



European Communities

EUROPEAN PARLIAMENT

SESSION DOCUMENTS

English Edition

6 May 1991

A3-0123/91

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R E P O R T

of the Committee on Energy, Research and Technology

on the proposal from the Commission to the Council for a decision concerning the promotion of energy efficiency in the Community
(COM(90) 365 final - C3-400/90)

Rapporteur: Mr Yves VERWAERDE

DOC_EN\RR\109062

PE 148.312/fin.

Or. EN

A Series: Reports - B Series: Motions for Resolutions, Oral Questions - C Series: Documents received from other Institutions (e.g. Consultations)

*

 = Consultation procedure requiring a single reading

**II

 = Cooperation procedure (second reading) which requires the votes of a majority of the current Members of Parliament for rejection or amendment

**I

 = Cooperation procedure (first reading)

 = Parliamentary assent which requires the votes of a majority of the current Members of Parliament

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By letter of 3 December 1990 the Council consulted the European Parliament, pursuant to Article 235 of the EEC Treaty, on the proposal from the Commission to the Council for a decision concerning the promotion of energy efficiency in the Community.

At the sitting of 10 December 1990 the President of Parliament announced that he had referred this proposal to the Committee on Energy, Research and Technology as the committee responsible and to the Committee on Economic and Monetary Affairs and Industrial Policy, the Committee on the Environment, Public Health and Consumer Protection and the Committee on Transport and Tourism for their opinions.

At its meeting of 28 November 1990 the Committee on Energy, Research and Technology appointed Mr Verwaerde rapporteur.

At its meeting of 28 and 29 January, 27 and 28 February, 21 and 22 March, 22 and 23 April and 2 and 3 May 1991 it considered the Commission proposal and draft report.

At the last meeting it adopted the draft legislative resolution unanimously.

The following took part in the vote: La Pergola, Chairman; Anger (vice-chairman), Adam (vice-chairman), Verwaerde (rapporteur), Bettini, Chiabrando, Desama, Fernex (for Breyer), Garcia Arias, Gasoliba I Böhm, Goedmakers (for Ford), Hervé, Lannoye, Linkohr, Mayer, Porrazzini, Regge, Quisthoudt-Rowohl and Seligman.

The opinions of the Committee on Budgets, the Committee on Economic and Monetary Affairs and Industrial Policy and the Committee on Transport and Tourism are attached. The Committee on the Environment, Public Health and Consumer Protection decided not to deliver an opinion.

The report was tabled on 6 May 1991.

The deadline for tabling amendments will appear on the draft agenda for the part-session at which the report is to be considered.

A

Proposal from the Commission to the Council
for a decision concerning the promotion
of energy efficiency in the Community

Commission text(1)

Amendments

(Amendment No. 1)
Article 1

The Community shall, under the conditions laid down in this Decision, support a series of energy efficiency initiatives within the context of the programme entitled SAVE (Specific Actions for Vigorous Energy Efficiency).

The cost to the Community of giving effect to the actions established by this Decision shall be determined annually by the budgetary authority.

1. The Community shall support a series of energy efficiency actions within the context of a framework programme entitled SAVE (Specific Actions for Vigorous Energy Efficiency).
2. The Community funds estimated necessary for the execution of the actions amount to 105 million ECU. An indicative breakdown of expenditure is set out in Annex III.
3. The budgetary authority shall decide on the appropriations available for each financial year and on the staff resources required to implement the action.

(Amendment No. 2)
Article 1a (new)

Within two years from the date of the adoption of this Decision, the Commission will make proposals for the measures set out in Annex I, in accordance with the Indicative Timetable in Annex II.

(1) For full text see COM(90) 365 final - OJ No. C 301, 30.11.1990, p. 11

Commission text

Amendments

(Amendment No. 3)
Article 2

Three categories of action on energy efficiency shall be financed under the SAVE programme, namely:

- (a) technical evaluations for gathering the data needed for defining technical standards or specifications,
- (b) measures to support the Member States' initiative for extending or creating infrastructures concerned with energy saving. These initiatives include:
- training and information activities with regard to energy efficiency at regional level,
 - sectoral pilot measures,
 - measures to implement the programme for improving the efficiency of electricity use adopted by Decision 89/364/EEC.

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- (a) technical evaluations for gathering the data needed for defining technical standards or specifications,
- (b) measures to encourage initiatives at Member States' level to extend or create infrastructures concerned with energy saving. These initiatives include:
- training and information activities with regard to energy efficiency at regional level,
 - sectoral pilot measures,
 - measures to implement the programme for improving the efficiency of electricity use adopted by Decision 89/364/EEC.

(Amendment No. 4)
Article 8

Three years after the entry into force of this programme and also at its expiry, the Commission shall present to the European Parliament and the Council, with a view to evaluating the results obtained, a report on the application of the present Decision and on the coherence of national and Community action.

