Education

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	5	9	18	

- sustained publicity drives on energy saving

Radio spots, TV spots, brochures, newspaper adverts etc.

- educational programmes in schools, technical colleges and universities and vocational retraining programmes

Introduction of rational energy use in all relevant professional training courses in association with the Länder. Inclusion of energy-efficient driving in the driving test is now proposed.

31

9.

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	33	56	84	

A very large programme.

8. Sustained Efforts in Research, Development  
and Demonstration

FRANCE : Energy Pricing Practices

1.

Taxes on energy consumption in France are generally relatively high, but have not been further increased recently.

Electricity tariffs have been changed to reduce degressivity and to discourage the use of electricity for space heating without storage.

Gas tariffs were increased in January 1980 to bring them into line with other energy prices.

FRANCE : Specific Measures

<u>Title</u>	<u>Action</u>	Public Sector Budget
1. <u>Energy Saving in the Home</u>		
		<u>1978</u> <u>82</u>
		<u>1979</u> <u>132</u>
		<u>1980</u> <u>187</u>
		MECU
- a substantial upward revision of compulsory minimum performance requirements for new housing and heating systems	<ul style="list-style-type: none"> <li>Higher insulation standards adopted in 1977, including temperature limits.</li> <li>Compulsory allocation of charges in relation to individual consumption in all new buildings: existing buildings to be adapted by 1985.</li> <li>regulations to ensure individual metering, billing and control of heating systems in multi-occupied residential buildings</li> <li>performance standards and control of servicing of heating systems</li> <li>publicity campaigns and advice centres for energy saving in the home</li> <li>financial aids for necessary improvements to existing houses, an exemplary programme for dwellings in public ownership</li> <li>labelling to indicate the energy consumption of domestic appliances</li> </ul>	<p>Information and advice campaigns. Beginning in autumn 1979, a large-scale programme to encourage energy saving in homes and buildings in commercial use.</p> <p>Aids for the insulation of existing houses to a value of up to 72 ECU per t.o.e. saved and loans up to 1785 ECU at controlled interest rates. Aid up to 30% of cost for public sector dwellings. Loans for installation of new direct-heating appliances.</p> <p>Compulsory labelling of the electricity consumption of household appliances.</p>

3.

Action

## Public Sector Budget

197819791980

MECU

29            71            64  
 In the framework of sector agreements, the energy balances and progress of energy saving programmes in business are periodically examined.

2. Energy Saving in Industry

- energy auditing, especially in industries consuming large volumes of energy

- financial aids for small and medium-sized businesses, publicity campaigns

- financial and tax aids to encourage investment to save energy

Aids for advice for small and medium-sized businesses (1.8 MECU). Information campaigns for industrialists. Organization of conferences.

Aids for investment (15 to 22% of capital cost). Aids for preliminary studies for energy saving investments (0.9 MECU). Loans at reduced interest rates (up to 7% reduction). Freeing of credit restrictions. Accelerated depreciation allowed. Sector contracts for energy saving. Financing of leasing schemes for energy saving equipment.

- financial aids for the commercial promotion of new energy-saving technologies, equipment or methods (demonstration projects)

Aid up to 50% of cost with an average of 27%.

3. Energy Savings in Agriculture

Action

**Public Sector Budget**

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
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- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly
  - rational use of chemical fertilizers
  - better use of locally available energy sources to heat farm buildings and glass houses
- A "green programme for energy" (programme vert pour l'énergie) was adopted in January 1980.
- This programme reflects fully the objectives of the measures in the basic programme. Objectives are a 15% energy saving in the use of agricultural machinery, a 5-10% saving in use of energy in fertilisers, a 25% saving in homes, a 30-50% saving in sheds for rearing animals, a 25% saving in glasshouses, a 20% saving in drying processes, and a 20% saving in the food processing industry. In addition, the commercial use of fuels of agricultural origin is to be actively developed, to a value of at least ± 15m.t.o.e. by 1985.

5.

**4. Energy Saving in Offices and in Commerce**

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	
	24	23.5	70	MECU

- an exemplary public sector programme

National administrations must prepare an energy saving plan for 1980-85, especially for heating. Cash limits (1980 expenditure same as 1979). Investment credits almost trebled. Periodic control of temperatures.