1. During the third year of the programme, the Commission shall address a report to the European Parliament and to the Council on the basis of the results achieved. This report shall be accompanied by proposals for any changes which may be necessary in the light of these results.

2. At the end of the programme the Commission shall assess the results obtained, the application of the present Decision and the coherence of national and Community actions. It shall address a report thereon to the European Parliament and the Council.

(Amendment No. 5)
Annex I (new)

THE PROPOSED ACTION

OBJECTIVES

The objective of the SAVE programme is to promote energy efficiency throughout the Community, thereby contributing to better use of resources, to improved fund allocation and to the achievement of the Internal Market. The SAVE programme will provide a framework for the following medium and long-term structural measures:

(a) An initial set of technical measures will be concerned with the performance of equipment, since the diversity of provisions currently in force in this field represents an obstacle to the completion of the internal market. The progressive improvement of the performance of equipment of medium durability and the emergence of computerized equipment (house automation) will enable substantial reductions to be made in the medium term in energy consumption. Action on durable equipment is no less significant but will take a longer time to bear fruit.

(b) These technical measures will be backed up by financial instruments which will provide additional incentives in fields which cannot be influenced by provisions relating to equipment performance.

(c) A third category of measures will aim to influence consumer behaviour, a decisive parameter of energy consumption.

(d) Third countries, and in particular the countries of Eastern Europe will be associated with actions, where appropriate, undertaken under the SAVE programme.

A. TECHNICAL MEASURES

1. Definition of standards of technical specifications

The measures to be proposed cover three sectors:

(a) The building sector, which uses over 40% of final energy consumption and offers room for great improvements in energy efficiency.

Actions will be proposed in the following areas:

(i) The operation of heat generators for heating and hot water production in non-industrial buildings, and in particular the current diversity of Member State requirements, represents a serious obstacle to the free movement of goods. Progress in this field depends on the definition of minimum performance levels. A Directive on the approximation of laws concerning performance requirements for new boilers will be presented by the Commission.

(ii) Annual inspections of boilers in service throughout the Community will be made compulsory.

(iii) Standards for heat insulation will require a systematic approach. In order to reconcile the variations in standards established by Member States, minimum insulation levels for buildings will be specified for the various climatic zones of the Community.

Commission text

Amendments

- (b) Domestic appliances with a potential for final energy savings of nearly 10 million toe per year are another priority sector for Community action.

Actions will be proposed in the following areas:

- (i) A voluntary agreement with domestic appliance manufacturers to improve energy efficiency will be explored.
- (ii) A specific voluntary agreement will concern the optimization of the energy consumption of domestic electrical appliances by including them in a house automation system (automatic optimization of operation, load-shedding, etc.).
- (iii) consideration will be given to methods to promote the gradual introduction of metals with a high magnetic permeability level in electrical appliances.
- (iv) Minimum energy performance levels for refrigerators and freezers will be adopted since measuring standards for these types of appliances have already been established by CEN/CENELEC. For other types of domestic appliances the Commission will make use as far as possible of measuring agreements drawn up by associations of manufacturers.
- (v) Standards will be revised regularly and an accompanying system of quality labels for higher performance equipment established.

Commission text

Amendments

(c) In the transport sector, the following actions will be proposed:

(i) The Community will establish minimum performance requirements for cars with a view to drastically limiting CO2 emissions. These requirements could, for example, take the form of a non-exceedable fixed average consumption according to vehicle weight.

(ii) The Community will introduce a system for limiting the consumption of vehicle fleets manufactured by all automotive industries in the Member States.

(iii) A periodic compulsory inspection of cars will be made applicable throughout the Community. The periodic inspections will also apply to the efficiency of anti-pollution equipment.

(iv) Urban and regional planning projects will systematically have to include the promotion of public transport. Pilot projects will also be developed to improve the ratio of public to private use of town roads.

(v) consideration will also be given to more effective methods of reducing heat losses in the use of engines and electric transformers.

2. Cogeneration

Combined heat and power production, or cogeneration is a vital source of energy savings. New designs for cogeneration plants in the building industry and energy industry sections will continue to receive support through the THERMIE programme.

Commercial and structural obstacles to the development of this type of energy production exist and the Commission will make proposals for their removal.

3. House automation

House automation and building control systems now make it possible to optimize the operation of installations and improve management of energy consumption. Taking these technologies into account will make it possible to improve the overall energy performance of buildings as a whole.

The Commission will put forward proposals to promote the integration of equipment concerning the energy pole (heating, lighting, etc.) in house automation systems ensuring more effective energy management.