- compulsory minimum performance standards  
for new offices

Regulations for thermal insulation and ventilation for buildings other than dwellings and especially for new buildings heated by electricity.

- performance standards and control of  
servicing of heating, cooling and ventilation  
systems

Rules relating to ventilation and to the servicing of heating systems. Minimum performance and compulsory inspection of installations above a defined thermal rating.

6.

Action

## Public Sector Budget

5. Energy Saving in Transport

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	2	4	6.5	

- information and publicity campaigns

Encouragement of energy-efficient driving. Control of publicity on energy saving devices - minimum 5% proven economy is required. Economic driving school programme being expanded, and includes heavy goods vehicle drivers.

- implementation of a standard method of measuring the fuel consumption of vehicles

Consumption is measured by three test cycles and must be displayed in publicity about new vehicles. Control of publicity about new vehicles.

- if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community

Agreements with manufacturers for the development before 1985 of prototypes saving 25% of fuel, and for the production by 1985 of a range of automobiles consuming an average of 7.3 litres/100 km.

- collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level

7.

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Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	-	-	-	-

6. Energy Production

Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks

Tariffs for autoproducers of electricity to encourage CHP. Proposals before Parliament to encourage CHP and heat distribution grids.

7. Information and Education

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	2.4	7.5	11.5	

- sustained publicity drives on energy saving

The "Agence pour les économies d'énergie" is responsible for a public information campaign in all sectors of consumption.  
Law preventing misleading advertising recently strengthened.

- educational programmes in schools, technical colleges and universities and vocational retraining programmes

Distribution of a text on energy problems for secondary schooling

39

8.

Action

8. Sustained Efforts in Research, Development  
and Demonstration

**Public Sector Budget**

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	42	51	58	

**Research and Development Programme.**

1.

IRELAND : Energy Pricing Practices

Taxes on petrol increased by 0.07 ECU per litre and on other fuels by 0.02 ECU per litre in March 1980, but taxes on oil products remain low by Community standards. No VAT is charged to domestic consumers of gas and electricity. Road fund tax abolished for cars up to 2000 cc but registration fee doubled.

Declining block rates are being phased out in electricity tariffs.

IRELAND : Specific Measures

<u>Title</u>	<u>Action</u>	Public Sector Budget		
		<u>1978</u>	<u>1979</u>	<u>1980</u>
1. <u>Energy Saving in the Home</u>				
	Mandatory standards apply to grant-aided housing, as of July 1979. <u>No mandatory standards for unsubsidized housing.</u> Improved insulation standards for Local Authority housing.			
	Individual metering and billing exists for all electrically-heated buildings and normally for other categories of building.			
	<u>Will be proposed</u>			
	- regulations to ensure individual metering, billing and control of heating systems in multi-occupied residential buildings			
	- performance standards and control of servicing of heating systems			
	- publicity campaigns and advice centres for energy saving in the home			
	Various publicity campaigns. Publication of a report and related booklet. The Institute for Industrial Research and Standards (IIRS) acts as an advice centre. The Electricity Supply Board and Department of Energy also answer requests for information.			

3.

- financial aids for necessary improvements to existing houses, an exemplary programme for dwellings in public ownership

Income tax relief on labour costs for conservation measures to a maximum of 714 ECU.

A comprehensive programme is under active consideration.

- Will be proposed.
- labelling to indicate the energy consumption of domestic appliances

4.

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
--	-------------	-------------	-------------	------

2. Energy Saving in Industry

- energy auditing, especially in industries consuming large volumes of energy

- financial aids for small and medium-sized businesses, publicity campaigns

- financial and tax aids to encourage investment to save energy

- financial aids for the commercial promotion of new energy-saving technologies, equipment or methods (demonstration projects)

Energy audits are encouraged but are not mandatory.  
Aids for new industry is conditional on the use of energy-efficient methods.

A Fuel Efficiency Advisory Service is available.  
Grants are provided for up to 1/3 of cost of consultants.  
Training guides for energy managers have been prepared.

Grants of 25 to 35% of approved capital expenditure available towards expenditure to reduce energy usage in factories.

Grants of up to 79 000 ECU are available to develop new processes which reduce energy consumption, and for demonstration projects.

5.

3. Energy Saving in Agriculture

<u>Action</u>	<u>Public Sector Budget</u>		
	<u>1978</u>	<u>1979</u>	<u>1980</u>
- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly	General advice and information from the IIRS.		
- rational use of chemical fertilizers			
- better use of locally available energy sources to heat farm buildings and glass houses	Demonstration project in the field of horticulture.		

45

6.

Action

Public Sector Budget

	1978	1979	1980	MECU
--	------	------	------	------

4. Energy Saving in Offices and in Commerce

- an exemplary public-sector programme
- compulsory minimum performance standards for new offices
- performance standards and control of servicing of heating, cooling and ventilation systems

In government offices, consumption is checked regularly.  
Insulation standards for new schools, hospitals.  
Advisory service offered by IIRS.

A national boiler testing service is now in operation.

7.

46

Action	Public Sector Budget		
	1978	1979	1980
5. <u>Energy Saving in Transport</u>	MECU		

Intensive campaign on car use and maintenance,  
June/July 1979

Discussion proceeding in EEC context.

- information and publicity campaigns
- implementation of a standard method of measuring the fuel consumption of vehicles
- if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community
- collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level

8.

Action

## Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
--	-------------	-------------	-------------	------

6. Energy Production

Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks

Subsidies can be given for the installation of a CHP system.

7. Information and Education

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
--	-------------	-------------	-------------	------

- sustained publicity drives on energy saving

Publicity in all sectors. Conservation stamp, October 1979 : mail stamped with a "conserve energy" logo for two months in the year.

- educational programmes in schools, technical colleges and universities and vocational retraining programmes

Energy Manager training. A schools competition on the theme of energy saving is supported by the Department of Energy.

9.

8. Sustained Efforts in Research; Development  
and Demonstration

<u>Action</u>	<u>Public Sector Budget</u>		
	<u>1978</u>	<u>1979</u>	<u>1980</u>
MECU			
	0.2	1.4	

ITALY: Energy Pricing Practices

1.

Tax increases for petrol and heating oil in 1977. Further increases for petrol but not heating oil approved in November 1979. Taxes on LPG for transport and heating also increased. Tax instituted for gas in non-industrial uses in 1977.

Progressive tariffs for the domestic use of electricity and gas introduced. As from August 1980, the amount of electricity on which assistance is given to low income groups is reduced from 1800 to 900 kWh per annum and second homes cease to be eligible.

Refinery margins are now comparable to those in other Member States.

## ITALY : Specific Measures

2

<u>Action</u>	Public Sector Budget				<u>MECU</u>
	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>	
1. <u>Energy Saving in the Home</u>					
- a substantial upward revision of compulsory minimum performance requirements for new housing and heating systems					
- regulations to ensure individual metering, billing and control of heating systems in multi-occupied residential buildings					
- performance standards and control of servicing of heating systems					
- publicity campaigns and advice centres for energy saving in the home					
- financial aids for necessary improvements to existing houses, an exemplary programme for dwellings in public ownership					
- labelling to indicate the energy consumption of domestic appliances					

(5)

3.

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>
MECU	-	-	-

2. Energy Saving in Industry

- energy auditing, especially in industries consuming large volumes of energy
- financial aids for small and medium-sized businesses, publicity campaigns
- financial and tax aids to encourage investment to save energy

Funds of 103m ECU are proposed for 1980 to contribute to interest rate reductions for energy saving investments in industry and agriculture. Aids are also proposed to renovate industrial and agricultural buildings.

Demonstration projects for energy saving are funded as part of a wider Research and Development programme, up to 100% of cost. Funds of 26m ECU are foreseen for 1980 for demonstration projects in the field of energy saving for renewable energy sources, or the substitution of oil or electricity.

Demonstration projects for energy saving are funded as part of a wider Research and Development programme, up to 100% of cost. Funds of 26m ECU are foreseen for 1980 for demonstration projects in the field of energy saving for renewable energy sources, or the substitution of oil or electricity.

4.

Action

## Public Sector Budget

## MECU

197819791980

3. Energy Saving in Agriculture
- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly

Aids for investment in energy-saving technologies and to renovate agricultural buildings, (see section 2), and to promote the use of waste heat, biomass, wind and solar.