B. FINANCIAL AND TAXATION MEASURES

1. Promotion of third party financing

New methods of financing have been devised in order to stimulate investments in energy efficiency which are remunerated from the energy savings made. The following actions will be proposed:

- (i) The Commission will promote the creation of a European network for third-party financing. This network will bring together institutions which wish to promote the third party financing of energy efficiency projects; the Commission will examine together with this association the measures to be taken to enable this technique to be disseminated as widely as possible by undertaking inter alia a series of demonstrations.
- (ii) The Commission will present a proposal obliging Member States to remove obstacles to the use of the third party financing mechanism in investments designed to promote the rational use of energy in the public sector.

2. Least cost planning and demand side management

An important element in sectoral activity will be a programme of 10 to 15 pilot studies on least cost planning. These studies should establish the viability of this technique in the European context while giving companies supplying the public sector in the Community direct experience of planning mechanisms. Particular attention will be paid to possibilities for action in those areas of the Community which have had below-average performance in terms of improving energy-intensity, and where active encouragement of demand side management and least cost planning will yield the greatest dividends.

Commission text

Amendments

Measures will be taken to promote, and where appropriate strengthen, special national and regional energy agencies, which will be given a leading role in determining energy-saving policies, in particular by drawing up regional energy plans.

Under certain conditions, however, the use of least cost planning may prove difficult. In those cases, demand side management remains an efficient instrument of rational energy use.

3. Taxes and other levies

The use of taxes or other levies to promote energy efficiency and environmental protection has been actively explored for some time by the Community. The following actions will be proposed:

- (i) A detailed examination will be made of how energy pricing strategies reflect the real cost of energy to society and how energy taxation might better represent energy efficiency and environmental considerations. In the light of the results of this study the Commission will make specific proposals regarding energy pricing.
- (ii) These measures could also be accompanied by incentives, particularly tax incentives, to encourage investments designed to reduce energy consumption.

These incentives should be aimed at industrial and final users so as to encourage consumers to save energy.

Commission text

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(iii) in the context of a general policy aimed at the progressive internationalization of the various external costs relating to commercial and individual road transport, and in coordination with the R & D policy to promote 'clean' forms of transport, the following measures will be examined:

- public transport subsidies;
- development of the concept of urban road pricing, i.e. making motorists pay to cross specific urban zones, which will be examined from the point of view of its effectiveness and applicability in the Member States;
- tax incentives to curb the current trend towards increasingly powerful vehicles;

C. MEASURES RELATING TO USER BEHAVIOUR

The Commission will promote a two fold action designed to obtain a reduction of energy consumption, and a more responsible use of energies by domestic and industrial users in cooperation with Member State authorities

- by targeting information of an educational and promotional nature and
- by education and training in efficient energy use.
- consideration will also be given to the application of tax instruments (taxation and tax incentives) to energy products, so as to encourage consumers to save energy.

The Commission in the SAVE programme will therefore help develop national structures for more efficient energy use and promote the creation of a network linking the authorities concerned.

To achieve this, there is a clear need for regionalization of the action taken, with the setting up and operation of support programmes being placed under the authority of regional bodies and national bodies with regional characteristics.

The following actions will be undertaken:

Commission text

Amendments

(i) Training, which involves giving priority to staff responsible for carrying out energy audits and to those responsible for improving the rational use of energy in industry, construction and transport. This action, aimed at facilitating the introduction of certain legal measures foreseen by SAVE, will be limited in duration; it will be complementary to continuous professional training activities such as those undertaken in the framework of the FORCE and COMETT programmes.

(ii) Information, involving special efforts for determining energy saving potential and the viability of corresponding investments. Component actions will be:

(a) The Commission will present a proposal calling on energy users of a certain size either to undergo periodically an energy audit carried out by a specialist external firm or to appoint an internal energy manager who will be permanently responsible for optimum energy management in the firm.

Energy management must also take the practical form of departmental structures responsible for energy efficiency in public transport undertakings, taxi companies and cooperatives, railway systems, and airlines,

When modernizing their fleets, public transport undertakings must be incited to give preference to vehicles powered by alternative fuels or drive systems (dual-mode, electric, methane, ethanol systems, etc.), not least with a view to public action to establish a market in clean, energy-saving road vehicles.

(b) The energy certification of buildings will be reviewed on a new basis.

(c) Existing practices on heating charges in multi-occupancy buildings are not compatible with responsible decision-making on energy consumption. The Commission will present a proposal on calculation principles for heating charges in multi-occupancy buildings based on heat metering, thereby providing a truer reflection of actual energy consumption.

(d) A customer information scheme will be established to permit purchasers of domestic appliances to compare more effectively the energy performance of equipment produced by different manufacturers. This will involve the use of a standardized EC equipment label or an information sheet for domestic appliances giving clear and comparable information on energy consumption.