- rational use of chemical fertilizers

- better use of locally available energy sources to heat farm buildings and glass houses

v 3

5.

4. Energy Saving in Offices and in Commerce

- an exemplary public-sector programme

- compulsory minimum performance standards  
for new offices

- performance standards and control of  
servicing of heating, cooling and ventilation  
systems

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
--	-------------	-------------	-------------	------

Regulations concerning thermal insulation standards.  
The design and operation of new and existing commercial  
buildings and their heating systems.

Mandatory standards for the installation and servicing  
of heating systems.

6.

Action:5. Energy Saving in Transport

Public Sector Budget			
	<u>1978</u>	<u>1979</u>	<u>1980</u>
			MECU

- continuation of the present campaign. Driving test modified to include economic driving.
- information and publicity campaigns
- implementation of a standard method of measuring the fuel consumption of vehicles
- if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community
- collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level

7.

Action

Public Sector Budget

6. Energy Production

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
--	-------------	-------------	-------------	------

Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks

Law which provides that:

- the Ministry for Industry request ENEL for technical solutions for CHP
- the local authorities and regions construct and manage CHP installations
- hydroelectric concessions not being used by ENEL be transferred to local authorities or autoproducers.

Financial aid is foreseen to encourage the development of renewable resources, and CHP in industry (34m ECU).

7. Information and Education

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
--	-------------	-------------	-------------	------

- sustained publicity drives on energy saving
- educational programmes in schools, technical colleges and universities and vocational retraining programmes

Continuation of public information campaigns through public and private agencies. Budget of 2.6m ECU for 1980.

Programme for schools sponsored by ENEL.

8.

8. Sustained Efforts in Research, Development  
and Demonstration

Action  
Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	10	10	10	

A programme of energy research was approved in 1975 with a budget of 35m ECU, of which 22m ECU for energy conservation.

LUXEMBOURG : Energy Pricing Practices

1.

Taxation of energy in general, and oil products in particular is very low in Luxembourg compared to the general situation in the Community.

57

LUXEMBOURG : Specific Measures

<u>Title</u>	<u>Action</u>										
	Public Sector Budget (Housing/Trade, Transport and Industry)										
1. <u>Energy Saving in the Home</u>	<table border="1"> <thead> <tr> <th></th> <th><u>1978</u></th> <th><u>1979</u></th> <th><u>1980</u></th> <th>MECU</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td>0.12</td> <td></td> </tr> </tbody> </table>		<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU				0.12	
	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU							
			0.12								
- a substantial upward revision of compulsory minimum performance requirements for new housing and heating systems	Standards for thermal insulation recommended for new dwellings										
- regulations to ensure individual metering, billing and control of heating systems in multi-occupied residential buildings	Requirements for the installation and periodic inspection of oil-fired boilers.										
- performance standards and control of servicing of heating systems	Distribution of brochures. Subsidies for "thermos" surveys.										
- publicity campaigns and advice centres for energy saving in the home	Financial aids to private users for energy-saving investment up to 25% of the capital cost with a ceiling of 3 750 ECU per dwelling.										
- labelling to indicate the energy consumption of domestic appliances											

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3.

2. Energy Saving in Industry

<u>Action</u>	Public Sector Budget			MECU
	<u>1978</u>	<u>1979</u>	<u>1980</u>	
- energy auditing, especially in industries consuming large volumes of energy	-	-	-	-
- financial aids for small and medium-sized businesses, publicity campaigns	-	-	-	-
- financial and tax aids to encourage investment to save energy	-	-	-	-
- financial aids for the commercial promotion of new energy-saving technologies, equipment or methods (demonstration projects)	-	-	-	-

4.

<u>Action</u>	<u>Public Sector Budget</u>		
	<u>1978</u>	<u>1979</u>	<u>MECU</u>

### 3. Energy Saving in Agriculture

- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly
- rational use of chemical fertilizers
- better use of locally available energy sources
  - to heat farm buildings and glass houses

6)

5.

Action

Public Sector Budget

4. Energy Saving in Offices and in Commerce

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
--	-------------	-------------	-------------	------

- an exemplary public-sector programme
- compulsory minimum performance standards for new offices

- performance standards and control of servicing of heating, cooling and ventilation systems
- Requirements for the installation and inspection of oil-fired equipment

6.

<u>Action</u>	Public Sector Budget		
	<u>1978</u>	<u>1979</u>	<u>1980</u>
5. <u>Energy Saving in Transport</u>			MECU

Introduction of a course on economic driving in the driving test.  
Incentives for the use of public transport.

- information and publicity campaigns
- implementation of a standard method of measuring the fuel consumption of vehicles
- if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community
- collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level

7.

	<u>Action</u>	Public Sector Budget			MECU
		<u>1978</u>	<u>1979</u>	<u>1980</u>	
6. Energy Production	Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks				
7. Information and Education	- sustained publicity drives on energy saving - educational programmes in schools, technical colleges and universities and vocational retraining programmes - Brochures proposed: Courses for builders and allied trades organized by the Chamber of Commerce.	<u>1978</u>	<u>1979</u>	<u>1980</u>	0.2      0.6

8.

8. Sustained Efforts in Research, Development  
and Demonstration

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
<u>1978</u>	-	-	-	-
<u>1979</u>	-	-	-	-
<u>1980</u>	-	-	-	-

1.

THE NETHERLANDS : Energy Pricing Practices

Vehicle taxation increased by an average of 22% in 1979. However, a surtax reduction on diesel motors has been discontinued for environmental reasons.

New contracts for large consumers of gas based on fuel oil price equivalence. However, some decreases were approved for largest consumers in January 1979. For small consumers' gas prices, it is intended to move towards fuel oil equivalence over a few years, which may imply price increases of the order of 20%. Gas export prices will also be reviewed. Flat rate tariffs to be introduced for domestic users of electricity.

THE NETHERLANDS : Specific Measures

2.

<u>Title</u>	<u>Action</u>		
	Public Sector Budget		
	<u>1978</u>	<u>1979</u>	<u>1980</u>
	MECU	MECU	MECU
1. <u>Energy Saving in the Home</u>			
	35	88	124
- a substantial upward revision of compulsory minimum performance requirements for new housing and heating systems	<p>Standards have been raised several times since 1974. A further increase is under study.</p>		
- regulations to ensure individual metering, billing and control of heating systems in multi-occupied residential buildings	<p>Measures to require individual and more frequent metering adopted.</p>		
- performance standards and control of servicing of heating systems	<p>Minimum efficiency standards for central heating boilers (gas) raised in April 1979. High efficiency boilers are being developed and the possibility of combining efficiency checks with boiler maintenance is being studied.</p>		
- publicity campaigns and advice centres for energy saving in the home	<p>These are organized in association with the renovation of existing buildings, at the initiative of SVEN (Agency for Energy Conservation in the Netherlands).</p>		

- financial aids for necessary improvements to existing houses, an exemplary programme for dwellings in public ownership

National Homes Insulation Plan adopted in 1973 envisaging the insulation of 200 000 homes a year for 10 years. Budget for 1979 is 93m. ECU. Average level of subsidy is 30% of cost. Subsidies may be given up to a maximum of 1 444 ECU per dwelling. The programme is managed on a regional basis. Additional financial aid is also available for local authority housing construction.

- labelling to indicate the energy consumption of domestic appliances

Legislation is being prepared.

4.

68

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	14	18	54	

2. Energy Saving in Industry

- energy auditing, especially in industries consuming large volumes of energy
- financial aids for small and medium-sized businesses, publicity campaigns
- financial and tax aids to encourage investment to save energy
- financial aids for the commercial promotion of new energy-saving technologies, equipment or methods (demonstration projects)

No mandatory requirements for audits. In 1978, a programme started to identify possible improvement in industrial energy-efficiency sector by sector. A report for the paper industry is already published. Reports will soon be available for five other sectors.

Since 1977, a regulation has provided for a grant of up to 370 ECU. Over 500 firms surveyed to date (mid-1979).

Temporary schemes were in force in 1977, 1978. Subsidies amounting to 67m. ECU were granted. A new regulation is to be proposed for 1980, with a foreseen budget of 37m. ECU.