Commission text

Amendments

(e) A monitoring system will be set up to review the energy efficiency of all domestic appliances and present the overall findings in a form which is easily comprehensible to the customer and consumer advice bodies.

(f) Utilities will be encouraged to play an active role in promoting energy efficiency.

(g) The Community action programme for improving the efficiency of electricity use approved by the Council on 5 June 1989 will be integrated into the SAVE programme.

(h) Each year the Commission will evaluate and disseminate a detailed programme provided by each Member State, listing energy efficiency measures to be implemented in that Member State, and including a financial statement.

D. COOPERATION WITH THIRD COUNTRIES

Since the rational use of energy and its consequent effects on security of energy supply and the environment are global, an important element of SAVE will be the exchange of experience of energy efficiency between the Community and other countries. The countries of Eastern Europe and Developing Countries, where there is considerable potential for energy saving, will be associated with the policy initiatives provided for in the SAVE programme.

Closer cooperation should be promoted, particularly with developing countries, aimed at rational use of their energy, resources, in order to reduce the exploitation of forestry resources.

Parallel initiatives taken in Japan, the United States and Canada will be studied and the results of the study forwarded to Council and Parliament. Where appropriate the Commission will make proposals associating the Community with such parallel initiatives.

(Amendment No. 6)
Annex II (new)

INDICATIVE TIMETABLE OF ACTIONS

Second half 1991:

- Heat generators standards
- Building certification
- Heat metering on the basis of actual consumption
- Third party financing in the public sector
- Labelling of domestic appliances
- Periodic inspection of heat generators
- Building insulation standards
- Energy audits/energy managers
- Voluntary agreements with manufacturers of domestic appliances

First half 1992:

- Combined heat and power production (cogeneration)
- Minimum standards for certain domestic appliances
- Motor vehicle performance requirements
- Minimum standards for other domestic appliances

Commission text

Amendments

(Amendment No. 7)
Annex II (new)

Indicative breakdown of expenditure
for the period 1990-1995

%

Technical evaluation and 5 - 10
pre-normative activities

Supporting measures
- training 20 - 25

- pilot actions 35 - 40

Information and
dissemination 20 - 25

Studies 15 - 20

The breakdown between different
areas does not exclude the
possibility that projects could
cover several areas.

DRAFT LEGISLATIVE RESOLUTION

embodying the opinion of the European Parliament on the proposal from the Commission to the Council for a decision concerning the promotion of energy efficiency in the Community

The European Parliament,

- having regard to the Commission proposal to the Council¹ (COM(90) 365 final),
 - having been consulted by the Council pursuant to Article 235 of the EEC Treaty (Doc C3-400/90),
 - having regard to the report of the Committee on Energy, Research and Technology and the opinions of the Committee on Budgets, the Committee on Economic and Monetary Affairs and Industrial Policy and the Committee on Transport and Tourism (A3-0123/91)
1. Approves the Commission proposal subject to Parliament's amendments and in accordance with the vote thereon;
 2. Calls on the Commission to amend its proposal accordingly, pursuant to Article 149(3) of the EEC Treaty;
 3. Calls on the Council to notify Parliament should it intend to depart from the text approved by Parliament;
 4. Calls for the conciliation procedure to be opened if the Council should intend to depart from the text approved by Parliament;
 5. Asks to be consulted again should the Council intend to make substantial modifications to the Commission proposal;
 6. Instructs its President to forward this opinion to the Council and Commission.

¹ OJ No. C 301, 30.11.1990, p. 11

B

EXPLANATORY STATEMENT

INTRODUCTION

1. The SAVE proposal concerning the promotion of energy efficiency in the Community is a welcome, if over-due, measure designed to enable the Community to reach the 1995 Energy Objective established in 1986 of achieving a 20% improvement in the energy intensity² of final demand. Recommendations adopted by Council hitherto (on improving the energy efficiency of buildings, encouraging auto-producers of electricity) have had little effect in a time of low energy - particularly oil- prices. Overall the Community achieved an 11% improvement in the period 1980-1988, 7.2% of which was achieved before 1985.
2. The SAVE proposal is opportune in that it coincides with a rising tide of concern over the energy/environment issue, and recognition of the need to reduce the environmental impact of energy production, supply and consumption. Energy technology and energy efficiency measures are the most effective mechanisms for achieving rapid reductions in pollutant emissions.
3. SAVE is, finally, an important element in the achievement of the Internal Energy Market, constituting a first step towards coherence in a policy area which up to now has been solely the prerogative of Member States' individual policies, and allowing for harmonisation of standards for energy equipment and appliances.

THE COMMISSION PROPOSAL

4. The Commission's proposal itself as published in OJ C 301 of 30 November 1990 lacks content - focusing primarily on the need to put in place a training and information campaign - but is prefaced in the Commission document COM(90) 365 final by a long introductory section which outlines three types of measures:
 - (a) technical measures (harmonisation of norms, standards, labelling)
 - (b) financial measures (third party financing and fiscal measures)
 - (c) consumer behaviour (training, information, energy audits)
5. By the Commission's own admission "the SAVE measures alone are insufficient to reach the objective of stabilizing CO₂ emissions by the year 2000" or of achieving more than final energy savings of 100 mtoe per year, which would improve energy intensity by 14% by 2010.
6. The Commission therefore proposes an action, with minimal financial resources (35 mECU over five years), which it hopes will stimulate energy efficiency initiatives in the Member States, justifying its limited scope by recourse to the "subsidiarity" principle. It is nonetheless clear that there is a major disproportion between the scale of the problem set out by the Commission on the one hand, and the small-scale of the actions proposed.

² Energy intensity = energy consumption per unit of GDP

7. The Commission departs from previous practice in not including in the proposal for a Decision any "amount deemed necessary" for the programme, and citing the figure of 35 mECU in the Financial Statement only. Your rapporteur considers that
- (a) the Commission should explain the reasons for this since a systematic application of this practice would appear to deprive, or seek to deprive, one arm of the Budgetary Authority, the Parliament, from indicating the budgetary implications and consequently the political importance, of the legal act on which it has been consulted, bearing in mind that Parliament's practice is not to amend Financial Statements,
 - (b) an amount deemed necessary for the programme should be increased to 105 mECU to cover the actions required by the addition of a Technical Annex, and the considerably reinforced programme activities proposed by the rapporteur,
 - (c) the Commission should consider a possible revision of this amount deemed necessary after the second year of the programme's implementation, to reflect and cater for the demand - or lack of it - for the actions envisaged.
8. Your rapporteur considers that unless substantive content is restored to the SAVE programme, the action is unlikely to have more than a minor impact on Member States' energy intensity or on energy users' behaviour in the Community. Contacts between the rapporteur and both the Commissioner and his services have reinforced this view and resulted in an agreement in principle that substantive elements, based on the introductory section of COM(90) 365 final, should be built into the programme decision.

COMMENT

9. Your rapporteur accepts that energy efficiency is an important issue. It has been promoted as a panacea for environmental and energy supply problems, and often as a clean "energy resource" in its own right. While there is no doubt that substantial energy efficiency improvements can be economically achieved, it is important to note the conclusion of the 1989 World Energy Conference that the overall effect is to increase total costs, with a generally adverse economic effect. Historically, as the Community's record shows, the motor for energy efficiency has only been increases in real energy prices, perceptions of price rises or scarcity. In almost all cases, past gains are offset by increased energy demand resulting from economic growth.
10. Furthermore, the fall in energy consumption between 1980 and 1983 was due not only to improved energy intensity, but also to the overall decline in economic activity, the relative decline of heavy manufacturing industry, and a change in the fuel mix with increased penetration of nuclear and gas at the expense of oil. (See Table I)

EC GROSS ENERGY CONSUMPTION BY FUEL

TABLE I

	1980	1983	1986	1989	mTOE
Solid fuels	223 (23%)	212 (23%)	232 (22%)	231	(21%)
Oil	520 (54%)	438 (48%)	474 (45%)	492	(45%)
Gas	170 (17%)	165 (18%)	187 (18%)	201	(18%)
Nuclear	43 (4%)	76 (9%)	134 (13%)	157	(14%)
Hydro/Renewables	15 (2%)	15 (2%)	17 (2%)	17	(2%)
TOTAL	970	907	1044	1098	

11. Table II below shows that energy crises have caused progress to be made in energy efficiency:

TABLE II

	FRANCE	FRG	EC 12	US	JAPAN
Per capita final consumption 1973 Toe	2,73	3,18	2,48	6,29	2,31
1986	2,47	3,27	2,39	5,29	2,08
Energy Intensity (Toe/1000 ECU*)					
1973	0,36	0,40	0,40	0,80	0,43
1986	0,26	0,31	0,31	0,55	0,27

*1988

Of the improvements between 1973 and 1986 which the table shows, only a small part is due to structural improvements, and the movement essentially derives from higher energy prices. In France, it is calculated that only 3% of the 26% improvement in energy intensity between 1973 and 1986 derives from structural factors. Instead this improvement is due to greater fuel efficiency in new cars, better insulation in buildings and less energy-intensive steel production. Nonetheless, in spite of the good track record, France, according to the state-funded Agency for Energy Management (AFME) has an estimated energy savings potential of 30 mToe (out of an annual consumption of 172.6 mToe in 1989).

12. Your rapporteur considers that greater emphasis should be put on the following areas which are only touched upon in the Commission's text:

I - Cogeneration and District Heating

13. A number of Member States, particularly Denmark and Germany, have shown that a potential undoubtedly exists in the Community for enhancing cogeneration.