A demonstration project scheme is in operation, including new and renewable energy sources. 1979 budget is 1.9m. ECU.

<u>Action</u>	Public Sector Budget			MECU
	<u>1978</u>	<u>1979</u>	<u>1980</u>	
3. <u>Energy Saving in Agriculture</u>				
- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly				
- rational use of chemical fertilizers				
- better use of locally available energy sources to heat farm buildings and glass houses				

6.

70

4. Energy Saving in Offices and in Commerce

- an exemplary public-sector programme
- compulsory minimum performance standards for new offices

- performance standards and control of servicing of heating, cooling and ventilation systems

A government energy audit programme has begun. Fairly high standards for new office buildings. Energy conservation co-ordinators appointed.

Not yet in force, but should be adopted in 1980.

Minimum efficiency standards for gas boilers raised April 1979. No action proposed for servicing.

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	3	3	50	

7.

Action

Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	-	-	-	

5. Energy Saving in Transport

- information and publicity campaigns

- implementation of a standard method of measuring the fuel consumption of vehicles

- if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community

- collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level

Not currently in progress.

Not yet in force. Proposals in preparation.

Discussions in progress with the industry.

8.

ActionPublic Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	14	9	22	

Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks

Active promotion of district heating. Expenditure in government support to date 27m. ECU. Studies under way into policy proposals for CHP and the use of waste heat.

7. Information and Education

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	2.4	2.8	3.3	

National campaign since 1976 on continuing basis. Budget 2m. ECU. Posters, brochures, TV spots and promotions.

No specific action

- educational programmes in schools, technical colleges and universities and vocational retraining programmes

73

9.

Action

Public Sector Budget

8. Sustained Efforts in Research, Development  
and Demonstration

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	15	11.8	14.2	

A national programme organized by sector is being instituted.

1.

UNITED KINGDOM : Energy Pricing Practices

Major increases in VAT on petrol and diesel fuel in July 1979. In March 1980 taxes on all oil products were further increased. The tax on gasoline was raised from 0.13 EUA per litre to 0.16 EUA per litre. Annual duty on cars was increased to 100 EUA. However, domestic users of electricity, gas and coal are still exempt from VAT.

Bill in preparation to alter relationships between government and the nationalised industries. Financial targets set at higher levels for nationalised fuel industries.

The Government announced its intention in January 1980 of increasing gas prices for domestic consumers by 30% in real terms over three years. Electricity prices will be increased by about 5% in real terms during the same period.

UNITED KINGDOM : Specific Measures

<u>Title</u>	<u>Public Sector Budget</u>			<u>Action</u>
	<u>1978</u>	<u>1979</u>	<u>1980</u>	
1. <u>Energy Saving in the Home</u>	MECU 44.4	MECU 83.0	MECU 48.5	
- a substantial upward revision of compulsory minimum performance requirements for new housing and heating systems				Standards were approximately doubled in 1975: proposals are being prepared for a further increase.
- regulations to ensure individual metering, billing and control of heating systems in multi-occupied residential buildings				No action presently proposed, pending development of improved heat meters.
- performance standards and control of servicing of heating systems				Legislation on performance standards will be laid before Parliament in 1980. Discussions being held on cost-effectiveness of servicing as an energy-saving measure.
- publicity campaigns and advice centres for energy saving in the home				<u>Proposals for advice centres abandoned in a recent review of public expenditure proposals.</u> Publicity campaigns continue.

3.

- financial aids for necessary improvements to existing houses, an exemplary programme for dwellings in public ownership

A 10-year programme adopted in 1977 for basic insulation in public sector housing - 160m. ECU over 4 years to 1982. Under 'Homes Insulation Act 1978', private households may claim grants of up to 66%, 80 ECU maximum, where no insulation presently exists. (No grants are available for upgrading low standards of insulation.) In 1980 a grant of 90% (subject to the same ceiling) was introduced for the elderly on low incomes. Budget to be reduced in June 1980.

- labelling to indicate the energy consumption of domestic appliances

Legislation will be laid before Parliament in 1980.