14. In the Federal Republic of Germany nearly 200 companies supply district heating, operating 500 long distance heating networks totalling 10,000 km. Eighty per cent of these networks are operated by electrical utilities.

However district heating accounts for only 8% of the space heating market, and has stagnated since the early 1980s. The great advantage of cogeneration is the improvement of thermal efficiency from around 35% to 80% with a consequent reduction in fuel input (about 3 mTOE p.a. in Germany). However only 4% of German electricity procedure is based on cogeneration. The limiting factors are:

- i) that waste heat is not continuously generated
- ii) there must be sufficient heat demand to justify the high investment costs and therefore sufficient density of population
- iii) 20 km is the normal limit between production and consumption of district heating
- iv) investment in cogeneration requires public support and - encouragement of cogeneration in Germany has taken the form of long payback periods
 - a 7.5% investment allowance
 - increased tax write-off possibilities
 - structural assistance for long-distance heating schemes.

15. Cogeneration cannot be a total substitute for base-load power plants. The potential however exists and competition between oil and gas at low price levels since 1985 has worked against the further expansion of cogeneration and district heating networks. By contrast, in Japan cogeneration facilities have increased from 7 in 1981 to 350 in 1989 with a corresponding increase in generation capacity of 14,564 kW (1981) to 247,644 kW in 1989. Incentives given include preferential taxation and low-interest loans.

16. In the examples cited, the expansion of cogeneration has required incentivitation. In most countries there is a lack of incentives, even a prohibition on electricity utilities selling heat. Undoubtedly, the centralisation of the electricity industry is a major inhibiting factor. An integrated, publicly-funded incentive approach is required to break down the institutional obstacles to CHP.

II Conservation

17. The elements for energy conservation are:

- | | |
|-------------------------------|--|
| Residential & tertiary sector | - insulation |
| | - optimal regulation/intelligent housing |
| | - heat pumps |
| Industry | - heat recovery and recycling |
| | - optimal energy management |
| | - increased efficiency of industrial processes |

In all of these, barriers exist to their expansion which includes lack of information and training, conflicting priorities, risk perception, avoidance of disruption etc. The most promising way forward is the incorporation of efficient new equipment when changes are being made (new housing, new processes etc) and by changing operational procedures and habits. Most, but by no means all of these elements are referred to in

the Commission proposal, which stops far short of attempting to remedy the root causes of their lack of implementation.

III - Least cost planning and demand-side measures

18. Your rapporteur welcomes the Commission's intention to initiate pilot studies on the experience in the United States of Least Cost Planning. Studies should also be carried out however on the relevance of pioneering actions being carried out in Sweden. These studies should also address the question of differentiated tariffs and strategic conservation, where the utility involves itself in conservation as an energy service enterprise.

IV Electricity

19. Electricity forms an increasing part of our energy requirements (about 35%) and is expected to grow by 2.3% a year up to the year 2005, more or less in line with economic growth. Barriers to efficiency are similar to the obstacles faced by industrial concerns outlined in 20 below, and relate to risk perception, understandable reluctance to lower revenue and economies of scale. Possible remedial action could therefore be:
- ensuring that electricity prices and metering practices provide correct market signals to users, and
 - building a regulatory framework to encourage end-use efficiency which would involve the utilities to a greater extent than is currently the case.

It is clear that as long as electricity utilities continue to encourage demand, particularly in the area of space heating, efficiency gains in this area from, for example, least cost planning, will be largely offset. The SAVE proposal contains only the most preliminary steps to tackle this situation.

20. Energy efficiency measures can apply to all points in the energy production/consumption chain. The SAVE proposal mirrors and to some extent hopes to build on government-sponsored programmes which concentrate on information campaigns and organisational aspects. However studies³ indicate that only 10% of all savings made by 1985 in the industrial sector was due to government sponsored programmes, and 90% due to market factors i.e. prices and technology availability. In periods of low prices the obstacles are:
- the invisibility of efficiency gains for all but the largest concerns
 - lack of information and skills for SMEs
 - perception of risks towards adoption of innovative technologies or services
 - desire to minimize production disruptions and

³ Energy and the Environment Policy Overview IEA

- access to capital

It is not clear how the Commission proposes to tackle these obstacles.

21. It is possible that energy efficiency measures in the Community may be costly to introduce. The U.S. experience of regulatory measures for improved efficiency, with efficiency standards for vehicles and appliances, and utility regulations directed at ensuring investment in conservation have only served to bring the US to levels typical of Community products. Energy efficiency's greatest scope is in a few large industries and in the domestic sector, and it is not entirely clear whether these sectors, and particularly the electricity utilities will make the necessary sacrifices without public sector intervention, and without Community-wide action.

CONCLUSION

22. Your rapporteur considers that the measures described in the Commission's introductory section to the SAVE proposal are, if not complete, at least a minimum and necessary package of measures which should be adopted by the Community in the shortest possible time-scale. SAVE should therefore become a political programme for the energy efficiency measures to be undertaken. Your rapporteur accordingly seeks to annex the list of measures to be taken to the decision itself, including it as an integral part of the Council decision.

OPINION

of the Committee on Budgets

Letter from the chairman of the committee to Mr Antonio LA PERGOLA, chairman of the Committee on Energy, Research and Technology

Luxembourg, 3 May 1991

Subject: Proposal for a Council decision concerning the promotion of energy efficiency in the Community (COM(90) 365 final - C3-400/90)

Dear Mr La Pergola,

At its meeting of 26 April 1991, the Committee on Budgets considered the proposal referred to above.

The committee noted that this proposal seeks the implementation of a five-year programme in the energy sector, at a cost of ECU 35 m. It similarly noted that the 1991 budget also provides for a total of ECU 1.5 m in commitment appropriations and ECU 1.3 m in payment appropriations (Articles B4-105 and 106) for certain measures, some of which are linked with those to be developed under this programme.

Accordingly, the Committee on Budgets would ask you to ascertain from the Commission, firstly, whether the ECU 35 m deemed necessary takes account of the appropriations entered in the 1991 budget for these measures, some of which are linked with the SAVE programme and, secondly, whether the amount corresponds with the efficiency threshold of the expenditure inherent in the objectives laid down by this programme.

Subject to these provisos, the Committee on Budgets approves this proposal.

Yours sincerely,

Thomas von der VRING

The following members were present for the vote: von der Vring, chairman; Colom I Naval, Goedmakers, Kellett-Bowman, Napolitano (for Colajanni), Samland, Tomlinson, Wynn and Zavvos.

OPINION

of the Committee on Economic and Monetary Affairs and Industrial Policy

Letter from the Chairman of the Committee to Mr LA PERGOLA, chairman of the Committee on Energy, Research and Technology

Brussels, 25 April 1991

Subject: Proposal for a Council Decision concerning the promotion of energy efficiency in the Community COM(90) 365 final - C3-400/90

Dear Mr La Pergola,

At its meeting of 24-25 April 1991, the Committee on Economic and Monetary Affairs and Industrial Policy considered the above subject and expressed the wish to make the following observations.

It should be noted that between 1955 and 1987, world energy consumption has risen by 224%. It corresponds to a compound annual growth rate of around 4%. It is equally evident that total energy consumption depends, to a very great extent, on the trend in production and income. However, economic development is conditioned by the supply of energy which at the same time determines the demand.

The Community, being the second largest consumer of energy, is faced with two options: either to let the Member States tackle the increasing demand for energy and its consequences such as the greenhouse effect and possibly a new energy shock or to propose energy efficiency measures so as to tackle the serious problems arising from the expanding demand for energy. The proposal under consideration is intended to act as a first step of Community efficiency measures entitled: "Specific Actions for Vigorous Energy Efficiency (SAVE)".

The SAVE programme focuses on three major areas (see Article 2): a) technical measures, b) financial measures and c) measures relating to consumer behaviour.

The overall objective of these measures is to improve energy efficiency. By energy efficiency it is meant to reduce the direct costs of industrial goods by reducing their energy content. Such a policy would have two effects: the first would influence the industrial competitiveness of the Community and the second effect would decrease the energy dependence of the Community on imported oil and gas.

A second objective of the SAVE programme is to ensure the compatibility of the initiatives currently prepared by several Member States with the completion of the internal market. The measures: a), b), and c) are meant to create the conditions for a single market in energy efficient products.

The Committee endorses both aims of the SAVE programme. It is estimated that if such measures are taken it would enable the Community to achieve a rate of improvement in primary energy efficiency comparable to the rate that had been

achieved over the period of 1980 to 1988 and to reach a 20% improvement in energy efficiency by 1995. However, it is equally important that the SAVE programme should take specific measures in two related areas. First, to establish Community instruments needed to remove existing barriers to the free movement of equipment. Second, to prevent fresh obstacles from being created either because of uncoordinated action by Member States or because of maintaining existing national arrangements that are either monopolistic in nature or are receiving national aids which are not compatible with the objective of a single market.

Distortions could arise from both technical and financial measures unless the SAVE programme establishes the framework and sets the Community standards. The Community framework could allow financial and taxation measures, such as the creation of a European network for third-party financing of energy efficiency projects, to be compatible with the completion of the internal market and with the removal of obstacles in Member States' rational use of energy in the public sector. On the other hand, a Community definition of standards and technical specifications would promote not only harmonisation in the design and manufacturing of equipment leading to superior performance but it would also spur new research and development in energy efficiency techniques that might lead to a common industrial approach in this field.