Action

	Public Sector Budget		
	1978	1979	1980
	7.5	10.9	28.8

2. Energy Saving in Industry

- energy auditing, especially in industries consuming large volumes of energy

Energy audits are encouraged but are not mandatory.  
 The Energy Technology Support Unit has published 9 reports on detailed investigations. Energy Survey Scheme : grant of up to 110 ECU for a one-day survey. A 50% discretionary grant can be obtained for a large survey. Surveys published for 16 industries.

- financial aids for small and medium-sized businesses, publicity campaigns

Free advisory services: Energy Quick Advice Service. Energy Thrift Scheme is concerned with the collection of data for government use. In this process, firms may obtain, by invitation, some advice on heat energy use at no charge.

- financial and tax aids to encourage investment to save energy

Energy Conservation Scheme (discontinued June 1980):  
Selective grants (generally 15 to 25% of cost) to replace or improve inefficient boiler plant, for insulation and for CHP projects. 100% first year tax allowance for insulating existing industrial buildings.

- financial aids for the commercial promotion of new energy-saving technologies, equipment or methods (demonstration projects)

34m. ECU available over 4 years (beginning 1978).  
Budget reduced in 1980.

5.

<u>Action</u>	Public Sector Budget			
	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
3. Energy Saving in Agriculture				

- promotion of the use of energy-saving agricultural equipment for the transport and processing of crops, informing users of the scope for making better use of existing equipment and of the use of energy-saving techniques of cultivation, and training them accordingly  
 - rational use of chemical fertilizers  
 - better use of locally available energy sources to heat farm buildings and glass houses

Action

## Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	37.4	68.0		105.0

Total budget 186m. ECU over 4 years to 1982, covering Civil and Defence estate, National Health Service, Education.

4. Energy Saving in Offices and in Commerce

- an exemplary public-sector programme

- compulsory minimum performance standards for new offices

Improved standards effective June 1979.

- performance standards and control of servicing of heating, cooling and ventilation systems  
Consultations on regulations requiring the provision of appropriate controls for new heating plant in progress. No control of servicing proposed.

7.

Action

## Public Sector Budget

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	1.1	0.3	0.8	

Advisory material is prepared in association with the Automobile Association. A 4-year educational programme (0.9m ECU per annum) is agreed (to 1982).

- information and publicity campaigns
- implementation of a standard method of measuring the fuel consumption of vehicles

Voluntary indicative targets (10% reduction by 1985)  
agreed in June 1979.

- if necessary, implementation of measures to ensure that new vehicles sold within the Community comply with voluntary targets for lower fuel consumption announced by car manufacturers in the Community

- collecting such available national data as will enable progress towards these voluntary targets to be examined at Community level

	<u>Action</u>		
	<u>Public Sector Budget</u>		
	<u>1978</u>	<u>1979</u>	<u>1980</u>
6. <u>Energy Production</u>	-	-	MECU 0.3

Measures to encourage the rational use of heat resulting from the generation of electrical energy and from industrial processes, as well as the development of heat distribution networks

Preliminary studies are expected in 1981 to identify sites suitable for a number of trial schemes for district heating

#### 7. Information and Education

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>MECU</u>
	2.5	3.4	5.5	

- sustained publicity drives on energy saving

16m. ECU spent 1974-78. Budget of 3m. ECU per annum agreed to 1980 (in 1977 prices). Coordination of energy saving publicity by utilities, fuel industries and oil companies.

- educational programmes in schools, technical colleges and universities and vocational retraining programmes

Aid for schools, courses for architects, energy managers, fleet managers, boiler operators.

9.

Action

## Public Sector Budget

8. Sustained Efforts in Research, Development  
and Demonstration

	<u>1978</u>	<u>1979</u>	<u>1980</u>	MECU
	14.9	15.5	16.5	

### Section D

Authorisations in public sector budgets for expenditure on energy saving) 1978-80