Subject to the above observations, the Committee approves the proposal under consideration.

Yours sincerely,

Bouke BEUMER

The following were present for the vote: Mr BEUMER, chairman; Mr Peter BEAZLEY, Mr BERNARD-REYMOND, Mr CASSIDY, Mr de DONNEA, Mr DE PICCOLI, Mr FRIEDRICH, Mr HERMAN, Mrs LULLING, Mr METTEN, Mr PAPAYANNAKIS, Mr PATTERSON, Mr PINXTEN, Mr ROUMELIOTIS, Mr SBOARINA, Mr SISO CRUELLAS and Mr WETTIG

O P I N I O N

(Rule 120 of the Rules of Procedure)

of the Committee on Transport and Tourism
for the Committee on Energy, Research and Technology

Draftsman: Mr Virginio BETTINI

At its meeting of 9 January 1991 the Committee on Transport and Tourism appointed Mr BETTINI draftsman.

At its meetings of 7 February 1991, 26 February 1991 and 19 March 1991 it considered the draft opinion.

At the last meeting it adopted the conclusions as a whole unanimously. The following were present for the vote: Topmann (acting chairman), Bettini (draftsman), Joanny, Lüttge, McIntosh, Müller, Romera i Alcàzar, Sapena Granell and Schodruch.

EXPLANATORY STATEMENT

The text under consideration sets out a framework programme to promote energy efficiency and contains proposals for research and coordination using computer systems, projected investment in which appears exceedingly modest.

The SAVE budget, in fact, is negligible, and the programme is relegated to a position of secondary importance.

There are no guidelines whatsoever on transport, even though this is a sector which has seen an increase in its energy consumption, whereas savings have been made in the industrial sector as a result of improved efficiency.

The proposal for a Council decision concerning the promotion of energy efficiency in the Community prompts the following questions:

1. Why are the industrial and building sectors alone considered crucially important from the energy efficiency point of view?
2. Why is no action proposed to impose speed limits with a view to increasing energy efficiency?
3. Why are motor vehicles, which mostly run on one fuel type only, dealt with in such general terms by the Commission?
4. Why is there no provision for practical measures in the transport sector?

All in all, the good ideas set out in the Commission text, barring a number of gaps as regards transport, have disappeared completely from the legislative section. In the proposal for a decision, transport has the Cinderella role.

CONCLUSIONS

The following amendments are proposed:

AMENDMENT No. 1

The sections of the Commission text entitled:

'I - Introduction', 'II - Objectives', 'III - The proposed action', 'IV - Implementation of the programme', and 'V - Conclusion' become Annex I to the proposal.

Annex I become Annex II, Annex II becomes Annex III, and Annex III becomes Annex IV.

AMENDMENT No. 2

Section II, point B (Action at Community level),

Fifth paragraph

Add at the end:

... and to explore the reasons why, out of the 14 energy efficiency measures it proposed, the Member States have given pride of place solely to the information aspect.

AMENDMENT No 3

Section II, point B (Action at Community level),

Add at the end:

... and to make provision for the rate of improvement in energy efficiency to be brought into line with the level laid down with the Community's energy policy objectives.

AMENDMENT No. 4

Section III, A (Technical measures), point (c), after the final paragraph

New paragraphs

In the road transport sector, energy savings can be achieved not only as a result of a change in user behaviour, but also by means of specific speed limits, use of a wider range of fuels, and maximum fuel consumption limits set according to vehicle weight.

Compulsory regular vehicle inspections must also be introduced, organized in two phases as follows:

- annual inspections to check the energy efficiency of engines and emissions;
- for vehicles over five years old, inspections every two years to check their energy and mechanical efficiency.

Various schemes should be proposed to promote the use of other fuels (such as natural gas, bioethanol, etc.) in motor vehicles operated as public transport. The introduction of the electric car, a more energy-efficient and environmentally acceptable means of transport, must be encouraged by setting up extensive town-wide and regional networks of recharging and servicing facilities.

AMENDMENT No. 5

Section III, C (Measures relating to user behaviour), add new point (c) after point (b).

- (c) Energy management must also take the practical form of departmental structures responsible for energy efficiency in public transport undertakings, taxi companies and cooperatives, railway systems, and airlines.

When modernizing their fleets, public transport undertakings must give preference to vehicles powered by alternative fuels or drive systems (dual-mode, electric, methane, ethanol systems, etc.), not least with a view to public action to establish a market in clean, energy-saving road vehicles.

AMENDMENT No. 6

Annex I (Chronology of legal actions and standards) .

Transfer the words 'Motor vehicle performance requirements' to the heading 'First half 1992'