<u>Programme</u>	Member States						MEUA		
	Belgium <u>Year</u>	Denmark <u>Year</u>	F.R. of Germany <u>Year</u>	France <u>Year</u>					
1) Energy Saving in the home	1978 -	1979 N/A	1980 (4)	1978 13	1979 57	1980 N/A	1978 288	1979 350	1980 368
2) Energy Saving in industry	-	-	(4) 5.9	-	-	N/A 8.6	43 54	87 87	1979 83
3) Energy Saving in agriculture	-	-	(4) -	-	-	N/A 1	4 5.5	29 29	1979 132
4) Energy Saving in offices and in commerce	-	-	(4) 10.4	17.1	N/A 21	-	24 82	71 24	1979 187
5) Energy Saving in transport	-	-	(4) 9.3	-	N/A 9.3	-	-	2 2	1979 64
6) Energy production	-	0.6	1.7	0.3	0.1 N/A	5 5	-	4 -	1979 12
7) Information and education	2	2	2	3	3 N/A	33 56	9 84	42 42	1979 58
8) Research and development	2	2.6	(3.7)	41.9	95.1 N/A	441 441	537 537	716.5 716.5	1979 409
9) Total	2	2.6	(3.7)	41.9	95.1 N/A	441 441	537 537	716.5 716.5	1979 409

2.

	Italy	Ireland	Luxembourg	Netherlands	United Kingdom
	<u>Year</u>	<u>Year</u>	<u>Year</u>	<u>Year</u>	<u>Year</u>
	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1978</u>	<u>1979</u>
1) Energy Saving in the home	-	(4)	(4)	-	0.1
2) Energy Saving in industry	-	(4)	(4)	-	-
3) Energy Saving in agriculture	-	(4)	(4)	-	-
4) Energy Saving in offices and in commerce	-	(4)	(4)	-	-
5) Energy Saving in transport	-	-	-	-	-
6) Energy production	-	-	(4)	-	-
7) Information and education	-	0.4	0.7	1.4	0.2
8) Research and development	10 $10^3$	$10^3$	0.2	1.4	4)
9) Total	10	10	0.6	2.1	(1.4)
				-	0.3
				(0.6)	83.4
				-	15
				-	11.8
				-	14.2
				-	14.9
				-	15.5
				-	16.5
				-	267.5
				-	(107.8)(181.1)(205.4)

Figures in brackets represent totals excluding non-available (N/A) items, where these are known to be small.

F/Y = financial year

3.

Commission of the European Communities

	<u>Year</u>		
	<u>1978</u>	<u>1979</u>	<u>1980</u>
1) Energy Saving in the home	-	-	-
2) Energy Saving in <sup>(2)</sup> industry	4	17.6	23
3) Energy Saving in agriculture	-	N/A <sup>(5)</sup>	N/A <sup>(5)</sup>
4) Energy Saving in offices and in commerce	-	-	-
5) Energy Saving in transport	-	-	-
6) Energy production	-	N/A <sup>(5)</sup>	N/A <sup>(5)</sup>
7) Information and education	-	N/A	N/A
8) Research and development	4.6	0.5	11.2
9) Total	8.6	(18.1)	<u>(34.2)</u>

4.

Notes

- (1) To the extent possible, expenditure by local and regional authorities is included. However, it is known that complete figures are not available for Belgium, France and the United Kingdom in particular.
- (2) Includes expenditure on demonstration projects.
- (3) Estimate made by the services of the Commission.
- (4) Expenditure is foreseen in a programme being prepared by the government, but not yet approved.
- (5) There is expenditure by the Community through the EAGGF and ERDF, but expenditure on energy saving cannot be identified separately.

Section E Comparison of the principal elements of some of the larger incentive schemes for energy saving in the home

<u>Nature of Scheme</u>	<u>Percentage grant</u>	<u>Maximum grant allowable</u>	<u>Remarks</u>
<u>Denmark</u>	Tax credit for owner-occupiers	50%	428 Under review due to poor take-up rates
	Subsidies for apartments	30%	256
<u>F.R. of Germany</u>	Subsidies or tax credits	25% subsidies or 10% tax credit for ten years	4785 Under review to improve cost-effectiveness
	Solar collectors and heat pumps also allowable		
<u>France</u>	Subsidies or soft loans for owner-occupier	Subsidies up to 72 EUA per t.o.e. saved	Considered successful
	Subsidies for public housing	30% of cost	-
<u>Netherlands</u>	Subsidies	Average level is 30%	Under review to improve cost-effectiveness
<u>United Kingdom</u>	Subsidies	Up to 66%	A 90% grant will be proposed for low-income pensioners